

Avista Corporation 2021 Task Force on Climate-related Financial Disclosures (TCFD) Report



AVISTA

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Introduction

Avista Corporation’s vision is to deliver better energy for life. We strive to fulfill this vision by improving the lives of our customers through the safe, responsible and affordable delivery of energy. Our guiding values of trust, innovation and collaboration support our commitments to Corporate Responsibility, which encompass a broader approach to sustainability in order to build long-term value for our stakeholders.

At its heart, Corporate Responsibility is our commitment to manage the social, environmental and economic effects of our operations safely, responsibly, and affordably, while endeavoring to have a positive, lasting impact on the society and environments in which we operate.

Avista Corporation (Avista or Company) prepared this report in accordance with the recommendations of the [Task Force on Climate-related Financial Disclosures](#) (TCFD) framework and their corresponding TCFD Implementation Guide. Additionally, the Company has included industry-relevant environmental, social, governance (ESG) and sustainability metrics adhering to

the [Sustainability Accounting Standards Board](#) (SASB) standards for the Electric Utilities and Power Generators industry and the SASB standards for the Gas Utilities and Distributors industry. Avista’s disclosed SASB metrics are presented in the concluding section of this report.

As numerous TCFD and SASB disclosures align with our own Corporate Responsibility commitments, there is considerable overlap between this report and Avista’s broader 2021 Corporate Responsibility Report. To learn more about our additional commitments to Our Environment, Our People, Our Customers and Communities and Our Ethical Governance, please visit our [ESG/Corporate Responsibility](#) webpage.

There, you may also access the Company’s disclosed Edison Electric Institute’s (EEI) and American Gas Association’s (AGA) ESG and sustainability reporting templates. These reporting templates represent another way that we capture sustainability data in alignment with our Corporate Responsibility commitments promoting transparency, accountability and engagement with our stakeholders.

Governance

Board Oversight

Avista’s Board of Directors (Board) is responsible for directing the management of the business and affairs of the Company. As such, the Board provides strategic direction and oversight of the Company’s business and affairs, with a view to serving the best interests of the Company and its shareholders and other stakeholders.

The Board also plays an active role in the oversight of the Company’s risk management processes, including the identification of major risks and opportunities affecting the Company in pursuit of its strategic goals. The Board’s strategic and risk oversight processes are integrated within the Company’s governance practices, which include regular reporting and communication from management on areas of material risks and opportunities to the Company, together with the mitigation or implementation strategies for these risks and opportunities, including climate change-related matters.

While the full Board retains responsibility for the general oversight of risks and opportunities, the Board’s primary oversight is conducted through the committees of the Board as set out in their respective Charters. The four committees of the Board who have been assigned Corporate Responsibility, ESG or climate change-related oversight responsibilities are all comprised of independent Board directors.

Avista’s full Board is apprised of climate change-related issues and performance through reports from the Committee Chairpersons at each Board meeting. This enables the Board and its Committees to coordinate risk oversight, particularly with respect to the interrelationships among various climate change-related risks and opportunities. The Board also conducts additional oversight functions through its Finance Committee and Executive Committee, which are primarily comprised of independent directors.

Board Committees with Corporate Responsibility, ESG or Climate Change-Related Oversight Responsibilities

Governance and Corporate Responsibility Committee	Oversight responsibility for the Company’s strategy and disclosure of Corporate Responsibility matters, which include climate change-related issues and environmental, social and governance (ESG) issues.
Environmental, Technology and Operations Committee	Oversight responsibility for the Company’s business and operational risks. Issues concerning existing and emerging climate change-related risks and opportunities including the Company’s clean energy goals are reviewed and regularly discussed by this Committee.
Audit Committee	Oversight responsibility for the Company’s climate change-related disclosures in Avista’s financial statements and oversees the risk assessment and risk management processes administered through the Company’s Enterprise Risk Management (ERM) program.
Compensation Committee	Oversight of issues relating to compensation and benefits of executive officers and human capital management, including employee satisfaction, engagement, diversity, equity and inclusion.

Role of Management

While the Board is responsible for oversight of the Company's strategic and risk management processes, Avista's management team is responsible for the day-to-day operations and performance of its strategic objectives and management of risks. Climate change-related risks and opportunities and their associated mitigation and implementation strategies are managed and executed by Company management.

Managers are responsible for understanding climate change-related trends, risks and opportunities, participating in risk assessments, and preparing and executing mitigation and implementation activities. Managers are also responsible for monitoring performance and reporting results of their climate change-related risk and opportunity activities to their leader. These performance results are reported to appropriate officers as well. On a quarterly basis or more often if needed, Company officers will report on the performance of these climate change-related issues to the appropriate Board committee or to the full Board.

Avista's Perform Council is an interdisciplinary team of Company officers, management and other employees which regularly meets to discuss, assess and manage current and emerging issues associated with climate change-related risks and opportunities. Among other things, the Perform Council:

- Facilitates internal and external communications regarding climate change-related issues.
- Analyzes policy effects, anticipates opportunities and evaluates strategies for the Company.
- Develops recommendations on climate change-related policy positions and action plans.

- Provides direction and oversight with respect to the Company's clean energy goals.

On a quarterly basis or more often if needed, representatives from the Perform Council will report on the performance of these issues to the Environmental, Technology and Operations Committee, to another appropriate Board committee or to the full Board.

The Company's Corporate Responsibility Committee is a cross-functional team devoted specifically to sustainability and ESG matters. This Committee promotes alignment of our strategies to our Corporate Responsibility commitments in managing the environmental, social and economic effects of our operations, while endeavoring to have a positive, lasting impact on the society and environments in which we operate.

When reporting to Board committees or to the full Board, management will provide report summaries and performance progress on climate change-related issues and their associated work activities. During these meetings, active discussions occur between management and Board directors concerning the climate change-related issues being reported.

It is the responsibility of management to incorporate Board oversight feedback and guidance from these committee or full Board meetings back into their day-to-day operational responsibilities. This may include revisions to strategic objectives, management of climate change-related risks and opportunities and performance reporting recommendations. Management is likewise responsible for executing on, and monitoring performance relating to, Board provided feedback and guidance for inclusion in future committee or full Board report updates.



Strategy

This Strategy section contains climate change-related risks and opportunities that Avista is currently tracking and that are responsive to and organized by the TCFD implementation guidance. Please note that this Strategy section does not cover all risks facing the organization and contains summaries of those TCFD requested risks and our current expectations. Readers should note our Forward-Looking Statement included at the end of this report, and are encouraged to review our most recent Annual Report on Form 10-K, or Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission, for further details and listing of risks and assumptions. Those reports are also available on our website at www.avistacorp.com.

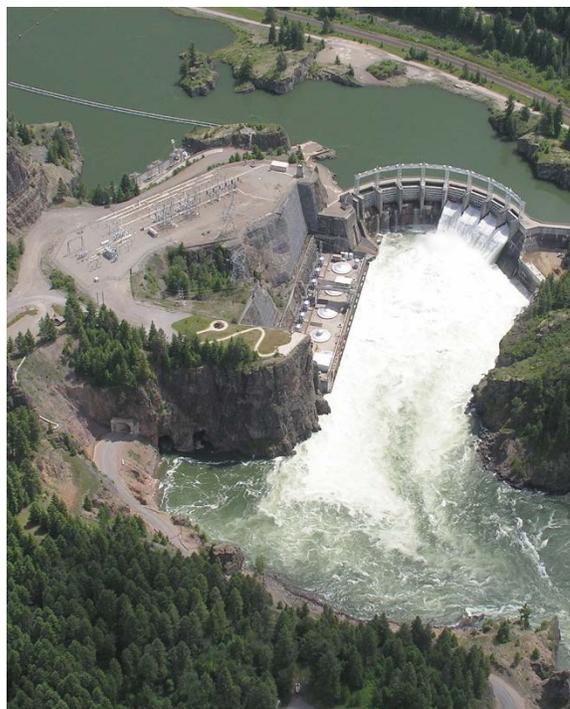
Transition Risks

Policy, Legal and Market Risks

Concerns about long-term global climate changes and the potential impacts of such changes could have a significant effect on our business. Our operations could be affected by changes in laws and regulations intended to mitigate the risk of, or alter, global climate changes, including restrictions on the operation of our power generation resources and obligations or limitations imposed on the sale of natural gas. We may also be impacted by regulatory penalties for non-compliance, risk litigation and face higher fuel and or material costs to generate or procure energy for our customers. Due to these risks and the nature of the utility industry's historical greenhouse gas (GHG) emissions, the Company is addressing these risks through the following measures:

Avista's clean electricity goals, which are to serve our customers with 100% clean electricity by 2045 and to have a carbon-neutral supply of electricity by the end of 2027, meet or exceed current GHG emission reduction laws or regulations that apply to our Company. Since our founding with hydroelectric power in 1889, we have embraced and grown renewable energy generation, allowing the Company to keep our GHG emissions among the lowest in the nation. Currently, our electrical generation capability is comprised of 60% renewable energy that includes hydroelectric, biomass, solar and wind resources.

The Company's 2021 Electric Integrated Resource Plan (IRP) validates and reinforces our clean electricity goals. The IRP processes are state mandated scenario analysis planning requirements of utility regulated assets that forecast customer load and energy prices, identify generation needs, and include analysis of known and potential environmental and climate change-related laws or regulations, including a social cost of carbon, among others. These scenario analyses forecast decades into the future, resulting in a Preferred Resource Strategy (PRS). The PRS is a reasonable low-cost plan balancing cost, reliability, and environmental goals and mandates. Avista's 2021 PRS includes the following near-term highlights in support of our clean electricity goals:



Avista's Preferred Resource Strategy (PRS) Near-Term Highlights

Targeted greenhouse gas emission reductions of 74% from 2019 levels by 2030
100 MW of new renewable energy generation added by 2025
Colstrip Units 3 & 4 (Avista's only coal generating resource) exit our generation profile by the end of 2025 ¹
Lancaster PPA (natural gas generation) contract expiration in October 2026
An additional 100 MW of new renewable energy generation added by 2028

Beyond 2030, and as we approach 100% clean electricity by 2045, long-term energy storage technologies, which are either not currently available or are not cost-effective, will need to advance in a way that allows us to meet our goals while also maintaining reliability and affordability for our customers. Engaging stakeholders in IRP updates every two years, including the post 2030 period where technological development is critical to meeting our 2045 goal, will inform specific resource decisions and necessary adjustments in our plans. Meeting our clean energy goals may also require accommodation from economic and environmental regulatory agencies insofar as the Company may need to acquire emission offsets to meet its goals.²

In April 2021, Avista announced our goals to reduce natural gas emissions 30% by 2030 and to be carbon neutral in our natural gas operations by 2045. These natural gas goals demonstrate that our vision of a clean energy future encompasses both electric and natural gas resources.

Natural gas is one of the cleanest burning fuels and plays a key role in reducing carbon emissions. The use of natural gas has been the single greatest contributor to greenhouse gas reductions in the United States as electrical power plants have converted from coal to cleaner burning natural gas. In addition, the direct use of natural gas by our customers in their homes is a more efficient use of the energy as compared to its use for generating electricity to meet the same need. Compared to wood, heating oil and other fuels, natural gas also improves air quality. Even though natural gas is a clean fuel, we recognize there is opportunity to further improve and lower our natural gas emissions even further.

We have developed a strategy for carbon reduction for our natural gas operations and have identified several pathways to get us there. The three primary pathways included in our strategy are:

- Diversify and transition from conventional, fossil fuel natural gas to renewable natural gas (RNG), hydrogen, and other renewable biofuels.
- Reduce consumption via conservation, energy efficiency, and new technologies.
- Purchase carbon offsets as necessary.

As with reductions in emissions associated with our clean electricity goals, reaching our natural gas goals will require further improvements in costs and technology associated with renewable fuels and hydrogen as well as regulatory support. In addition, we will continue our efforts to modernize our gas delivery systems and eliminate fugitive emissions of methane.

As a downstream natural gas local distribution company (LDC), we do not have the ability to directly impact methane emissions from the upstream or midstream sectors of the natural gas industry. However, in addition to supporting the research and development of RNG, we are also engaging with natural gas producers and pipeline companies to advocate for their development of commitments and goals regarding methane reduction strategies. Likewise, we participate in the EPA's Methane Challenge designed to increase transparent reporting and actions to reduce methane emissions, and we participate in the AGA's ESG and sustainability reporting template.

¹ The Avista [2021 Electric IRP](#) determined Colstrip Units 3 & 4 is cost effective for Avista customers to exit in 2022. Please see Chapter 4 of the Avista 2021 Electric IRP for additional details concerning the contractual complexities associated with exiting this resource.

² For additional information regarding Avista's clean electricity goals, scenario constraints and assumptions, please refer to our [2021 Electric IRP](#) and our [2020 Annual Report](#).

Within Avista's natural gas LDC, we are taking direct measures to reduce our fugitive methane emissions. We employ integrity management programs to measure, monitor and address risks to our natural gas infrastructure, including a replacement program for removing aging and leak prone pipeline and a comprehensive leak survey program for identifying and remediating natural gas pipeline leaks. Most of our fugitive methane emissions are the result of excavation damages to our facilities by the public rather than from our operational processes. To combat this threat, we invest in public awareness and training campaigns within our communities in order to reduce the numbers of dig-ins and related impacts to our facilities.

With the growing emphasis on climate change and demands for action, we are witnessing numerous, and at times, competing measures arising from consumer advocacy groups, environmental groups, federal, state, and local government positions and legislative actions that may affect Avista and the energy prices paid by our customers. Through active monitoring and engagement of these emerging initiatives, we seek to represent our stakeholders' interests to ensure that proposed solutions do not adversely impact one stakeholder for the benefit of another, or result in required actions that do not represent cost effective solutions for our customers.

We represent the interests of our customers and communities through collaborative and respectful interactions with stakeholders during these important climate policy development discussions. This is especially important when proposed measures have a direct bearing on future costs of our customers' energy. We are there to ensure that all parties understand and recognize the economic realities facing our customers and communities when considering new mandates, rules or laws intended to address climate change-related risks.

Energy efficiency and conservation efforts over the past decade has realized electricity savings equal to the annual electricity usage of 76,000 of our customer homes.

Energy efficiency and conservation efforts over the past decade has realized natural gas savings equal to the annual natural gas usage of 16,000 of our customer homes.

Since 1995, we have been promoting energy efficiency and conservation programs to our natural gas customers. These programs provide economically feasible strategies to reduce customers' usage of natural gas. With just under 12 million cumulative therms of natural gas consumption avoided through energy efficiency measures in the past decade, our customers are not only benefiting from lower energy usage, but we have also avoided the associated greenhouse gas emissions of these natural gas therms as well.

For our electrical customers, we began offering energy efficiency and conservation programs beginning in 1978. These programs provide cost effective strategies to reduce customers' usage within the prevailing market and economic conditions. Currently, 160 aMW of electrical energy efficiency is benefiting our customers, representing nearly 14.5% of our 2019 electrical load requirements. Put simply, we are avoiding the associated greenhouse gas emissions of these 160 aMW of electrical generation due to the energy efficiency and conservation actions of our electrical customers.



Technology Risk

The threat of long-term global climate changes and the potential impacts of such changes is requiring the development of new technologies and capabilities to support and enable the energy industry's transition to a lower carbon future. While new technologies and related products and services will be key to the fulfillment of long-term zero emission goals for many, technology risks also present shorter-term risks. Among these are the potential for unsuccessful adoption of emerging technologies, high costs of research, development and implementation, and failure to adopt and deploy in an efficient manner new practices and processes in order to leverage the new technology. Due to these risks and the nature of the utility industry's reliance on technology to support a lower carbon future, the Company is addressing these technology risks through the following measures:

Avista has long been on the forefront of clean energy and innovation. Some of our past innovation and business development efforts include the creation of companies like Itron, Ecova (now Engie Impact) and Relion that all play a role in developing, supporting and implementing clean energy, increasing energy efficiencies and contributing to lower GHG emissions in support of the transition to a lower carbon future. The Company has also been actively involved in smart grid initiatives and partnerships with third parties to efficiently research, develop and innovate the grid of the future.

Collaboration and innovation are key strategies that we employ in order to increase insights, domain expertise, cost efficiencies and product and service opportunities across a broad range of organizations. Avista partners with similar oriented organizations who are poised to tackle the challenges of developing the digital and intelligible grid of the future. This includes leveraging federal and state grants for smart grid projects, involvement in industry initiatives, exploration of third-party technologies, and partnerships with local universities and national research labs in a continuous effort to learn, adapt and prepare for future technological innovations.

We set out to create “the five smartest blocks in the world” by creating a place to partner with others to reimagine our energy future, and advance energy innovation. The resulting [Eco-District](#), anchored by the Scott Morris Center for Energy Innovation and the Catalyst building, are intended to show the utility industry – and the world – what is possible. Most buildings are constructed one at a time, each with a dedicated heating and cooling system and their own connection to the grid. But Avista and partner McKinstry are testing a new shared energy model, called an Eco-District, where a centralized heating, cooling and electrical system can serve the energy needs of a group of buildings.

The Eco-District in Spokane's University District will enable us to shape how our smart grid of the future will perform and to define how buildings can operate and utilize energy in the most efficient manner. It acts as a living laboratory, where we

can test ideas and gain insights that can help Avista provide reliable, clean and affordable energy for our customers. For example, at night, when energy usage is low, the Eco-District can pull energy from the grid to recharge onsite batteries and thermal storage tanks at times when there is excess grid capacity. This energy is stored and used to operate the building when energy demand is high. Such flexibility lets the utility make the best use of the existing grid.

Ultimately, the Eco-District will enable us to innovate about how best to share energy. What we learn could not only shape how the grid of the future will operate, but also may provide a transformative new model for the entire utility industry. This effort demonstrates Avista's commitment to investing in bold ideas, new technologies and innovative partnerships to leverage the grid in new ways for a more sustainable energy future.



Located in Spokane’s University District, [Urbanova’s](#) smart city projects harness data to gain insights, empower people and solve urban challenges in new ways – all with the goal of enabling healthier citizens, safer neighborhoods, smarter energy infrastructure, and a stronger and more sustainable economy. As a co-founder of Urbanova, we are developing a living laboratory where companies and other innovators are working on smart city solutions. Current projects include an energy equity and environmental justice project, an initiative to develop strategies to reduce health risks during wildfire events and a project to strengthen Avista’s data sharing platform for increased partner agility and collaboration, among others.

Our recently completed Shared Energy Economy Model Pilot tested the integration of energy assets – from rooftop solar and battery storage to building energy management systems – that can be shared and used for multiple purposes. We were successfully able to examine how we, our customers and communities, can create a shared energy economy model by demonstrating that the electric grid can become more reliable, efficient, resilient and flexible.

Avista and McKinstry launched [EDO](#), a joint venture combining more than 200 years of expertise to deliver on the promise of grid-integrated buildings. By analyzing facility operational and grid data together, EDO looks to deliver support and technology solutions needed to create a synchronized and optimized platform that spans both sides of the meter. By understanding and demonstrating how commercial buildings can operate more efficiently in tandem with the

grid, it unlocks the possibility of saving energy and costs for owners, and may help utilities to relieve stress on distribution feeders and substations, leverage distributed energy and storage resources and become a grid-flexible asset.

Energy efficiency and grid-flexible assets are key to decarbonizing our electricity system and reducing our collective greenhouse gas emissions. EDO’s partnership model aims to unlock rapid innovation towards the grid of the future, creating an energy system that is reliable, equitable and carbon-free. This is just another example of how Avista is working to grow our business, leverage our history of innovation and enable our clean energy commitments.

We have also partnered with [Energy Impact Partners](#) (EIP) to further develop and learn from leading-edge energy solutions. EIP bring the best companies, experience and vision in the energy industry to tackle the issues around our emerging energy landscape. Key focus areas include energy efficiency, sustainable generation, energy storage, connected devices, big data and software solutions, and energy management. In working with EIP and their coalition of other progressive utilities, we help ensure that innovation remains firmly at the core of our business as we continue to drive technology advancements with the goals of increasing energy efficiency for our customers and communities and reducing emissions as we transition to a lower carbon future.



Reputation Risk

The electric and natural gas industries are at the forefront of long-term global climate change discussions, and our stakeholders collectively share a common desire to move towards a lower carbon future. During this societal transition, there are potential risks related to our reputation and how we engage and manage our stakeholder relationships on these critical climate change-related issues. The Company is addressing these reputational risks through the following measures:

Avista is committed to conducting our business ethically and being transparent about our actions to our stakeholders. We know that our work directly empowers our customers to live their lives to the fullest. As such, we carefully consider how our business intersects with our customers and communities especially on major issues such as climate change. We are committed to working together with our customers, communities and regulators to address the challenging issues of climate change, and aid in the transition to a lower carbon future in ways that make technological, environmental, economic and equitable sense for our customers and communities.

In recognition of these commitments, Avista has been recognized by [Ethisphere](http://www.ethisphere.com), a global leader in defining and advancing the standards of ethical business practices, as one of the World's Most Ethical Companies for the past two years. Our actions are mission-driven and values-based, with a commitment to achieving our organizational goals in ways that deliver value for our stakeholders. We are honored to receive this recognition, which demonstrates the leadership of our employees and Avista's commitment to an ethical corporate culture built on trust, collaboration and innovation.

As previously discussed under the Policy, Legal and Market Risks section, we continue to experience numerous and at times, competing climate change-related measures arising from consumer advocacy groups, environmental groups, federal, state, and local government positions and legislative actions that may affect Avista and the energy prices paid by our customers. We engage with these stakeholders in order to understand their positions and to represent the interests of our customers and communities. The company's collaborative engagement ensures that all parties understand and recognize the economic realities facing our customers and communities when considering new mandates, rules or laws intended to address climate change-related risks.

Our clean energy goals are clear commitments through which we are responding to our stakeholders' interests around climate change. Both our electric and natural gas clean energy goals are supported and enabled through the Company's IRP processes which are stakeholder driven. The development and



execution of our IRPs is a public process which includes Company personnel, customers, consumer advocates, academics, utility peers, government agencies, environmental groups, public utility commission staff and other interested parties. This large and diverse stakeholder engagement forum facilitates the exchange of ideas and discussion of relevant issues and risks. Our state regulators ensure that environmental impacts, compliance requirements and laws, reliability, conservation, efficiency and costs, among others, are properly factored into the IRP processes in order to support the interests of our stakeholders.

To further understand the perspectives and needs of those who rely on us, Avista proactively engages with our stakeholders through a variety of communication methods, partnerships, committees and recurring meetings, research and surveys, employees who are directly responsible for stakeholder engagements and by monitoring emerging initiatives and regulatory proceedings. Our Government

Relations, Regulatory Affairs, American Indian Relations, Regional Business Managers, Corporate Communications, and Local Area Managers consistently engage with our stakeholders on a variety of local issues and broader issues such as a climate change.

We recognize that the transition to a cleaner energy future may benefit or inadvertently harm customers disproportionately depending on certain factors such as where they live, their primary language or level of income. In order to aid in the identification and understanding of these potential barriers and how best to implement programs equitably, Avista established an [Equity Advisory Group](#) (EAG) comprised of Company representatives, customers, community members, environmental justice advocates, community agencies and other interested external parties. The EAG meets regularly to plan for the equitable distribution of energy and non-energy benefits, reduction of burdens to vulnerable populations and highly impacted communities and seeks to remove barriers to public participation such as language, cultural or economic factors.

Customers are at the center of everything Avista does. As such, we hold ourselves accountable to meeting the expectations of our customers, and our own service expectations as well. In support of this commitment, we set clear customer satisfaction goals through our Service Quality Measures (SQM) program. The SQM program establishes customer service, operational response times and system reliability goals among others. On an annual basis, we send our Washington and Idaho customers a summary SQM Report Card detailing the results of our efforts and serves to highlight our ongoing and transparent commitments to our customers.

Avista also tracks a key customer satisfaction metric referred to as the Voice of the Customer (VOC). The VOC is a survey administered by a third-party vendor to measure the satisfaction of customers who interact with us. We also analyze customer comments as they often shed light on different stakeholder perspectives or new opportunities for enhancing our products and services. We are proud to report that for each of the past 21 years, our Voice of the Customer satisfaction ratings have exceeded 90%.



The [Avista Foundation](#) serves as our primary charitable organization. Through active collaboration and engagement with our local and regional stakeholders, the Avista Foundation identifies opportunities and provides grants for community vitality, education, health and human services, arts and culture, and youth organizations and programs. Our vision for giving back means that we are investing in organizations and causes in ways that can be transformational and have long-lasting impact for our stakeholders by reinvesting in the communities we serve. Our community investments are made through corporate and foundation donations and are never included in customer rates. Rather, we give back a portion of the profits that we are allowed to earn from our state utility commissions. We believe that bringing value to our customers, communities and attaining our business goals go hand-in-hand.



Physical Risks

Acute Physical Risks

Climate change may increase the frequency of severe weather events, including wildfires, windstorms, snow and ice storms and flooding, which could disrupt and damage the Company's infrastructure used in energy generation, transmission and distribution operations. Due to the geography of our service territories, the location of our infrastructure and the historic impact of severe weather events on our utility operations, the Company is addressing these risks through the following measures:

Customers are at the center of everything Avista does. For over 130 years, we have held ourselves accountable to providing outstanding service and reliability, especially when faced with severe weather events. Avista has developed and implemented numerous operational and storm response procedures to mitigate the impact of these events on our infrastructure, customers and communities.

We actively monitor weather alerts, storm warnings and other unfolding emergency events and proactively communicate with customers regarding the potential for service disruption, how to stay safe and how to contact local community support services. We also provide customers with tips about preparing for a potential service interruption as well as various communication channels to keep our customers informed on restoration efforts and estimated times for service restoration.

Avista has implemented Emergency Operating Plans (EOPs) and Emergency Action Plans (EAPs) to respond to varying types of emergencies, from large utility outages, wildfires, flooding, earthquakes, cyber security breaches or other emergencies. These EOPs and EAPs are focused on responding to the initial emergency, minimizing potential dangers to people, property and the environment, and stabilizing the situation until normal operating conditions can resume. These plans are regularly exercised internally and in conjunction with local emergency responders and peer utilities. In support of these plans, and to ensure proper coordination with local emergency responders, Avista utilizes the Incident Command System (ICS) as the means by which all emergencies are managed.

The Company also participates in the utility industry's long-standing tradition of mutual aid assistance with other regional and national utilities. Following an event with significant outages, Avista will receive aid from participating utilities in order to supplement resources and speed recovery efforts. Mutual assistance is a cornerstone of utility operations during emergencies and an essential part of our industry's emergency contingency planning. In addition to our mutual aid partnerships, we may further supplement our resources through existing agreements with utility service contractors.

The Company continues to expand its safeguards for preventing, mitigating and reducing the impact of wildfires through our enhanced [Wildfire Resiliency Plan](#). Western utilities and communities are facing increased risks of wildfires due to the effects of climate change. And at the same time, we are witnessing residential developments expand into forested areas and other high fire-risk locations.

Wildfire Resiliency Plan Elements



Climate Change

Replace and/or strengthen electric infrastructure, especially in fire-prone areas, to protect it from possible damage and reduce the likelihood of spark-ignition sources.



Vegetation management

Elevate our already robust management of fire-prone areas, especially near densely populated locations, to further reduce the possibility of contact between vegetation and power lines.



Situational awareness

Improve operational decisions by increasing our ability to assess potential fire risks.



Operations and emergency response

Decrease the potential for wildfires by instigating operational changes when re-energizing power lines in rural and or forested areas.



Worker and public safety

Increase overall safety by creating cohesive partnerships with emergency first responders and fire agencies to share wild-fire responsibilities.

Avista’s enhanced Wildfire Resiliency Plan seeks to further minimize the possibilities of wildfires and their related impacts on our customers and communities through the expansion of our current safeguards for preventing, mitigating and reducing the impact of wildfires. This enhanced 10-year Wildfire Resiliency Plan will emphasize grid hardening, vegetation management, partnerships with emergency providers and fire agencies, and provide helpful resources and information to protect property and prevent wildfires.

The design, construction, operation, inspection and maintenance of our utility infrastructure complies with regulatory safety and reliability requirements. The use and application of new and emerging design standards and construction materials contribute to the reliability of our systems and internal grid hardening programs such as replacing wooden transmission poles with steel poles improve their ability to withstand higher winds and other extreme

weather events. The Company also implements asset maintenance and management programs, including a robust vegetation management program, and employs physical and cyber security protection measures to guard against intrusions and potential disruptions to the energy grid.

For over a decade, Avista has been implementing numerous smart grid technologies that not only aid our customers in offering additional products and services, but also enhance the reliability of our electrical system. Our distribution management system actively manages energy conservation, monitors our electrical distribution system and can autonomously manage certain outage restoration processes through self-healing configurations. Our Advance Metering Infrastructure (smart meters) further enhances operational efficiencies and improved outage detection and restoration through active two-way communications between the utility and the customer meter.

Chronic Physical Risks

Increasing temperatures, changing precipitation patterns, prolonged drought conditions, and other climate-related weather changes may impact customer demand, water availability, hydroelectric operations and cost of generation among other business activities. While some of these chronic physical risks, such as rising sea levels, may not pose a risk to our utility operations, others may impact our operations in the future, and the Company addresses these potential risks through the following measures:

Avista manages access to water for its operations, both for the generation of electricity and other operational uses in the course of its business, by securing necessary water rights. The Company’s service territories and generating plants are all located in states which recognize water rights through prior appropriation, and we currently have water rights secured for our existing generation portfolio and other operational needs.

The majority of our non-generation consumptive water use is associated with office locations within municipalities that provide water service as a local utility. Going forward, we will continue to partner with our local and state agencies in complying with our existing water rights and, if necessary, to acquire additional water rights as needed.

Avista’s clean electricity goals emphasize our continued transition from thermal generation resources toward additional renewable resources to enhance our generation portfolio—a portfolio that is already comprised of 60% renewable generation. Thermal generation resources fueled by coal and natural gas traditionally rely on large amounts of

water for cooling plant equipment and powering steam turbines for electricity production. With the Company’s planned exit from our only coal-fired resource Colstrip Units 3 & 4 by the end of 2025, we remain on track to significantly reducing both greenhouse gas emissions and water use. Currently, Colstrip Units 3 & 4 account for approximately 88% of our consumptive water use.

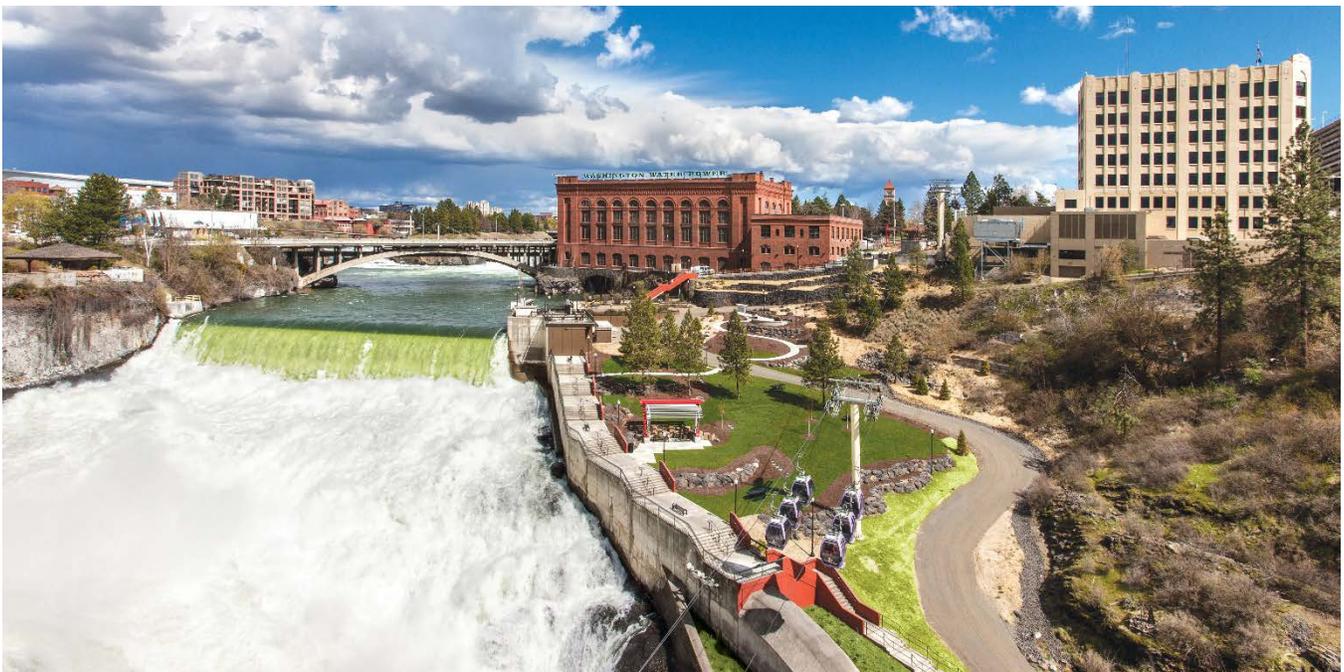


Currently, none of Avista’s facilities or generating plants are located in areas listed as High or Extremely High Baseline Water Stress by the World Resources Institute’s (WRI) Water Risk Atlas Tool, Aqueduct. The Company’s hydroelectric plants are located within two different water basins, along the Clark Fork River in northwestern Montana and northern Idaho and along the Spokane River in northern Idaho and eastern Washington. Neither river system is expected to experience significant water stress in the foreseeable future, especially compared to other river systems located in southwestern regions of the United States. Our hydro resources benefit from a combination of higher-altitude snowpack and upstream reservoirs.

In addition, the Company employs Hydro Operations Engineers to monitor and forecast water availability for our hydroelectric plants in order to optimize generation performance. By tracking and modeling weather forecasts, measuring precipitation and snowpack levels and assessing river flow conditions, an inventory of available water and a generation schedule is produced to optimize the production of electricity from our hydroelectric plants. Furthermore, our FERC operating licenses and related agreements governing hydro operations provide significant operational flexibility for Avista’s hydroelectric resources.

Current regional climate modeling, with significant uncertainty, predicts slight increases in overall precipitation for our region going forward, although with earlier runoff and the possibility of reduced summer precipitation. To further understand increasing regional temperatures, Avista conducted a study as part of our 2021 electric IRP planning processes to determine the effects to our generation portfolio due to changing customer loads and hydro profiles. In particular, this study examined anticipated climate change impacts to our hydro production levels as a result of changes in streamflow and precipitation patterns.

In summary, the study concluded that going forward, average annual customer load levels do not significantly vary, but winter peak loads are slightly lower by 2045 (reduce by 63 MW) and summer peak loads are slightly higher (increase by 55 MW)³. As for hydro conditions, Avista’s production is expected to increase slightly (increase by 15 aMW) for the Clark Fork and Spokane River systems over the year with lower expected hydro production in the spring and summer and higher hydro production in the winter months. From a hydro production point of view, these changes will reduce the cost to serve our customers in the future. The combined result is also indicative of a gradual shift of customer loads from winter peaking towards summer peaking by the early 2030s.



³ Avista’s [2021 Electric IRP](#); Climate Shift Portfolio Optimization beginning on page 278.

Opportunities

Renewable Energy

Since the Company's founding on renewable hydroelectric power in 1889, Avista has continued to increase the share of renewable energy in our generation portfolio. Our current electrical generation capability is comprised of 60% renewable energy that includes hydroelectric, biomass, solar and wind resources. As a comparison, the US electric industry's generation capability is comprised of only 19% renewable energy.⁴

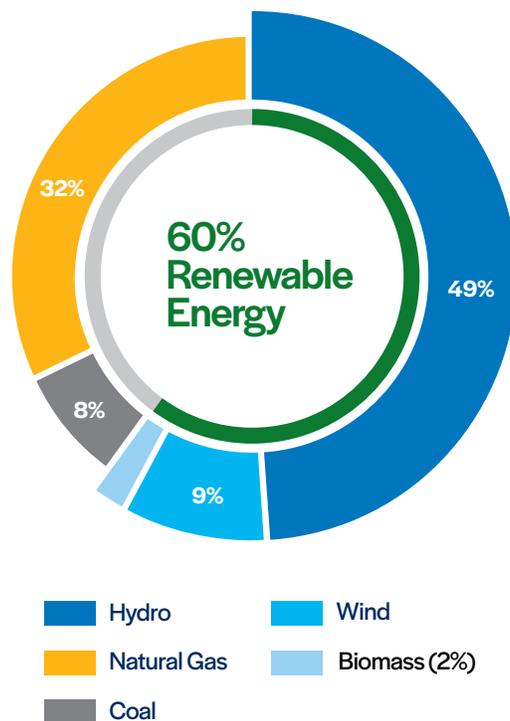
Our existing hydroelectric generation is a flexible baseload energy resource that supports the integration and operational reliability of renewable energy generation. When the wind dies down and the sun does not shine as brightly, our hydroelectric generation can immediately ramp up to balance this unanticipated dip in renewable generation, ensuring a smooth generation profile across our resource portfolio.

The costs and operational efficiencies of renewable energy resources have steadily been improving over the past several decades and this trend is expected to continue. In addition, renewable energy projects do not emit GHG emissions, are more geographically diverse, utilize far less water, and may be sited in numerous different areas across our service territories as compared to traditional baseload thermal plants. These renewable energy characteristics lower the risks associated with acute and chronic physical climate change risks and aid in the transition to a lower carbon future that aligns with Avista's clean electricity goals and renewable energy strategy. Our IRP planning processes continue to validate the transition to renewable energy projects going forward.

To further aid in implementing our renewable energy strategy, Avista will begin operating within the Western Energy Imbalance Market (EIM) operated by the California Independent System Operator (CAISO) in the western United States in March of 2022. The Western EIM is a real-time energy balancing market that automatically uses the lowest-cost electric resources available over a large geographic area to meet utility customer needs while optimizing the use of renewable energy. By rebalancing supply and demand across a larger more diverse footprint and in a more economic manner, the Western EIM participants can share generation resources, which drives customers costs lower and allows for the efficient use of additional renewable energy resources while maintaining the reliability of the electrical grid.

Electricity Generation Resource Mix

As of Dec. 31, 2020
Excludes AEL&P



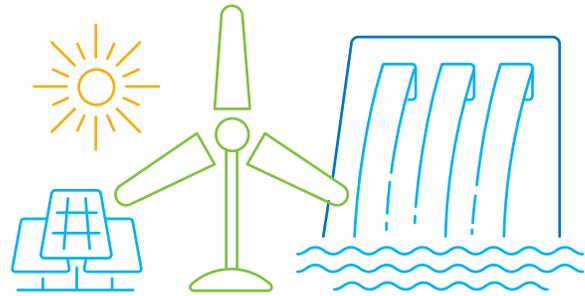
Avista is actively preparing for new opportunities and energy sources on the natural gas side of our business as well. In particular, RNG is being analyzed as a near-term supply resource for our natural gas local distribution company (LDC). The captured methane gas in RNG yields substantial greenhouse gas emissions savings and is considered a renewable energy resource. RNG may be used by boilers for heat, as power generation, compressed natural gas vehicles for transportation or directly injected into the natural gas grid for customer end use. Additionally, RNG increasingly becomes a cost-effective supply resource when located within our natural gas LDC area as this proximity reduces siting, infrastructure and transportation-related costs.

⁴ U.S. Energy Information Administration 2020 US electric industry generation capability: Renewables 19%, Nuclear 20%, Coal 23% and Natural Gas 38%.

Hydrogen is another opportunity and energy source with potential to help solve our future energy needs. While hydrogen remains a longer-term supply resource option for our natural gas LDC, expanding renewable electricity production to create green hydrogen is moving from concept to market throughout the world. Further, green hydrogen can be combined with a carbon dioxide source to produce methane, referred to as methanation, and then injected in the natural gas grid for customer end use – a process known as power to gas. This process can also be used for seasonal energy storage needs.

Avista continues to analyze and prepare for these emerging opportunities on the natural gas side of our business. We view RNG and hydrogen as important components of our natural gas emission reduction goals and corporate strategy moving forward.⁵ These emerging technologies will provide our customers with new environmentally friendly, low carbon fuel choices, delivered seamlessly through our existing natural gas system.

Continued growing customer demand for clean energy ensures that Avista will seek opportunities to incorporate renewable energy choices into our customers’ products and service offerings. The Company currently offers several voluntary renewable energy programs for our customers in order to provide simple, flexible and convenient opportunities to directly support the continued expansion and transition to clean, renewable energy.



Customer Clean Energy Programs	
My Clean Energy	Funds received from participating customers are used to purchase Renewable Energy Credits (RECs) from renewable energy facilities. Funds may also be used towards the construction of new community-based projects that increase public support of renewable energy through education, and growing awareness of renewable energy technologies.
Community Solar	Participating customers can purchase a stake in a community-based solar array. Over the life of the solar array project, participating customers will realize energy cost savings in the form of monthly credits on their utility bills.
Solar Select	Offered to our commercial and industrial customers, the Solar Select program provides the opportunity to acquire solar electricity and the associated RECs with no additional costs. This program is powered by a large solar array located in central Washington and includes more than 80,000 panels across 200 acres.
Onsite Generation	Resources, tools and net metering services offered to customers for onsite renewable energy projects. From initial evaluation, locating experienced installers and getting connected to our grid, Avista actively supports solar and other types of customer onsite renewable energy generation.

⁵ Avista’s [2021 Natural Gas IRP](#); Chapter 5: Carbon Reduction.

Energy Efficiency

Avista believes that some of the most effective carbon reduction strategies that we can implement involve helping customers avoid energy usage in the first place. In the past decade alone, our customers have realized energy efficiency savings in excess of 800 million Kilowatt hours of electricity and just under 12 million therms of natural gas. Our current IRP planning processes on the electric and natural gas sides of our business both continue to identify long-term and increasing value in the Company's offering of energy efficiency and conservation programs to our customers.

Based on our 2021 electric IRP preferred resource strategy,⁶ the Company expects 113 aMW of electrical energy efficiency from our customers through 2041. In total, energy efficiency is anticipated to meet 68% of forecasted load growth between 2022 and 2045. Furthermore, demand response programs are integral to Avista's strategy of serving peak load requirements with non-emitting resources in the future as well. By offering a variety of cost-effective program incentives and rate redesigns, demand response programs are targeted to begin in 2024 and ramp up to provide over 70 MW of capacity by 2035.

Electric Transportation

As concerns about a changing climate grow, the imperative to move away from fossil fuels in the transportation sector continues to gain momentum. The global transition to electric transportation is driven by climate policy mandates and operational cost saving opportunities across the economy over the long-term. Considerable investments in electric battery technologies and systems around the world continue to improve functionality and drive down electric vehicle and equipment costs, increasingly providing a viable option for residential and commercial customers to make the switch.

Whether moving people or goods, electric transportation powered by clean, affordable and renewable energy sources promises a better energy future for all. By mid-century, electric transportation loads could account for 20% or more of a utility's electrical load. This additional load must be managed and integrated within the electrical grid in an optimal way in order to avoid costly system upgrades.

On the natural gas side of our business, we anticipate a similar increase in energy efficiency opportunities to be realized in the future. Based on our 2021 natural gas IRP, the Company expects cumulative energy efficiency savings in excess of 70 million therms through 2040.⁷ By the end of this 20-year timeframe, this represents approximately 16% of our baseline natural gas supply forecast for our customers being provided through energy efficiency.

To support these energy efficiency programs from a revenue perspective, the Company has regulatory decoupling mechanisms in place with each of our state's public utility commissions. Decoupling ensures that reductions in customer energy usage due to abnormal weather, conservation or energy efficiency will not negatively impact Company revenue.

By continuing to offer our conventional energy efficiency and conservation programs and by leveraging new and emerging smart grid technologies that are anticipated both on the utility side and the customer side of the meter, the Company expects energy efficiency opportunities to remain an important part of our transition to a lower carbon future.

Avista is committed to this transformation and has implemented numerous initiatives over the years to lay the groundwork for taking advantage of these electric transportation opportunities. Our comprehensive [Transportation Electrification \(TE\) Plan](#) aims to satisfy emerging customer needs, reduce transportation-related greenhouse gas emissions and provide value beyond traditional energy services.

Building on what we learned from our initial Electric Vehicle (EV) pilot program carried out from 2016 through 2019, the TE Plan lays out a roadmap for transitioning to a better energy future aligned with our clean energy goals, where by 2045 the majority of transportation is powered by clean, reliable and affordable electricity. This transition will save our customers in vehicle fuel and maintenance costs, while eliminating more than 80% of greenhouse gases in the transportation sector that currently account for the largest source of emissions in our region.

⁶ Avista [2021 Electric IRP](#); Chapter 11 Preferred Resource Strategy.

⁷ Avista [2021 Natural Gas IRP](#); Chapter 3: Demand Side Resources.

Recent regulatory approvals in Washington state have enabled commercial EV rates with time-of-use designs to encourage off-peak charging, accelerated fleet electrification and private investments in public DC fast charging sites. Locally, we have witnessed the growing electrification of public transit and city fleets, electric forklift adoption and strong customer interest in workplace and residential charging.

By working together with our industry partners, community leaders, regulators, and customers, Avista is well positioned to support and benefit from these electric transportation opportunities through increased electrical loads and billing revenue and a significant reduction of transportation-related GHG emissions in our region.



Smart Grid

Avista is committed to taking advantage of opportunities associated with the emergence of the smart grid. We have long been an advocate for the development of a digital and intelligible grid which enhances the product and services our customers desire in order to continue our collective transition to a low carbon future.

The Company's Advanced Metering Infrastructure (smart meters) is an example of our enhanced product and service capabilities. Smart meters provide for two-way communication between Avista and our customers for operational efficiencies and improved customer usage information. This enhanced information will arm our customers with a better understanding of their energy use in order to make informed decisions regarding how best to manage their energy consumption, reduce their own bills and help cut greenhouse gas emissions.

Likewise, smart meters provide a platform for accommodating new and emerging technologies in conjunction with the smart grid of the future. With smart meters and the smart grid, digital technologies are applied to every aspect of the industry, from generation, to transmission, to distribution, to the customer

interface. This will enable the grid to sense current conditions in energy flow, improve reliability and energy efficiencies. The smart grid will also contribute to a more sustainable energy future by facilitating the integration of additional renewables, helping to reduce our region's carbon footprint.

As previously discussed, Avista has been on the forefront of clean energy and innovation for quite some time. We have been actively involved in smart grid initiatives and partnerships with third parties to efficiently research, develop and innovate the smart grid of the future for the past several decades. Our Eco-District, Urbanova, EDO and EIM partnerships and efforts are continuing to shape how shared energy resources may be used in the most efficient manner, among other opportunities.

These and other initiatives and partnerships all play a role in Avista's efforts to develop, support and implement the smart grid of the future that will enable additional clean energy opportunities, increasing energy efficiencies and additional products and services for our customers in pursuit of their clean energy demands.

Risk Management

Climate change-related risks are fundamental risks to our industry and have been shaping its evolution for an extended period of time, as witnessed by the shift from fossil fuel generation to renewables, growth in conservation and demand response, technological innovation for a smarter grid and additional products and services to our customers, and the advancing regulatory and policy frameworks supporting transition to a lower carbon future.

Avista's management team utilizes an enterprise risk management (ERM) process throughout all levels of the organization to identify and assess all relevant business risks, including those related to the climate change. The ERM process supports management in identifying, assessing, quantifying, managing and mitigating our risks. In addition to climate change-related risks, the Company also evaluates other sustainability and ESG factors in its integrated ERM processes as well due to the high degree of interrelationships between these subjects and our other business risks.

Avista's risk management department facilitates the collection and analysis of risk information across all areas of the Company through the application of their ERM framework methodology. The Company's ERM process includes guidance to promote a consistent risk assessment process throughout all levels of the organization. When assessing risks, each risk undergoes an assessment process to determine time horizons, as well as the likelihood and severity of potential impacts to the Company. The ERM process also includes periodic review with the business of potential future potential risks in addition to the current risks. Climate change-related risks are assessed using the same methodology as all other risks to which the Company is exposed.

Following the ERM risk identification and assessment processes, the risk management department reviews the business units' risk mitigation and monitoring activities. This risk management process also considers the risk appetite of the organization when determining the appropriate risk

mitigation criteria, including whether to accept, avoid, transfer or reduce the potential impact of the risk to the Company.

The business is responsible for implementing and ensuring that the appropriate risk mitigation activities are being executed as designed. Regular reviews and assessments of risk mitigation effectiveness occur through ongoing ERM processes, which may require the business to implement revised mitigation activities if the desired risk reduction has not been realized upon subsequent risk assessments. Climate change-related risks undergo these same ERM processes for the development, execution, monitoring and assessment of risk mitigation activities.

In addition to the ongoing ERM process of gathering, assessing, monitoring and assessing risks throughout the organization, the Company's risk management department performs an annual risk review with Company officers. This formal review process serves to ensure that the ERM processes are identifying the relevant risks facing the organization, including the identification of pending and future potential risks. The risk management department facilitates the review of the organization's top risks with the officer team to enable a portfolio level review. This risk management process is designed to ensure that risks and interrelated risks are correctly identified, assessed and prioritized, to ensure alignment to Company strategy and to ensure support and budget and resources are available to successfully carry out the implementation of the risk acceptance activities.

Collectively, risk information is organized among the Company's primary categories of risk exposure – utility regulatory, operational, cyber and technology, strategic, external mandates, financial, energy commodity, and compliance – of which climate change-related risks are embedded. On a quarterly basis, or more often if needed, status updates on the Company's top risks is communicated to the Audit Committee and the full Board.

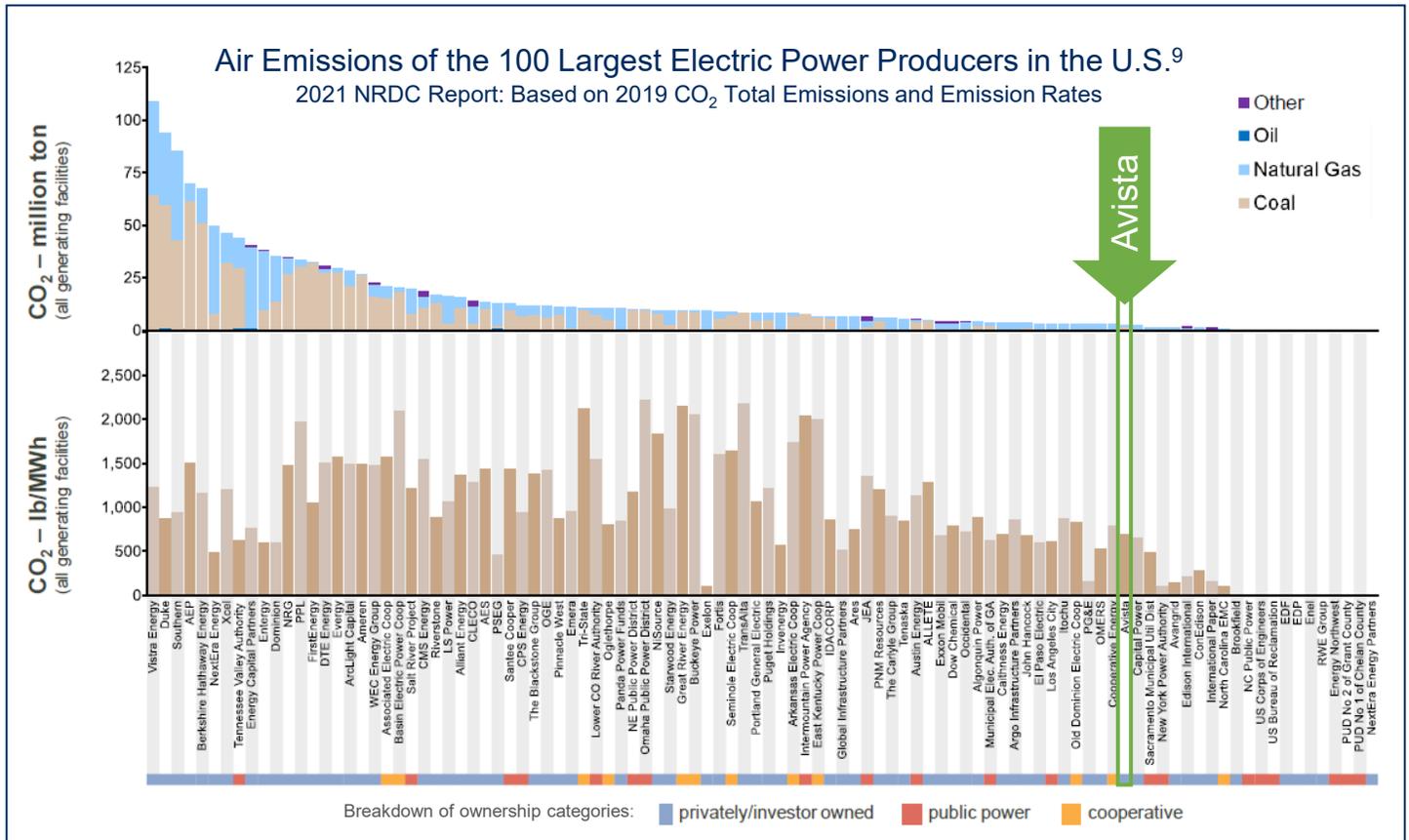
Metrics & Targets

Since our founding in 1889 as a producer of clean, renewable hydro power, Avista has been a leader in clean energy and innovation. Today, we are proud to build upon these commitments to environmental stewardship and sustainability as we continue to meet the changing energy needs of our customers and communities.

Avista’s clean electricity goals of serving our customers with a carbon neutral supply of electricity by the end of 2027 and with 100% clean electricity by 2045 demonstrate our vision and support of a clean energy future. We continue to work towards reducing and ultimately eliminating greenhouse gases from the electricity that we deliver to our customers and the

communities we serve. In addition, our clean electricity goals meet or exceed current greenhouse gas emission reduction laws and regulations that apply to our Company.

We have long been recognized by the Natural Resources Defense Council (NRDC) as one of the cleanest power producers in the country when it comes to greenhouse gases. Our electrical generation capability is reflective of our renewable energy strategy and is currently comprised of 60% renewable energy that includes hydroelectric, biomass, solar and wind resources. As a comparison, the US electric industry’s generation capability is comprised of only 19% renewable energy.⁸



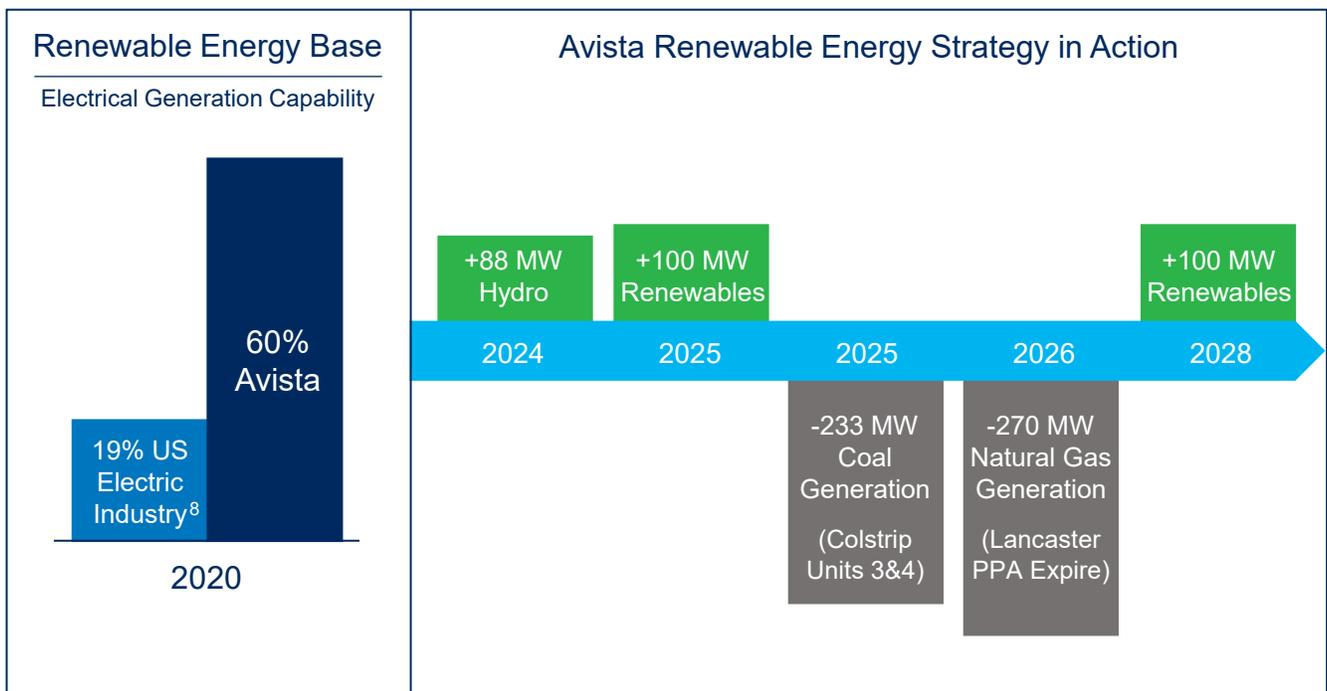
⁸ U.S. Energy Information Administration 2020 US electric industry generation capability: Renewables 19%, Nuclear 20%, Coal 23% and Natural Gas 38%.

⁹ Source: National Resources Defense Council: Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the US (July 2021): <https://www.nrdc.org/resources/benchmarking-air-emissions-100-largest-electric-power-producers-us>

As detailed in the Renewable Energy section of this report, Avista is committed to meeting the needs for reliable and affordable energy while advancing environmental sustainability principles. Renewable energy’s operating attributes increasingly lower the risks associated with climate change and aid in the transition to a lower carbon future. As such, our renewable energy strategy, which involves the continued use and future acquisitions of additional renewable energy, clearly aligns with our clean electricity goals.

Furthermore, the Company’s IRP planning processes continue to validate our renewable energy strategy by supporting new

renewable energy projects in both our short-term and longer-terms planning horizons. The acquisition of additional renewable energy projects are designed to offset market purchases and replace the retirement of existing fossil-fuel thermal generating resources consistent with our most recent 2021 electric IRP’s Preferred Resource Strategy (PRS). The graphic below further highlights near-term examples of our renewable energy strategy in action. Over the course of this decade, our current PRS anticipates greenhouse gas emission reductions of 74% from 2019 levels by 2030 as a result of implementing our renewable energy strategy in support of the Company’s clean electricity goals.



When it comes to reducing greenhouse gas emissions and our clean electricity goals, Avista is starting from a position of strength. Our Company was founded on renewable hydro power and since then we have continued to expand our renewable energy base. Today, 60% of our electrical generation capability is comprised of renewable energy, and this percentage will only continue to grow in the near-term and long-term as we implement our renewable energy strategy and work towards our clean electricity goals.

As presented in the “Avista CO₂e Emissions” summary table and graph beginning on the next page of this report, Avista has already realized meaningful reductions in our greenhouse gas emissions. Compared to our historical baseline year of 2005, we have reduced our total (Scopes 1 and 2) greenhouse gas emissions from electric power deliveries by 26%, which represents a reduction of over one million metric tons of associated CO₂e emissions on an annual basis. Similarly, over this same timeframe, our total (Scopes 1 and 2) greenhouse gas emission intensity rate associated with power deliveries has been reduced by 21%.

Avista CO ₂ e Emissions in Metric Tons Associated with Electric Power Deliveries								
Category	2005 Baseline	2017	2018	2019	2020	2020 Reduction from 2005 Baseline	2028	2045
Scope 1 – Owned Power Generation	2,371,430	2,093,789	2,072,194	2,371,367	1,968,205	17%	Carbon Neutral Electricity Supply	100% Clean Electricity Supply
Scope 2 – Purchased Power	1,934,684	1,155,543	1,267,028	1,231,045	1,183,787	38%		
Scope 1 + Scope 2 Total	4,306,114	3,249,332	3,339,222	3,602,413	3,151,992	26%		
Avista CO ₂ e Emission Intensity (Metric Tons/Net MWh) Associated with Electric Power Deliveries								
Category	2005 Baseline	2017	2018	2019	2020	2020 Reduction from 2005 Baseline	2028	2045
Scope 1 – Owned Power Generation	0.323	0.281	0.278	0.313	0.276	14%	Carbon Neutral Electricity Supply	100% Clean Electricity Supply
Scope 2 – Purchased Power	0.321	0.232	0.234	0.231	0.220	31%		
Scope 1 + Scope 2 Total	0.322	0.261	0.259	0.279	0.252	21%		
Emission calculations adhere to the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Corporate Protocol Standard.								

When examining our remaining non-renewable energy resources and their associated greenhouse gases, two resources warrant particular attention. As the Company’s only coal-fired resource, Colstrip Units 3&4 is the single largest source of remaining greenhouse gas emissions for Avista. Based on 2020 emissions data, Colstrip Units 3&4 represent roughly 60% of Avista’s remaining Scope 1 greenhouse gas emissions. Similarly, the natural gas-fired Lancaster PPA is the second largest source of remaining greenhouse gas emissions for the Company. Based on 2020 emissions data, the Lancaster PPA represents roughly 58% of the Company’s remaining Scope 2 greenhouse gas emissions. Together, these two resources represent roughly 58% of Avista’s total Scope 1 and Scope 2 remaining greenhouse gas emissions.

As both of these resources are planned to exit our generation portfolio (Colstrip Units 3&4 by the end of 2025¹⁰ and the expiration of the Lancaster PPA in October 2026), we are projected to realize substantial greenhouse gas emission reductions in the near-term. To illustrate the impact of these

two resources exiting our generation portfolio, the emissions graphs on the next page of this report projects our greenhouse gas emissions for 2026 and 2027 (2026 reflective of Colstrip Units 3&4 exit and 2027 reflective of the Lancaster PPA exit).

It should be noted that this emissions graph is not a complete representation of our forecasted greenhouse gas emissions’ trajectory, as the 2026 and 2027 figures are for illustrative purposes only. The 2026 and 2027 illustrative figures are based on the Company’s 2020 emissions data and removing Colstrip Units 3&4 emissions for 2026 and removing Lancaster PPA emissions for 2027. The emissions graph does not include forecasted additions of new renewable energy resources, energy efficiency and demand response, upgrades to our existing hydroelectric and biomass plants or changes to customer load and regional emission forecasts as detailed in the Company’s current electric PRS. Inclusive of all PRS planning assumptions and forecasts, the Company anticipates greater reductions than those illustrated in the following emissions graph.

¹⁰ The Avista [2021 Electric IRP](#) determined Colstrip Units 3 & 4 is cost effective for Avista customers to exit in 2022. Please see Chapter 4 of the Avista 2021 Electric IRP for additional details concerning the contractual complexities associated with exiting this resource.

Avista CO₂e Emissions in Million Metric Tons Associated with Electric Power Deliveries



As mentioned in the Policy, Legal and Market Risks section of this report, beyond 2030 and as we approach 100% clean electricity by 2045, the continued development of renewable energy technologies will need to advance in ways that support our clean electricity goals while also maintaining reliability and affordability for our customers. Stakeholder engagement in our IRP planning processes will inform specific resource decisions and any necessary adjustments in our plans. Meeting our clean electricity goals may also require accommodation from economic and environmental regulatory agencies insofar as the Company may need to acquire emission offsets to meet its longer-term goals.¹¹

Avista’s commitments and progress towards our clean electricity goals work in unison with our other clean air initiatives as well. As we continue to move towards our carbon-neutral and 100% clean electricity goals, we are reducing our greenhouse gas emissions and other related air pollutants as well, such as Nitrogen Oxide (NO_x), Sulfur Dioxide (SO₂), Mercury (Hg), and Volatile Organic Compounds (VOCs), among others. The Company’s generating resources are operated and maintained in compliance with air quality permits and other

agency rules. In addition, we have implemented pollution control measures to limit the amount of air pollutants associated with our electric power deliveries over the years.

As presented in the “Avista Other Air Emissions” summary table and graphs beginning on the next page of this report, Avista has already realized meaningful reductions in several air emission categories. Compared to our historical baseline year of 2005, we have reduced our NO_x and SO₂ emissions from electric power deliveries by 68% and reduced our Hg emissions by 30%. Similarly, over this same timeframe, our air emission intensity rates associated with NO_x and SO₂ have reduced by 67% and Hg by 28%.

Going forward, and in a similar fashion with respect to greenhouse gas emission reductions, we anticipate even further reductions in both absolute and intensity rates for our other air emissions when Colstrip Units 3&4 exit our electric generation portfolio. For illustrative purposes, the impact of removing Colstrip Units 3&4 is projected for the 2026 emission figures and overall reductions from our baseline.

¹¹ For additional information regarding Avista’s clean electricity goals, scenario constraints and assumptions, please refer to our [2021 Electric IRP](#) and our [2020 Annual Report](#).

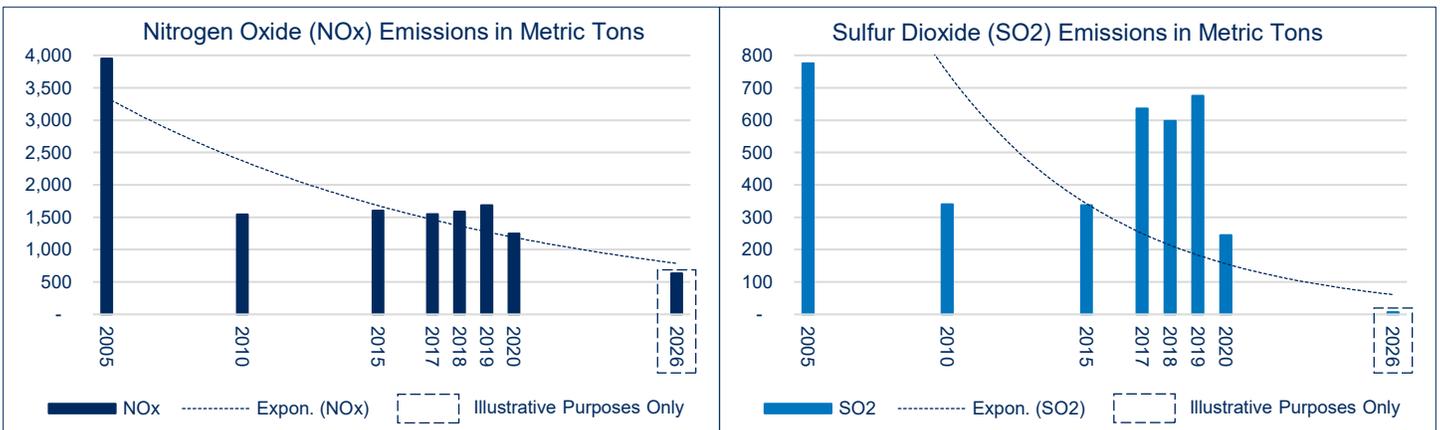
Avista Other Air Emissions Associated with Electric Power Deliveries (Scope 1)

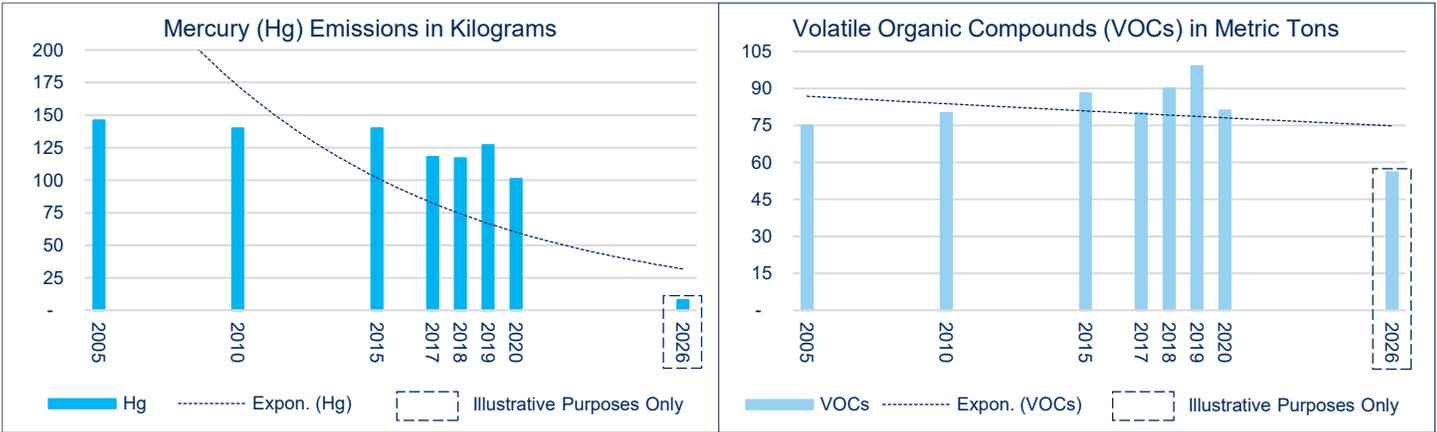
Category	Unit	2005 Baseline	2017	2018	2019	2020	2020 Reduction from 2005 Baseline	Projected	
								2026 Emissions	2026 Reduction from 2005 Baseline
Nitrogen Oxide (NOx)	Metric Tons	3,954	1,549	1,588	1,684	1,247	68%	632	84%
Sulfur Dioxide (SO2)	Metric Tons	776	636	598	675	245	68%	7	99%
Mercury (Hg)	Kilograms	146	118	117	127	101	30%	8	94%
Volatile Organic Compounds (VOCs)	Metric Tons	75	80	90	99	81	(8% Increase)	56	25%

Avista Other Air Emission Intensity (Unit/Net MWh) Associated with Electric Power Deliveries (Scope 1)

Category	Unit	2005 Baseline	2017	2018	2019	2020	2020 Reduction from 2005 Baseline	Projected	
								2026 Intensity	2026 Reduction from 2005 Baseline
Nitrogen Oxide (NOx)	MT / Net MWh	0.000539	0.000208	0.000213	0.000222	0.000175	67%	0.000108	80%
Sulfur Dioxide (SO2)	MT / Net MWh	0.000106	0.000085	0.000080	0.000089	0.000034	67%	0.000002	98%
Mercury (Hg)	Kilograms / Net MWh	0.000020	0.000016	0.000016	0.000017	0.000014	28%	0.000002	90%
Volatile Organic Compounds (VOCs)	MT / Net MWh	0.000010	0.000011	0.000012	0.000013	0.000011	(11% Increase)	0.000009	7%

Net MWh is comprised of Avista's Total Scope 1 Owned Power Generation MWhs for each reporting period and forecasted Net MWh for 2026.





Additional Metrics

SASB

Avista has also utilized the SASB standards for the Electric Utilities and Power Generators industry and the Gas Utilities and Distributors industry to prepare additional quantitative ESG-related disclosures. The methodologies underlying these SASB metrics are detailed in the industry-relevant accounting standards available at www.sasb.org. The Company’s disclosed SASB metrics are presented in the next section of this report.

EEI & AGA ESG and Sustainability Reporting

We have also adopted EEI and AGA’s ESG and sustainability reporting templates that were developed to provide the financial sector with uniform and consistent ESG and sustainability data and information relevant for the electric utility and natural gas utility industries. Additional information regarding the EEI and AGA ESG and sustainability reporting template is available at www.eei.org. The Company’s disclosed EEI and AGA metrics are available on Avista’s [ESG/Corporate Responsibility](#) webpage.

SASB Standards

Electric Utilities and Power Generators Standard¹²

SASB Code	Accounting Metric	Avista Utilities	
Greenhouse Gas Emission & Energy Resource Planning			
IF-EU-110a.1	Gross global Scope 1 emissions (metric tons CO ₂ e) ¹³	1,968,205	
	Percentage covered under emissions-limiting regulations	70.9	
	Percentage covered under emissions-reporting regulations	100	
IF-EU-110a.2	Greenhouse gas (GHG) emissions with power deliveries (metric tons CO ₂ e) ¹⁴	3,151,992	
IF-EU-110a.4	Number of customers served in markets subject to renewable portfolio standards	261,438	
	Percentage fulfillment of RPS target by market	100	
Air Quality			
IF-EU-120a.1	NOx emissions (metric tons); percentage of each in or near areas of dense population	1,247	3.3
	SOx emissions (metric tons); percentage of each in or near areas of dense population	245	0.3
	Particulate matter emissions (metric ton); percentage of each in or near areas of dense population	639	1.5
	Lead emissions (metric tons); percentage of each in or near areas of dense population	Not Available	
	Mercury emissions (metric tons); percentage of each in or near areas of dense population	0.1	0
Water Management			
IF-EU-140a.1	Total water withdrawn (thousand cubic meters) ¹⁵ ; percentage of each in regions with High or Extremely High Baseline Water Stress	45,816,076	0
	Total water consumed (thousand cubic meters); percentage of each in regions with High or Extremely High Baseline Water Stress	18,689	0
IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	0	
Coal Ash Management			
IF-EU-150a.1	Coal combustion residuals generated (metric tons)	57,141	
	Percentage of coal combustion residuals recycled	0	
IF-EU-150a.2	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	1x Incised, N/A 1x Significant, Satisfactory	

¹² Data provided for Avista Utilities only, 2020 operating data.

¹³ Figure represents Avista Utilities' total Scope 1 emissions from owned power generation.

¹⁴ Figure represents Avista Utilities' total Scope 1 emissions from owned power generation and total Scope 2 emissions from purchased power.

¹⁵ 99.96% of total water withdrawals represent non-consumptive use by hydroelectric plants.

SASB Standards

Electric Utilities and Power Generators Standard (Continued)

SASB Code	Accounting Metric	Avista Utilities	
Energy Affordability			
IF-EU-240a.1	Average retail electric rate for residential customers (USD/kWh)	\$0.099	
	Average retail electric rate for commercial customers (USD/kWh)	\$0.102	
	Average retail electric rate for industrial customers (USD/kWh)	\$0.056	
IF-EU-240a.2	Typical monthly electric bill for residential customers for 500 kWh (USD)	\$49.62	
	Typical monthly electric bill for residential customers for 1,000 kWh (USD)	\$99.23	
IF-EU-240a.3	Number of residential customer electric disconnections for non-payment	4,530	
	Percentage of residential customer electric disconnections for non-payment reconnected within 30 days	85	
Workforce Health & Safety			
IF-EU-320a.1	Total recordable incident rate (per 100 full-time workers)	3.21, 4.40 ¹⁶	
	Total fatality rate (per 100 full-time workers)	0	
	Total near miss frequency rate (per 100 full-time workers)	0.48	
End-Use Efficiency & Demand			
IF-EU-420a.1	Percentage of electric utility revenues from rate structures that are decoupled	82	
	Percentage of electric utility revenues from rate structures that contain a lost revenue adjustment mechanism (LRAM)	0	
IF-EU-420a.2	Percentage of electric load served by smart grid technology	99	
IF-EU-420a.3	Customer electricity savings from efficiency measures (MWh), by market	WA	24,186
		ID	16,711
Nuclear Safety & Energy Management			
IF-EU-540a.1	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	Avista Corporation does not own or operate any nuclear power units	
IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness		
Grid Resiliency			
IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	0	
IF-EU-550a.2	System Average Interruption Duration Index (SAIDI) inclusive of major event days	378	
	System Average Interruption Frequency Index (SAIFI) inclusive of major event days	1.45	
	Customer Average Interruption Duration Index (CAIDI) inclusive of major event days	261	

¹⁶ Figure including work-related COVID-19 cases for current year 2020 results.

SASB Standards

Electric Utilities and Power Generators Standard (Continued)

SASB Code	Accounting Metric	Avista Utilities
Activity Metrics		
IF-EU-000.A	Number of residential customers served	350,669
	Number of commercial customers served	43,497
	Number of industrial customers served	1,277
IF-EU-000.B	Total electricity delivered to residential customers (MWh)	3,807,041
	Total electricity delivered to commercial customers (MWh)	2,994,648
	Total electricity delivered to industrial customers (MWh)	2,042,265
	Total electricity delivered to all other retail customers (MWh)	31,089
	Total electricity delivered to wholesale customers (MWh)	2,796,393
IF-EU-000.C	Length of transmission lines (km)	3,661
	Length of distribution lines (km)	30,899
IF-EU-000.D	Total electricity generated by Hydropower (MWh)	3,650,500
	Total electricity generated by Natural Gas (MWh)	1,988,395
	Total electricity generated by Coal (MWh)	1,220,311
	Total electricity generated by Biomass (MWh)	264,851
	Percentage of total electricity generated in regulated markets	100
IF-EU-000.E	Total wholesale electricity purchased (MWh)	5,396,452

SASB Standards

Gas Utilities and Distributors Generators Standard¹⁷

SASB Code	Accounting Metric	Avista Utilities	
Energy Affordability			
IF-GU-240a.1	Average retail gas rate for residential customers (USD/MMBtu)	\$0.971	
	Average retail gas rate for commercial customers (USD/MMBtu)	\$0.727	
	Average retail gas rate for industrial customers (USD/MMBtu)	\$0.363	
	Average retail gas rate for transportation services (USD/MMBtu)	\$0.046	
IF-GU-240a.2	Typical monthly gas bill for residential customers for 50 MMBtu of gas delivered per year (USD)	\$48.55	
	Typical monthly gas bill for residential customers for 100 MMBtu of gas delivered per year (USD)	\$97.10	
IF-GU-240a.3	Number of residential customer gas disconnections for non-payment	715	
	Percentage of residential customer gas disconnections for non-payment reconnected within 30 days	69	
End-Use Efficiency & Demand			
IF-GU-420a.1	Percentage of gas utility revenues from rate structures that are decoupled	95	
	Percentage of gas utility revenues from rate structures that contain a lost revenue adjustment mechanism (LRAM)	0	
IF-GU-420a.2	Customer electricity savings from efficiency measures (MMBtu), by market	WA	59,533
		ID	35,255
		OR	41,938
Integrity of Gas Delivery Infrastructure			
IF-GU-540a.1	Number of reportable pipeline incidents	1	
	Number of Corrective Action Orders	0	
	Number of Notices of Probable Violation	8	
IF-GU-540a.2	Percentage of distribution pipeline that is cast and/or wrought iron	0	
	Percentage of distribution pipeline that is unprotected steel	0	
IF-GU-540a.3	Percentage of gas transmission pipelines inspected	100% Leak Survey Inspections	
	Percentage of gas distribution pipelines inspected	44% Leak Survey Inspections	

¹⁷ Data provided for Avista Utilities only, 2020 operating data.

SASB Standards

Gas Utilities and Distributors Generators Standard (Continued)

SASB Code	Accounting Metric	Avista Utilities
Activity Metrics		
IF-GU-000.A	Number of residential customers served	327,125
	Number of commercial customers served	36,186
	Number of industrial customers served	243
IF-GU-000.B	Total natural gas delivered to residential customers (MMBtu)	219,987,659
	Total natural gas delivered to commercial customers (MMBtu)	132,856,780
	Total natural gas delivered to industrial customers (MMBtu)	15,079,939
	Total natural gas transferred to a third party (MMBtu)	185,730,625
IF-GU-000.C	Length of gas transmission pipelines (km)	146
	Length of gas distribution pipelines (km)	21,851

Forward-Looking Statement

This report contains forward-looking statements, including statements regarding our current expectations, plans or objectives for future operations and other factors, which may affect the company in the future. Such statements are subject to a variety of risks, uncertainties and other factors, most of which are beyond our control and many of which could have significant impact on our operations, results of operations, financial condition or cash flows and could cause actual results to differ materially from those anticipated in our statements.

For a further discussion of these factors and other important factors please refer to our most recent Annual Report on Form 10-K, or Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission. Those reports are also available on our website at www.avistacorp.com. The forward-looking statements contained in this report is current as of December 1, 2021, and should not be relied upon as being current as of any subsequent date. We undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances that occur after the date on which such statement is made or to reflect the occurrence of unanticipated events. New risks, uncertainties and other factors emerge from time to time, and it is not possible for management to predict all of such factors, nor can it assess the impact of each such factor on our business or the extent to which any such factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement.

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