SASB Standards index

For the year ended December 31, 2023
Published March 2024

SASB Standards, now managed by the International Financial Reporting Standards (IFRS) Foundation, enable companies to disclose consistent and decision-useful ESG information to investors. This index provides information with respect to the disclosure topics and accounting metrics in the SASB Standard for Telecommunications. In the following tables, quantitative data is followed by narrative information that contextualizes the data where appropriate and is also responsive to any qualitative metrics. The inclusion of information in this index should not be construed as a characterization regarding the materiality or financial impact of that information. See our Annual Report on Form 10-K for the year ended December 31, 2023, and other publicly filed documents, which are available on our Investor Relations website.

Unless otherwise indicated, quantitative data is provided as of or for the years ended December 31, 2021, 2022 and 2023, where available. Where relevant, data measurement techniques, the bases of calculations and changes in the basis for reporting or reclassifications of previously reported data are noted. On November 23, 2021, we completed the acquisition of TracFone Wireless, Inc. (TracFone). Other than the metrics reported pursuant to TC-TL-000.A, TC-TL-000.C and TC-TL-220a.2, the metrics reported herein exclude TracFone results.

Data assurance. Annually, Verizon obtains independent assurance of our emissions data and other select ESG indicators, including the metrics reported pursuant to TC-TL-000.D and TC-TL-130a.1 in this index. Read the Independent Accountants' Review Reports for more information. For information that is not specifically identified as being independently assured, Verizon relies on the application of internal policies (including those requiring the creation and maintenance of accurate records

and the establishment of internal controls over externally reported financial and non-financial information) and compliance with data quality standards and verification procedures set forth in our ESG information governance and control frameworks to validate such information. We will update this index to include the 2023 metrics that are currently undergoing independent assurance when the Independent Accountants' Review Report with respect to those metrics has been issued.

Note on non-financial reporting. Non-financial information is subject to measurement uncertainties resulting from limitations inherent in the nature of, and the methods used for determining, such data. Some of our disclosures in this index are based on assumptions due to these inherent measurement uncertainties. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Activity metrics

SASB code	Metric	2021	2022	2023
TC-TL-000.A	**Number of wireless retail connections**	142,806,000	143,253,000	144,751,000
	Wireless retail connections are retail customer device postpaid and prepaid connections as of the end of the period. Retail connections under an account may include those from smartphones and basic phones (collectively, phones), postpaid and prepaid fixed-wireless access (FWA), as well as tablets and other internet devices, wearables and retail IoT devices.			
TC-TL-000.C	**Number of broadband connections**	7,588,000	8,936,000	10,717,000
	Total broadband connections are the total number of connections to the internet using Fios internet services, Digital Subscriber Line and postpaid, prepaid and IoT FWA as of the end of the period.			
TC-TL-000.D	**Network traffic in petabytes**	114,413	134,202	Pending independent assurance
	Beginning in 2022, we made adjustments to assumptions and estimations used in the calculation of network traffic. As a result, the 2021 metric was recast.			

Accounting metrics

Environmental footprint of operations

SASB code	Metric	2021	2022	2023
TC-TL-130a.1	**Total energy consumed in gigajoules (Gj)**	40,802,503	41,167,721	Pending independent assurance
	Percentage grid electricity	87.1	88.9	Pending independent assurance
	Percentage renewable energy	6.7	11.3	Pending independent assurance

Total energy consumed is calculated based on emissions sources included in scope 1 and 2 GHG emissions, namely natural gas, gasoline, diesel, jet fuel, propane, kerosene, compressed natural gas, B02, B05, B11, B20, E85, methanol, ethanol, electricity, steam and chilled water.

Percentage grid electricity is calculated as total electricity consumed as purchased from the grid (and reported for scope 2 GHG emissions) divided by total energy consumed.

Percentage renewable electricity is calculated as total renewable electricity generated on-site or purchased in the form of energy attribute certificates divided by total energy consumed.

For information on our emissions profile, climate goals and targets and carbon reduction strategy for our scope 1, 2 and 3 emissions, see the Environment section of our ESG Report, as well as our Emissions reporting webpage.

Data privacy

SASB code	Metric	2021	2022	2023
TC-TL-220a.1	**Description of policies and practices relating to targeted advertising and customer privacy**			
	See Data privacy for a discussion of Verizon's corporate policies and operating procedures governing how we collect, use, retain and protect data.			
TC-TL-220a.2	**Percentage of customers whose information is used for secondary purposes**	100	100	100
	The reported metric is 100% because, as described in the Verizon Privacy Policy, Verizon uses customer data to improve our products and services, which is one of the ways that the SASB Standard defines "secondary purposes" for purposes of this metric.			
TC-TL-220a.3	**Total amount of significant monetary losses as a result of legal proceedings associated with privacy**	Not significant	Not significant	Not significant
	For purposes of reporting this metric, we have established a significance threshold that is lower than the materiality threshold for reporting legal proceedings in our SEC reports and will report any loss of $100 million or more, individually or in the aggregate.			
TC-TL-220a.4	**Number of U.S. law enforcement requests for customer information**	156,000+	155,000+	173,000+
	Number of customer selectors whose information was requested	292,000+	311,000+	315,000+
	Percentage resulting in disclosure	90.4	90.3	89.6
	The metrics include subpoenas, warrants and orders that we receive from federal, state and local law enforcement in the U.S., but do not include wiretap orders, pen register and trap and trace orders, national security demands and emergency requests, which we separately report in our Transparency Report. A customer selector is an information point, such as a telephone number, used to identify a customer. Verizon does not maintain a record of unique customers whose information was requested because multiple selectors may refer to the same customer (e.g., the same person may have multiple phone numbers) and selectors may be duplicated across requests (e.g., the same phone number requested in two subpoenas is counted as two selectors). We define a disclosure as a full or partial disclosure of information in response to a request.			
	For more information on our processes and procedures for releasing customer information in response to law enforcement requests, see our Transparency Report.			

Data security

SASB code	Metric	2021	2022	2023
TC-TL-230a.1	**Number of data breaches** **Percentage that are personal data breaches** **Number of customers affected**	Not available	Not available	Not available
	Except as required by law, Verizon does not report this information.			
TC-TL-230a.2	**Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards**			
	For information about our approach to managing data security risks, see Cybersecurity.			

Product end-of-life management

SASB code	Metric	2021	2022	2023
TC-TL-440a.1	**Materials recovered through take-back programs in pounds**	35,525,183	43,428,528	46,970,629
	Verizon defines e-waste as electronic products and component parts that are at the end of their useful life and/or have been returned by customers. E-waste generated by our business operations includes cell phones, chargers, set-top boxes, network equipment, batteries and associated plastic components. For more information on our e-waste recycling and device trade-in programs, see E-waste: reducing, reusing and recycling.			

Competitive behavior and open internet

SASB code	Metric	2021	2022	2023
TC-TL-520a.1	**Total amount of significant monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations**	Not significant	Not significant	Not significant
	For purposes of reporting this metric, we have established a significance threshold that is lower than the materiality threshold for reporting legal proceedings in our SEC reports and will report any loss of $100 million or more, individually or in the aggregate. For information on Verizon's global antitrust program, see Antitrust compliance.			
TC-TL-520a.2	**Average actual sustained download speed in Megabits per second (Mbps) of (a) owned and commercially-associated content and (b) non-associated content**	Not available	Not available	Not available
	Verizon does not measure download speeds on the bases specified in the standard (i.e., owned and commercially associated content versus non-associated content). We are committed to an open internet and have been at the forefront of innovation in the broadband ecosystem, advocating consistent policies aimed at creating a robust, level and dynamic playing field for all participants in the internet environment. For information on the expected and actual performance of our networks and our network management practices, see Network performance.			
TC-TL-520a.3	**Description of risks and opportunities associated with net neutrality, paid peering, zero rating and related practices**			
	See Verizon's SEC reports for our disclosures relating to the risks and opportunities associated with laws and regulations addressing net neutrality. Verizon's Interconnection Policy for Internet Networks establishes separate requirements for each of our three regional internet networks, with the requirements scaled for each network.			

Managing systemic risks from technology disruptions

SASB code	Metric	2021	2022	2023
TC-TL-550a.1	**System average interruption duration, system average interruption frequency and customer average interruption duration**	Not available	Not available	Not available
	Verizon does not currently calculate and report metrics relating to the frequency and duration of system disruptions in the manner specified in the standard.			
TC-TL-550a.2	**Discussion of systems to provide unimpeded service during service interruptions**			
	Verizon is an industry leader in operating resilient and reliable networks that support the needs of our customers. Our networks in the U.S. include various design elements, technologies and business processes that work together to enhance the reliability of our services.			

Designed with dual path and equipment redundancy. Verizon's network design includes redundancy on critical paths and for critical network components to mitigate the impact of network events on customers. We use forward-looking risk assessments to plan and maintain our fiber backhaul configuration for critical network sites. Such sites may contain traffic aggregation points, data centers or other technical facilities and typically have fiber backhaul deployed in a resilient ring or hub configuration, as well as dual diverse entrance facilities supporting our core infrastructure. Verizon has also implemented a "meshed" core network architecture, which enables network equipment to switch traffic almost instantly across multiple available transmission paths between two endpoints. When available, this enables the network to self-recover promptly from outages to physical facilities (e.g., a fiber cut).

Use of battery and generator technology. To minimize the impact of power disruptions at critical sites, we deploy reserve power in the form of batteries and/or generators. Our switching facilities are equipped with battery backup power and generators. Macro sites have battery backup power as well, and the majority are equipped with generators. In addition, we have a fleet of portable backup generators that can be deployed as needed.

Reliability-focused business processes. To minimize the likelihood of congestion on our networks, Verizon proactively manages and augments network capacity based on defined thresholds associated with the expected voice, video, application and data traffic patterns across our network. To help ensure appropriate network diversity and redundancy, we perform several internal audits per year. Our engineering standards for strategic directional platforms require high availability equipment with auto-failover capabilities to protect critical services. Requirements for diversity and redundancy for critical paths and network sites are reviewed and addressed as part of network planning, engineering and operations activity.

Overlapping spectrum and coverage areas. Verizon designs its wireless network to provide for overlapping spectrum and coverage areas in many cases. If a particular cell site goes offline, devices may switch to a different site and maintain connectivity. Different spectrum bands deployed on our 4G and 5G networks can provide customers with additional options for connectivity and capacity if certain bands or nodes experience an increase in usage. Most customer devices have the option to move seamlessly between our 4G and 5G networks and available Wi-Fi networks to provide our customers with a high degree of reliability.

For more information on how we manage business continuity risk and the measures we have undertaken to make our networks more resilient, see Network resilience and our latest TCFD Report.