

TCFD Report

verizon

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Introduction

About this report

This is Verizon's fourth report using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). This report utilizes the reporting framework outlined in the June 2017 Final Report of Recommendations of the TCFD, as supplemented by the TCFD's October 2021 implementing guidance (collectively, the TCFD Reporting Framework). The report is structured into four sections: Governance, Risk management, Strategy and Metrics and targets. This report, published in December 2025, provides a view into how Verizon understands and manages the risks and opportunities associated with climate change as of the publication date.

The inclusion of information in this report should not be construed as a characterization of the materiality or financial impact of that information. For a discussion of risks and other matters material to Verizon, as well as our latest audited financial statements, see our [2024 Annual Report on Form 10-K](#).

Alignment with reporting framework

This report, except as detailed below, aligns with the disclosure recommendations set forth in the TCFD Reporting Framework.

We are expecting to acquire significant physical telecommunications infrastructure in the first quarter of 2026 that will significantly alter the geographic footprint of our landline operations. We are delaying further physical risk scenario analysis until after the acquisition so that any future analysis may account for the purchased infrastructure, allowing for a more comprehensive evaluation of our physical risk profile.

Similarly, we are delaying further transition risk scenario analysis until after the acquisition, given that our operation of the additional infrastructure may significantly affect our total electricity consumption. As with our prior analysis, our electricity usage is expected to be a key input in any future transition risk scenario analysis.

Further, we are currently assessing the implications of changes to key climate-related regulations in the European Union (i.e., the Corporate Sustainability Reporting Directive (CSRD) and Corporate Sustainability Due Diligence Directive (CSDDD)). Based on the outcome of these changes, we aim to develop a scenario analysis process that aligns with the requirements of the various climate-related regulations we are subject to globally.

Following our development of such a process and the collection of relevant data from the acquisition, we will revisit the feasibility of commencing new analyses.

Forward-looking statements

Given the inherent uncertainty in predicting and modeling future conditions, caution should be exercised when interpreting the information provided. In this report, we have made forward-looking statements, including statements regarding our climate-related targets, commitments and other business objectives. These statements are based on our estimates and assumptions and are subject to risks and uncertainties. Forward-looking statements include information about our possible or assumed future results of operations and include statements using words such as "aims," "anticipates," "believes," "estimates," "expects," "forecasts," "plans," "strategy," "target," "goal" or similar terms. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. For a list of important factors that could affect future results and could cause those results to differ materially from those expressed in the forward-looking statements, refer to Verizon's latest Annual Report on Form 10-K. Certain information contained herein relating to any targets, intentions or expectations is subject to change, and no assurance can be given that such targets, intentions or expectations will be met. Similarly, there can be no assurance that Verizon's responsible business initiatives, policies and procedures, as described in this report, will continue.

Governance

The Verizon Board of Directors and executive leadership team periodically assess and discuss climate-related risks and opportunities. Teams of experts with visibility across our business operations are core to our efforts to integrate climate-related considerations into our strategic and operational decision-making processes, encourage effective communication between Verizon management and our Board and prepare our responsible business disclosures.

Board oversight

Our Board reviews the risks associated with Verizon's strategic plan throughout the year, including our plans for meeting our emissions reduction and renewable energy sourcing targets. Each committee of the Board oversees the management of the specific climate-related risks and opportunities that fall under that committee's area of responsibility, receiving updates from management on these matters. The committee chairs provide regular updates to the full Board on the activities of their committees. Several of our Directors have experience with climate-related topics, including renewable energy, network resilience, technological solutions and emissions management.

- The **Audit Committee**, which met 11 times in 2024, oversees Verizon's enterprise risk management program. Climate-related risks discussed during in-depth business risk reviews throughout the year include operational and financial risks relating to network reliability and resilience and the impacts of current and emerging environmental and responsible business reporting regulations.
- The **Corporate Governance and Policy Committee**, which met five times in 2024, oversees Verizon's sustainability strategy and public policy engagement.
- The **Finance Committee**, which met six times in 2024, monitors and oversees Verizon's capital allocation and financing activities, including our green finance and renewable energy programs.

Management's role

Management councils

To gain a holistic perspective and appropriately assess risks and opportunities when making important company decisions, we maintain a number of cross-functional management councils composed of members of our executive leadership team. These councils meet regularly to address a range of matters that are critical to Verizon's success, including business and technology strategies, network and product development, customer experience and brand management, capital and expense allocation, emergency preparedness and responsible business initiatives. Our management councils operate using a year-round planning and execution process, uniting strategy development, financial planning and budgeting, talent management and execution to coordinate each organization's implementation of Verizon's strategy.

Management sub-councils and committees

The work of the councils is supported by cross-functional management sub-councils and committees, which manage those climate-related risks and opportunities and environmental impacts relevant to their particular responsibilities. These groups include:

- The **Executive Climate Oversight Committee**, composed of the leaders of our Finance, Legal, Sustainability, Network and Centralized Operations functions, has primary responsibility for assessing the company's management of climate-related risks and opportunities and overseeing progress against our emissions reduction and renewable energy sourcing targets. Representatives from Fleet, Global Real Estate, Strategy and Treasury report into the Committee on climate-related issues and initiatives that fall within their purview.
- The **International ESG Regulatory Oversight Committee**, composed of designated senior executives representing Legal, Finance, Sustainability, Verizon Business Group and Human Resources, was established in 2024 to oversee our efforts to comply with the European Union's CSRD and CSDDD, which are expected to impose obligations to assess and/or manage certain climate-related risks, opportunities and impacts.
- The **Business Continuity Executive Steering Committee**, composed of designated senior executives representing Global Network & Technology, Verizon Consumer Group, Verizon Business Group and Verizon Global Services, oversees our Business Continuity and Event Management (BCEM) function. See [Risk management](#) for more information about the BCEM organization and how climate-related risks are identified, prioritized and addressed in emergency preparation plans.
- The **Global Supply Chain Resilience Governance Council**, composed of representatives from Sourcing, Supplier Risk, Global Network & Technology and other organizations, focuses on supply chain continuity, compliance and reputational risk.
- The **Global Network & Technology Transformation Office** is responsible for delivering operational savings through cross-functional ideation and partnership. The Energy Transformation Office Forum, one subset of the broader office, focuses on energy usage and cost reduction throughout our wireless and wireline networks. The Forum is composed of representatives from Network Planning, Technology & Product Development, Engineering, Sourcing and Artificial Intelligence & Data.

Members of these cross-functional management organizations are expected to review significant climate-related risks and opportunities with executive leadership and/or our Board and its applicable committees to the extent they deem such action to be necessary or appropriate, consistent with existing corporate governance reporting structures and processes to elevate non-climate-related matters affecting Verizon.

Management responsibilities

The following functions are responsible for the assessment and management of climate-related matters:

- **Centralized Operations.** The Executive Vice President and President – Verizon Global Services has primary responsibility for several climate-related issues, such as energy efficiency projects, emissions management, renewable energy development and procurement, natural resources management, supply chain resilience and circularity and value chain engagement. The Senior Vice President of Supply Chain Operations & Chief Sustainability Officer and the Vice President – Real Estate have day-to-day responsibility for the management of these issues.
- **Finance.** The Chief Financial Officer has primary responsibility for managing the company's budget and green financing strategies, including expenditures for climate mitigation activities such as network resilience, renewable energy and fleet transformation initiatives.
- **Legal.** The Chief Legal Officer has primary responsibility for managing the company's compliance with applicable climate-related regulatory and reporting requirements. As such, the Legal team has an integral role in the assessment, management and monitoring of climate-related issues that may affect the company's strategy and operations. The Legal team additionally oversees the company's voluntary climate-related disclosures.
- **Global Network & Technology.** The Executive Vice President & President – Global Network & Technology has primary responsibility for incorporating climate considerations into Verizon's strategic network planning function, including network energy usage, fleet management and infrastructure resilience.

See **Risk management** for more information about the processes by which management is informed about climate-related issues.

Risk management

As part of our overall enterprise risk management process, Verizon is proactively identifying, assessing and preparing for transition and physical climate-related risks. In order to address these risks, we have established formal, cross-functional risk management mechanisms that engage both our Board and management team.

Risk identification and assessment processes

We identify climate-related risks and assess their importance relative to other business risks through four key processes. Senior management uses the results of the annual climate-related risk assessment and other inputs to make materiality determinations with respect to the company's climate-related risks. Climate-related reporting decisions are overseen by Verizon's Disclosure Committee.

Annual climate-related risk assessment

Our annual enterprise-wide climate-related risk assessment asks relevant senior leaders and subject matter experts to identify and evaluate the impact of climate-related risk on our business, strategy and financial planning over the short, medium and long term. The assessment considers a comprehensive inventory of transition and physical climate-related risks, informed by each sub-category of the TCFD risk taxonomy, that could impact Verizon.

Participants are asked to assess the likelihood and impact of, and most relevant timeframe for, a broad range of these risks and to identify any other relevant climate-related risks. Participants additionally are asked to consider mitigation measures that may reduce the likelihood or severity of a risk in order to arrive at a residual risk assessment score.

We share the results of the assessment with senior leaders who have primary responsibility for addressing risks related to the operations within their purview. Decisions on whether and how to prioritize, mitigate, accept or adapt to a particular identified climate-related risk are made at the business unit level and reviewed with senior management. This assessment supports the integration of climate-related risk into our overall risk management approach.

Semiannual business risk identification and assessment

Our semiannual enterprise-wide business risk identification and assessment process elicits input from all senior leaders on strategic and operational business risks via surveys and interviews. Although the assessment is focused on previously identified key risks to the company that are not specific to climate change, it also solicits qualitative feedback on other potential risks, which can provide insight into the significance of climate-related risks compared to other business risks.

The results of the assessment are shared with senior leaders to support the development of mitigation strategies, which are discussed with the Audit Committee of the Board during business risk reviews held throughout the year.

Annual business impact analysis

Our annual business impact analysis (BIA) assesses the potential operational impact resulting from a major disruption of services based on known and predicted events, including climate-related events. The assessment prioritizes risk based on the level of impact to our network, customers, employees and business operations.

Network planning

We leverage information from third-party sources, as well as lessons learned from severe weather and other natural events, to integrate climate-related risks into planning for Verizon's network operations. We use geospatial analysis to evaluate the potential impact of climate-related events, including storm surge from hurricanes, flooding, wildfire, high straight-line wind and tornadoes, on our current and future operational and network models. Key risks are discussed with management and directly integrated into our annual business continuity and network build planning.

Risk management processes and integration

Our overall risk management approach includes processes designed to prioritize, mitigate, accept or control key business risks, including climate-related risks. See [Strategy](#) for more information about our management of specific climate-related risks and opportunities.

Business risk management

Our enterprise-wide business risk management program utilizes the semiannual business risk identification and assessment process to provide management and the Board with visibility into the key risks to our business and Verizon's overall control environment. Senior management teams from across the business meet with the Audit Committee of the Board to discuss identified risks and related mitigation activities. See [Governance](#) for more information on the climate-related topics covered in these reviews.

Business continuity and event management

Our Business Continuity and Event Management (BCEM) organization uses the BIA to develop action plans and coordinate response and recovery efforts for local emergencies and widespread disasters. The BCEM framework, which follows Verizon's corporate policy statement on national security emergency preparedness, is designed to protect and support Verizon personnel, critical operations and infrastructure during emergencies and disasters, including weather-driven events.

The framework supports operational preparedness, mitigation, response and recovery by weaving BCEM considerations into Verizon decision-making, focusing on internal and external partnerships, optimizing BCEM tools and technology and developing a comprehensive training program for the BCEM team, strategic partners and employees.

The BCEM organization operates our Global Event Management Center (GEMC), which actively monitors and assesses potential threats to Verizon's operations around the world. When a potential threat or significant event is identified, the GEMC performs a risk assessment, in consultation with internal and external subject matter experts, and disseminates situation information and intelligence to key response groups within the company. Leveraging Verizon's in-house weather-monitoring platform, the GEMC identifies potential impact areas and coordinates readiness activities prior to impact. Restoration teams and equipment are pre-stationed near potential impact areas to help ensure our personnel, facilities and network are supported and restored. The GEMC also leads our crisis management teams, overseeing incident response and recovery operations and after-action reviews, with a focus on continuous improvement.

Supply chain resilience and risk management

Our supply chain resilience management program identifies, assesses, monitors and manages supply chain risks, including disruptions caused by natural and human-induced events, related to our products and services. The program is guided by our corporate policy statement on supply chain resilience and is overseen by our cross-functional [Global Supply Chain Resilience Governance Council](#).

For example, the Supply Chain Resilience Management team utilizes a multi-tiered intelligence tool that uses supply chain information to map out Verizon's macro supply chain environment. The tool produces a visual, data-driven representation of expenditures, materials and products by location and supplier. It enables us to identify risks, such as exposure to natural or human-induced disasters, that may result from clustered suppliers or geographies. The tool also guides new supply chain decisions based on our supply chain landscape. This technology allows us to plan for supply chain resilience in the face of increasing weather-related events.

Verizon's Third Party Risk Management program also supports the company's responsible sourcing efforts. Managed by a dedicated team, the program enables Verizon to identify, assess, monitor and manage a range of supply chain risks, including those that may be associated with the environmental impacts of supplier activity. The team works closely with organizations across the company to implement a risk management framework and make recommendations regarding future supplier engagement.

Environmental, health and safety (EHS) management

Verizon maintains a robust EHS management system, which provides a framework for identifying, controlling and reducing the EHS risks associated with our operations. Verizon's EHS department maintains International Organization for Standardization (ISO) 14001 (environmental) and ISO 45001 (occupational health and safety) certifications for our EHS management system. The management system and supporting documents are guided by our corporate policy statement on EHS.

Strategy

Management approach to climate-related risks and opportunities

In this section, we identify climate-related risks and opportunities with potential impact to our business over short (less than one year), medium (one to five years) and long (more than five years) time horizons, detailing the time horizon over which we believe a particular risk or opportunity is likeliest to occur.

We categorize the identified risks using the TCFD's two major risk categories: (1) transition risks created by the world's transition to a low-carbon economy as a result of carbon policy changes and (2) physical risks stemming from a changing climate, particularly in the absence of carbon policy measures.

While our internal processes determined that these risks are not likely to have a material impact on our business over these time horizons, we nonetheless maintain robust mitigation strategies to improve our climate resilience.

To identify potential opportunities, we consider the TCFD's full list of areas of opportunity.

For the identified risks and opportunities, we discuss below management's approach to address or take advantage of them, as applicable. For more information on our emissions reduction and renewable energy sourcing targets, see [Metrics and targets](#).

Transition risks

Regulatory and legal

Description	Impact to business
	<p>Likeliest time horizon Medium term</p> <p>ESG Center of Excellence We created an ESG Center of Excellence, composed of teams from Enterprise Risk Management, Legal and Accounting Policy, to implement an expanded internal control framework and facilitate our compliance with climate-related laws and regulations.</p> <p>Monitoring policy and regulatory developments We monitor policy and regulatory developments related to climate and the environment (e.g., carbon tax incentives and penalties, mandatory reporting and transition plan requirements) at the local, state, federal and international levels and create a course of action specific to the areas affected, as appropriate. If enacted, regulatory developments in these areas may require a significant investment of time and/or capital to support Verizon's compliance. Our ESG Center of Excellence and other dedicated business and legal compliance teams facilitate our compliance with climate-related laws and regulations.</p> <p>Setting emissions reduction targets and committing to operational net-zero We are committed to achieving net-zero scopes 1 and 2 greenhouse gas emissions by 2035 and have set science-based emissions reduction targets. See Metrics and targets for more information.</p> <p>Procuring and deploying renewable energy Because most of our operational carbon footprint comes from the electricity that powers our networks, our path to operational net zero relies heavily on our transition to renewable energy. We have achieved our interim target to source renewable energy equivalent to 50% of our annual electricity usage by 2025 and are working towards our second target of sourcing renewable energy equivalent to 100% of our annual electricity usage by 2030. See Metrics and targets for more information. We are working to bring additional renewable energy to the U.S. grid primarily by entering into long-term renewable energy purchase agreements (REPVAs) for solar and wind power.</p>
Management approach	

Market and technology

Description	Impact to business
	<p>Market risk. Market-driven shortages or increases in the price of fuel, energy, raw materials or components used in our products and services as a result of the transition to a low-carbon economy may limit our ability to offer certain products and services or affect our ability to achieve our emissions reduction and renewable energy sourcing targets. Increased energy or fuel prices in geographies where we operate (within the U.S. and Europe, in particular) could make it more expensive to operate our networks, buildings or vehicles. Customer demand for our products and services may be affected to the extent we are unable to meet the needs and requirements of customers as we transition to a low-carbon economy.</p> <p>Technology risk. Our ability to transition to a low-carbon economy depends, in part, on the development and adoption of new or alternative low-carbon technologies, products and services in our operations and supply chain. Early replacement of existing assets with low-carbon alternatives may require us to write off such assets before their end of life. The lack of, or delay in, the development of such technologies, products and services may prevent us from maintaining competitive offerings or achieving our emissions reduction and renewable energy sourcing targets.</p> <p>Likeliest time horizon</p> <p>Medium term</p>
Management approach	<p>Enterprise-wide energy management strategy</p> <p>We are committed to reducing energy use across our networks, building portfolio and fleet to mitigate certain risks arising from the transition to a low-carbon economy and to lower operating costs now and into the future. We are utilizing AI and machine learning capabilities to drive energy efficiency initiatives across Verizon. We describe key network, building and fleet energy management initiatives below.</p> <p>Network energy management</p> <p>Verizon's strategic focus on network modernization and decommissioning (i.e., powering down) of legacy network equipment that is at end-of-life or no longer serves business or customer needs continues to result in significant energy savings. As part of a wireline network transformation initiative, we have been migrating copper-based services to fiber technologies, which enables us to decommission energy-intensive switches and utilize our newer intelligent edge network platforms. Our fiber-delivered broadband services are significantly more efficient on a kilowatt hour per gigabyte basis than copper-delivered broadband services.</p> <p>We are implementing a variety of initiatives to effectively manage energy consumption throughout our active 4G and 5G networks, including:</p> <ul style="list-style-type: none"> Optimizing power usage, equipment placement and heat generation within network facilities to reduce cooling demand, as well as increasing the heat tolerance of key network sites, installing high temperature batteries and upgrading HVAC equipment Enhancing network equipment by utilizing lower power modes and developing equipment sleep features Migrating to clean energy sources, such as fuel cells and solar power, where practicable <p>Building energy management</p> <p>We continue to install energy-efficient systems and employ energy management best practices at our buildings while consolidating our real estate portfolio to more efficiently co-locate people and equipment, thus eliminating unnecessary building emissions.</p> <p>Additionally, we design and operate our data centers for optimal energy efficiency. Our data centers leverage the full range of environmental tolerances allowed by most server, storage and network hardware suppliers, enabling us to implement energy-saving practices, such as free cooling, waterside economizers, evaporative cooling, aisle containment and passive exhaust.</p> <p>Fleet fuel management</p> <p>We are taking a multifaceted approach to reducing our fleet emissions, including:</p> <ul style="list-style-type: none"> Replacing aging bucket trucks, other than those outfitted for special uses, with trucks with hybrid drive systems Utilizing optimized vehicle dispatching technology and automation to minimize the miles driven to service our networks and reduce the number of truck rolls needed for Fios dispatches Purchasing EVs at a rate aligned with available products and charging infrastructure suitable for our operations

Reputational

Description	Impact to business
	<p>Our customers, employees and other stakeholders expect us to be environmentally responsible and take appropriate measures to minimize the impact of our operations on the environment. Our brand is essential to the growth and success of our business. Damage to our reputation from poor environmental performance, including the failure to meet our emissions reduction and renewable energy sourcing targets, could impact customer or investor demand or result in a loss of existing talent or the inability to attract new talent.</p>
Management approach	Climate-related oversight and accountability
	<p>Reputational risk is regularly reviewed by management and overseen by the Board. Specifically, our Corporate Governance and Policy Committee reviews Verizon's position and engagement on important issues that may affect our business and reputation, including those relating to sustainability. See Metrics and targets for a description of our emissions reduction and renewable energy sourcing targets.</p>
	<p>Verizon Community Resilience</p> <p>As part of our commitment to environmental responsibility, our Verizon Community Resilience program works to empower communities with educational resources, hands-on support and access to innovative technologies to more confidently prepare for, respond to and recover from weather-related natural disasters. In partnership with United Way, Habitat for Humanity and the American Red Cross, we are rolling out initiatives across the U.S. to bolster community disaster resilience.</p> <p>Funding climate innovation</p> <p>Verizon's Disaster Resilience Prize, in partnership with MIT Solve, helps to scale proven, in-market solutions that mitigate the impacts of natural disasters. The Prize awards one million dollars to four startups offering solutions that enhance early warning systems and disaster preparedness, improve emergency response and resource coordination, strengthen infrastructure and/or support long-term recovery and community resilience after weather-related disasters. Through the prize, Verizon has supported technologies related to flood detection, wildfire response and clean energy projects.</p> <p>Building a brand that supports community resilience</p> <p>During times of crisis, Verizon stands ready to support our first responders, communities, customers and employees with disaster response and recovery efforts.</p> <ul style="list-style-type: none"> • Supporting our communities. The Verizon Frontline Crisis Response Team provides on-demand emergency assistance to government agencies, first responders and public safety officials nationwide – at no cost to the agencies – to help maintain essential communications when they're needed most. • Supporting our customers. After major natural disasters, teams across Verizon Frontline Crisis Response, Major Emergency Incident Response, Dedicated Incident Response and Emergency Response are on-site conducting network restoration and supporting our affected customers and communities. • Supporting our employees. In times of crisis, the VtoV Employee Relief Fund, supported by employee donations and the Verizon Foundation Matching Gifts Program, provides aid to Verizon employees displaced from their homes due to a natural or personal emergency. <p>For more information about our disaster response efforts, see Physical risks: Acute.</p>

Physical risks

Acute

Description	Impact to business
	<p>Extreme weather events (e.g., hurricanes, heavy rain, high wind, wildfires, blizzards and heat waves) may disrupt our direct or value chain operations and result in negative financial, operational and reputational impacts. The future of our business is dependent on the protection of our employees, infrastructure and business processes. More frequent and severe weather events could pose a threat to these critical assets.</p>
	<p>Likeliest time horizon</p> <p>Medium term</p>
Management approach	<p>Risk management strategy</p> <p>Our risk management strategy prepares our business to respond to natural and human-induced events around the world that could adversely impact our business operations. See Risk management for more information about our identification, assessment and prioritization of climate-related physical risks and related business continuity, supply chain resilience and network planning processes.</p>
	<p>Network reliability and resilience</p> <p>Verizon is an industry leader in operating reliable and resilient networks that support our customers' needs and keep them connected. Our networks in the U.S. include various design elements, technologies and business processes that work together to enhance the reliability of our services. The resilience of our networks reflects many years of significant investment that supports our commitment to serving our customers even in times of crisis, from extreme weather to other emergency events. We make enhancements to our facilities and networks based on assessments of the relevant geographic area and corresponding types of risks.</p>
	<p>Disaster response</p> <p>Verizon Frontline provides on-demand emergency assistance to government agencies, first responders and public safety officials nationwide during crisis situations. We have a collection of deployable assets to assist public safety teams. For more information on our disaster response efforts, see Transition risks: Reputational.</p>
	<p>Insurance</p> <p>We maintain robust self-insurance and third-party property insurance policies.</p>

Chronic

Description	Impact to business
	<p>Long-term changes in climate and weather patterns (e.g., changing precipitation levels, average temperatures and sea levels) may disrupt our operations or our value chain operations and result in negative financial, operational and reputational impacts.</p>
	<p>Likeliest time horizon</p> <p>Long term</p>
Management approach	<p>We utilize analysis and modeling to identify vulnerabilities and plan future network resiliency.</p>
	<p>Long-term temperature changes</p> <p>Rising average and more frequent extreme temperatures could require our cooling infrastructure to operate more often, increasing the burden on local power and water resources. See Transition risks: Market and technology for how we are optimizing energy use in our networks and buildings.</p>
	<p>Increased precipitation and drought</p> <p>Changing levels of precipitation could increase the risk of flooding in low-lying areas, as well as risk of drought and related wildfires. Many of the actions we have taken to manage weather impacts (e.g., raising or relocating equipment) have bolstered our ability to manage chronic climate-related risks. For more information, see Physical risks: Acute.</p>

Opportunities

Resilience

Description	Impact to business
	<p>We continue to invest in the resilience of our operations, networks and infrastructure. These investments provide new opportunities to reduce operating costs and create potential competitive advantages from resilient operations.</p> <p>Likeliest time horizon</p> <p>Medium term</p>
Management approach	<p>Network resilience</p> <p>For information on our network reliability strategy, see Physical risks: Acute.</p> <p>Supply chain resilience</p> <p>For information on our supply chain resilience strategy, see Risk management.</p>

Resource efficiency

Description	Impact to business
	<p>Improving the operating and energy efficiency of our network, fleet and buildings, transitioning to low-carbon or other substitute technologies, such as EVs or fiber technologies, and shifting to low-carbon suppliers may result in reduced costs, emissions and/or water usage.</p> <p>Likeliest time horizon</p> <p>Medium term</p>
Management approach	<p>Verizon actively collaborates with manufacturers and industry associations to spur the development of energy efficient technologies, such as special-use-case commercial electric vehicles and high temperature batteries. For information on our energy management strategy, see Transition risks: Market and technology.</p>

Metrics and targets

We track several climate-related metrics across our operations and value chain. We use these metrics to manage performance against our long-term emissions reduction targets and to monitor current and future climate-related risks. We have set targets to achieve net-zero operational greenhouse gas emissions by 2035 and source renewable energy equivalent to 100% of our annual usage by 2030.

For information on our emissions data and progress toward meeting our targets, see our [Emissions Reporting webpage](#). For information about our emissions calculation approaches, see our latest [Independent Accountants' Review Report](#).

Metric	Target	Time frame (YE)
Emissions		
Scopes 1 and 2 emissions*	Target: Expect to achieve net-zero operational emissions	By 2035
	Interim target: Expect to achieve a 53% reduction in our scopes 1 and 2 operational emissions (over a 2019 baseline)**	By 2030
Scope 3 emissions***	Target: Expect to achieve a 40% reduction in our scope 3 emissions from our value chain (over a 2019 baseline)**	By 2035
Energy		
Renewable energy sourced****	Target: Expect to source renewable energy equivalent to 100% of our annual electricity usage	By 2030
	Interim target: Expect to source renewable energy equivalent to 50% of our annual electricity usage	By 2025

* Scopes 1 and 2 emissions are independently assured.

** Approved by the Science Based Targets initiative (SBTi). For the purposes of evaluating progress against this target, we calculate market-based scope 2 emissions, which account for our use of energy attribute certificates.

*** Scope 3 emissions are also independently assured. Relevant categories included are purchased goods and services, capital goods, fuel- and energy-related activities (not included in scopes 1 or 2), upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, use of sold products and end-of-life treatment of sold products.

**** Progress against these targets is calculated based on the total renewable electricity generated on-site or obtained in the form of energy attribute certificates divided by the total electricity consumed.