

VISTRA
*CLIMATE
REPORT*
2023

About Vistra

Vistra (NYSE: VST) is a leading Fortune 500 integrated retail electricity and power generation company based in Irving, Texas, providing essential resources for customers, commerce, and communities. Vistra combines an innovative, customer-centric approach to retail with safe, reliable, diverse, and efficient power generation. The company brings its products and services to market in 20 states and the District of Columbia, including all major competitive wholesale power markets in the U.S. Serving approximately 4 million residential, commercial, and industrial retail customers with electricity and natural gas, Vistra is one of the largest competitive electricity providers in the country and offers over 50 renewable energy plans. The company is also the largest competitive power generator in the U.S. with a capacity of approximately 37,000 megawatts powered by a diverse portfolio, including natural gas, nuclear, solar, and battery energy storage facilities. Vistra is guided by four core principles: we do business the right way, we work as a team, we compete to win, and we care about our stakeholders, including our customers, our communities where we work and live, our employees, and our investors.



Our Purpose

**Lighting up lives,
powering a better way forward.**

About this report

Vistra believes the identification of climate-related risks and opportunities is essential in the process of our energy transition and decarbonization pursuit. As part of our commitment to transparency, we are pleased to be releasing our second Task Force on Climate-Related Financial Disclosures (TCFD) aligned Climate Report.

The TCFD framework is intended to provide a set of recommended climate-related disclosures that companies may use to better inform investors, customers, and stakeholders of their climate-related financial risks. This report discusses our approach to evaluating and managing climate-related risks and opportunities and is guided by TCFD's four pillars: governance, strategy, risk management, and metrics and targets. Please see below an outline of TCFD's core recommended disclosures which this report will follow in the subsequent sections.

For additional information about our environmental, social, and governance (ESG) and risk management efforts, see our 2022 Sustainability Report and accompanying 2022 Sustainability Accounting Standards Board (SASB) Standards Table, 2022 Global Reporting Initiative (GRI) Index, 2022 Statement of Greenhouse Gas Emissions in accordance with the Greenhouse Gas Protocol, 10K, and Annual Proxy.

Relevant Links

[2022 Sustainability Report](#)

[2022 SASB Standards Table](#)

[2022 Statement of Greenhouse Gas Emissions](#)

[10K](#)

[Annual Proxy](#)

TCFD Core Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the company's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the company's business, strategy, and financial planning, where such information is material.	Disclose how the company identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
A) Describe the board's oversight of climate-related risks and opportunities.	A) Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	A) Describe the company's process for identifying and assessing climate-related risks.	A) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.
B) Describe management's role in assessing and managing climate-related risks and opportunities.	B) Describe the impact of climate-related risks and opportunities on the company's business, strategy, and financial planning.	B) Describe the company's processes for managing climate-related risks.	B) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	C) Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2.0°C or lower scenario.	C) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	C) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.

Board Oversight

We discuss sustainability related topics with our Board each quarter and on a more frequent basis as necessary. Each board member brings relevant experience navigating climate change and sustainability strategy and policy, human capital management, and diversity, equity, and inclusion (DEI). Further, the full Board focuses extensively on our path to decarbonization, our long-term sustainability strategy, and takes an active role with management to review and oversee the development and execution of Vistra's long-term corporate strategy. Given their significance and interconnectedness with capital deployment and business strategy, the Board regularly reviews climate-related risks and opportunities, including the transformation of our generation portfolio, progress towards sustainability targets, and investments in low-to-no carbon resources.

The Board leverages best corporate governance practices through the use of committees to provide a diversity of subject matter expertise. Board Committees relevant to sustainability include the Sustainability and Risk Committee, Nominating and Governance Committee, and Social Responsibility and Compensation Committee.

The Sustainability and Risk Committee, among its responsibilities:

- Reviews and discusses with management Vistra's strategies, policies, and practices to assist in addressing public sentiment and shaping policy to manage sustainability efforts
- At least annually reviews and discusses with management Vistra's climate-related risks including physical, transition, reputation, regulatory, supply chain, and market risks related to climate change
- Oversees and monitors Vistra's core vision and values and advises the full Board and management on sustainability policies, including Vistra's publicly stated targets and objectives for company-wide reduction of GHG emissions
- Provides oversight of any sustainability reporting to the public or governmental agencies

Sustainability and Risk Committee is comprised of four independent directors who have experience in analyzing climate risks across the enterprise, advocating for appropriate climate-related policies, and creating long-term sustainable strategy.

Hilary E. Ackerman chair of the Sustainability and Risk Committee, previously served as the chief risk officer at Goldman Sachs, responsible for all enterprise-wide risk assessment.

Gavin R. Baiera has served on numerous boards of directors including, most recently, MACH Gen, Orbitz Worldwide, and Travelport Worldwide.

Jeff D. Hunter has served as the senior managing director for an investment company focused exclusively on lower carbon and renewable energy infrastructure investments.

Julie A. Lagacy was chief sustainability and strategy officer at Caterpillar Inc., a manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives, from November 2021 through January 2023.

The Nominating and Governance Committee, among its responsibilities:

- Identifies individuals qualified to become directors and recommends to the Board the nominees to stand for election as directors
- Oversees and assumes a leadership role in the governance of the Company including recommending periodic updates to the Corporate Governance Guidelines for the Board's consideration
- Participates with the Chairman in the Board's annual evaluation of its performance and of the Committees
- Recommends to the Board the director nominees for each annual stockholder meeting and for each Committee
- Oversees the orientation process for new directors and ongoing education for directors

Nominating and Governance Committee is comprised of three independent directors:

Paul M. Barbas, Chair

Arcilia C. Acosta

Brian K. Ferraioli

Social Responsibility and Compensation Committee, among its responsibilities:

- Oversees and monitors the Company's culture and core principles, including periodically reviewing employee engagement
- Reviews and oversees the Company's overall compensation philosophy, including its alignment to consider climate-related risks and opportunities
- Oversees the development and implementation of compensation programs, policies, and programs aligned with the Company's business strategy. This responsibility led the committee to evolve Vistra's corporate scorecard to incorporate climate-related topics including performance towards emission reduction targets and the performance of the Vistra Zero portfolio
- Oversees and monitors the Company's strategies, initiatives, and programs relating to human capital management and talent retention
- Reviews the Company's DEI philosophy, commitment, results, and effectiveness including programs relating to employees, community, and suppliers
- Reviews the Company's practices and strategies to further its corporate citizenship, including corporate social responsibility initiatives in support of charitable and community service organizations

Social Responsibility and Compensation Committee is comprised of four independent directors:

Lisa Crutchfield, Chair

Gavin R. Baiera

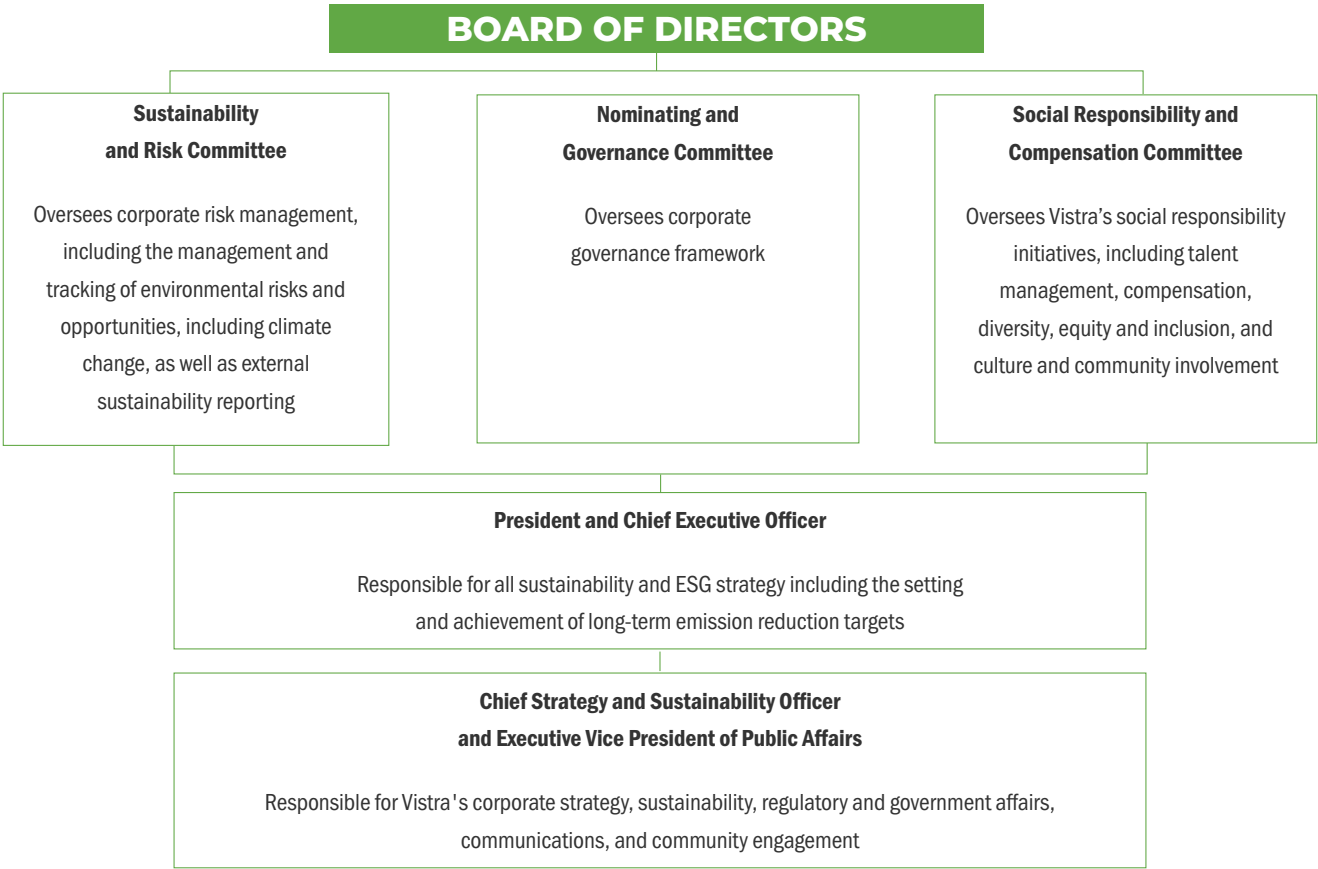
Jeff D. Hunter

Julie A. Lagacy

Management Responsibility

Climate-related risks and opportunities are monitored by numerous individuals within the Vista management organization, with direct oversight by Jim Burke, Vistra’s President and Chief Executive Officer (CEO). Burke has 20+ years of experience in the electric industry, providing him with extensive knowledge of the electric grid, competitive markets, regulatory oversight, commercial operations, and emerging technologies. He has been a key leader in Vistra’s strategic shift from a coal intensive fleet to a mostly natural gas-powered fleet as the company focuses on reducing its carbon footprint while also investing in zero-carbon assets such as renewables, battery energy storage, and nuclear assets.

Directly reporting to the CEO is Stacey Doré, Chief Strategy & Sustainability Officer and Executive Vice President of Public Affairs (CSO). The CSO manages the Corporate Sustainability team, responsible for Vistra’s ESG reporting and disclosures, and presents to the Sustainability and Risk Committee of the board at least quarterly, at each regularly scheduled committee meeting. Within the Vistra management team, the CSO is a member of Vistra’s Executive Committee, which consists of the CEO and his direct reports. The Executive Committee meeting forum includes discussion and decision-making related to general strategy, policy items, and operational updates.



The Risk Management Committee, chaired by the Chief Financial Officer (CFO), provides risk management oversight, monitoring, control, and guidance for all risk management activities at Vistra, and it approves risk management activities within limits delegated by the Board of Directors. Each of the Executive and Risk Management committee provides a forum for discussion and monitoring of climate-related issues with leaders from the risk, planning, strategy, regulatory affairs, government affairs, legal, retail, and operations teams.

Vistra's Senior Vice President (SVP) of Environmental Health and Safety, reporting to the Executive Vice President, General Counsel and Chief Compliance Officer, is responsible for the day-to-day management and oversight of environmental reporting, performance, and compliance as well as employee safety programs. These topics are discussed on at least a quarterly basis with the Board of Directors. The Corporate Sustainability team and SVP of Environmental Health and Safety coordinate efforts regarding Vistra's emissions reductions targets and reporting of performance.

Vistra's Executive Vice President, General Counsel and Chief Compliance Officer oversees the governance and compliance of the organization, in addition to all legal matters. All leaders with responsibility over a compliance area meet on a quarterly basis to discuss compliance metrics that are tracked and reported on a quarterly basis to the Audit Committee of the Board of Directors which oversees the Company's system of compliance controls.

External Governance - Political Contributions and Lobbying

Vistra supports active corporate citizenship and has an active voice on potential or proposed legislation and regulation that impacts its business while also participating in meetings, providing written letters, and interacting regularly with regulators and policymakers. Vistra also advocates for its business interests with state and federal government officials. Vistra's key business interests include:

- Retail electric and generation policy and regulations
- Environmental, sustainability, climate change mitigation, and other climate policy and regulations
- Tax policy, regulations, and rules
- The health, safety, and welfare of our employees including diversity and inclusion, social equity, and justice

Vistra lobbies by advocating for legislation and regulations that will enhance value for our customers, communities, environment, employees, and shareholders. We recognize that public policy decisions can greatly impact our business and industry—now and in the future. Vistra reviews all lobbying efforts to ensure adherence to applicable laws and Vistra’s core principles.

Vistra is also a member of and participates in trade groups, associations, and other third-party organizations. We are a founding member of the Climate Leadership Council (CLC) and its advocacy arm, Americans for Carbon Dividends, actively supporting the CLC’s framework of a consistently applied national carbon fee and dividend approach with a border tax adjustment as the ideal public policy solution to appropriately incentivize investments in carbon-free and carbon-reducing technologies. Joining trade groups and participating in advocacy efforts extends beyond Vistra’s own utility sector as Vistra joined the Zero Emissions Transportation Association (ZETA) in September of 2020 as a founding member. ZETA is a federal organization advocating for policies that will enable meeting a goal of 100% electric vehicle sales by 2030. Vistra understands and appreciates that its voice can make a difference as state and federal policies supporting climate change are adopted and is committed to advocate for the country’s transition to a lower carbon future in line with the Paris Agreement while providing affordable and reliable electricity.

For additional details on Vistra’s political contributions and trade associations please refer to our publicly available contribution disclosures as well as our Lobbying & Political Contributions Policy referenced at the conclusion of this section.

Green Financing

Vistra’s strategy is to grow our businesses responsibly and reliably through economically attractive investments. Sustainable focused investments include acquisition of retail portfolios, development of renewable and storages assets, and other ventures that assist in reducing our carbon footprint and create a more sustainable and resilient company well positioned to generate long-term value for all of our stakeholders. We are transforming our generation portfolio through responsible retirement of our coal-fueled assets, investments in zero-carbon resources, and new carbon-reducing technologies with a target to achieve net-zero carbon emissions by 2050.



To advance our sustainability and energy transition initiatives, in December 2021, we adopted our Green Finance Framework, pursuant to which we issued \$1.0 billion of Series B Preferred Stock to finance or refinance, in whole or in part, new or existing eligible green projects.

Using these funds, Vistra opportunistically acquired and developed high-quality renewable generation and energy storage assets that complement our core capabilities and align with our operational, financial and sustainability goals. The allocation of these funds is reported through our Vistra Zero Allocation and Impact Report, which can be sourced at the conclusion of this section.

Additionally, our announced acquisition of Energy Harbor reinforces our commitment to investment decision-making that supports a sustainable business and responsibly leads the way in the energy transition. This planned acquisition will add more than 4,000 MW of carbon-free nuclear generation to our portfolio capacity. Energy Harbor represents an exciting opportunity that allows Vistra to grow its zero-carbon portfolio at scale and aligns with our focus on reliability during our nation's energy transition.

Relevant Links

[Corporate Governance Guidelines](#)

[Social Responsibility and Compensation Committee Charter](#)

[Sustainability and Risk Committee Charter](#)

[Nominating and Governance Committee Charter](#)

[Lobbying and Political Contributions Policy](#)

[Vistra Green Finance Framework](#)

[Vistra Corporate Political Contributions](#)

[Vistra Trade Groups and Memberships](#)

[Vistra Zero Allocation Report](#)

Climate Scenario

Vistra utilizes climate scenario planning as a tool to aid our strategy development process. We partnered with BSR, a global nonprofit that works with its network of over 300 member companies to build a just and sustainable world, to explore the strategic implications for Vistra under three climate scenarios through 2050. The scenario analysis process involved multiple steps, as detailed in the following pages.

Scenario Development

BSR and Vistra selected three climate scenarios, a 1.5°C scenario, 2.0°C scenario and greater than 2.0°C scenario to provide the base narrative for our climate analysis. These climate scenarios provide the base narratives for Vistra's climate scenario analysis. BSR further extended each of the narratives by adding content about how a range of business-relevant topics might plausibly play out in each of these scenarios impacting Vistra.

To identify climate-related risks and opportunities, interviews were conducted with more than 25 Vistra participants from seven diverse functional areas to analyze business impacts of the three scenarios and identify climate-related risks (both transition and physical) and opportunities for Vistra.

Strategic Implications

A cross-functional workshop was conducted with internal Vistra stakeholders to validate the risk and opportunity assessment and identify ideas to enhance Vistra's resilience and refine its strategy around risks common across the three scenarios.

Action Planning

A follow-up to the workshop was organized to identify the next steps on the most important issues to improve Vistra's strategic resilience.

As a result of this effort, Vistra identified five strategic focus areas that may involve climate-related risks and opportunities across all scenarios:

1. Physical impacts to assets
2. Transition impacts on existing assets
3. Government regulation
4. Supply chain
5. Workforce and Reputation

These scenario insights were reviewed by Vistra's management team and were used to inform Vistra's strategy and risk management processes.

Scenario Details

While there are a multitude of climate scenarios available, Vistra and BSR leveraged three climate scenarios developed by the Network for Greening the Financial System (NGFS): Net Zero 2050, Delayed Transition, and Current Policies. The impacts of these scenarios were grouped into three timeframes: Short Term (0-5 years), Medium Term (6-10 years) and Long Term (10+ years). All these scenarios have a 2050 horizon year but are differentiated by various assumptions in the table below.

Individual Assumptions

	Current Policies	Net Zero 2050	Delayed Transition
Scenario	Minimal climate-related policy changes fail to diminish rising GHG emissions as physical risks grow in severity and frequency.	Stringent climate policies and innovation, reaching global net zero GHG emissions around 2050.	Climate policies are delayed, which forces a very aggressive policy response starting in 2030.
Impact of transition and physical risk	 High physical risks  Low transition risks	 Low to medium physical risks  Low to medium transition risks	 Low to medium physical risks  Medium to high transition risks
Temperature Assumptions*	3°C+ policy ambition	1.5°C policy ambition	1.8°C policy ambition
Policy reaction	No policy reaction	Immediate and smooth policy reaction	Delayed policy reaction
Technology	Slow technology change	Fast technology change	Slow to fast technology change
Carbon dioxide removal	Low use of carbon dioxide removal	Medium use of carbon dioxide removal	Low use of carbon dioxide removal
Regional policy reaction	Low regional policy variation	Medium regional policy variation	High regional policy variation

Current Policies - Physical Scenario impact aligned to Representative Concentration Pathway (RCP) 6.0

Emissions have steadily grown over the past three decades, reaching 2°C of warming by 2050. As a result, physical climate impacts have also increased steadily, both in severity and frequency. The world is on a trajectory to see at least 3.3°C of warming by 2100 and there is now no part of the globe where climate risks do not exist. Despite this, investment in low-carbon energy remains slow, there have been limited investments in energy efficiency, and there have been continual coal and oil additions.

Net Zero 2050 - Physical Scenario impact aligned to RCP 2.6

The transition to a net-zero economy by 2050 required drastic and coordinated global action, particularly in the 2020s. While the cost of this action in the 2020s was high as some industries were negatively impacted and the location and types of jobs changed, the ongoing climate impacts already being felt in the 2020s and only expected to increase, made clear the cost of inaction.

Delayed Transition - Physical Scenario impact aligned to RCP 2.6

A decade of inaction in the 2020s drove mounting public pressure for climate action. What followed was a set of hasty and reactionary policies in the 2030s that sought to rapidly halt GHG emissions and make up for lost time. The disorderly approach came at high social and economic costs but ultimately led to a halving of emissions by 2040 and peak warming at 1.8C by 2050.

Strategic Risk/Opportunity Assessment

As mentioned, there were five strategic focus areas identified across all three climate scenarios. These focus areas included risks AND opportunities to the company's business strategy and our financial planning. Vistra has reviewed these impacts and has summarized the description of risks/opportunities, their overall financial/strategic impact to the company and our current/planned resiliency efforts.

Physical impacts to assets

The impacts of climate change could create impacts to our physical assets including our generation facilities and office locations. These potential climate impacts include: flood/excessive rain, more frequent/severe storms with hail, wind, heat, wildfires and cold. Assets could experience increased damage from climate-related weather events, and subsequently require more frequent maintenance and repairs. Damage from climate-related weather events could result in higher insurance costs for Vistra's assets. The impacts of climate change could adversely affect our ability to deliver reliable service to customers. Physical impacts, specifically an increase in heat and heat waves, will cause an increase in demand for electricity for cooling systems. The increased demand for energy may cause greater volatility which can impact energy markets and further stress existing systems.

Table 2.1 — Physical Impacts To Existing Assets

Risk / Opportunity	Specific Context	Climate Scenario	Time Horizon	Strategy / Resiliency
 Risk	Damage to generation sites from weather, increased operations and maintenance costs, and greater insurance costs could impact Vistra's abilities to optimally run its assets.	Delayed Transition Current Policies	Short Medium Long	Vistra's current strategy is to continuously invest in maintenance and operational readiness to support high operational readiness. Our demonstrated commercial availability is historically above 90%, with FY2022 achieving +95%. Vistra feels it has sufficient capital allocated for weatherization and drought resiliency over all planning horizons.
 Risk	Higher temperatures for longer durations could cause power market price volatility coupled with higher demand for electricity. If generation assets are not available at periods of high demand, the company could be at a greater risk for financial loss.	Delayed Transition Current Policies	Short Medium Long	Vistra has a robust long term hedging program to minimize risk in future years for most market prices scenarios. Vistra constantly monitors asset availability/ reserves to ensure adequate generation assets are available at critical times.
 Opportunity	Due to physical climate impacts such as increased temperature, there will be a greater demand for energy and cooling. Vistra will see increased energy demand and higher topline revenue.	Delayed Transition Current Policies	Short Medium Long	Vistra has a robust long term hedging program to minimize risk in future years for most market prices scenarios. Our retail brands are proficient managing customer relationships in periods of volatile usage with optimized product structures, payment plans, and tailored contract arrangements.

Transition impacts on existing assets

The impacts of climate change could create transition impacts at our existing generation facilities. These potential transition impacts include accelerated electrification, potential for stranded assets, distributed generation build-out, shifts in market design/dynamics and investment uncertainty. The pace and magnitude of these transition impacts differ based on the type of climate scenario and type of impact. For instance, all three scenarios reviewed showed accelerated electrification, but the increase was much more pronounced in the Net Zero 2050 scenario with a faster pace of transportation electrification as opposed to the Current Policies scenario which assumed a slower pace of transportation electrification. Note that transition impacts on existing assets are assumed to be driven by market forces, customer choices, and social factors as opposed to government/regulatory transition impacts. Government/regulatory impacts, which could be transitory in nature, are discussed later.

Table 2.2 — Strategic Risk/Opportunity: Transition Impacts on Existing Assets

Risk / Opportunity	Specific Context	Climate Scenario	Time Horizon	Strategy / Resiliency
 Risk	Current fossil fuel assets may have to be retired early due to increased pressure on reducing carbon emissions from customers or communities reducing earnings potential. Additionally, local communities could be negatively impacted with fewer jobs, reduced tax base, and other associated impacts.	Net Zero 2050 Delayed Transition	Medium Long	Vistra has already planned for retirement of the bulk of its coal fleet by 2027 while simultaneously increasing mix of new low/no carbon generation assets. Many of these new assets are located at retiring facilities, ensuring a Just Transition where feasible. For our large natural gas-fired fleet, we are exploring the potential to leverage lower carbon intensive fuel (hydrogen) and carbon capture and storage (CCS).
 Risk	Distributed generation (DG) assets (solar, wind, battery) could be installed at increased rate and could reduce overall wholesale electricity demand from all generators, including Vistra, reducing future revenue.	Net Zero 2050 Delayed Transition	Medium Long	Vistra fully expects distributed generation assets to help meet growing electricity needs. We can partner with customers to leverage DG assets in a virtual power plant (VPP) model to build a shared revenue model. Vistra's perspective is that utility-scale generation will be required for the foreseeable future.
 Opportunity	Increasing electrification of transportation, building, and industrial loads driving increased demand for electricity and associated higher revenue.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra's ERCOT generation fleet is already supporting annual market growth of 1-2% per year. In all markets, Vistra plans to meet growing demand as we invest capital in maintaining existing assets and building new zero/low carbon emitting generation assets.
 Opportunity	In the markets we operate in, shifting generation mix may add more renewable resources that have limited dispatch capability at all hours of the day. Vistra's 24/7 dispatchable gas fleet can provide generation when needed and for long durations especially during constrained times when renewable resource capabilities are more limited.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra continues to see a need for long-term dispatchable generation which our gas fleet is well positioned to provide. Our fleet is flexible in period of high demand and high volatility to provide reliability to the grid and capture financial value. Our fleet can leverage these same strategies with a lower carbon footprint through CCS or lower carbon fuels such as hydrogen.

Government Regulation

The impacts of climate change could create additional government regulation impacts at a local, state, and federal level. These potential government regulation impacts include additional disclosure requirements, emission targets/reductions, new or modified policies, and changes to incentives/subsidies. Since Vistra's 2020 Climate Report, there have been numerous shifts in government policy, including the passage of the Inflation Reduction Act in 2022, proposed SEC climate disclosures rule, and EPA's Proposed Clean Power plan 2.0. Vistra has dedicated teams specifically focused on regulatory policy and governmental relations in all markets in which we do business. We continue to advocate for economically rational and market-based policies and solutions to address greenhouse gases consistent with the goals of the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement. We will work within our industry and across other stakeholder groups to help develop policies that address the issue, balance the need for reliable and affordable power, and consider the impact on the domestic economy. Vistra is a founding member of the CLC and its advocacy arm, Americans for Carbon Dividends. Vistra actively supports the CLC's framework of a consistently applied national carbon fee and dividend approach with a border tax adjustment as the ideal public policy solution to appropriately incentivize investments in carbon-free and carbon-reducing technologies. Vistra believes the CLC's Bipartisan Carbon Roadmap is the right public policy solution to facilitate the country's transition to a lower carbon future while maintaining the strength of the American Economy.

Table 2.3 — Strategic Risk/Opportunity: Government Regulation

Risk / Opportunity	Specific Context	Climate Scenario	Time Horizon	Strategy / Resiliency
 Risk	Current fossil fuel assets may have to be retired early due to increased pressure from regulators or policy makers focused on reducing carbon emissions, which could reduce earnings potential.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra has already planned for retirement of the bulk of its coal fleet by 2027 while simultaneously increasing mix of low/ no carbon generation assets. For our large natural gas-fired fleet, we are exploring the potential to leverage lower carbon intensive fuel (hydrogen) and carbon capture and storage (CCS).
 Risk	Increased regulation and modified policies around GHG emissions oversight may require Vistra to spend more resources to comply.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra consistently cultivates relationships with multiple government entities across regional, state, and national levels in order to position Vistra for all forthcoming regulations, incentives, and laws. Internal resources could be rationally expanded to address increased regulatory oversight.
 Opportunity	Incentives, rebates and grants funneled toward low carbon technologies and deployment of renewables will drive capital investment for generation companies and increased revenue opportunities.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra has resourced teams focused on new grants and incentive opportunities around renewables, hydrogen, batteries, and other innovative technology. New opportunities are tracked and incorporated into our development strategies.

Supply Chain

The impacts of climate change could create supply chain impacts for Vistra. These potential supply chain impacts include competition for key minerals, materials and components, reduced fossil fuel supply in extreme weather events, national security impacts on availability of certain commodities, schedule delays, and inflationary pressures. While not climate-related, COVID-19 and the conflict in Ukraine have illustrated how impacts to supply chain can disrupt companies, industries or countries as certain key parts, materials or resources become scarce. There are numerous ways to address these risks that Vistra can leverage. A supplier engagement strategy involves working with suppliers on questionnaires, to ensure they have risk mitigation strategies in place, while other forms of direct communication can help alleviate any knowledge gaps in the event of a crisis. Supplier buffering ensures having adequate inventory reserves in the event of climate-related disruptions, especially for key materials or equipment identified as high risk or long lead time. Finally, Vistra can sometimes source materials from different geographic regions, so that if one is heavily impacted in a climate disruption, other locations may still be able to meet our supply demand.

Table 2.4 — Strategic Risk/Opportunity: Supply Chain

Risk / Opportunity	Specific Context	Climate Scenario	Time Horizon	Strategy / Resiliency
 Risk	Climate impacts on supply chains could increase the frequency of supply disruptions on pipelines and rail that provide natural gas and coal to our fossil fuel assets.	Delayed Transition Current Policies	Medium Long	Since winter storm Uri impacted Vistra in Feb of 2021, the company has developed more resilient supplies and contingencies for our fossil fuel plants as well as on-site storage capabilities where appropriate.
 Risk	Increased demand for key minerals, materials and new renewable technology could exceed supply and lead to increased inflationary pressures. Procurement efforts could be strained, and delays could become more frequent.	Net Zero 2050 Delayed Transition Current Policies	Medium Long	Vistra has a robust supply chain organization that works with existing and prospective suppliers to ensure we have adequate inventory. We leverage multiple sources where feasible and diverse companies to ensure resiliency in our procurement strategy.
 Opportunity	Vistra's significant supply chain spend would enable us to quickly engage and leverage companies focused on promising low carbon technologies and our extensive generation fleet footprint.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra has noteworthy plans for capital investments in low to zero-carbon technologies including optionality for our gas fleet. Our significant spend should allow us to readily partner with willing suppliers as we can offer them the potential to grow and scale quickly.

Workforce and Reputation

The impacts of climate change could create workforce and reputation risks for Vistra. These potential workforce impacts include the need to reskill/upskill our employees, additional protection measures for extreme heat/cold, and additional employee resources for risk management and reporting efforts. Potential reputational impacts include potential stakeholder concern about use of fossil fueled assets, frustration at affordability or reliability of electricity supply, and land use concerns over build-out of renewables on larger parcels of lands.



Vistra's continued success is powered by our people.

We have a resilient workforce as demonstrated with the challenges of COVID-19 and our employees' ability to adapt to a shifting work environment. We feel that same resilience would apply in a world with potential climate change impacts. Vistra has focused on a just transition for our employees as we have retired numerous coal plants and mines while helping employees pursue new opportunities within the company. To address rising risks of extreme weather impacts on our workforce, we ensure our safety practices are top of mind for all employees and leverage continuous learning to apply best practices as environmental factors evolve.

Vistra knows that the reputation of our company depends on our past performance, our current impacts on our stakeholders and our commitments for the future. All our customers have a choice, to remain with us or choose a competitor. That is why Vistra constantly listens to all our stakeholders, including our customers, to ensure their concerns are addressed in all areas of our business. Our stakeholders can see demonstration of our past accomplishments supporting the energy transition as we shift from a largely coal-powered generation fleet to a more diversified generation fleet including cleaner burning natural gas fleet. They can observe how we are currently investing significant capital in solar and battery storage development and can have confidence in our future intentions with our announced acquisition of Energy Harbor zero-carbon emitting nuclear plants.

Table 2.5 — Strategic Risk/Opportunity: Workforce and Reputation

Risk / Opportunity	Specific Context	Climate Scenario	Time Horizon	Strategy / Resiliency
 Risk	Increasing frequency and magnitude of impactful weather events such as heat waves, extended freezes and severe storms could create incremental safety concerns and lower productivity for our workforce.	Delayed Transition Current Policies	Medium Long	Vistra's focus on safety is our top priority and we have incorporated lessons learned from recent impact weather events (winter storms Uri and Mara) to improve the safety of our work practices.
 Risk	If customers, communities and investors are concerned with Vistra's fossil fueled assets, they may be less willing to receive service from us or less willing to invest in our company.	Net Zero 2050 Delayed Transition Current Policies	Short Medium Long	Vistra has already focused on transitioning our fleet as we retire coal assets while simultaneously increasing mix of low/no carbon generation assets. We are consistently in discussion with our stakeholders, including customers and investors, to ensure their concerns are addressed.
 Opportunity	Vistra's transition into low/no carbon generating assets along with our ability to serve a growing sustainably focused customer segment will support our long term value proposition for investors.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra has demonstrated capital investments in low/zero-carbon assets over the past few years with firm commitments continuing in the future along with our announced Energy Harbor acquisition.
 Opportunity	Vistra's reputation as a highly regarded employer and fulfilling place to work helps us hire top tier personnel in an increasingly competitive workforce. This high value workforce will drive improved productivity and company profitability.	Net Zero 2050 Delayed Transition	Short Medium Long	Vistra is constantly focused on retaining and attracting top talent with appropriate compensation, evolving benefit structures, and opportunities to work on emerging technologies. We focus on employee engagement with numerous employee resource groups to help make the company a preferred workplace.

Vistra's risk management process for the identification, evaluation, and mitigation of enterprise risks, including climate risks, is ultimately overseen by the Board of Directors. The Board of Directors has established a Sustainability and Risk Committee. The Committee serves in an advisory role to management to provide advice and assistance in developing and implementing the Company's climate change and sustainability policies and practices, including the management and tracking of environmental risks and opportunities, as well as external sustainability reporting.

Sustainability and climate-related issues are discussed at each scheduled quarterly Sustainability and Risk Committee meeting and on a more frequent basis as necessary. In addition, at least annually, the board will review and discuss with management the Company's assessment of greenhouse gas-related risks, including physical, transition, regulatory, reputational, and/or market risks related to climate change, and management's process for the identification, evaluation, and mitigation of transition risks related to climate change.

Risk Management Process

The Chief Financial Officer (CFO) leads the company's financial team and manages the enterprise risk management process, which includes climate-related risks. The Chief Risk Officer (CRO) reports to the CFO and meets annually with every functional group in the company to review the risk universe for any relevant updates. During the annual review process new risks are added, outdated risks are removed, and the likelihood and severity of all risks are evaluated. Risks are prioritized based on expected financial impact to company market capitalization and likelihood of occurrence. All identified enterprise risks are further evaluated against climate risks utilizing the following factors:

- Transition or Physical (including Acute or Chronic)
- Timeframe of risk in years (0-5), (5-10), or (10+)
- Materiality
- Likelihood
- Severity
- Potential Mitigants and Impact

The output of this process is then reviewed by Vistra's Risk Management Committee and reported to the Sustainability and Risk Committee of the Board. Vistra's management utilizes the output from the risk framework to anticipate emerging risks, integrate risk into business planning, and take steps to mitigate the potential impact of any identified risks on the operations and performance of the business.

Policies and Procedures

Vistra's General Counsel and Chief Compliance Officer leads the company's legal and compliance team and oversees the company's compliance program, including maintaining and managing policies and procedures across the enterprise. In support of risk management, these established policies and procedures guide our employees on the responsible course of action. Vistra's established policies and procedures also dictate how we disclose and address risks across business practices as seen in the relevant links provided.

Vistra policies are reviewed annually by respective responsible officers in coordination with Vistra Compliance to assess relevance as well as to identify any potential gaps. Additionally, the company's Code of Conduct is reviewed annually with the Audit Committee of the Board of Directors. Vistra Compliance also works with leaders across the company who are responsible for a compliance area to identify and implement necessary training on our policies and procedures, including annual Code of Conduct training that is completed by all employees and all members of the Board of Directors.

Relevant Links

- [Code of Conduct](#)
- [Anti-Corruption Compliance Policy](#)
- [Diversity, Equity, and Inclusion Policy](#)
- [Human Rights Policy](#)
- [Whistleblower Policy](#)

As our country navigates the energy transition and shift towards electrification in demand, Vistra knows we have an obligation to balance affordability, reliability, and sustainability. To align our strategy with this obligation, Vistra has committed to a 60% reduction of Scope 1 and 2 GHG emissions by 2030, as compared to our 2010 baseline year emissions. In addition, we have committed to net-zero carbon emissions by 2050, assuming necessary technological advancements and public policy incentives are achieved. Through reporting year 2022 we have reduced our scope 1 and 2 emissions 45% from our 2010 baseline year which equates to nearly 80 million metric tons of CO₂e.

Examples of actions we have taken to reduce our scope 1 and 2 emissions and improve our emissions intensity include:

- Vistra Zero, our zero-carbon generation portfolio, continues to grow with the deployment of innovative technologies and solutions. At present, Vistra Zero has 3,750 MW of operational zero-carbon capacity
- In 2023, we announced an agreement to acquire Energy Harbor and combine its nuclear and retail businesses. This transaction accelerates the growth of Vistra's zero-carbon operations, adding 4,000 MW of nuclear capacity
- In total, Vistra Vision will be a large-scale 7,800 MW zero-carbon generation business with access to a growth pipeline of more than 3,500 MW of additional renewable and storage projects
- As of June 2023, Vistra completed the Phase III expansion of our Moss Landing energy storage facility, which now has 750 MW/3,000 MWh of storage capacity making it the largest of its kind in the world. The expansion means Vistra now has the second-largest BESS fleet in the U.S.
- Retired 2,900 MW capacity of coal generating assets in fiscal year 2022
- Since 2018, Vistra has retired ~10,400 MW of fossil fuel generating assets, the most by any company in America in that timeframe
- Vistra has joined SBTi's Business Ambition for 1.5°C to align our near-term emissions reduction targets with the Paris Agreement to keep warming to 1.5°C – 2.0°C and reaching science-based net-zero emissions by 2050
- After closing of the Energy Harbor transaction, Vistra will operate its zero-carbon businesses including the Vistra Zero portfolio, the Energy Harbor nuclear assets and Comanche Peak under the Vistra Vision brand. In total, Vistra Vision will be a large-scale 7,800 MW zero-carbon capacity business with access to a growth pipeline of more than 3,500 MW of additional renewable and storage projects

Science Based Targets

We intend to continue to align our emissions reduction targets with the Paris Agreement to keep global temperature rise well below 2.0°C and reach science-based net-zero emissions by 2050. Vistra is supportive of the Paris Agreement and joined SBTi's Business Ambition for 1.5°C in 2021 under the power sector framework. In April of 2023, we submitted our near-term targets for assessment, and while these targets are currently under evaluation by the Science Based Target Initiative, if approved, we feel they will represent industry leading GHG reduction goals.



Vistra's announced coal plant retirements that will occur by 2027 and our continued investment in innovation and operational improvements, as well as advocacy for policy changes that will enable a responsible transition to a clean energy future, will assist us in achieving our short-term reduction targets. Furthermore, we continue to review opportunities for investment in technologies such as carbon capture, long-duration storage, new nuclear, and hydrogen, all of which will be essential to ensuring a reliable, cost-effective power supply as the generation mix evolves.



Further, we are supportive of the U.S. setting an ambitious Nationally Determined Contribution (NDC) climate target of at least a 50% reduction by 2030 as compared to a 2005 baseline and setting a path to reach net-zero emissions by 2050. Vistra believes that with the appropriate public policy balancing sustainability, reliability, and affordability, net-zero carbon emissions is achievable. Vistra believes the next several decades will reflect meaningful advancements in technology and regulatory policy for renewables and carbon abatement that will further propel Vistra to achieve net-zero carbon emissions.

Table 4.1 — Scope 1 and Scope 2 GHG Emissions (in million mtCO₂e)

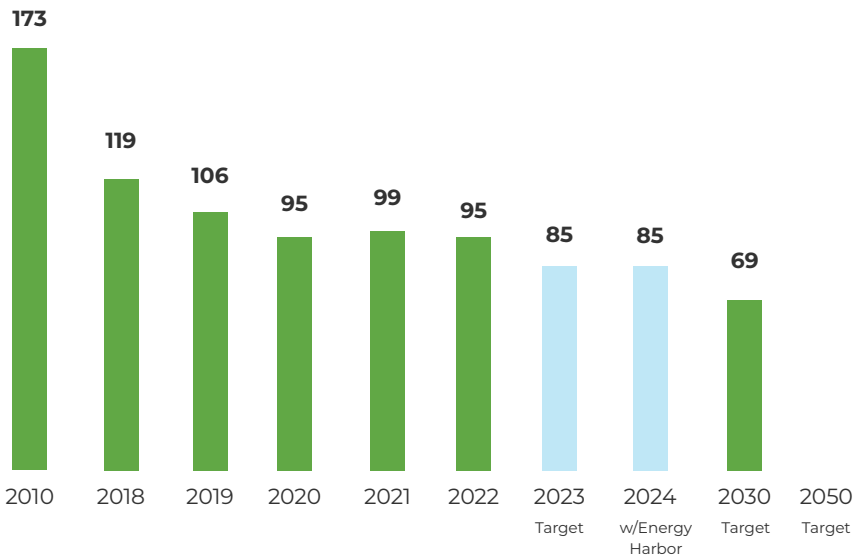


Table 4.2 — Scope 1 and Scope 2 GHG Emissions Intensity (mtCO₂e / MWh)

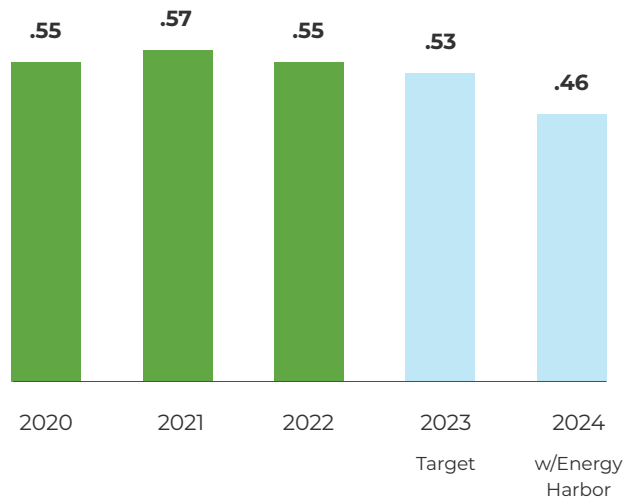


Table 4.3 — Scope 3 Categories

2022	mt CO ₂ e
Category 6 - Business Travel	622
Category 7 - Employee Commuting	18,860
Category 11 - Use of Sold Products	2,361,430

