

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Pinnacle West Capital Corporation ("the Company"), an energy holding company based in Phoenix, has consolidated assets of about \$24 billion, about 6,300 megawatts of generating capacity and nearly 5,900 employees in Arizona and New Mexico. Through its principal subsidiary, Arizona Public Service Company (APS), the Company provides retail electricity service to approximately 1.4 million Arizona homes and businesses. This report contains forward-looking statements based on current expectations, including statements regarding our earnings guidance and financial outlook and goals. These forward-looking statements are often identified by words such as "estimate," "predict," "may," "believe," "plan," "expect," "require," "intend," "assume," "project," "anticipate," "goal," "seek," "strategy," "likely," "should," "will," "could," and similar words. Because actual results may differ materially from expectations, we caution you not to place undue reliance on these statements. A number of factors could cause future results to differ materially from historical results, or from outcomes currently expected or sought by Pinnacle West or APS. A discussion of some of these risks and uncertainties is contained in the Pinnacle West/APS Annual Report on Form 10-K for the fiscal year ended December 31, 2022; the Form 10-Qs for the quarters ended March 31, 2023, and June 30, 2023; and on our website, at PinnacleWest.com, which readers should review carefully before placing any reliance on disclosures set forth in this report. We assume no obligation to update any forward-looking statements, even if our internal estimates change, except as may be required by applicable law.

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.

Financial control

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

Micro grids

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	US7234841010

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
Chief Executive Officer (CEO)	The Chief Executive Officer (CEO), who is also the Chairman of the Board and President of Pinnacle West as well as the Chairman of the Board and CEO of Arizona Public Service Company, provides the vision and leadership to execute the Company's strategy and create shareholder value. Additionally, the CEO has overarching responsibility for managing risk, including climate change and greenhouse gas risks that directly or indirectly impact our ability to execute to our mission and achieve our vision. One of the most significant effects of climate change in Arizona is drought: The state is in its 28th year of a long-term drought. Higher temperatures and extreme drought are expected to increase the severity, frequency and extent of wildfires, which harm the natural environment and human health.
Board Chair	The Chairman of the Board, President and CEO of Pinnacle West and Chairman of the Board and CEO of Arizona Public Service Company provides the vision and leadership to execute the Company's strategy and create shareholder value. Additionally, the Board Chair has overarching responsibility for managing risk, including climate change risks that directly or indirectly impact our ability to execute to our mission and achieve our vision. The Board oversees the Company's risk management strategy and focuses on fostering a culture of risk awareness and risk-adjusted decision-making. They discuss the list of the Company's top risks and allocate responsibilities for such risks among the Board and the Board Committees.
Board-level committee	The Nuclear and Operating Committee has primary responsibility for the Company's sustainability initiatives and strategies, including climate change, environmental matters, and associated operational risks. The Committee reports regularly to the Board on its activities. The Committee also periodically reviews with management the principal risks related to the Company's nuclear, fossil generation, transmission and distribution, environmental, health and safety operations, and other matters, including security policies, programs and controls for protection of cyber and physical

	<p>assets.</p> <p>In addition, the Board's Corporate Governance and Public Responsibility Committee is responsible for the adoption and maintenance of good governance practices. This Committee also is responsible for reviewing significant environmental, social and governance (ESG) trends that may impact the Company (including climate-related trends and risks), ensuring the oversight of relevant ESG issues by the Board and its Committees, and making recommendations to the Board as appropriate.</p>
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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 – some meetings	Reviewing and guiding the risk management process	<p>The Nuclear and Operating Committee has primary responsibility for the Company's sustainability initiatives and strategy, including climate change, environmental, health and safety (EH&S) matters, and associated operational risks. The Committee reports regularly to the Board on its activities. The Committee periodically reviews with management the principal risks related to or arising out of the Company's nuclear, fossil generation, transmission and distribution, EH&S and other matters.</p> <p>In addition, the Board's Corporate Governance and Public Responsibility Committee has primary responsibility for the adoption and maintenance of good governance practices. The Committee also is responsible for reviewing significant environmental, social and governance (ESG) trends that may impact the Company (including climate-related trends and risks), ensuring the oversight of relevant ESG issues by the Board and its Committees, and making recommendations to the Board as appropriate.</p> <p>The Company's Executive Risk Committee, comprised of cross-functional Company leadership and chaired by the Chief Administrative Officer, responsible for ensuring that the Board receives timely information concerning the Company's material risks and risk management processes, including climate change-related risk. The</p>

		Executive Risk Committee provides the Board with a list of the Company's top risks on an annual basis, and each Board Committee receives periodic presentations from management about its assigned risk areas and discusses their risk reviews with the Board at least annually.
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C1.1d

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

	Board member(s) have competence on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	No, but we plan to address this within the next two years	Important but not an immediate priority	In 2022, we added Sustainability as a board competence skill to gain more understanding of board competence related to environmental matters that can include climate-related issues.

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

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

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

More frequently than quarterly

Please explain

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

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

More frequently than quarterly

Please explain

Position or committee

Other, please specify

Senior Vice President of Public Policy

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

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

More frequently than quarterly

Please explain

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

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

More frequently than quarterly

Please explain

Position or committee

Other, please specify
Sustainability Director

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

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

More frequently than quarterly

Please explain

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	

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

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Performance indicator(s)

Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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

Our compensation programs focus on transparency with an emphasis on incentivizing performance. APS's compensation philosophy incorporates multiple business performance metrics.

One example is the Palo Verde Generation Station's (PVGS) capacity factor is an example. PVGS has been the nation's largest producer of clean, carbon-free energy for 30 years and is critical to the Company's ability to achieve its clean energy goals and mitigate the effects of climate change. In 2022, PVGS's capacity factor target was 93% , and the plant reached an actual capacity factor of 92.59%.

As a result, Palo Verde generated more than 32 million megawatt-hours of clean, carbon-free electricity. APS operates PVGS and owns or leases 29.1% of the plant.

In 2021, a new Clean Megawatts (MW) Installed metric was adopted that ties a portion of executive long-term incentive compensation to progress towards our Clean Energy Commitment interim milestones. (Our interim milestones are to achieve a 65% clean resource mix by 2030, 45% of our generation portfolio coming from renewable energy.) The new Clean MW Installed metric establishes targets and measures performance related to the installation of clean, renewable, or other carbon-free resources over a rolling three-year average, commencing in 2022.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Performance indicator(s)

Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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

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One example is the Palo Verde Generation Station's (PVGS) capacity factor is an example. PVGS has been the nation's largest producer of clean, carbon-free energy for 30 years and is critical to the Company's ability to achieve its clean energy goals and mitigate the effects of climate change.

In 2022, PVGS's capacity factor target was 93.00%, and the plant reached an actual capacity factor of 92.59%. As a result, Palo Verde generated more than 32 million megawatt-hours of clean, carbon-free electricity. APS operates PVGS and owns or leases 29.1% of the plant.

Entitled to incentive

Business unit manager

Type of incentive

Monetary reward

Incentive(s)

Performance indicator(s)

Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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

Our Business Unit managers' compensation programs focus on transparency with an emphasis on incentivizing performance. APS's compensation philosophy incorporates multiple business performance metrics, including nuclear capacity factor, to assess performance.

One example is the Palo Verde Generation Station's (PVGS) capacity factor is an example. PVGS has been the nation's largest producer of clean, carbon-free energy for 30 years and is critical to the Company's ability to achieve its clean energy goals and mitigate the effects of climate change.

In 2022, PVGS's capacity factor target was 93.00%, and the plant reached an actual capacity factor of 92.59%. As a result, Palo Verde generated more than 32 million megawatt-hours of clean, carbon-free electricity. APS operates PVGS and owns or leases 29.1% of the plant.

Entitled to incentive

Business unit manager

Type of incentive

Monetary reward

Incentive(s)

Other, please specify

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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

As part of the formula to determine performance ratings, Business Unit managers receive ratings based on the achievement of specified performance goals. Some Business Unit managers have goals and metrics that are related to climate change, including for example, carbon intensity goals, percent clean and energy efficiency

targets, and others. The performance of each Business Unit is important to the success of the Company.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Performance indicator(s)

Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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

Eligible employees receive annual cash incentives based on the achievement of specified performance goals, with a focus on transparency and an emphasis on incentivizing performance. APS's compensation philosophy incorporates multiple business performance metrics, including nuclear capacity factor, to assess performance.

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	1	Short-term horizons are used to plan for the upcoming fiscal year to track to short-term goals from each Business Unit. Emergent risks are

			often identified in short-term time horizons with ultimate longer-term implications.
Medium-term	1	5	Medium-term horizons are typically used for the business planning process and by the Integrated Resource Planning team.
Long-term	5	30	Long-term horizons are used by the Integrated Resource Planning team, Enterprise Risk Management and Corporate Strategy to ensure the business is planning for and assessing future risks and opportunities, and to support a sustainable future for Arizona.

C2.1b

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

APS defines substantive or strategic impact to the business based on whether an observed or anticipated effect is large enough to be meaningful within the context of financial, operational, reputational or safety assessments. To determine whether a risk will result in substantive or strategic impact, the Enterprise Risk Management (ERM) department has established a formal process by which Business Units identify and assess risks, including climate-related risks, consistent with our overall enterprise risk framework. The ERM framework is a depiction of how the Company to identifies, assesses, mitigates and controls risks. Under the ERM framework, Business Units assign values to each risk for financial, operational, reputational and safety impacts utilizing a 0-4 threshold; levels 3-4 are considered substantive.

For financial impact, the thresholds are described as follows:

- (04) - Major means an impact of greater than \$25M;
- (03) - Significant means an impact between \$15M and \$25M;
- (02) - Moderate means an impact between \$5M and \$15M;
- (01) - Limited means an impact between \$2M and \$5M;
- (00) - Very limited means an impact between \$0 and \$2M.

For operational impact, the thresholds are described as follows:

- (04) - Major means potential for grid instability leading to large-scale blackouts due to generation or transmission related voltage and frequency instabilities;
- (03) - Significant means potential for rolling blackouts at times when the demand exceeds supply (large geographical area effects) or an event which has a reasonable probability of significantly negatively impacting the Company's operational objectives;
- (02) - Moderate means outages arising from a major line or circuit outage impacting greater than 50,000 customers or an event which has a reasonable probability of moderate negative impact to the Company's operational objective;
- (01) - Limited means local outages caused by pole collapse, pole fires or transformer problems usually impacting a smaller geographical area or an event which has a reasonable probability of limited negative impact to the Company's operational objective.
- (00) - Very limited means no outages or local outages of a very small duration.

For reputational impact, the thresholds are described as follows:

- (04) - Major means an event that generates local/national media coverage or causes a dramatic change in confidence with public, employees and/or stakeholders and/or results in negative action by regulators, with the impact lasting more than twelve months;
(03) - Significant means an event that generates local/national media coverage or causes a significant change in confidence with public, employees and/or stakeholders and/or attracts attention of regulators, with the impact lasting more than three months;
(02) - Moderate means an event that generates local/national media coverage or causes a moderate change in confidence with public, employees and/or stakeholders, with the impact lasting between one and three months;
(01) - Limited means a complaint or recognition at a localized (contained) level with minimal change to stakeholder confidence, with impact lasting less than one month;
(00) - Very limited means little or no impact.

For safety impact, the thresholds are described as follows:

- (04) - Major means life-impacting injuries and/or fatalities to employees may result, significant impact to public health may result or evacuation is necessary;
(03) - Significant means lost-time injuries to employees may result and/or moderate impact to public health may result;
(02) - Moderate means moderate injuries, including OSHA recordable injuries, with short-term impacts to employees or minor impact to the public health may result;
(01) - Limited means minor injuries to employees may result or no impact to public health or impact to public is immediately correctable;
(00) - Very limited means no resulting injuries to employees or the public, including for example "close calls."

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

The Enterprise Risk Management (ERM) department facilitates the establishment and implementation of governance over process(es) related to identifying, assessing and reporting material risks inherent to the Company's business, including both physical and transitional climate-related risks. Risks are identified, defined, assessed and prioritized based on the likelihood and impact of their occurrence. Due to the complexity of operational, financial and regulatory environments, APS has numerous risk objectives and obligations, which are addressed by policies, controls, processes and programs. Risks are identified, defined, assessed and mitigated at an asset level.

APS identifies and assesses climate-related risks in a manner consistent with our overall enterprise risk management framework. The ERM framework is a depiction of how the Company identifies, assesses, mitigates and controls risks. The ERM process is one of the Company's efforts within this framework.

The ERM process at APS is a formal process by which Business Units and the ERM group support the Executive Risk Committee (ERC) as it carries out responsibilities set forth in the ERC charter. This includes the following and includes climate-related risks:

No less than annually, the ERC, in conjunction with the ERM group develops an enterprise risk management profile of the organization based on risk identification and assessments from the organization's Business Units and ERM group. The chairperson of the ERC or his designee presents that profile to the Chairman of the Board & Chief Executive Officer.

No less than annually, the ERC presents highly critical risks to the Board of Directors. No less than quarterly, or as often as the Chairperson determines to be necessary, the Business Unit, which is assigned ownership of the risk, with support from the ERM group, reviews and monitors relevant material organizational risks with members, participants and delegates of the ERC.

Business Units maintain an inventory of their most significant short-term, medium-term, and long-term risks and associated risk response plans. This includes significant risks on our direct operations as well as our upstream and downstream value chains. On an annual basis, Business Units record this information in a prescribed format, for analysis, categorization and prioritization of risks to support development of an enterprise risk profile. Risk prioritization can include an assessment of likelihood, impact, risk direction, velocity, external evidence, feasibility and cost of mitigation. Quantitative correlation analysis is used for Company projects and business scenarios to provide probability distributions of cost contingencies and schedule uncertainties for multiple risk drivers. Additionally, the Company utilizes qualitative analysis through periodic risk workshops, focusing on risk drivers, potential consequences and existing mitigation efforts. These types of sensitivity analyses are used to identify factors affecting the budget and timing of projects, leading to more effective and efficient mitigation strategies. Opportunities are prioritized based on their ability to assist in meeting or exceeding targets.

The ERM process receives input from and provides output to the execution and implementation of the Company's risk policies and controls, the business planning process and Business Units' specific risk management programs. However, the ERM process does not direct or control these policies, processes or programs, as they are exclusively within the control and purview of the responsible Business Units.

Transitional Risk: In 2022, the ERM identified and assessed the potential transitional risks of emerging decarbonization regulations and policies, by both state and federal regulators. Both federal legal compliance and liability and Arizona utility regulation were identified as enterprise top risks in 2022. An emergent climate-related regulatory risk in 2022 is the potential for federal regulation of greenhouse gasses from electric utilities, which could include promulgation of a carbon tax or cap-and-trade program. Carbon tax costs are challenging to forecast because, despite numerous efforts, the federal government has not reached policy consensus on the magnitude, timing or need for a carbon tax. It is difficult to forecast what final form that regulation may take; nonetheless, APS included the potential for carbon pricing in its 2020 Integrated Resource Plan (IRP). The CO₂ cost included in the IRP analysis was based on the California market cap-and-trade 2020 CO₂ cost of \$16.68, escalated at 2.5% beginning in 2025. Prior to 2025, APS's analysis assumed the CO₂ cost to be \$0. The resulting potential impact based on these assumptions and projected carbon emissions from 2020 through 2035 is \$1,278M-\$1,658M. To mitigate this transitional risk, APS maintains specialized environmental and public policy consultants who review and track local, state and federal environmental regulations, which may impact APS's current and future operational goals. Responsibility for oversight of the federal legal compliance and liability risk was allocated to the entire Board, and oversight for the Arizona utility regulation risks was allocated to the Board's Corporate Governance and Public Responsibility Committee.

Physical Risk: In 2022, the ERM also identified heightened risk of a catastrophic fire event as a climate-related physical risk, resulting from changes in precipitation patterns and extreme variability in weather patterns, and the resulting potential impact to operating costs. Catastrophic fire events were identified as an enterprise top risk in 2022. Due to extended drought over the past decade, forests and vegetation have been stressed from lack of regular and sufficient moisture, compounded by shorter, drier winters and longer, warmer summers. These changes in weather patterns pose a fire risk to the communities we serve. Wildfire risks have the potential to cause damage to our facilities, including transmission, generation, or distribution, which may increase operating costs and decrease revenues. To effectively respond to this risk, we work to create defensible space throughout Arizona. With approximately 5,800 miles of transmission lines and 34,000 miles of distribution lines throughout Arizona, the potential threat to our system from wildfires is very real. Responsibility for oversight of a catastrophic fire event was allocated to the Board's Nuclear and Operating Committee.

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	<p>One example of climate-related risk within current regulations is compliance with regional and national regulation. This risk is considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. There are numerous financial and operational risks inherent in managing mandatory compliance with the Company's vast and continually evolving regional and federal regulatory requirements. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigated measures.</p> <p>APS continues to transition its energy assets away from high carbon intensity assets (coal) to low or no carbon intensity assets (natural gas, renewables, storage), consistent with our Clean Energy Commitment to deliver 100% clean, carbon-free electricity by 2050.</p>
Emerging regulation	Relevant, always included	<p>The legal risk of increased litigation, including the cumulative effects of the legal/compliance requirements, is considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigation measures.</p> <p>There are several legislative and regulatory carbon-related actions that may impact future strategic resource decisions and are considered potential transitional risks that may impact operating costs. The utility industry may face alternative efforts from parties seeking to establish greenhouse gas (GHG) emission limitations for power plants.</p> <p>In addition, commencing in 2021, the U.S. Securities and Exchange Commission (SEC) is considering requirements for certain companies to report Scope 1-3 GHG emissions to the SEC, creating a mandatory regulatory environment for GHG emissions reporting. This rule, when finalized, could increase the potential for legal challenges over quantification or representation of GHG climate impacts. In 2022 we established a cross-functional working team to explore software solutions for an ESG Data Management Tool to help mitigate concerns meeting the proposed SEC requirements.</p> <p>APS continues to transition its energy assets away from high carbon intensity assets (coal) to low or no carbon intensity assets (natural gas,</p>

		renewables, storage), consistent with our Clean Energy Commitment to deliver 100% clean, carbon-free electricity by 2050.
Technology	Relevant, always included	<p>The risk of the impacts associated with disruptive technologies is considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigated measures.</p> <p>Risk associated with new technologies remains an acute concern for APS. As more emerging technologies, such as energy storage devices, become commercially viable, they will continue to change how our customers interact with us. This may require us to make changes to our energy delivery and generation to be more responsive to customers' needs, while balancing grid efficiency, reliability, and affordability. By being proactive and working with our customers to identify and respond to their changing needs, we remain well positioned to deliver value.</p> <p>These technology risks may cause potential resource substitutions and diversification that may impact our ability to operate in various conditions as demand for electricity shifts and diversifies. To address this shift to new technologies, APS is deploying a wide array of new distributed energy resource (DER) technologies to provide clean, reliable, affordable energy to its customers. These include battery storage, thermal storage, load management, electric vehicles and other beneficial electrification technologies that have the potential to increase the value of intermittent generation resources as well as increase grid reliability and stability.</p>
Legal	Relevant, always included	<p>The legal risk of increased litigation, including the cumulative effects of the legal/compliance requirements, is considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigation measures</p> <p>There are several legislative and regulatory carbon-related actions that may impact future strategic resource decisions and are considered potential transitional risks that may impact operating costs. The utility industry is likely to face additional efforts from federal regulators seeking to establish greenhouse gas emissions limitations for power plants.</p> <p>In addition, in 2021, the Securities and Exchange Commission (SEC) began considering requirements for certain companies to report Scope 1-3 GHG emissions to the SEC creating a mandatory as opposed to voluntary regulatory environment for GHG emissions reporting, which could arguably increase the potential for legal challenge over</p>

		<p>quantification or representation of GHG climate impacts. In 2022, we established a cross-functional working team to explore software solutions for an ESG Data Management Tool to help mitigate any concerns meeting the proposed SEC requirements.</p> <p>APS continues to transition its energy assets away from high carbon intensity assets (coal) to low or no carbon intensity assets (natural gas, renewables, storage) consistent with our Clean Energy Commitment to deliver 100% clean, carbon-free electricity by 2050.</p>
Market	Relevant, always included	<p>The market risk of a potential water supply shortage and increased demand is considered in our ERM process based on assessments conducted by business area manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigation measures.</p> <p>One potential shift in the market in the desert Southwest is a potential water supply shortage and increased demand. Water in the Southwest is a limited resource. However, APS has been diligent and forward-looking in its efforts to find and secure sufficient water supplies for current and future power generation.</p> <p>Although there could be both financial and operational risk if sufficient water is not available to meet APS needs, the probability of this happening is low, because APS has robust water contingency plans, secured assured water supplies, and established a dedicated business unit that addresses current and future water needs.</p>
Reputation	Relevant, always included	<p>The reputational risk of catastrophic fire safety is considered in our ERM process based on assessments conducted by the business unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigation measures.</p> <p>APS has taken great care to build our reputation over many years. Our commitment to our mission of creating a sustainable energy future for Arizona is a driving force in maintaining our reputational risk. For this reason, reputation is always considered when evaluating enterprise risks. We pride ourselves on delivering clean, reliable and affordable energy for our customers.</p>
Acute physical	Relevant, always included	<p>The physical risk of wildfires due to changes in physical climate parameters are considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigation measures.</p> <p>Catastrophic fire events were identified as an enterprise top risk in 2022. Due to extended drought over the past decade, forests and</p>

		<p>vegetation have been stressed from lack of regular and sufficient moisture, compounded by shorter, drier winters and longer, warmer summers. These changes in weather patterns pose a fire risk to the communities we serve. Wildfire risks have the potential to cause damage to our facilities, including transmission, generation, or distribution lines throughout Arizona, which may increase operating costs as a result of repair damaged facilities or impact the reliability of services, resulting in decreased revenues.</p> <p>With approximately 5,800 miles of transmission lines and 34,000 miles of distribution lines throughout Arizona, the potential threat to our system from wildfires is very real. APS is always focused on wildfires, planning year-round and continually strengthening the system so that customers can feel confident in our ability to serve them. Through proactive fire-mitigation measures, APS works to reduce the likelihood of fire in and around electrical equipment. Mitigation initiatives include the deployment of infrastructure systems technology as well as mobile technology to track and report fires.</p> <p>We also have proactively increased our system resiliency, implemented forest management programs to mitigate the risk of wildfires, and developed rapid-response plans to promptly restore power after storms. We also work to mitigate the threat of fire to our transmission system. To reduce risk to our power lines and first responders working during wildfires, we make a priority of creating defensible space to address vegetation around equipment poles. Our goal is to remove combustible material within a minimum 10-foot radius around equipment poles. Our right-of-way, which is cleared of vegetation, is used by firefighters to stop, anchor and suppress wildfires.</p>
Chronic physical	Relevant, always included	<p>The risk of a reduction in water supplies is considered in our ERM process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigated measures.</p> <p>In the long term, water supplies may be at risk due to climate change. Declining water reservoirs will require adaptation and new technological and policy solutions for water management. In 2022, U.S. Secretary of the Interior declared a Tier 2 shortage on the Colorado River. Even in the event of a more severe water shortage declaration if additional shortages are declared on the Colorado River, APS power plants are unlikely to be impacted due to water rights, contracts, agreements, and reliance on essentially drought- proof treated effluent. However, perceptions of water shortages could result in unfavorable press, loss of investor confidence, and limits in</p>

		municipal, commercial, or industrial growth. APS Water Resource Management (WRM) is responsible for securing primary, secondary and contingent water supplies for nine power plants, through a combination of water rights, water contracts and agreements. WRM also constructs and maintains reliable pumping, delivery and water storage infrastructure.
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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

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Transition risks for APS in 2022 that may have financial impact on our operating costs are climate change litigation and legislative and regulatory efforts to limit greenhouse gas (GHG) emissions. Although there are no current or planned congressional attempts to pass cap-and-trade legislation to regulate GHG emissions, in the event such legislation ultimately passes, the actual economic and operational impact to APS depends on a variety of factors, none of which can be fully known at this time. Factors include allowable GHG emissions; cost to reduce emissions; how any allowable emissions will be allocated to sources; the associated costs; and whether offsets and other measures to moderate the costs of compliance will be available. However, for numerous years the APS Integrated Resource Plan has included a "cost of carbon," which is factored into resource allocation decisions to address this potential cost to operations. Carbon tax costs are challenging to forecast because, despite numerous efforts, the federal government has not reached policy consensus on the magnitude, timing or need for a carbon tax. It is difficult to forecast what final form that regulation

may take; nonetheless, during 2019, the EPA took action to repeal the Clean Power Plan and replace it with the Affordable Clean Energy Rule, which was subsequently vacated and remanded back to the EPA. While the outcome is still unpredictable, future EPA regulation is likely. APS evaluated carbon costs in our resource planning effort, assuming that carbon legislation will occur at either the state or federal level and carbon pricing will take effect in 2025. APS has included the potential for carbon pricing in its 2020 Integrated Resource Plan (IRP).

The CO2 cost included in the IRP analysis was based on the California market cap-and-trade 2020 CO2 cost of \$16.68, escalated at 2.5% beginning in 2025. Prior to 2025, APS's analysis assumed the CO2 cost to be \$0. Based on financial modelling, the resulting potential impact based on these assumptions and projected carbon emissions from 2020 through 2035 is \$1,278 million-\$1,658 million. These costs would result in higher revenue requirements recovered through a rate case or adjustor mechanisms. A carbon cost will continue to be integrated into future scenarios as we work with stakeholders on future resource plans.

Time horizon

Medium-term

Likelihood

Likely

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

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Other, please specify

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased capital expenditures

Company-specific description

In 2022, the risk of a reduction in available water supply is an example of a risk that has potential financial impact requiring increased capital expenditures. The risk of reduction in water supply is driven by changes in precipitation patterns and extreme variability in weather patterns which can create the physical conditions leading to drought.

Since water can be a scarce resource in the Southwest, any change in precipitation or extended droughts driven by climate change brings with it inherent risks for APS and could materially impact on our business and operations. However, since its inception over a century ago, APS has been diligent and forward-looking in its efforts to find and secure sufficient water for current and future power generation. APS has an entire Business Unit dedicated to assessing and addressing our current and future water needs.

In 2022, water risk was considered in our Enterprise Risk Management (ERM) process based on assessments conducted by the Business Unit manager and the ERM group. The risk is recorded and monitored to determine the magnitude of the risk and the associated mitigated measures.

Time horizon

Medium-term

Likelihood

Likely

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

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Other, please specify

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Other, please specify

Increased capital expenditures and operating costs.

Company-specific description

In 2022, the risk of catastrophic fire event is an example of a risk that has potential financial impact to operating costs. The risk of catastrophic fire event is driven by changes in precipitation patterns and extreme variability in weather patterns which can create the physical conditions leading to drought. Catastrophic fire events were identified as an enterprise top risk for the last five years (2017-2022).

In Arizona, about half of primary residential and commercial structures are located near the wildland-urban interface. Due to extended drought over the past decade, forests and vegetation have been stressed from the lack of regular and sufficient moisture, compounded by shorter, drier winters and longer, warmer summers. These changes in weather patterns pose a fire risk to the communities we serve. To effectively respond to this risk, we collaborate with key stakeholders to reduce wildland fire risk and create defensible space throughout Arizona. With approximately 5,800 miles of transmission

lines and 34,000 miles of distribution lines throughout Arizona, the potential threat to our system from wildfires is very real. APS is focused on wildfires at all times, planning year-round and continually strengthening the system so that customers can feel confident in our ability to serve them power.

We use a three-pronged approach to mitigate fire risk. First, we assess site-specific fire risk and develop a model to prioritize resources. Second, we educate and inform the communities we serve about fire mitigation. Third, we implement a proactive program to create defensible space around poles (DSAP) to address vegetation at the base of utility poles. The goal of the DSAP program is to remove combustible material inside a minimum 10-foot radius around equipment poles on a three-year cycle.

Time horizon

Short-term

Likelihood

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 of response to risk

Description of response and explanation of cost calculation

Comment

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 supportive policy incentives

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

The energy efficiency standard (EES) set by the Arizona Corporation Commission, requires utilities to achieve cumulative savings equivalent to 22% of 2020 retail sales. APS continued successful implementation of DSM programs in 2022 and continued to stay in compliance with the 22% cumulative savings goal throughout the year.

In addition, in the 2022 Demand Side Management (DSM) Plan, the ACC established a goal for APS to achieve annual incremental savings of 405,002 MWh from approved DSM programs in 2022. APS was able to deliver over 87.4% of this annual savings goal by achieving savings of 354,153 MWh. Since 2005, the lifetime energy savings from our energy efficiency programs have avoided approximately 7,496,969 MWh, and 56,512,000 million lbs of carbon emissions.

There is a cost to implement DSM programs, but ultimately the savings from DSM potentially reduce our indirect (operating) costs by helping to reduce demand on our fleet. APS offers a comprehensive portfolio of DSM programs to achieve the required EES. The APS DSM portfolio also includes a focus on demand response, load shifting, energy storage and load management programs designed to help flatten system load shapes and shift energy use into the middle of the day during peak solar production when APS's generation mix has the lowest carbon intensity. These programs are essential to us reaching our goal to provide 100% clean, carbon-free electricity by 2050.

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

Each year APS files a DSM implementation plan with the Arizona Corporation Commission (ACC) that includes detailed information about DSM program goals, estimated participation, energy savings, emissions reductions and proposed budgets. Since program inception, this investment has created over \$1.25 billion of net economic benefits (present value of societal benefits created by avoiding energy generation less the present value of societal costs from installing energy efficient measures) for APS customers.

The APS DSM portfolio is measured for cost effectiveness using the Societal Benefits Test. These net benefits are the result of avoided generation capacity, fuel savings and operations and maintenance savings due to APS DSM programs. These net benefits do not include any monetary value for the carbon emission savings resulting from programs – these savings are quantified but not monetized.

Based on portfolio cost effectiveness results reported to the Arizona Corporation Commission, the APS DSM portfolio has produced over \$1.25 billion in net benefits (total benefits minus costs) for APS customers from 2005-2022. Of the \$1.25 billion, \$487 million in benefits result from implemented residential energy efficiency programs, \$793.9 million in benefits result from implemented business energy efficiency programs, \$56.5 million in benefits result from implemented codes and standards and \$86.8 million in costs result from additional DSM initiatives (tribal communities, measurement and evaluation, and performance incentives). Energy efficiency measures implemented by our customers in 2022, totalling 354,153 MWh annual savings, contributed \$35.6 million net benefits to the over \$1.25 billion in net benefits from 2005-2022.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

During the time period from 2005 through 2022, APS spent a total of over \$808.1 million in customer-focused demand side management (DSM) programs and expenses. This

investment has created over \$1.25 billion of net economic benefits (present value of societal benefits created by avoiding energy generation less the present value of societal costs from installing energy efficient measures) for APS customers. Of the \$808.1 million in program to date expenses, \$343.9 million was for the implementation of residential energy efficiency program, \$298.2 million for the implementation of non-residential programs, \$47.8 million for other initiatives including Energy Storage and Load Management programs, Managed EV Charging Pilot, Energy and Demand Education, tribal communities and codes and standards, \$32.9 million for measurement, evaluation, and research, and \$57.4 million for performance incentives and \$27.9 million for Demand Response programs.

Each year APS files an annual DSM implementation plan with the Arizona Corporation Commission for approval that includes detailed information about DSM program goals, estimated participation, energy savings, emissions reductions and proposed budgets.

Comment

Identifier

Opp2

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

Increased diversification of financial assets

Company-specific description

In January 2020, APS announced its Clean Energy Commitment, an aspirational goal to provide 100% clean, carbon-free electricity by 2050 with a nearer-term 2030 target of achieving a resource mix that is 65% clean energy, with 45% of our generation portfolio coming from renewable energy. The financial impacts of increasing renewables as part of our resource mix reduce our exposure to future fossil fuel price increases, as we do not need to purchase additional fossil fuels. The Arizona Corporate Commission (ACC) has adopted a renewable energy standard (RES), in which electric utilities under its jurisdiction must supply an increasing percentage of their retail electric energy sales from eligible renewable resources, including solar, wind, biomass, biogas and geothermal technologies.

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

Comment

Identifier

Opp3

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

Reduced indirect (operating) costs

Company-specific description

APS is deploying a wide array of new distributed energy resource (DER) technologies to provide clean, reliable, affordable energy to its customers. These include battery storage, thermal storage, load management, electric vehicles and other beneficial

electrification technologies that have the potential to increase the value of intermittent generation resources as well as increase grid reliability and stability, while also reducing carbon emissions. Besides simply storing and dispatching power, these technologies have the ability to provide other ancillary services such as voltage regulation, frequency response, and support for intermittent renewable resources. DERs can also help defer investments in more traditional transmission and distribution infrastructure, allowing system reliability to be maintained at lower overall cost. With respect to renewable resources, energy storage makes these intermittent resources more useful for the utility system by better aligning the availability of power with the system's peak energy demand.

Time horizon

Short-term

Likelihood

Very likely

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 to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Comment

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

Our clean energy commitment is to provide 100% carbon free electricity by 2050 with a nearer-term 2030 target of achieving a resource mix that is 65% clean energy, with 45% of our generation portfolio coming from renewable energy, and a planned exit from all coal fired generation by 2031. Our 2050 target is consistent with the Intergovernmental Panel on Climate Change's recommended timeframe for limiting global warming this century to 1.5°C above pre-industrial levels (SR1.5). We will continue to monitor climate science developments to stay aligned with new research and recommendations. While APS has key performance indicators tracking our progress as well as initiatives and strategies to achieve our commitment, we are working on developing a public facing-climate transition plan that aligns with a 1.5C world and which has a feedback mechanism in place for stakeholders. In addition, our 2020 Integrated Resources Plan (IRP), which is available to the public, does have our transition plan through 2035.

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	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Other, please specify Our strategy has been influenced by climate-related risks and opportunities, and as of late 2022, we have partnered with the Electric Power Research Institute to conduct a Climate Change Scenario Analysis.	We use a variety of methods to inform our strategies to achieve our clean energy commitment including both qualitative and quantitative analysis, including an analysis of risks and opportunities, KPIs, compensation incentives, benchmarking, investment in innovation. Additionally, we have begun work on a Climate Change

			<p>Scenario Analysis that is relevant for APS.</p> <p>We take our clean energy commitment seriously and have a variety of business frameworks in place to ensure we are taking the short, medium, and long-term steps to achieve our commitment. We believe climate scenario planning is an important tool and we have embarked on this process.</p>
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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>A climate related risk and opportunity the Company has addressed in 2022 is our strategic decision to continue the implementation of a new online marketplace to reach customers digitally and provide access to educational information, APS rebates and special discounts on energy efficient devices and appliances. This strategy was influenced by APS's plan to mitigate climate-related technology risks by providing customers with the necessary resources to understand and manage their own energy and peak demand. This strategy is anticipated to cover both short- and medium-term time horizon (0-5 years).</p> <p>In 2022, APS launched the Green Power Partners Program, which provides business with special options to reach their sustainability goals and transition to 100% clean operations.</p> <p>Throughout the year we also promoted certain residential participation in our demand-side management programs in the marketplace.</p>
Supply chain and/or value chain	Yes	<p>A climate related risk and opportunity the Company has addressed in our value chain is the adoption of a fleet vehicle standard that will impact our procurement strategy and value chain. We have continued on a path to transitioning 30% of our light-duty vehicles and equipment (comprised of forklifts, all-terrain vehicles, golf carts and</p>

		<p>light-duty passenger vehicles) to electric by 2025 with an aspirational goal of achieving a 100% clean, carbon-free fleet by 2050.</p> <p>As of the end of 2022, we have electrified 16% of our light-duty vehicles and equipment and have placed an order for our first round of fully electric light-duty pickup trucks.</p> <p>Our strategic decision to adopt a fleet vehicle standard was influenced by the climate-related risk of emerging regulation surrounding GHG emissions reductions. The standard will reduce our Scope 1 emissions and is anticipated to span both medium- and long-term time horizons (1-30 years). Our transportation fleet's conversion to more fuel-efficient vehicles and electrification continues through market research and updates to our electrification strategy. We are monitoring medium and heavy-duty options and will adopt them once there is more commercial availability. Through this ongoing conversion and by using our fleet more efficiently, we are working to reduce carbon emissions and operating costs.</p>
Investment in R&D	Yes	<p>Electric vehicle (EV) adoption in Arizona represents a climate related opportunity. A substantial strategic decision to invest in EV adoption was influenced by the climate-related opportunity to implement the use of lower-emission sources of energy. APS is planning to continue to expand and develop this technology across an anticipated medium and long-term time horizons (1-30 years). The transportation sector represents a significant emissions source, and the electrification of that economic sector can help achieve overall air quality goals and our goal of providing 100% clean, carbon free energy by 2050.</p> <p>We launched an innovative pilot program encouraging electric vehicle (EV) adoption by providing charging stations throughout Arizona, where customers would install and own EV charging equipment located at various businesses, government agencies, non-profits and multifamily communities within the Company's service territory. Through the program, APS is gaining valuable knowledge to better understand the needs of Arizona with regards to the electrification of the transportation sector.</p>
Operations	Yes	<p>A climate related risk and opportunity for our operations is investment in capital in clean generation. A substantial strategic decision was to invest in capital in clean</p>

		<p>generation that was influenced by the climate-related risk of emerging regulations for carbon reduction. Our planned investments and clean energy expenditures are anticipated to span short medium- and long-term time horizons (1-30 years).</p> <p>A key driver of the Company's strategic plan is to take steps to reduce carbon emissions with a long-term goal of providing 100% clean, carbon-free electricity by 2050 through the Company's clean energy commitment. This goal includes a nearer-term 2030 target of achieving a resource mix that is 65% clean energy, with 45% of our generation portfolio coming from renewable energy. We also plan to exit from all coal-fired generation by 2031, seven years sooner than previously projected.</p> <p>The commitment is informed by consultations with Arizona universities and non-governmental organization experts. This will impact the operations of the Company as it adopts resources and technologies to achieve this plan.</p>
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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	Capital allocation	<p>APS currently allocates its capital based on clean generation and other environmental expenditures. These expenditures are influenced by climate-related technology opportunities. We have planned environmental expenditures that span the short (0-1 years), medium (1-5 years), and long-term (5-30 years) time horizons, and are constantly monitoring the status of related environmental matters. Capital expenditures are comprised of various additions and improvements to APS's clean generation resources, including nuclear plants, renewables and energy storage systems. Examples of the types of projects included in the forecast of generation capital expenditures are additions of renewables and energy storage and upgrades and capital replacements of our various nuclear and fossil power plant equipment, such as turbines, boilers and environmental equipment. We are monitoring the outcome of environmental matters, which could require modification to our planned environmental expenditures.</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, but we 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

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO₂e)

16,557,441

Base year Scope 2 emissions covered by target (metric tons CO₂e)

126,614

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO₂e)

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

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

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

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

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

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

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

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

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO₂e)

Base year total Scope 3 emissions covered by target (metric tons CO₂e)

Total base year emissions covered by target in all selected Scopes (metric tons CO₂e)

16,684,055

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

99.5

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

99.5

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO2e)

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 CO2e)

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 CO2e)

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 CO2e)

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 CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

99.5

Target year

2032

Targeted reduction from base year (%)

70

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

5,005,216.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

12,665,061.08

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

123,121

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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 CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

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)

12,788,182.55

Does this target cover any land-related emissions?

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

33.3583896207

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In January 2020, the Company set the boldest clean-energy goal of all Arizona electric companies, as well as one of the most ambitious in the country: to deliver 100% clean, carbon-free electricity by 2050. This goal includes a nearer-term 2030 target of 65% clean energy, with 45% of our generation portfolio coming from renewable energy. We also plan to exit all coal-fired generation by 2031. The commitment is informed by consultations with Arizona universities and non-governmental organization experts. Their input is grounded in current, globally recognized climate science and provides a greater understanding of the impacts of our changing climate across the state.

Our 2050 target is consistent with the Intergovernmental Panel on Climate Change's recommended timeframe for limiting global warming this century to 1.5°C above pre-industrial levels. We will continue to monitor climate science developments to stay aligned with new research and recommendations. The target year of 2032 considers the first two milestones of our Clean Energy Commitment: with a nearer-term 2030 target of achieving a resource mix that is 65% clean energy, with 45% of our generation portfolio coming from renewable energy and ceasing reliance on coal-fired generation. Our 2020 Integrated Resource Plan (IRP) includes an Action Plan that lays out the near-term actions we must take to progress rapidly to our 2030 interim target and ultimate 2050 goal. This target aligns with path 2 Shift in our 2020 IRP.

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

During 2022, the share of APS's energy supply from clean resources was 51%, which includes energy from nuclear, renewables and demand side management (DSM). We are on track to reach our goal of 65% clean resource mix by 2030. In addition, by 2030, 45% of our generation portfolio will be from renewable energy. Renewable energy is measured in accordance with the Arizona Corporation Commission's Renewable Energy Standard as a percentage of retail sales.

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

Target reference number

Abs 2

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

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO₂e)

16,557,441

Base year Scope 2 emissions covered by target (metric tons CO₂e)

126,614

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO₂e)

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

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

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

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

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

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

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

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

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

16,684,055

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

99.5

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

99.5

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

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 CO₂e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO₂e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO₂e)

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

99.5

Target year

2050

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

12,665,061.08

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

123,121.47

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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 CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

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)

12,665,061.08

Does this target cover any land-related emissions?

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

24.0888316419

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In January 2020, the Company set the boldest clean-energy goal of all Arizona electric companies, as well as one of the most ambitious in the country, to deliver 100% clean, carbon-free electricity by 2050. This goal includes a nearer-term 2030 target of 65% clean energy, with 45% of our generation portfolio coming from renewable energy. We also plan to exit coal-fired generation by 2031. The commitment is informed by consultations with Arizona universities and non-governmental organization experts. Their input is grounded in current, globally recognized climate science and provides a greater understanding of the impacts of our changing climate across the state. Our 2050 target is consistent with the Intergovernmental Panel on Climate Change's recommended timeframe for limiting global warming this century to 1.5°C above pre-industrial levels. We will continue to monitor climate science developments to stay aligned with new research and recommendations.

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

During 2022, the share of APS's energy supply from clean resources was 51%, which includes energy from nuclear, renewables and demand side management (DSM). We are on track to reach our goal of 65% clean resource mix by 2030. In addition, by 2030, 45% of our generation portfolio will be from renewable energy. Renewable energy is measured in accordance with the Arizona Corporation Commission's Renewable Energy Standard as a percentage of retail sales.

At the end of 2022, APS had a diverse portfolio of existing and planned renewable resources totalling 3,894 MW, including solar, wind, geothermal, biomass and biogas. Of this portfolio, 2,418 MW are currently in operation and 1,476 MW are under contract for development or are under construction. Renewable resources in operation include 264 MW of facilities owned by APS, 736 MW of long-term purchased power agreements, and an estimated 1,418 MW of customer-sited, third-party owned distributed energy resources.

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?

Target(s) to increase low-carbon energy consumption or production
Net-zero target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2007

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2007

Consumption or production of selected energy carrier in base year (MWh)

324,094

% share of low-carbon or renewable energy in base year

1.1

Target year

2025

% share of low-carbon or renewable energy in target year

15

% share of low-carbon or renewable energy in reporting year

12

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

78.4172661871

Target status in reporting year

Underway

Is this target part of an emissions target?

Yes, this target is integral to meeting our renewable energy targets as laid out in our Clean Energy Commitment. In January 2020, APS announced its Clean Energy Commitment. By 2050, APS will provide 100% clean, carbon-free and affordable electricity to customers. The Clean Energy Commitment includes a 2030 target of achieving a resource mix that is 65% clean energy, with 45% of our generation portfolio coming from renewable energy. This 2030 target will serve as a critical checkpoint for the company's resource planning, investment strategy, and customer affordability efforts as APS moves toward our commitment.

APS's clean energy goals build on the company's history of promoting and integrating renewables, energy efficiency, battery storage, and carbon-free generation. Achieving these aggressive goals will require a combination of the right technologies, collaborative partnerships and a supportive policy environment that understands that flexibility is critical to balancing the building of clean energy generation, while maintaining affordability and reliability for our customers. As APS pursues its Clean Energy Commitment, the company will continue to install resources that allow it to comply with the Renewable Energy Standard and Tariff Rules.

Is this target part of an overarching initiative?

Other, please specify

Our commitment to 100% clean, carbon-free energy by 2050.

Please explain target coverage and identify any exclusions

The Arizona Corporation Commission requires, through the Renewable Energy Standard and Tariff Rules (RES Rules), that 12.0% of the utility's 2022 retail kilowatt-hour sales come from eligible renewable energy resources.

The RES Rules further mandate that 30% of that 12% be fulfilled be fulfilled with energy produced from Distributed Energy) sources, one-half of which may come from residential applications and the remaining one-half from non-residential, nonutility applications.

The RES Rules also mandates that 70% of the 12% of the utility's 2022 retail sales be fulfilled with energy produced from renewable generation resources. APS defines Renewable Generation as renewable resources interconnected on the utility side of the meter. Renewable Generation resources are grid-scale projects and apply to the RES Rules total production requirement.

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

On July 1, 2021, APS filed its 2022 RES Implementation Plan, which was subsequently amended on December 9, 2021. On May 18, 2022, the ACC approved the 2022 RES Implementation Plan, including an amendment requiring a stakeholder working group to convene and develop a community solar program for the Commission's consideration at a future date. On September 23, 2022, APS filed a community solar proposal in compliance with the ACC order that was informed by a stakeholder working group. APS is proposing a small, pilot scale program size of up to 140 MW that would be selected through a competitive RFP. The ACC has not yet ruled on the proposal. However, on

November 10, 2022, the ACC approved a bifurcated community solar process, directing ACC Staff to develop a statewide policy through additional stakeholder involvement and establishing a separate evidentiary hearing to define other policy components. The community solar program was deferred to the ACC's Hearing Division so that a formal evidentiary hearing could be held to consider issues of substance related to community solar. APS cannot predict the outcomes of these future activities.

On July 1, 2022, APS filed its 2023 RES Implementation Plan, and on November 10, 2022, the ACC approved the 2023 RES Implementation Plan, including APS's requested waiver of the distributed energy requirement for 2023.

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

Abs2

Target year for achieving net zero

2050

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

Carbon-free energy means that no carbon is emitted to the atmosphere, which is going above and beyond net zero. In January 2020, the Company set the boldest clean-energy goal of all Arizona electric companies, as well as one of the most ambitious in the country, to reach 100% clean, carbon-free electricity by 2050. This goal includes a nearer-term 2030 target of 65% clean energy, with 45% of our generation portfolio coming from renewable energy. We also plan to exit from coal-fired generation by 2031. The commitment is informed by consultations with Arizona universities and non-governmental organization experts. Their input is grounded in current, globally recognized climate science and provides a greater understanding of the impacts of our changing climate across the state. Our 2050 target is consistent with the Intergovernmental Panel on Climate Change's recommended timeframe for limiting global warming this century to 1.5°C above pre-industrial levels. We will continue to

monitor climate science developments to stay aligned with new research and recommendations.

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

Unsure

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

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.

No

C4.3d

(C4.3d) Why did you not have any emissions reduction initiatives active during the reporting year?

Our goals include adding clean resources to meet customers' growing energy needs. Since our initial announcement in 2020, we've procured over 2,509 megawatts (MW) of clean energy and storage – all of which are expected to be in service for APS customers no later than 2025. All 2,509 MW were procured through competitive solicitations or as a Qualifying Facilities through Public Utilities Regulatory Policies Act of 1978, ensuring competitive pricing for new resources as we plan to serve our growing economy.

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

Group of products or services

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

Other, please specify

Arizona Energy Efficiency Standard and all programs use ENERGY STAR products

Type of product(s) or service(s)

Other

Other, please specify

Energy Efficiency programs for customers, residential and commercial

Description of product(s) or service(s)

APS offers customers a comprehensive portfolio of energy efficiency options.

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 CO₂e 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

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Power
Solar PV

Description of product(s) or service(s)

APS Green Choice program allows customers to purchase up to 100% of their power from renewable energy from Arizona and New Mexico.

APS also offers a Green Power Program for businesses with three options for participation.

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 CO₂e 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.

The natural gas consumed by APS is used as a fuel for our fleet of 37 natural gas-fired combustion turbines in Arizona and for start-up operations in certain coal units at our Four Corners and Cholla Power Plants in New Mexico and Arizona respectively. Due to the large

amount of natural gas used by the facilities, APS works to properly manage and prevent inadvertent releases of methane to assure plant safety, environmental protection, and fiscal responsibility.

Our main emission reduction efforts regarding methane include ensuring methane leaks do not go undetected by plant personnel. To do so, APS uses third-party companies to conduct methane leak detection surveys on the underground and accessible above – ground natural gas pipelines, valves, and gas conditioning system. Our eight fossil plants all have their own frequency of third-party inspections depending on various requirements: Four Corners Power Plant gets an annual inspection; Cholla Power Plant, Ocotillo Power Plant, Saguaro Power Plant, West Phoenix Power Plant and Yucca Power Plant get semi-annual inspections; Redhawk Power Plant and Sundance Power Plant get quarterly inspections.

The surveys are conducted by a third party. Any leaks identified are tagged and a report is generated. The detected leaks are classified using ASTM B31.8 Appendix G-11 (1983) to determine severity and action criteria. The reports are sent to the Corporate Engineer who creates a service request for each plant in our internal work management system. The plant then schedules the repairs to be completed by maintenance or an outside vendor. The surveys start at the APS gas yards at each plant and cover the underground and accessible above-ground piping up to the unit. The contractor uses methane-specific intrinsically safe detection equipment. In addition, to assure continual safety of personnel and equipment, plant operators monitor and inspect the natural gas supply lines and gas conditioning equipment regularly. Plant operators record any identified methane leaks and issue work orders for plant maintenance to repair leaks as quickly as possible. The daily monitoring by plant personnel and the third-party natural gas detection inspections provides a process for APS to ensure any methane leaks are promptly identified and repaired. In 2022, APS continued to do surveys at the to meet our regulatory requirements and maintain our commitment to our leak detection program.

Because large Grade 1 or 2 methane leaks at the sites are rare, a specific methane reduction target has not been established. However, the methane identification and reduction actions taken by the plant ensures emissions are minimized to maintain the plant in a safe condition, protect the environment from greenhouse gas emissions and maintain fiscal responsibility by ensuring natural resources are not wasted. APS is currently becoming engaged with various organizations to understand the larger issue of methane emissions associated with natural gas exploration, production, and distribution emissions methodology.

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?

No

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?	
Row 1	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 CO2e)

16,661,531

Comment

2005 is used as the Scope 1 baseline year to align our carbon emission reductions with the targets set at COP 21.

Scope 2 (location-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

116,939

Comment

2020 is used as the baseline year for Scope 2 carbon emissions because this is the first year we updated our methodology.

Scope 2 (market-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

116,939

Comment

2020 is used as the baseline year for Scope 2 carbon emissions because this is the first year we updated our methodology.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

339

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

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

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO₂e)

2,647,368

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2016

Base year end

December 30, 2016

Base year emissions (metric tons CO₂e)

6,043

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

1,685

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2016

Base year end

December 30, 2016

Base year emissions (metric tons CO₂e)

4,153

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2016

Base year end

December 30, 2016

Base year emissions (metric tons CO₂e)

3,586

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

C5.3

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

The Climate Registry: Electric Power Sector (EPS) Protocol

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)

12,665,061.08

Comment

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

We calculate both Location-Based and Market-Based emissions

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

123,121.47

Scope 2, market-based (if applicable)

91,739.65

Comment

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?

No

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 CO₂e)

159

Emissions calculation methodology

Spend-based method

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

99

Please explain

Includes paper products

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

We do not separate capital goods from overall purchased goods.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

2,838,506

Emissions calculation methodology

Site-specific method

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

99

Please explain

CO2e emissions are associated with purchase power agreements from conventional sources such as gas units. marketing and trading purchases (resales) and renewable purchased power.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

6,953

Emissions calculation methodology

Distance-based method

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

99

Please explain

APS receives total miles from our logistics firm that handles the majority of our shipping needs. The CO2e emissions are calculated by APS using the EPA Emission Factors for Greenhouse Inventories and the 5th Assessment of Global Warming Potentials. Specifically, the product transport emission factors for medium and heavy-duty trucks.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,616

Emissions calculation methodology

Waste-type-specific method

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

99

Please explain

Waste data includes the scrap metal, small pole and pad mount transformers, single stream (co-mingled) recycling, and other recycling as captured through Investment Recovery only. Investment Recovery receives data from vendors who recycle our waste.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

623

Emissions calculation methodology

Spend-based method
Distance-based method
Site-specific method

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

75

Please explain

CO2e emissions from air travel, rental car travel, and employee mileage reimbursement for 2022.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

219

Emissions calculation methodology

Distance-based method

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

99

Please explain

We encourage employees to take part in the Trip Reduction Program. This program focuses on reducing the number of single-occupancy vehicles commuting to our work sites. Maricopa County is a customer of APS, but the survey is not performed as part of our value chain.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have any upstream leased assets.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

APS generates and distributes electricity. Transmission losses are accounted in our Scope 1 emissions at the point of generation and purchased power line losses are accounted for in Scope 2 emissions.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

APS generates and distributes electricity. Electricity is an end product and is not processed. Therefore, we do not have Scope 3 emissions related to processing sold electricity.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Emissions from the end use of electricity, our product is calculated into our Scope 1 emissions at the point of generation. Emissions of sold electricity are therefore not included in our Scope 3 emissions.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The use of electricity is considered as the end-of-life treatment of our product. This is calculated in our Scope 1 emissions and therefore not included in our Scope 3 emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have a current method to evaluate emissions by any of our investments.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have any additional upstream sources in 2022.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

APS does not have any additional downstream sources in 2022.

C6.7

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

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO₂.

	CO ₂ emissions from biogenic carbon (metric tons CO ₂)	Comment
Row 1	3,947	

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.003

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

12,756,799.73

Metric denominator

unit total revenue

Metric denominator: Unit total

4,324,000,000

Scope 2 figure used

Market-based

% change from previous year

0

Direction of change

No change

Reason(s) for change

Other, please specify

No change

Please explain

No change between 2021 and 2022

Intensity figure

0.369

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

12,756,799.73

Metric denominator

megawatt hour transmitted (MWh)

Metric denominator: Unit total

34,592,000

Scope 2 figure used

Market-based

% change from previous year

9.82

Direction of change

Increased

Reason(s) for change

Change in renewable energy consumption

Please explain

In 2022, gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e emissions per total MWh transmitted (a combination of generated and purchased generation) increased, due to higher than expected load growth, high temperatures in our service area, and underproduction of solar resources, which required higher than expected utilization of our coal facilities.

However, we have had an overall 24% decrease in annual carbon dioxide emissions since 2005. During 2022, the share of APS's energy supply from clean resources was 51%, which includes energy from nuclear, renewables and demand side management (DSM). We are on track to reach our goal of 65% clean resource mix by 2030. In addition, by 2030, 45% of our generation portfolio will be from renewable energy.

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 CO ₂ e)	GWP Reference
CO ₂	12,665,061.08	IPCC Fifth Assessment Report (AR5 – 100 year)
SF ₆	10,761	IPCC Fifth Assessment Report (AR5 – 100 year)

CH4	27,708	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	47,176	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	0	0	10,761	10,761	
Combustion (Electric utilities)	12,553,688	27,705	0	12,581,393	
Combustion (Gas utilities)	0	0	0	0	APS is not a gas utility
Combustion (Other)	15,550	3	0	15,640	Diesel and gasoline from mobile fleet and generators
Emissions not elsewhere classified	0	0	0	0	No additional emissions to report

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	12,665,061.08

C7.3

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

- By business division
- By facility
- By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO ₂ e)
Generation. All emissions based on owned energy production.	12,639,242
Transmission and Distribution. All emissions based on fleet and mobile generators.	19,766

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO ₂ e)	Latitude	Longitude
Four Corners Power Plant	7,256,334	40.929011	-121.544389
Cholla Power Plant	3,258,231	34.94	-110.33
Ocotillo Power Plant	496,431	33.4225	-111.9122
West Phoenix Power Plant	1,275,751	33.773441	-84.394931
Redhawk Power Plant	2,212,815	33.335833	-112.840528
Yucca Power Plant	142,490	32.715235	-114.710441
Saguaro Power Plant	68,830	32.552181	-111.298135
Douglas Power Plant	85	31.363622	-109.552532
Sundance Power Plant	266,683	53.5075	-114.557222

C7.3c

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

Activity	Scope 1 emissions (metric tons CO ₂ e)
Stationary Combustion	12,628,481
Mobile Combustion	19,766
Fugitive Combustion	10,761

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	12,665,061.08	

C7.7

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

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?

Increased

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				Renewable facilities - decrease of 73,153 MWh 623,273 MWh produced in 2021 vs 550,120 MWh produced in 2022
Other emissions reduction activities	0	No change		Not applicable in 2022
Divestment	0	No change		Not applicable in 2022
Acquisitions	0	No change		Not applicable in 2022
Mergers	0	No change		Not applicable in 2022
Change in output				Coal facilities – increase of 1,993,726 MWh 6,836,238 MWh produced in 2021 vs 8,829,964 MWh produced in 2022

Change in methodology	0	No change		Not applicable in 2022
Change in boundary	0	No change		Not applicable in 2022
Change in physical operating conditions	0	No change		Not applicable in 2022
Unidentified	0	No change		Not applicable in 2022
Other	0	No change		Not applicable in 2022

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?

Market-based

C8. Energy

C8.1

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

More than 70% but less than or equal to 75%

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)	550,120	26,932,729	27,482,849
Consumption of purchased or acquired electricity		2,418,000	6,127,303	8,545,303
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		2,968,120	33,060,032	36,028,152

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

Unable to confirm 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

Not applicable

Other biomass

Heating value

Unable to confirm 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

Not applicable

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

550,120

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Solar energy

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

8,829,964

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

514

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

8,769,795

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

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

Heating value

HHV

Total fuel MWh consumed by the organization

9,332,456

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Nuclear

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

27,482,849

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

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)

1,357

Gross electricity generation (GWh)

9,520

Net electricity generation (GWh)

8,830

Absolute scope 1 emissions (metric tons CO₂e)

8,784,801

Scope 1 emissions intensity (metric tons CO₂e per GWh)

995

Comment

Lignite

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

Not applicable

Oil

Nameplate capacity (MW)

70

Gross electricity generation (GWh)

0.55

Net electricity generation (GWh)

0.51

Absolute scope 1 emissions (metric tons CO₂e)

853

Scope 1 emissions intensity (metric tons CO₂e per GWh)

1,658

Comment

Gas

Nameplate capacity (MW)

3,503

Gross electricity generation (GWh)

9,152

Net electricity generation (GWh)

8,870

Absolute scope 1 emissions (metric tons CO2e)

3,768,035

Scope 1 emissions intensity (metric tons CO2e per GWh)

430

Comment

Sustainable 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

Not applicable

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

Not applicable

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

Not applicable

Nuclear

Nameplate capacity (MW)

1,146

Gross electricity generation (GWh)

9,799

Net electricity generation (GWh)

9,332

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

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

Not applicable

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

Not applicable

Hydropower

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

Not applicable

Wind

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

Not applicable

Solar

Nameplate capacity (MW)

264

Gross electricity generation (GWh)

616

Net electricity generation (GWh)

550

Absolute scope 1 emissions (metric tons CO₂e)

0

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

Marine

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

Not applicable

Other renewable

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

Not applicable

Other non-renewable

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

Not applicable

Total

Nameplate capacity (MW)

6,340

Gross electricity generation (GWh)

29,087

Net electricity generation (GWh)

27,483

Absolute scope 1 emissions (metric tons CO₂e)

12,665,061.08

Scope 1 emissions intensity (metric tons CO₂e per GWh)

460

Comment

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)

8,545,303

Consumption of self-generated electricity (MWh)

27,482,849

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]

36,028,152

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)

36,028

Annual energy losses (% of annual load)

4

Scope where emissions from energy losses are accounted for

Scope 1

Emissions from energy losses (metric tons CO2e)

634,093

Length of network (km)

64,052

Number of connections

1,344,414

Area covered (km2)

88,060

Comment

APS owns transmission (above 69kV) and distribution lines. However, the majority of the lines are distribution so both types of lines are included in this response. The number of connections shown is the number of electric customers served at year end.

Additionally, our line losses from purchased power are covered in our Scope 2 emissions. However, line losses for electricity we generate and distribute are accounted for at the point of generation, Scope 1. Since we cannot choose two scopes, for the purpose of this response, Scope 1 was chosen as the majority of the power we distribute is from power that we generate.

C9. Additional metrics

C9.1

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

Description

Metric value

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

Direction of change

Please explain

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)

55,047,039.09

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

10

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

Explain your CAPEX calculations, including any assumptions

CAPEX is not provided publicly beyond a 3-year estimate. Therefore, we are providing a three (2023-2025) year total instead of a 5-year total. All figures with the exception of 2022 data are estimations.

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

Not applicable

Oil

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

1,251,376.21

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

0.2

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

0.3

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

Explain your CAPEX calculations, including any assumptions

CAPEX is not provided publicly beyond a 3-year estimate. Therefore, we are providing a three (2023-2025) year total instead of a 5-year total. All figures with the exception of 2022 data are estimations.

Gas

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

149,644,778.45

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

34.3

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

30

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

Explain your CAPEX calculations, including any assumptions

CAPEX is not provided publicly beyond a 3-year estimate. Therefore, we are providing a three (2023-2025) year total instead of a 5-year total. All figures with the exception of 2022 data are estimations.

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

Not applicable

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

Not applicable

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

Not applicable

Nuclear

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

111,879,313

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

20

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

8.6

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

Explain your CAPEX calculations, including any assumptions

CAPEX is not provided publicly beyond a 3-year estimate. Therefore, we are providing a three (2023-2025) year total instead of a 5-year total. All figures with the exception of 2022 data are estimations.

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

Not applicable

Hydropower

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

Not applicable

Wind

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

Not applicable

Solar

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

233,326,902

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

41

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

47

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

Explain your CAPEX calculations, including any assumptions

CAPEX is not provided publicly beyond a 3-year estimate. Therefore, we are providing a three (2023-2025) year total instead of a 5-year total. All figures with the exception of 2022 data are estimations.

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

Not applicable

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

Not applicable

Other renewable (e.g. 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

Not applicable

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

Not applicable

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
Other, please specify Renewables and energy storage	Solar communities programs, energy storage, renewable projects and other clean energy projects	985,381,104	47	2025
Other, please specify Environmental	Generation environmental projects	162,528,244	8	2025

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	A low-carbon services offering provided by APS is the EV charging demand management pilot program known as the APS SmartCharge program. The objective of the program is to dynamically manage EV charging and educate customers about beneficial charging behavior that occurs during off-peak periods whenever possible. Electric system benefits will be realized by managing EV charging based on seasonal and evolving distribution and system level needs, including demand response (DR) events as needed. This will result in significant customer benefits including fuel savings, lower transportation costs, reduced tailpipe emissions, and more efficient electric system operations that help manage future energy costs. The APS SmartCharge program encourages EV owners to share data on their driving and charging behavior by either installing a data sharing module in the diagnostic port of their car or granting permission to share their car account data using an API with the implementer. As part of this program, APS is offering a \$250 rebate to customers that purchase a new connected smart charger. Smart chargers are connected to the internet and can provide telemetry data on home charging behavior as well as participate in load shifting and DR events. Qualifying smart chargers are sold on the APS online marketplace where the rebate is immediately applied at checkout or if the eligible charger is purchased at a local retailer the rebate is reimbursed using an online rebate process. The pilot program is intended to proactively address the growing electric demand from EV charging as EVs become more widely adopted.

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	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

			C0.4) (optional)		
Demand response D ₁	Pilot demonstration				A low-carbon services offering provided by APS is the EV charging demand management pilot program known as the APS SmartCharge program. The objective of the program is to dynamically manage EV charging and educate customers about beneficial charging behavior that occurs during off-peak periods whenever possible. Electric system benefits will be realized by managing EV charging based on seasonal and evolving distribution and system level needs, including demand response (DR) events as needed. This will result in significant customer benefits including fuel savings, lower transportation costs, reduced tailpipe emissions, and more efficient electric system operations that help manage future energy costs. The APS SmartCharge program encourages EV owners to share data on their driving and charging behavior by either installing a data sharing module in the diagnostic port of their car or granting permission to

					<p>share their car account data using an API with the implementer. As part of this program, APS is offering a \$250 rebate to customers that purchase a new connected smart charger. Smart chargers are connected to the internet and can provide telemetry data on home charging behavior as well as participate in load shifting and DR events. Qualifying smart chargers are sold on the APS online marketplace where the rebate is immediately applied at checkout or if the eligible charger is purchased at a local retailer the rebate is reimbursed using an online rebate process. The pilot program is intended to proactively address the growing electric demand from EV charging as EVs become more widely adopted.</p>
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 Energy management and storage product

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

 APS_CY2022 Verification Opinion_v2.pdf

Page/ section reference

Page 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

 APS_CY2022 Verification Opinion_v2.pdf

Page/ section reference

Page 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

 APS_CY2022 Verification Opinion_v2.pdf

Page/ section reference

Page 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

 APS_CY2022 Verification Opinion_v2.pdf

Page/section reference

Page 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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, but we are actively considering verifying within the next two years

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.

California CaT - ETS

C11.1b

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

California CaT - ETS

% of Scope 1 emissions covered by the ETS

1.34

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

147,000

Allowances purchased

157,000

Verified Scope 1 emissions in metric tons CO₂e

169,894

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Facilities we own and operate

Comment

The reason for the difference between the California Carbon Allowance allocation quantity and the California Carbon Allowance purchases quantity was that there was a trade made for 10,000 allowances on 12/28/22 that was not delivered until January 2023.

C11.1d

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

Since 2012, we have had policies and procedures in place to track and monitor our obligations and allowances, related to the net imports into the state of California, to comply with California's AB-32 cap-and-trade program. The Risk Management group compares obligations and allowances weekly in accordance with our internal GHG Hedge Policy to ensure APS is able to fulfil our Compliance Requirements of the GHG Allowance Process. Additionally, our Back Office Settlements team tracks allowances using the Compliance Instrument Tracking System Service (CITSS) system monthly to validate APS emissions transactions are accurately and completely captured, inventoried, and settled ensuring compliance with the requirements of the Western Climate Initiative cap-and-trade Programs. CITSS tracks compliance instruments (emissions allowances and offsets) from the point of issuance by jurisdictional governments, to ownership, transfer by regulated greenhouse gas emitters and other voluntary or general market participants, and to final compliance retirement.

This strategy has kept us in compliance with our participation in the California cap-and-trade program. Timescale of implementation for this strategy is immediate and will continue as long as we are participating in the California market.

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

Internal fee

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price

Navigate GHG regulations

Scope(s) covered

Scope 1

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)

16.68

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

16.68

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

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

No

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

We use internal price on carbon to measure, model and manage financial and regulatory risks from emerging GHG regulations. For instance, APS has included in its analysis the potential for carbon pricing in its 2020 Integrated Resource Plan (IRP). The CO2 cost included in the 2020 IRP analysis was based on the California market cap and trade 2020 CO2 cost of \$16.68, escalated at 2.5% beginning in 2025. Prior to 2025, APS's analysis assumed the CO2 cost to be \$0. The resulting potential impact based on these assumptions and projected carbon emissions from 2020 thru 2025 is \$1,278 million - \$1,658 million. These costs could result in higher revenue requirements recovered through a rate review or adjustor mechanisms. The carbon cost will continue to be integrated into future scenarios as we work with stakeholders on our new plan that is currently scheduled to be updated in 2023.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers/clients

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 other climate related information at least annually from suppliers

% of suppliers by number

% total procurement spend (direct and indirect)

28

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

100

Rationale for the coverage of your engagement

Annually, APS engages our suppliers representing approximately 28% of the Company's total spend through a sustainability survey. Our suppliers primarily provide materials and services to our power plants, and the transmission and distribution of our energy. They are a part of key suppliers who are identified through a rigorous segmentation process that includes assessing spend, risk analysis, category strategy alignment and criticality to APS operations. We engage our top tier suppliers, was these suppliers to provide products and services that are directly tied to our upstream operations (e.g., generation and distribution of grid electricity) and because we spend a significant amount of dollars in procuring materials and services from these suppliers. The survey helps us identify our suppliers' environmental priorities as well as determine if APS and its suppliers are aligned in our sustainability priorities. The survey also includes questions on how they are managing environmental impacts in their operations, including greenhouse gas emissions, energy and water usage, waste and materials management. Additionally, suppliers are incentivized to implement sustainable practices within their businesses as our bid evaluations give additional credit to have a 2.5% weighting for the suppliers that 1) have a formal environmental management system; EMS; 2) engage their value chain in water risk and climate change strategies; 3) set sustainability goals or targets; and 4) consider a lifecycle perspective in products /services. For example, a project critical to the expansion of APS operations has incorporated supplier environmental sustainability maturity questions to develop a better understanding of opportunities to measure environmental impacts.

Impact of engagement, including measures of success

APS defines success in two ways: a year over year improvement in performance across the key performance indicators and increased engagement with suppliers. Successful supplier discussions have led to a number of improvement opportunities incorporating sustainable best practices into some of our construction projects. We define success as an average of 6 percent year on year increase in suppliers who have climate-related initiatives in place. In 2016, two years before we started our climate-related supplier engagement strategy, we found that only 20 percent of our suppliers had implemented climate-related controls and improvement plans. However, in 2022, 77% of survey respondents said they track and report their Scope 1 emissions data with 53% of survey respondents reporting their Scope 1 emissions data has been verified by a third party. Of the survey respondents, 65% said they have Scope 1 emissions targets. Additionally, 32% of survey respondents currently have a strategy in place to create sustainable products. From the information gathered from the surveys, APS is able to develop continuous improvement opportunities to incorporate sustainable practices into some of our construction projects as well as in improving our strategies for achieving our emissions reduction goals. APS recognizes exceptional supplier performance by hosting a Key Supplier Forum and Awards. Success stories are celebrated through our Supplier Excellence awards nomination process, and awards are presented in five categories: Performance, Customer Service, Value-Added Relationship, Safety and Environmental Sustainability. To qualify for these awards, suppliers must excel in each of these categories.

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

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

0

Please explain the rationale for selecting this group of customers and scope of engagement

APS engages with 100% of our customers through messaging on our website, monthly newsletters (printed and email), emails, social media, trade allies, sponsorships and advertising in order to give all our customers the opportunity to achieve energy savings and greenhouse gas (GHG) emission reductions as all customers are eligible to participate in our programs. Technologies such as rooftop solar, smart thermostats and energy efficiency measures have given customers more power to control their energy usage and potentially reduce their costs and GHG emissions. As more emerging technologies, such as energy storage devices, become commercially viable, they will continue to change how customers interact with us. By being proactive and working with our customers to identify and respond to their changing needs, we remain well positioned to deliver value.

As part of this effort in 2022, APS continued its online Marketplace site that reaches customers digitally and provides access to educational information, APS rebates and special discounts on energy efficient devices and appliances. Through our Take Charge AZ program, we install and own EV charging equipment at various workplace, fleet and multifamily communities. This has enabled charging at businesses, workplaces and municipalities within APS service territory.

Impact of engagement, including measures of success

There are various ways to measure success of messaging, but the most successful measurement for knowing we have reached our customers is when they participate in our programs. This means our customers have not only become aware of the program through our messaging, but also they have acted to potentially reduce their energy use and GHG emissions. In 2022, the energy efficiency program focused on educating

customers on energy management best practices and helping them make informed buying decisions. This was done through traditional marketing channels and free, onsite energy assessments for customers interested in learning how their facility uses energy. Our energy efficiency program effectiveness is measured through a third-party and is part of our Measurement Evaluation and Verification (MER) process.

In 2022, the online marketplace was used to educate and promote many of our demand-side management measures included those in the residential homes program. We measure success in program marketing and awareness through increases in program participation and the implementation of energy efficiency measures.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we 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?

Yes

Attach commitment or position statement(s)

See page 6 of Clean Energy Commitment.

 Clean-Energy-Commitment-Report.pdf

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

The company regularly engages externally with our customers, communities, industry participants and regulators on a variety of issues including the strategies necessary to achieve our long-term strategic plan, priority sustainability issues, and resource planning

priorities to serve our customers in the short and long term. These strategies and priorities are aligned align to our overall climate commitment and vetted through Executive and Board of Directors (BOD) review of our strategies, priorities, and risks and opportunities. We advocate for sound, forward-looking public policy that creates a shared value for our stakeholders.

We have a public facing political participation policy addressing engagement that aligns to long-term business interests and the interests of our customers, communities and shareholders. The political participation policy highlights public engagement and decision-making and governance processes for political spending and for reporting of political contributions, in which processes both management and our BOD play important roles.

The policy includes:

- Sponsorship of a registered political action committee that engages in independent expenditures concerning specific candidates, initiatives, or referenda.
- Participation in federal, state, and local issues through membership in trade associations which we join to represent various business and industry interests.
- Promotion of the economic health of the jurisdictions we serve through our activities with chambers of commerce.
- Support for charitable and non-profit organizations that support a variety of community and educational endeavours. These organizations, in turn, are at times actively involved in promoting social welfare missions to our elected leaders.
- Engagement through philanthropic giving to drive greater impact through strategic programs, partnerships and grants that align with our vision.

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

Mandatory climate-related reporting

In 2021, the Securities and Exchange Commission (SEC) evaluated environmental disclosure requirements. The SEC posed a set of questions for public input seeking feedback and other information to assist in assessing the materiality of climate-related disclosures, and the costs and benefits of different regulatory approaches to climate disclosure. That information was used in the development of a more comprehensive rule proposal that was issued in 2022. APS worked with EEI to respond to the questions including but not limited to:

- How can the Commission best regulate, monitor, review, and guide climate change disclosures to provide more consistent, comparable, and reliable information for investors while also providing greater clarity to registrants as to what is expected of them?
- What information related to climate risks can be quantified and measured? How are markets currently using quantified information? Are there specific metrics on which all registrants should report (such as, for example, scopes 1, 2, and 3 greenhouse gas emissions, and greenhouse gas reduction goals)?
- What are the advantages and disadvantages of establishing different climate change reporting standards for different industries, such as the financial sector, oil and gas, transportation, etc.? How should any such industry-focused standards be developed and implemented?

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

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 minor exceptions

Description of engagement with policy makers

We evaluated the initial questions regarding climate disclosure raised by the Securities and Exchange Commission and provided our feedback to the Edison Electric Institute (EEI) which is a trade organization that advocates for the electric utility industry. Our comments were incorporated and generally consistent with those of EEI and were filed with the SEC for consideration by the agency in the development of their formal rule proposal.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

No exceptions

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

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 leading a clean energy transformation. We are united in our commitment to get the energy we provide as clean as we can as fast as we can, without compromising on the reliability or affordability that are essential to the customers and communities we serve. Today, carbon emissions from the U.S. power sector are as low as they were in 1984, while electricity use is up 72 percent since then. EEL's member companies are committed to continuing to reduce carbon emissions in our sector and to helping other sectors—particularly the transportation and industrial sectors—transition to clean, efficient electric energy. This is just the start. With investments in new technologies and the right policies in place, we can do even more to build a cleaner, stronger economy together. Together, we are delivering America's energy future.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

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
Nuclear Energy Institute

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

We need deep decarbonization to hit our climate goals. Nuclear power can get us there. As our largest source of carbon-free energy, nuclear power is critical to reducing greenhouse gas emissions. Wind, solar and geothermal are on the rise, but the smartest policies will ensure these technologies complement, not replace, nuclear's clean energy production. Protecting and growing our use of nuclear technologies are important ways to dramatically reduce greenhouse gases and help us make meaningful progress to address climate change. Now is the time to do all that we can to reduce carbon emissions. The threat that climate change poses is clear: We must reduce emissions as quickly as possible across the economy to avoid it. Policymakers are working to put America in position to meet this moment and, as the largest provider of carbon-free energy around-the-clock and with new innovations on the horizon, nuclear energy is the ideal partner to wind and solar in this endeavour. In a clean energy system, wind and solar will play important roles as renewable resources. But when the sun isn't shining or the wind isn't blowing, they will need support in the form of a reliable, carbon-free electricity source like nuclear energy. Nuclear energy provides more than half of our nation's carbon-free energy. It's always available around-the-clock, a reliable part of our critical infrastructure. Carbon-free is the direction the world is headed, and thanks to the Biden administration's actions, the U.S. is preparing to lead this effort again.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

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

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

EPRI

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

The Electric Power Research Institute (EPRI) and Gas Technology Institute (GTI) have created the Low-Carbon Resources Initiative (LCRI) to accelerate the deployment of low- and zero-carbon energy technologies required for deep decarbonization. LCRI is specifically targeting advances in the production, distribution, and application of low carbon, alternative energy carriers and the cross-cutting technologies that enable their integration at scale. These energy carriers—which include hydrogen, ammonia, synthetic fuels, and biofuels—are needed to enable affordable pathways to achieve deep carbon reductions across the energy economy. The LCRI is focused on technologies that can be developed and deployed beyond 2030 to support the achievement of a net zero emission economy by 2050. We are participating in the LCRI in order to facilitate research and development in low carbon technologies that can help transform the industry and enable us to achieve our clean energy commitment. These technologies may be adopted as potential clean resources that may be adopted into or inform the development of regional, national, or international climate policies, targets, or regulation that apply to public utilities or energy industries.

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

 2023-ESG-Highlights-Final.pdf

Page/Section reference

See also web-based Corporate Responsibility Report:

<https://www.pinnaclewest.com/corporate-responsibility/default.aspx>

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Other, please specify

Biodiversity

Comment

Our Corporate Responsibility Report is a web-based report that is updated on an annual basis in April annually to reflect the prior years performance. The report is not published as a stand-alone document so is not attached. Instead an overview of the report is attached.

A link to the Corporate Responsibility Report home page is provided here:

<https://www.pinnaclewest.com/corporate-responsibility/default.aspx>

Governance

<https://www.pinnaclewest.com/corporateresponsibility/governance/default.aspx>

Strategy <https://www.pinnaclewest.com/corporate-responsibility/governance/business-framework/default.aspx>

Risks and Opportunities <https://www.pinnaclewest.com/corporate-responsibility/governance/business-framework/default.aspx>

Emission figures - Carbon and greenhouse gas reporting

<https://www.pinnaclewest.com/corporate-responsibility/esg-reporting/default.aspx>

Emission

Targets <https://www.pinnaclewest.com/corporateresponsibility/environment/clean->

energy/default.aspx

Other Metrics <https://www.pinnaclewest.com/corporate-responsibility/esg-reporting/default.aspx>

Other - Biodiversity <https://www.pinnaclewest.com/corporate-responsibility/environment/biodiversity-/default.aspx>

Publication

In mainstream reports

Status

Complete

Attach the document

 2023_FINAL-Proxy.pdf

Page/Section reference**Content elements**

Governance

Strategy

Other metrics

Other, please specify

Executive compensation tied to meeting our low carbon targets established by our clean energy commitment

Comment

The Proxy focuses on governance related topics related to ESG performance and incentives.


Publication

In mainstream reports

Status

Complete

Attach the document

 2022-Annual-Report.pdf

Page/Section reference

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

The Annual Report incorporates the company's 10K filing.

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
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues

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	<p>The Vice President of Transmission and Distribution Operations has governance over biodiversity issues, which are managed by the Forestry, Fire & Resource Management Department (FFRM). This team uses best practices to manage vegetation growing around our facilities and equipment—including substations, overhead power lines and poles—to ensure safe and reliable delivery of energy. APS's transmission facilities consist of approximately 5,800 miles of transmission lines and 34,000 miles of distribution lines, with almost 11,300 miles of those being overhead distribution lines.</p> <p>Our FFRM team has a dedicated staff of natural resource professionals, including foresters, arborists, biologists and archaeologists. They work to ensure we comply with the National Environmental Policy Act, the Endangered Species Act, the Bald and Golden Eagle Protection Act, the Migratory Bird</p>

		Treaty Act and other applicable statutes and regulations to protect biodiversity in our service territory. In addition, a variety of operations-related environmental programs are in place to manage vegetation in and around our facilities and rights-of-way to create habitat and keep areas available to support wildfire safety.
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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
Row 1	No, but we plan to do so within the next 2 years

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

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Not assessed

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?
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years

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	No, we do not use indicators, but plan to within the next two years	

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		Corporate Responsibility Report, Biodiversity Page: https://www.pinnaclewest.com/corporate-responsibility/environment/biodiversity-/default.aspx

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.

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	Director of Sustainability	Environment/Sustainability manager

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

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.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

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
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SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms