

Corporate Social Responsibility Report

2023

JUNIPER[®]
NETWORKS



About This Report

(GRI 2-2, 2-3)

Juniper Networks produces its CSR report on an annual basis and data is reported by fiscal year. This 2023 CSR Report summarizes the company's ESG activities, impacts and performance for fiscal year 2022, unless clearly marked otherwise.

The report's scope reflects the business operations of Juniper Networks, Inc. and facilities (owned or maintained) during the reporting period, which began January 1, 2022, and ended December 31, 2022, including the company's significant subsidiaries Juniper Networks International B.V., and Juniper Networks (US), Inc.

The report includes links to useful information and publicly available resources related to our financial, corporate governance, social and environmental policies and performance. Juniper Networks reports on CSR activity on an annual cycle, with the next report covering 2023 performance. Our last CSR Report was released in September 2022.

This report is available in its entirety on our website: <https://www.juniper.net/sustainability>

We welcome your questions, comments and feedback at corp-citizenship-sustainability@juniper.net

Forward-Looking Statements

This report contains "forward-looking statements." Forward-looking statements in this report are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934 and other federal securities laws. These statements are based on management's current opinions, expectations, beliefs, plans, objectives, assumptions, or projections regarding future events or results, including, but not limited to our sustainability strategies, initiatives and commitments; our business plans and strategy; our technology, products and services; sustainability risks and opportunities; and our stakeholder engagement efforts. These forward-looking statements are only predictions, not historical fact, and involve certain risks and uncertainties, as well as assumptions. Actual results, levels of activity, performance, achievements and events could differ materially from those stated, anticipated, or implied by such forward-looking statements. While we believe that our assumptions are reasonable, there are many risks and uncertainties that could cause actual results to differ materially from forward-looking statements, including the risks discussed under the heading "Risk Factors" in our most recent Annual Report on Form 10-K and subsequent 10-Q filings with the US Securities and Exchange Commission.

This report contains human capital measures or objectives that may be different from or are in addition to the human capital measures or objectives that we are required to disclose in our US Securities and Exchange Commission filings. For a discussion on human capital measures or objectives that we focus on in managing its business, please see the "Human Capital" section in our most recent Annual Report on Form 10-K.

Any references to "material," "priority" or "relevant" in this report are not intended to have the same meaning as the terms "material" or "materiality" in the context of financial statements or financial reporting or as defined by the securities laws of the United States. While we believe that our ESG initiatives are important to operating in a sustainable manner, we do not believe that such initiatives are material to our financial results and results of operations. For a discussion of the risks that we believe could materially affect our financial results and results of operations, please see the "Risk Factors" section in our most recent Annual Report on Form 10-K and subsequent 10-Q filings.

We undertake no obligation to update or revise any statement contained in this report, except as otherwise required by law.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

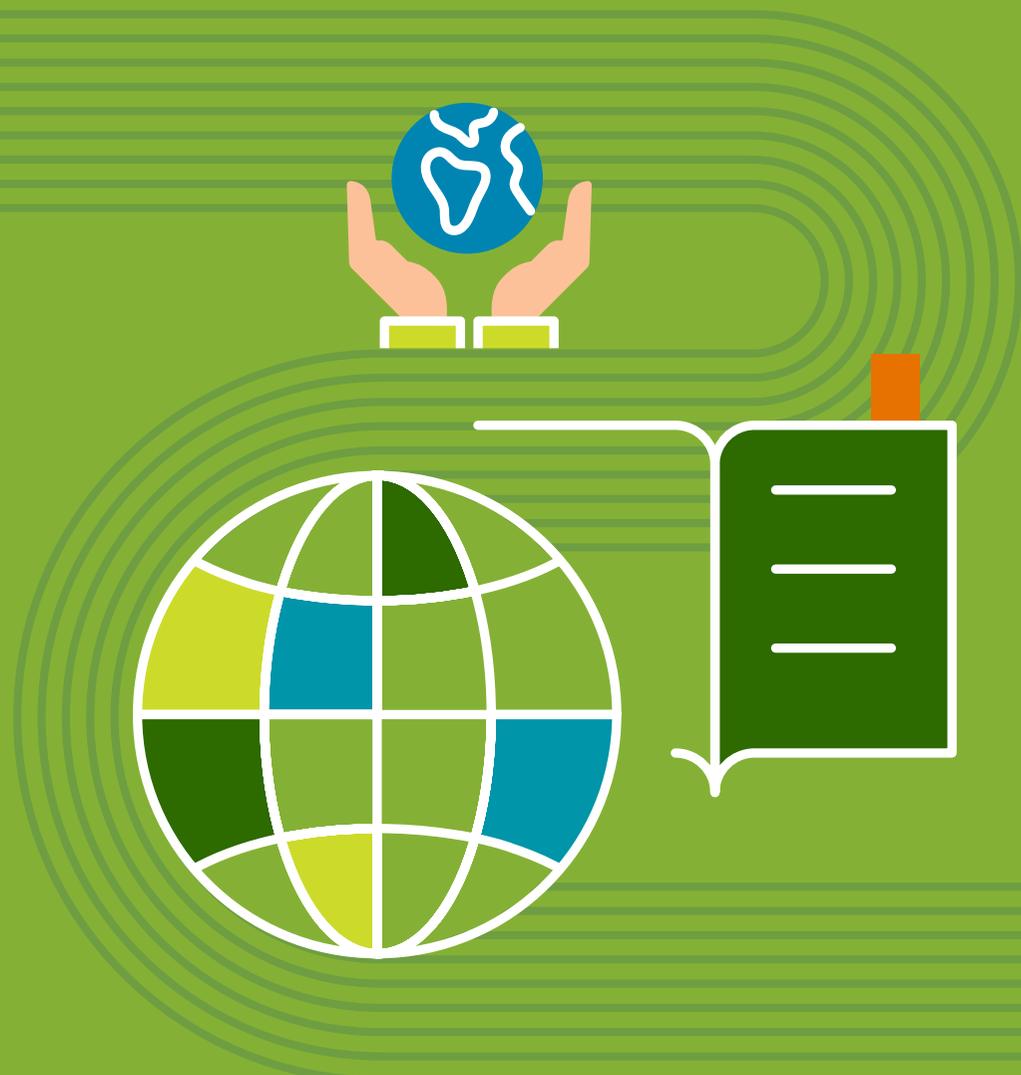
JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



CSR at Juniper

Juniper's mission is to power connections and empower change, to be a responsible global citizen and influence meaningful differences in the world around us. In everything we do, we act with a commitment to our customers, employees, partners, and the planet.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Introduction

(GRI 201 3-3, 202 3-3)

Juniper Networks delivers network experiences that transform how people connect, work, and live. We are a global leader in AI for IT and solutions for enterprise, cloud and service providers across IP transport, cloud-ready data centers, wired and wireless, connected security and automation—enabling our customers to build agile, scalable, secure, and cost-effective networks that deliver optimized efficiency and end-user satisfaction. Through our investments in research, development, engineering, and innovation, we support our customers and the global internet infrastructure, helping deliver economic and social opportunity to individuals and communities and impacting critical areas such as education, government, healthcare, and retail.

This report details Juniper’s environmental, social, and governance (ESG) activities, impacts, and performance for fiscal year 2022 (January 1 to December 31, 2022), giving a snapshot of our purpose and values and showing how we demonstrated those values and fulfilled our mission during the reporting period. Addressing topics of interest to our customers, employees, partners, investors and analysts, and other stakeholders, our report begins with the *what* and *why* of our vision, strategy, and value proposition, then continues into the *how*, describing progress across our three corporate social responsibility (CSR) pillars (see graphic). The report’s appendices tabulate our 2022 sustainability results in alignment with Sustainability Accounting Standards Board (SASB) and Global Reporting Initiative (GRI) reporting standards, as well as the Task Force on Climate-related Financial Disclosures (TCFD) framework.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Enhance Trust & Governance

- Advance integrity in our business, with our customers, and in our supply chain.
- Build trust with our key stakeholders.



Enable the Workforce of the Future

- Enable a diverse workforce and inclusive workplace at Juniper.
- Provide equitable employment opportunities in the digital economy.



Build Global Resilience

- Minimize our impact on the environment.
- Respond to global health, natural, and climate-related disasters.
- Advance climate solutions.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

Message from Our CEO



Rami Rahim

(GRI 2-22)

For nearly 30 years, Juniper Networks has worked to bring the future to life, creating the network and AI infrastructure that connects people, companies, and cultures in ways never before possible. By powering those connections, we're empowering change worldwide.

2022 marked a technology inflection point as AI moved out from the business world and emerged fully in the public imagination. As an early adopter of the technology, Juniper has long been committed to both AI's vast potential and its ethical use, and we continue to believe in its ability to deliver unimagined benefits for our customers and society at large.

That goal of broad-based social benefit also animates our CSR efforts. In a year that saw continued global challenges even as the threat of COVID-19 began to recede, our focus on building global resilience, empowering the workforce of the future, and enhancing trust and governance continued to exemplify our cultural values and enable us toward greater success and innovation.

Earlier this year, Ethisphere named Juniper as one of the 2023 World's Most Ethical Companies™, validating our commitment to conducting business with transparency, integrity, and trust. We ask the same of all our employees and partners, and work to build a corporate culture and ecosystem that embodies both technical and business excellence and individual dignity, respect, and empathy. To thrive in today's competitive talent market, we've evolved our workplaces and employee experience to better meet the needs of current and potential employees, assuring that Juniper remains a place that fosters inclusion, community, collaboration, and innovation. We grew our University Talent Program to encourage and attract the next generation of tech talent, and developed a new people-centered, AI-driven internal talent marketplace to help our colleagues learn new skills and explore the many career

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



paths Juniper can offer. To encourage greater workplace diversity, we set new representation goals for women globally and underrepresented groups in the U.S. Our commitment to tomorrow's workforce extends to our community work. In 2022, we launched a new three-year partnership with the nonprofit NPower, which provides free technical training to military veterans and young adults from underserved communities, fostering the skills to launch careers in the digital economy.

As our industry expands, we are committed to playing our part to address global climate challenges. In 2022, we continued to focus on performance and energy efficiency at every stage of our hardware and software product lifecycle, from improvements at the silicon/architecture, systems, and operations levels to more sustainable packaging and greater circular use of materials. For IT infrastructure companies like Juniper, our biggest opportunity to play a part in the global climate challenge is within our value chain, with the overwhelming amount of our carbon footprint resulting from the work to assemble our products, move our products, and operate the products our customers purchase. Therefore, I am proud that Juniper is committing to move beyond our 2025 carbon neutral commitment and establish Scope 3 goals. Juniper will be committing to a Science Based Target and plans to reduce the three largest categories of our Scope 3 greenhouse gas emissions by 22.5% by 2030. I believe this commitment firmly establishes us at the forefront of technology companies.

Over the past year, as the COVID-19 pandemic receded, I've thought deeply about the impact digital networks had in helping life continue through catastrophe—enabling people to connect with others, work remotely, educate children, shop for essentials, and receive healthcare. Our purpose and mission as a company have always driven me, but I've never felt a greater sense of responsibility than I do now. As the world grapples with complexity and challenge, Juniper is enabling the connection, collaboration, and analysis that will drive new and game-changing solutions. That's our mission. It's vital. It's right. It's Juniper.

Rami Rahim

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

Juniper at a Glance

(GRI 2-1)

Products & Services

Juniper Networks, Inc. is a global leader in designing, developing, and marketing AI-driven networking, cloud, and connected security solutions, delivering high-performance networks, simplified operation, and a superior end-user experience.



See our [2022 Form 10-K](#) for additional financial information.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

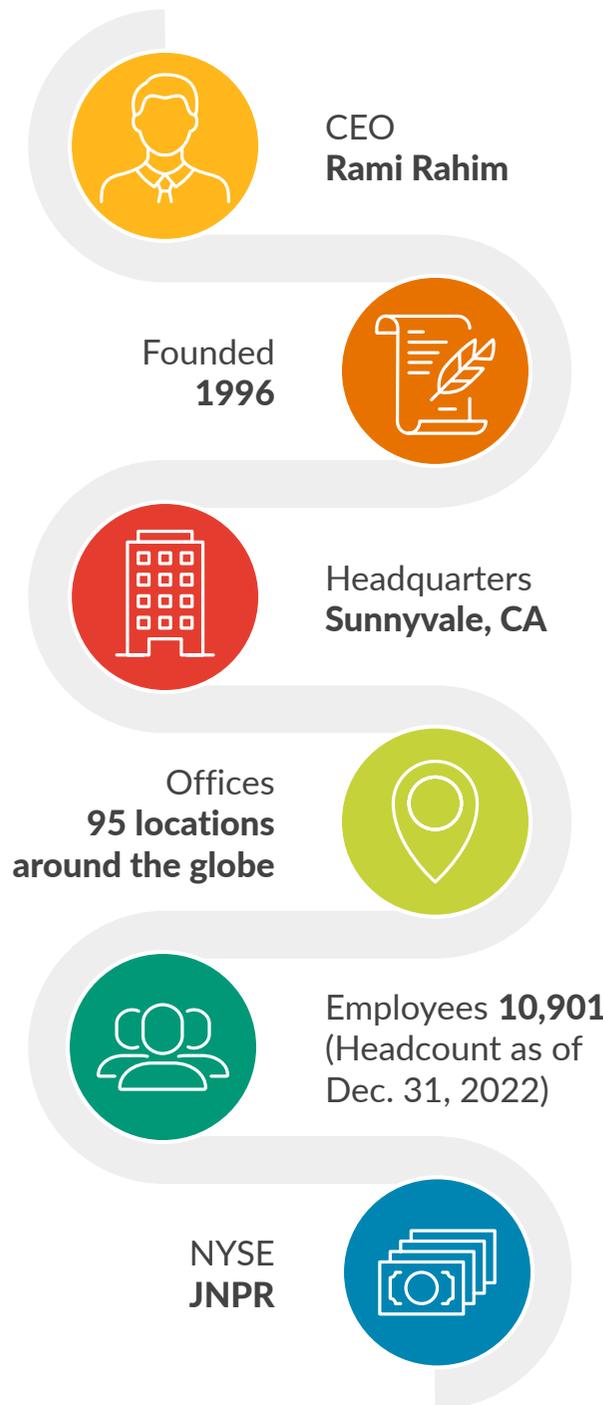
JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Recognition

Reaching the highest standards



CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

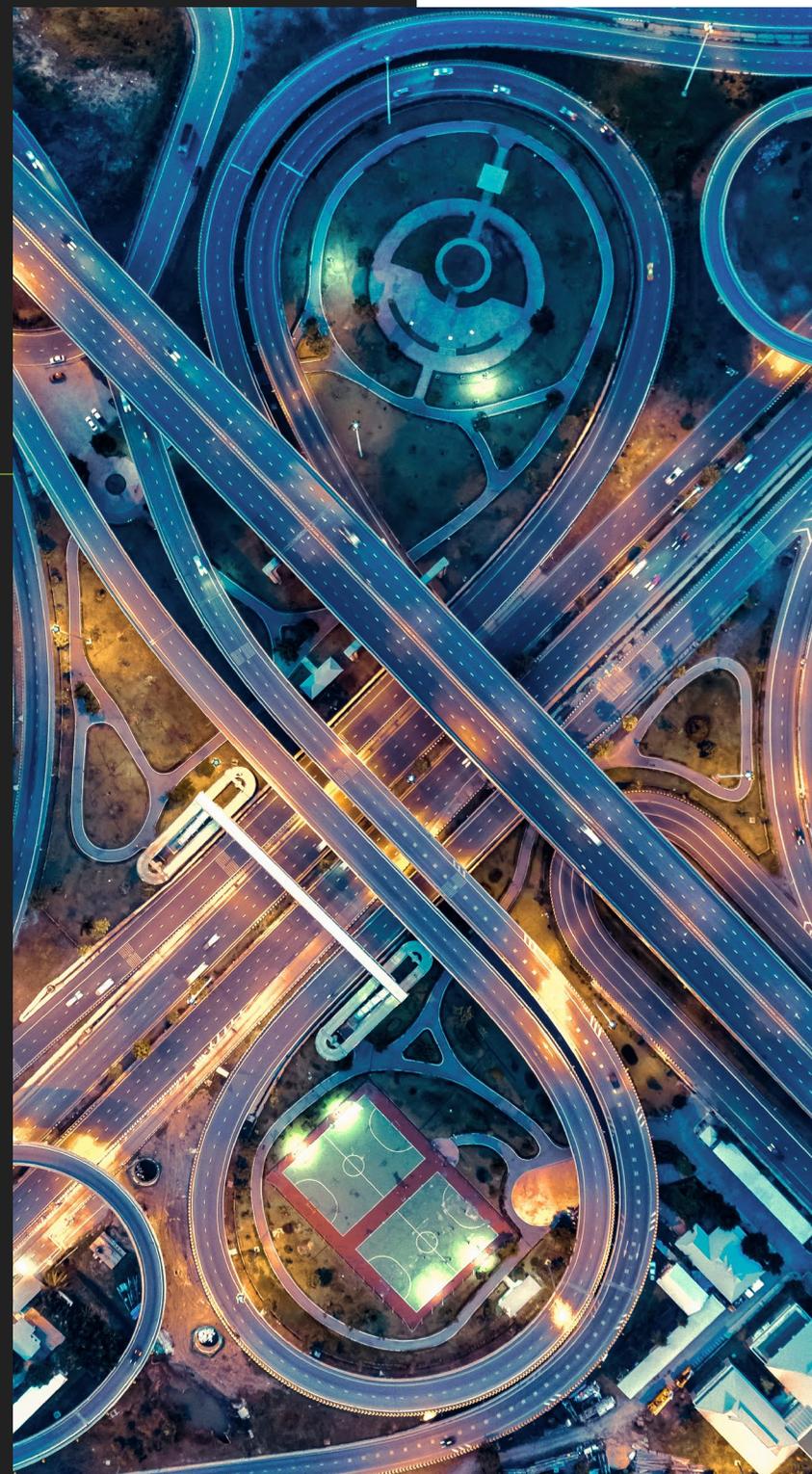
JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Our Business & Operations

Juniper Networks designs, develops, and sells products and services that enable our customers to build scalable, reliable, secure, and cost-effective business networks that leverage automation for improved agility and operating efficiency. Our network technology offerings include:

- Routing
- Switching
- Wi-fi
- Network security automation
- AI or AI-enabled networking operations (AIOps)
- Software-defined networking (SDN)

In addition to our products, we offer network maintenance and support services, education and training programs, professional services, software-as-a-service (SaaS), and a range of other services. We sell our solutions in more than 150 countries across three geographic regions: the Americas, Asia Pacific (APAC), and Europe, the Middle East, and Africa (EMEA).

Within our Cloud, Service Provider, and Enterprise verticals, our products and services meet our customers' need for high-performing networks to drive business success. Our silicon, systems, and software innovations help transform the economics and experience of networking, empowering our customers with superior performance, choice, and flexibility while reducing overall cost of ownership.

CSR AT JUNIPER

- Introduction
- Message from Our CEO
- Juniper at a Glance
- Our Business & Operations**
- Our Business Strategy
- Our Vision
- Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



(GRI 2-8)

Non-employee workers

At the end of the reporting period, we had 3,437 non-employee workers in our operations, calculated by headcount. The most common types of non-employee workers are categorized as Agency Workers, Independent Contractors, and Vendor Service Providers.¹

(GRI 2-7)

EMPLOYEE METRICS BY REGION & GENDER

Employee Category	Americas			APAC			EMEA		
	Male	Female	Other	Male	Female	Other	Male	Female	Other
Total	3565	1172	22	3557	1108	0	1212	261	4
Permanent	3558	1168	22	3537	1089	0	1189	256	4
Temporary	7	4	0	21	19	0	23	5	0
Non-guaranteed hours	0	0	0	0	0	0	0	0	0
Full-time	3551	1151	22	3491	1058	0	1201	233	3
Part-time	14	21	0	66	50	0	11	28	1

Figures represent headcount at the end of the reporting period (December 31, 2022). Only permanent employees are included in full-time/part-time numbers.

1. Agency Workers are engaged by Juniper to meet "short-term," "flexible," or "project-based" needs. Independent Contractors or Consultants are engaged by Juniper to achieve a specified result for an agreed-upon price. Vendor Service Providers are employees of companies providing services for Juniper, such as professional services (consulting firms, IT product/service firms) or outsourced service contracts (security, facilities management, payroll administration, janitorial, cafeteria services, etc.).

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



We are Junivators

We call our employees Junivators—the 10,901 individuals who put their talents to work for Juniper, their teams, and their self-actualization, bringing our innovations to life. Nurtured by thoughtful and accessible leadership and a culture that values taking chances and driving change, Junivators are always exploring new paths and adding their voices to the conversation. Junivators are the engine of Juniper’s forward momentum, pushing us to think outside the box each and every day as we build a more connected, inclusive, and innovative future.

CSR AT JUNIPER

- Introduction
- Message from Our CEO
- Juniper at a Glance
- Our Business & Operations
- Our Business Strategy**
- Our Vision
- Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Our Business Strategy

Our Mission:
*Power Connections,
Empower Change.*

At Juniper, we strive to deliver network experiences that transform how people connect, work, and live.

By challenging the inherent complexity of the 5G and cloud era, our solutions power the connections that matter most—from education and healthcare to government and secure banking. Our commitment is to advance real outcomes for network teams and every individual they serve. It's that simple.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Our Vision

User experience is Juniper's heart and soul.

We are driven to deliver a clearer, simpler, more streamlined experience for the teams that run networks and the organizations that depend on them.

We put our customers at the center of everything we do, empowering network architects, builders, and operators to deliver an enjoyable, user-friendly experience for *their* customers—the employees collaborating online, the students doing distance learning, the associates using scanners in a store.

It's all born from innovation. From Junos to Apstra and Paragon to Mist AI, we push the envelope on predictability, programmability, automation, and insights. By prioritizing an exceptional user experience, we help our customers build agile networks that transcend expectations.

CSR AT JUNIPER

Introduction

Message from Our CEO

Juniper at a Glance

Our Business & Operations

Our Business Strategy

Our Vision

Our Values

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



**BE
BOLD**

We pursue simplicity. We challenge the status quo, including challenging ourselves. We embrace diverse ideas and the change that they bring. That's what being bold is all about.



**BUILD
TRUST**

Our success is determined by our customers' success. We say what we mean and take the initiative, so you can count on us to get things done.



**DELIVER
EXCELLENCE**

We're obsessed with exceptional quality and a remarkable customer experience. Even when we've achieved that goal, we are always looking for ways to improve. And if we fall short, we act fast to fix it.

Our Values

Our mission is to power connections and empower change—to be a responsible global citizen and influence meaningful differences in the world around us. By powering connections, we're stimulating collaboration that can innovate solutions for some of the world's greatest challenges—in health and well-being, sustainability, and equity.

The Juniper Way is the values system that enables our pursuit of that mission—connecting our people, guiding our actions, and holding us accountable. It's the foundation of our culture, pushing us to be bold, build trust, and deliver excellence. It's our promise, to one another and to our customers.

Juniper became the company it is through big thinking, ambitious goals, trusted relationships with colleagues and customers, and a laser focus on excellence. Today, that foundation is distilled in our three core values—Be Bold, Build Trust, and Deliver Excellence—along with a set of refined behaviors and aspirations that help us continually evolve to meet the industry's accelerating pace of change.

When it comes to innovation, commitment, and creativity, our Junivators lead by example, embracing our core values and bringing our mission to life every day.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Juniper CSR Strategy

Our CSR strategy positions Juniper for tomorrow's competitive landscape. By enhancing trust and governance, enabling the workforce of the future, and building global resilience, we're creating the foundation for Juniper to innovate and thrive for decades to come.

As a company, Juniper exists to facilitate connection, enabling the exchange of information that drives society and the global economy. That's our value proposition but also our societal function and higher calling—both the product of our efforts and the enabler of our impact. It's the story of Juniper today and the story of our future.

Power Connections, Empower Change

The tech industry is accustomed to moving fast and driving change. In less than three decades, the industry's network and wireless innovations have transformed the way society connects, works, and lives. And today the AI revolution is poised to drive another leap forward. At Juniper, we believe it's time for tech to apply that same passion and skill to the urgent imperatives of today, including climate action and social progress. By making corporate social responsibility intrinsic to how we do business, we drive long-term benefit to our company, our stakeholders, and society.

At Juniper, social responsibility and ESG aren't just implied by what we do, they are part of our purpose. If we're in the business of connecting, we have to acknowledge that connection can't be artificially siloed. As a business and as individuals, we're all connected to people and societies globally, and to the world's climate, environment, and biosphere—everything and everyone, networked together to sustain the systems on which our lives depend.

Now more than ever, Juniper Networks is committed to being a force for good, powering new solutions for a low-carbon future. This includes delivering products that help our customers achieve responsible digital transformation and carbon reductions, promoting circular-economy innovations, and expanding network infrastructure for research and education, all while reducing our own carbon footprint and enhancing climate resilience across our business and supply chain.

A Three-Pillar CSR Strategy

Over the past two years, Juniper engaged our leaders, employees, and other stakeholders to define an organic, holistic alignment between our business and CSR strategy, then codified the results into three pillars. Working together, these pillars ensure our CSR ambitions are embedded in everything we do while creating a stable foundation for future success: supporting internal business needs, mitigating existing and emerging risks, and enabling positive impact for our customers, employees, partners, stockholders, and the planet.

Our CSR strategy is designed to address today's acute challenges while building our capacity to help solve tomorrow's. By enabling our business and securing the talent, resources, and relationships we need to continue innovating, we're driving an upward arc of interconnected opportunity and resilience that generates positive impact far beyond our company walls.



CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



How Our CSR Pillars Drive Progress

Our three CSR pillars position Juniper for success on both the risk and opportunity sides of the sustainability equation. By shoring up our internal systems, they help us mitigate security, privacy, trust, and resilience risks. On the opportunity side, they help us develop the future talent to support a healthy company and advance impactful and energy-efficient technologies.

Juniper fulfills our customers' need for solutions that drive efficiency and reduce carbon footprint. That's the convergence point of our business and CSR strategies: creating opportunity and impact by doing what we do best.

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Enhance Trust & Governance

A foundation of trust and transparent governance helps us build strong relationships and attract talent.

Integrity and trust are central to Juniper's culture and values, and to sustaining our reputation among investors, customers, and our employees. Our stakeholders know they can trust us to speak plainly and follow through, supporting their success as the surest path to growing our own.

This pillar reinforces our position on the table stakes of our business: integrity, ethics, effective governance, compliance and reporting, and respect for labor and human rights across our company and supply chain. It also supports cybersecurity and privacy efforts across our products and services. And, it extends our commitment to public advocacy on issues such as protecting internet freedom, educating the next generation of IT leaders, and promoting network investment to close the digital divide and stimulate economic growth.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Enable the Workforce of the Future

In our industry and operating environment, talent is paramount. Like our partners and competitors, we rely on our employees' inventiveness and initiative to create, market, and support the new technologies of a connected, sustainable future. We believe that working to create a diverse, inclusive, and inspirational community strengthens that foundation by supporting talent retention, unlocking broader talent pools, and empowering collaboration and diversity of thought that enables continued innovation and growth.

Juniper has always been about caring for our people and supporting them to reach their full potential. But our internal support and training are only part of the picture. As we move forward, we are working with partners and communities around the world to share knowledge and develop equitable career opportunities in digital technology, helping grow a global pool of talent and future innovation.

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Build Global Resilience

Juniper is committed to a sustainable future. We've pledged to be carbon neutral across our own operations by 2025, but that's only the beginning of our journey.

Sustainability is about assuring our organization has the resilience to thrive into the future, making us stronger and better prepared to weather challenges, mitigate risks, leverage opportunities, and protect the global environment. In a time of rapid and substantive change, embracing a company-wide resilience strategy is a matter of investing strategically.

And it doesn't stop with our own four walls, because Juniper is about connection, and connection has no limits. By building resilience in our company, our people, and our supply chain, we can enable advances in energy efficiency, materials innovation, and recyclability throughout the product lifecycle and support moves toward a circular economy. And by advancing the reach of our products, we'll enable connectivity that strengthens communities worldwide.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Materiality

(GRI 3-1, 3-2)

Juniper conducts materiality assessments every two to three years to gauge alignment of our CSR strategy, programs, and disclosures with the expectations of both internal and external stakeholders. Our latest assessment, completed in May 2022, revealed that stakeholder expectations for CSR are rising, as is our own acknowledgement of CSR’s long-term value to the company. It also confirmed that stakeholders want Juniper to integrate CSR more tightly into our strategy and operations, improving our ability to drive change. Across the board, assessment results aligned with and validated Juniper’s evolving CSR strategy, as described on page 18 of this report.

In this report, the meaning of “material” and “materiality” differs from their definitions in U.S. securities law and the context of financial statements and financial reporting. Instead, topics are designated as material due to their potential to directly or indirectly influence the creation, preservation, or erosion of economic, environmental, and social value for the company, our stakeholders, and society at large.

Materiality Assessment Process

Our materiality assessment process aligns with the requirements of the Global Reporting Initiative (GRI) for materiality and disclosure of ESG topics. The process includes three key steps:

- 1. Selection of important ESG topics**, during which our CSR team identifies ESG topics and configures their boundaries considering previous assessment results, current GRI guidelines and SASB topics, and benchmarking against industry peers, customers, and reporting frameworks.
- 2. Selection and survey of internal and external stakeholders**, who are chosen to represent a range of experiences and perspectives, and whose interests we believe will impact our long-term value. We conduct our surveys in an interview style, to gather both qualitative and quantitative feedback on topics that our stakeholders rank by their relative importance and/or perceived impact. We also survey internal stakeholders to understand how Juniper’s current ESG topic impacts are perceived.
- 3. Documentation and analysis of the results** by ranking and mapping material and non-material topics. After quantifying survey data, interview results, and other data, we create a matrix that we use to set company goals, drive programs, and inform our sustainability disclosures.

For our 2022 assessment, we explored the priorities of our top customers, largest shareholders, industry peers and competitors, raters and rankers, and industry groups, as well as company executives and employee focus groups. All key material topics identified by our stakeholders align closely with our three CSR pillars, giving us further confidence in our strategic direction. In addition, three key value-creation imperatives emerged from the assessment:

- 1. Trust is a Must**
- 2. To Win, Win Talent**
- 3. Environmental Strategy is Business Strategy**

These themes align with our CSR pillars and support our evolution toward integrating CSR across the business, helping us drive design excellence and innovation; integrate CSR performance into our products, services, and operations; and inspire our employees, investors, and partners with impactful CSR performance and a greater sense of our social and environmental mission.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

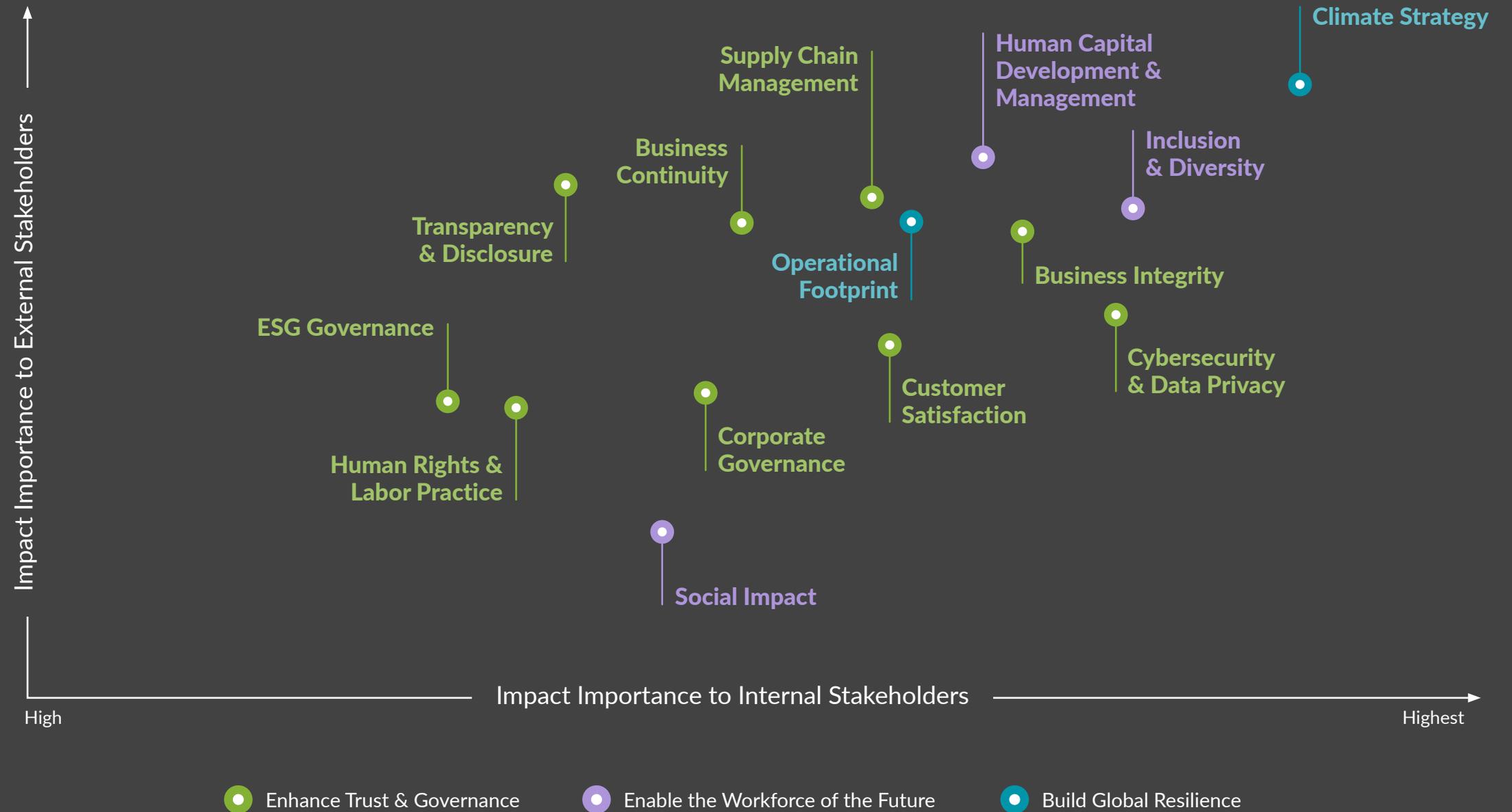
ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

MATERIALITY MATRIX TOPICS



ALIGNMENT OF CSR PILLARS & MATERIAL TOPICS

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

**Stakeholder Communication
& Engagement**

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Stakeholder Communication & Engagement

(GRI 2-29)

In addition to regular materiality assessments, Juniper conducts robust, ongoing, and inclusive engagement with our employees, customers, investors, and community members. Through these dialogues, we:

- Communicate progress on identified material ESG topics and other salient issues
- Secure valuable insight and feedback that helps us assess potential business risks and opportunities
- Improve how we manage, refine, and respond to identified issues and meet stakeholder expectations

The table on page 28 outlines engagement mechanisms for our primary stakeholder groups.

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

**Stakeholder Communication
& Engagement**

ESG Governance Structure

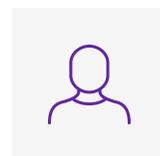
ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

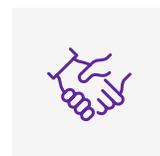
APPENDICES

Primary Stakeholder Groups & Channels for Engagement



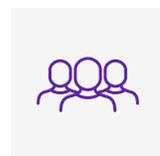
Customers

- Customer surveys
- Meetings & business reviews
- Security & CSR audits & assessments
- Codes of conduct compliance
- Materiality assessment



Strategic Partners

- UN Global Compact
- Business for Social Responsibility
- Global Partner Conference
- Surveys
- Customer requests for proposal



Employees

- Surveys
- Meetings
- Internal corporate communication & engagement vehicles
- Materiality assessment



Governments

- Industry organizations
- Government affairs
- Cybersecurity
- SEC filings
- Access to infrastructure



Shareholders

- Annual meetings
- Quarterly financial results
- ESG surveys
- Shareholder outreach
- Materiality assessment



Communities & Nonprofits

- RBA & RMI
- CDP
- Juniper Networks Foundation
- Nonprofit partnerships
- Materiality assessment



Suppliers

- CDP Supply Chain initiative
- Responsible Business Alliance (RBA)
- Responsible Minerals Initiative (RMI)
- Business Partner Code of Conduct
- Audits & risk assessments
- Supplier business reviews
- Supplier forums

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



ESG Governance Structure

(GRI 2-12, 2-14)

Our ESG strategy encompasses our CSR activities, impacts, and performance. Oversight of our CSR program starts with our Board of Directors (Board), reflecting CSR's position as a key priority for Juniper. The Board's CSR oversight extends through its committees:

- **Nominating and Corporate Governance Committee.** Oversee our programs, policies, disclosures and practices relating to social and environmental issues and impact to support the sustainable growth of our businesses.
- **Compensation Committee.** Reviews the status of programs related to human capital management and workforce inclusion and diversity (I&D).
- **Audit Committee.** Oversees CSR initiatives and ESG risks through the Enterprise Risk Management framework and as part of our trust pillar's focus on business ethics, anti-corruption, product responsibility, data privacy and security (including cybersecurity), and environmental compliance.

(GRI 2-13)

Our executive leadership team has ultimate responsibility for our CSR program. To ensure continued company focus and alignment on CSR, we have a dedicated **CSR Advisory Council** comprised of senior executive leaders representing every business function across the company. This council directs the overall vision, strategy, and execution of our CSR program and ensures alignment with our corporate priorities, objectives, and values.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

Power Connections,
Empower Change

A Three-Pillar CSR Strategy

How Our CSR Pillars Drive
Progress

Materiality

Stakeholder Communication
& Engagement

ESG Governance Structure

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



(GRI 2-17)

The CSR Advisory Council meets at least quarterly, discussing ongoing CSR activities and advancing knowledge within one or more areas of sustainability. In addition, members of the Legal Department routinely offer ESG knowledge development to the Board, including briefings on expectations under the SEC's proposed climate disclosure rules.

We have been enhancing our CSR strategy by focusing on near term and long-term goals in line with our overall sustainability objectives. Part of that process is to assess opportunities to further enhance our CSR governance and embed responsibility for, engagement with, and contribution to CSR initiatives in the organization. To that end, we have established an Environmental Sustainability Committee to guide our work and oversee implementation of our environmental sustainability strategy; this committee meets quarterly and provides updates to the CSR Advisory Council. A statement on Juniper's sustainable development strategy from the Board of Directors is included in the latest [Proxy Statement](#), and should be read in conjunction with the [CSR Strategy](#) text and [Message from Our CEO](#) presented at the beginning of this section.



Enhance Trust & Governance

Our value system, the Juniper Way, commits us to building the kind of trust that bonds our business with each of our stakeholders, from our employees and shareholders to our partners and communities. Through trust, we power connections and empower change.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

**ENHANCE TRUST
& GOVERNANCE**

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



In every interaction, Juniper's leaders and employees say what we mean and take the initiative, all with the goal of delivering on our word and creating customer success.

That commitment extends across every facet of our business ecosystem, starting from strong personal integrity and robust corporate governance. In all our interactions, we're dedicated to upholding the highest standards of ethics, compliance, accountability, and transparency. In our pursuit of building trust and customer satisfaction, we always go the extra mile. And in our products and services, we're laser-focused on delivering network experiences that transform how people connect, work, and live.



99.9% security effectiveness

In CyberRatings' 2023 Enterprise Firewall Report, our SRX4600 firewall received an AAA rating in all five categories,* demonstrating a 99.9% exploit block rate with zero false positives.

* Routing and access control, SSL/TLS functionality, threat prevention, performance, and stability/reliability

Product Security

The world's most demanding networks - including 75 of the Fortune 100 companies - depend on Juniper Connected Security to protect their networks.

(SASB TC-HW-230a.1)

The world is changing, and networks are changing alongside it. Employees and subscribers have become more globally distributed than just a few years ago, and more users, devices, and “smart things” are connected than ever before. Applications no longer reside in data centers but rather are distributed geographically and between public and private clouds.

During this period of increasing complexity, attackers have become more daring and successful, leveraging both the chaos of the global environment and inherent in the massive architectural changes that networks are still undergoing. Organizations must continuously evolve to fight the flurry of attacks threatening their networks. Still, they are forced to do so with fewer resources while maintaining resource availability and reliability necessary to make the business successful.

Juniper Connected Security extends threat visibility, intelligence and enforcement to every point of connection on the network to more effectively safeguard users, applications, and infrastructure.

ENHANCE TRUST
& GOVERNANCE

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Juniper Connected Security takes a different approach to securing the network. By using the network infrastructure responsible for moving data from one point to another — the routing, switching, and access points — to also help protect that data while maintaining the same carrier-grade performance that service providers rely on.

When it comes to security, a top concern for many service providers is that it may slow down the network. Unlike other competitors, Juniper Connected Security offers high-performance security solutions that also provide line-rate performance, thanks to our unique capability of integrating security services into our networking portfolio, all the way to the silicon level. In fact, Juniper Connected Security solutions have helped network security teams improve operational efficiency by reducing the time it takes to manage security in their networks by 20%. This is why 9 out of the top 10 global service providers use Juniper to connect and secure their mobile subscriber networks.

Juniper's Connected Security portfolio focuses on three key areas: the edge, the data center, and tying both together through unified policy management, analytics, and orchestration.

Our business relies on a foundation of customer trust, and it's by rewarding that trust that we drive success for Juniper, our customers, and our customers' customers.



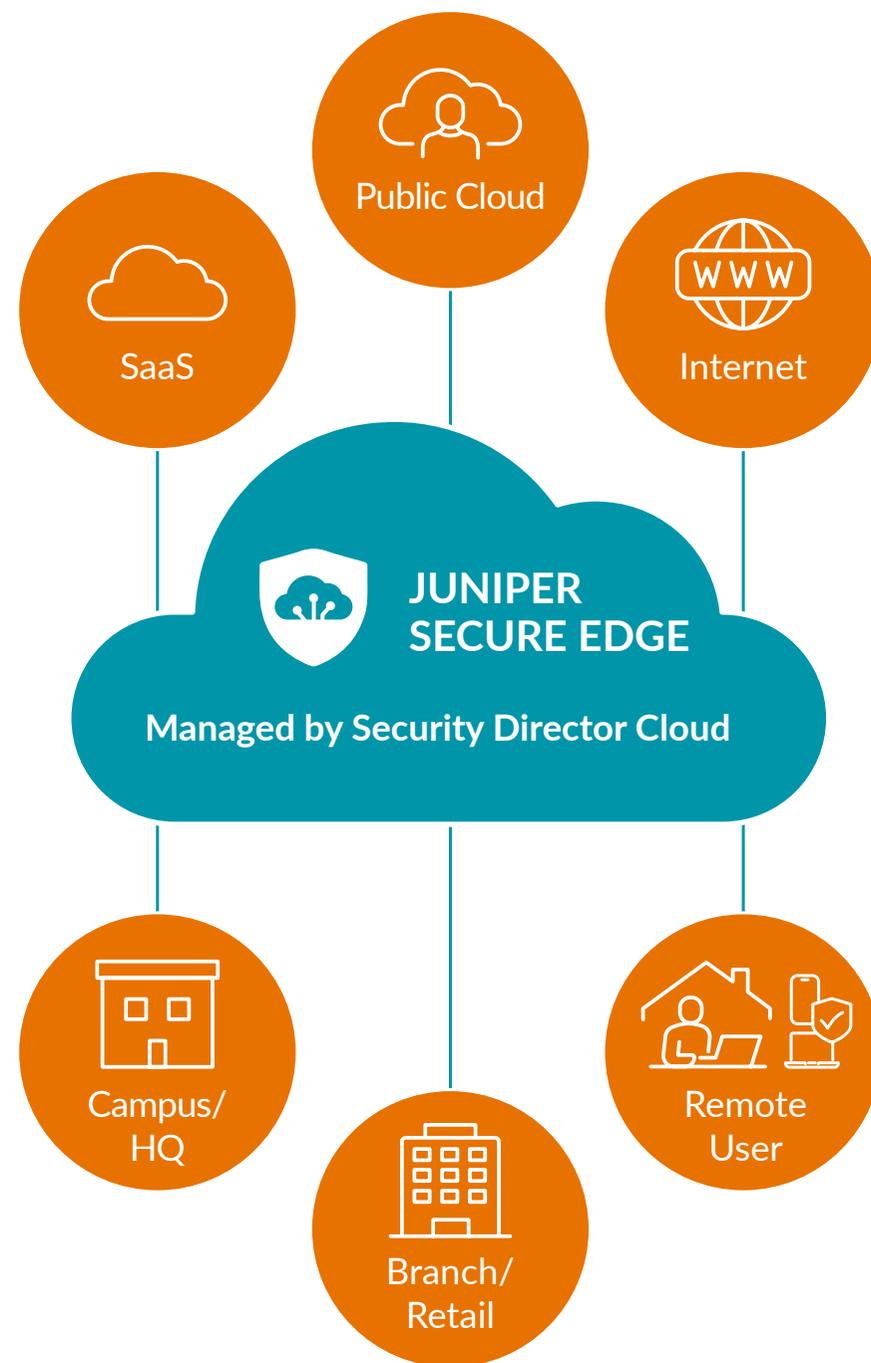
Security at the Cutting Edge

Everyday ops teams are asked to do the impossible while evolving their network architecture. They must provide a consistent network experience for end users while keeping the network secure. Ineffective technology and siloed solutions create complexity and require teams to develop manual integrations, making it especially difficult to scale zero-trust efforts to newer architectures.

That is where Secure Access Service Edge (SASE) comes into play. A SASE architecture brings together the best of both worlds: networking converged with security that centers around granting secure access to users based on the risk they introduce at that moment in time. It provides protection from attacks, regardless of where users are located, ensuring consistent security enforcement without having to backhaul traffic to a corporate location, reducing latency, and providing a better end-user experience.

Juniper helps organizations operationalize security for the edge with SASE capabilities that accommodate every use case a SASE architecture promises. Juniper extends zero trust access to users on and off the network by securing access to any application from anywhere while optimizing every connection. Security policies follow the user wherever they go (whether they are on or off the network), protecting users, devices and applications without having to copy over or recreate rule sets.

A well-built SASE architecture delivers a threat-aware network for the cloud era and ultimately improves security while reducing complexity and streamlining management. When organizations empower the network to be threat-aware, security incidents are detected sooner and attackers are less likely to gain a foothold in the network, which safeguards users, applications, and infrastructure.



SASE provides protection from attacks, regardless of where users are, and they must have the same user experience. Ultimately, the network should just work and never negatively impact the user experience. It must be seamless and secure.

Juniper SASE brings together its industry-leading Security Service Edge (SSE) and SD-WAN solutions, making it easy to connect and onboard SD-WAN endpoints to Juniper Secure Edge SSE to secure users on and off the network through a simple, integrated workflow.

Juniper Secure Edge SSE, managed by Security Director Cloud, secures workforces anywhere with the fast, reliable, and secure access they need. Delivers full-stack SSE capabilities, including FWaaS, SWG, CASB with DLP, ZTNA, and advanced threat protection to protect access to web, SaaS, and on-premises applications and provide users with security that follows them wherever they go. Juniper meets customers where they are and takes them where they want to go by leveraging what they have and extending their zero-trust initiatives to a cloud-delivered architecture without breaking the bank or their ops team.

JUNIPER SECURITY DIRECTOR CLOUD

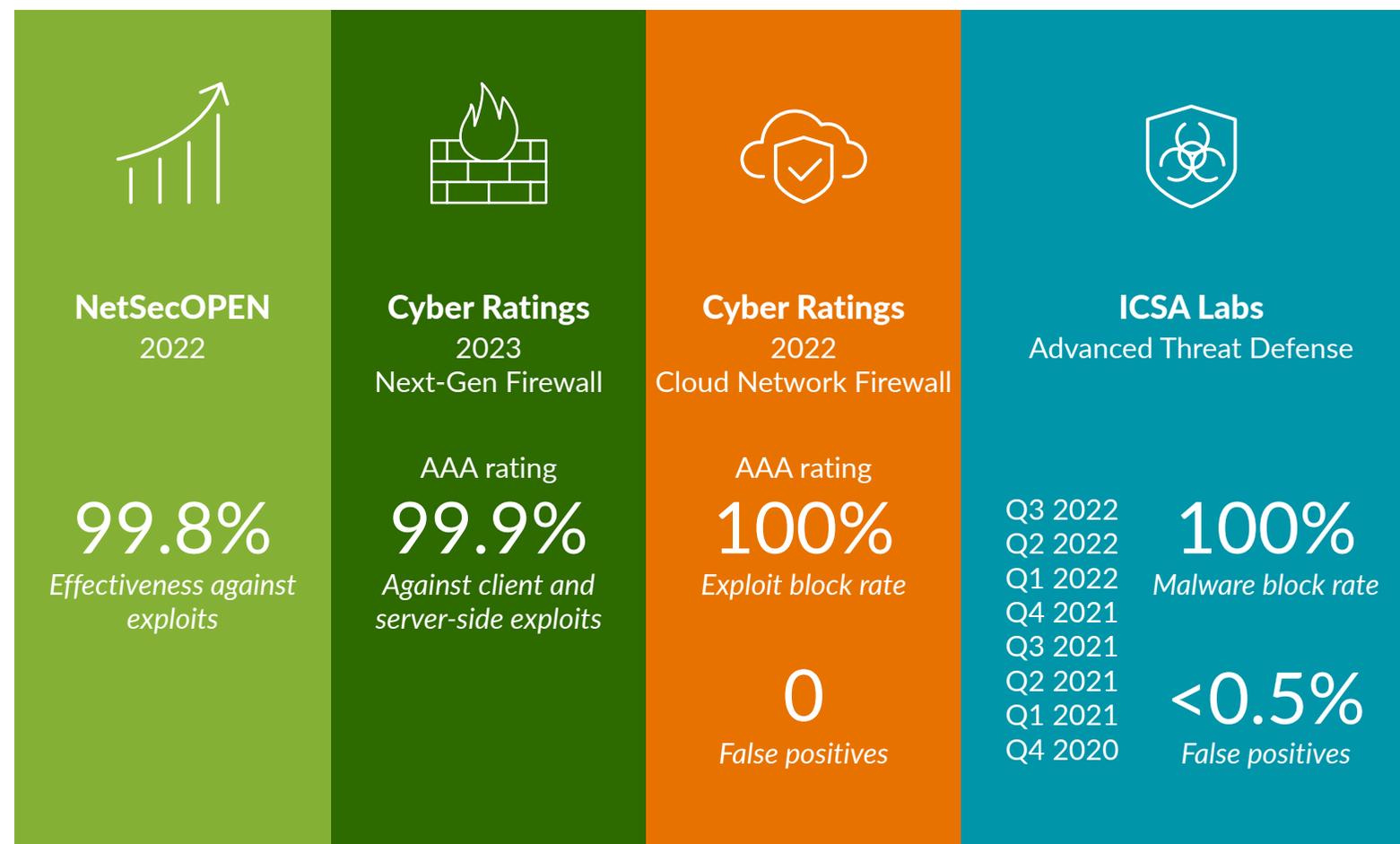


Security Director Cloud enables organizations to secure their architecture with consistent security policies across any environment—on-premises, cloud-based, cloud-delivered, and hybrid—and expands zero trust to all parts of the network from the edge all the way into the data center and to the applications and microservices. With Security Director Cloud, organizations have unbroken visibility, policy configuration, administration, and collective threat intelligence all in one place.

Easy migration to a cloud-delivered architecture



2023 SECURITY RECOGNITION & RANKINGS



At Juniper, we believe the security we sell can actually protect the network. That is why we've worked with objective third-party testing houses to confirm Juniper's security effectiveness. The results are in and we are #1 in security effectiveness for the past five years with 99.9% efficacy and zero false positives.



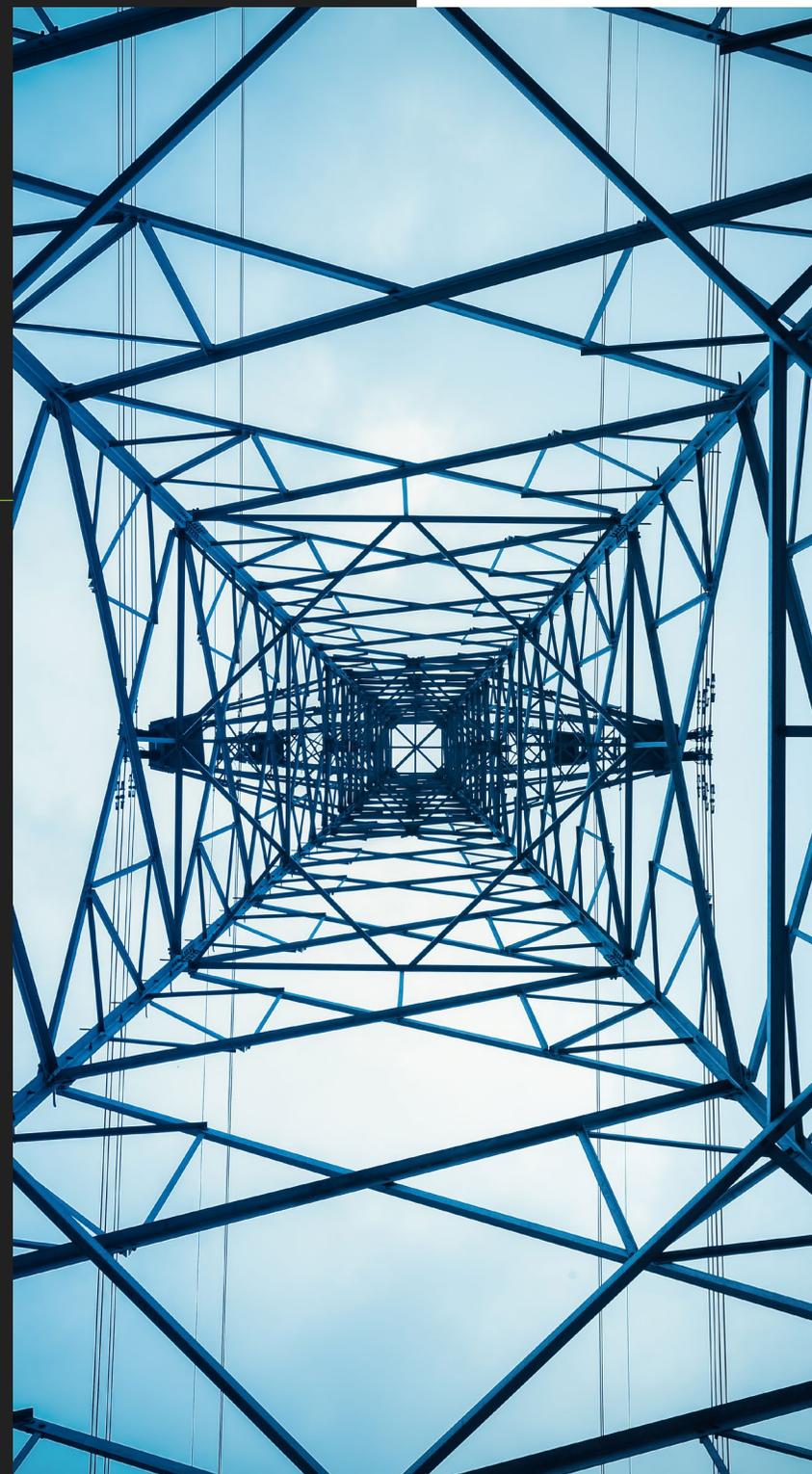
Juniper has been rated #1 in every security effectiveness test for the past four years, according to independently validated security efficacy organizations.



Enhancing trust through zero trust

With network perimeters continually evolving due to the cloud and the proliferation of non-managed mobile devices, the attack surface for cybercriminals is growing in parallel. In response, network owners are increasingly adopting Zero Trust security paradigms, which treat every connection in a network as potentially hostile. By using Zero Trust controls to create microperimeters around critical data, applications, and services, companies and public agencies can ensure that only known, permitted traffic and applications have access to those assets, reducing the risk of advanced threats, breaches, and data exfiltration.

At Juniper, we're integrating Zero Trust security into our network products. For example, each new Juniper ACX7000 platform has a unique, cryptographically signed device identity stored in our TPM 2.0 silicon, allowing Cloud Metro to automatically verify new network equipment's authenticity and integrity, ensuring it has not been compromised by malicious entities.



Secure Development Lifecycle & Incident Response

Juniper Networks' Secure Development Lifecycle methodology assures conformity to industry practices and supports our customers' requirements for continual improvements in security and resiliency. The methodology is structured into practices that address the major goals of Internet security:

- **Confidentiality:** ensuring only authorized individuals can access resources
- **Authentication:** ensuring controls to verify user identity
- **Integrity:** guaranteeing that the message sent is the message received
- **Availability:** ensuring the information system's proper operation
- **Non-repudiation:** guaranteeing that an operation cannot be denied

Together, the six Secure Development Lifecycle practices form a layered, holistic security model that aligns with Juniper's overall Product Development Lifecycle (PDL) methodology, a consistent process for product planning, design, implementation, testing, release, and ongoing support. Information involved in secure product development not only flows between practices, but is also exchanged with processes related to overall product release and delivery.

JUNIPER NETWORKS SECURE DEVELOPMENT LIFECYCLE



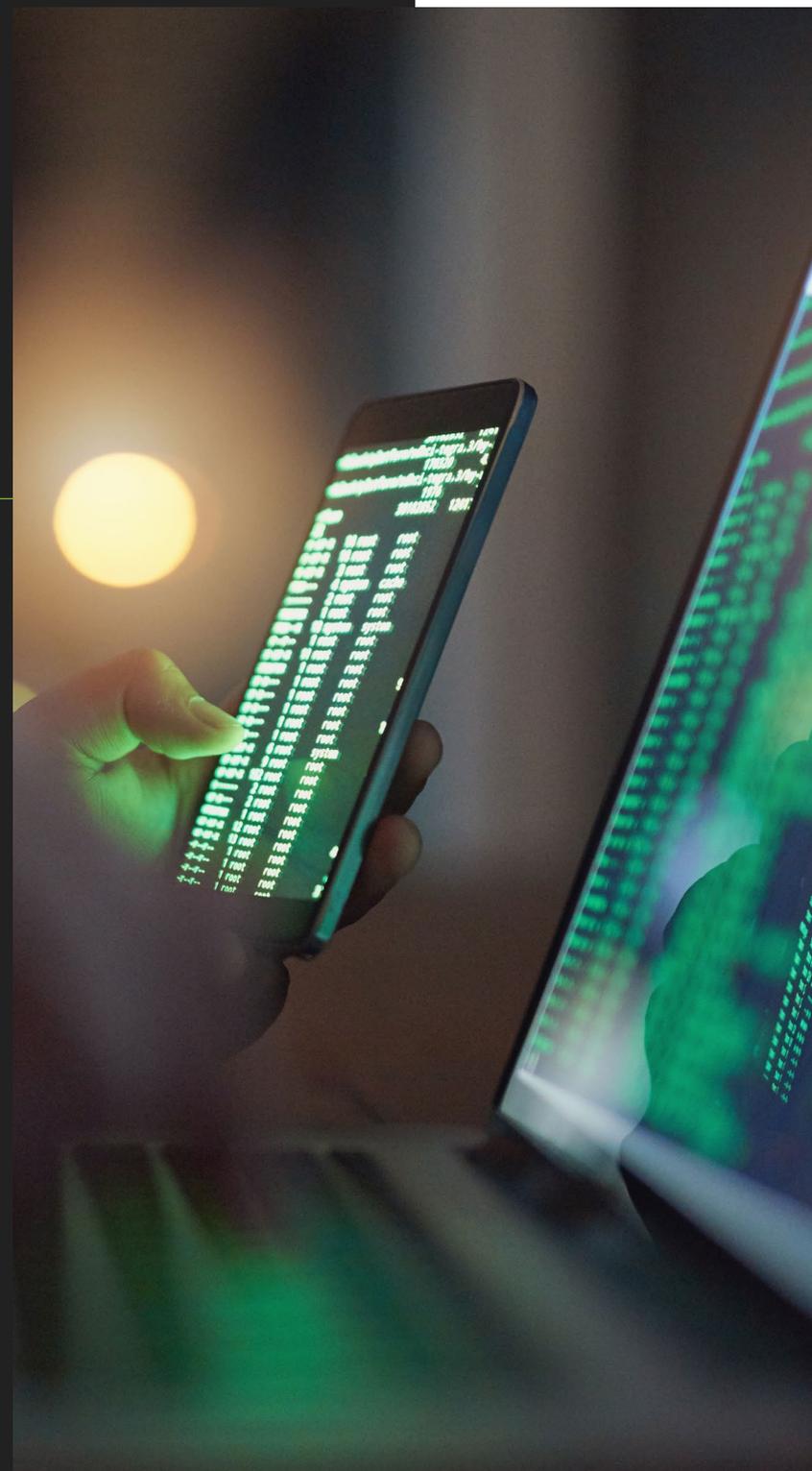
1. **Secure Coding Training.** Providing the foundation for building more resilient software, this training is mandatory for all developers but is available to all Juniper employees, reflecting our belief that everyone from our managers to testers and IT personnel is responsible for product software security. Provided 24-7 in multiple coding languages, the training covers fundamental concepts related to secure coding, secure design, secure testing, and privacy.
2. **Security Considerations in Design.** This design practice considers potential vulnerabilities and threats as well as associated mitigations related to product operation, establishing a baseline security posture. Activities include vulnerability assessments using industry-standard information and publications, security posture evaluation in product software functional specifications, and security feedback integrated into product planning and design.
3. **Threat Modeling.** Building a more secure product requires that developers understand the threats to that product. Via threat modeling, we evaluate the product to identify potential compromising threats (including to components and systems with which the product interacts), determine the product's potential attack surfaces and the level of risk from those threats, and set the boundaries for a range of appropriate mitigations.

4. **Penetration Testing.** After a product's potential attack surfaces have been identified, security risks are evaluated and validated through penetration testing, using common hacking tools and techniques and focusing on areas such as authentication, authorization, cryptography, and access privileges. Identified vulnerabilities can be mitigated in the PDL prior to product release and are added to the baseline for future product testing.
5. **Release Security Review.** The Release Security Review is a deliberate examination of a product's security posture prior to release, with the goal of identifying and evaluating security risks that might then be eliminated, reduced, mitigated, or accepted in relation to the PDL. The review considers background information about the product and related documentation, functional specifications and any recommendations for product enhancement, prior security and bug reviews, and results of threat modeling and penetration testing.
6. **Incident Response Plan.** The Incident Response Plan outlines how Juniper responds to potential product vulnerabilities and how these threats and mitigations are communicated to customers. This practice builds on Juniper's industry-respected Security Incident Response Team (SIRT) framework, which encompasses:

- Dedicated security experts available for response
- Established communications channels for resolving incidents
- Multi-source vulnerability identification, including internal review, customer service, threat monitoring, and cooperation with researchers, partners, and other vendors
- Security bug evaluation and scoring using the industry-standard Common Vulnerability Scoring System (CVSS) methodology
- Customer advisories published with industry-standard Common Vulnerabilities and Exposure (CVE) identifiers to aid customer understanding
- Information sharing with industry peers to prevent the spread of threats and allow repair of vulnerabilities in multivendor customer networks

Click here for a more in-depth look at our [Secure Development Lifecycle](#).

Our **supply chain security practices** bolster our Secure Development Lifecycle. Data protection is sought throughout our engagement with suppliers, starting with onboarding. Our efforts address supplier system security, network security, information and data security, incidents and response, audit practice, physical security, and their secure development process. Conditions for following the General Data Protection Regulation (GDPR) are also extended to suppliers.



Security Certifications

To boost customer decision-making confidence, Juniper maintains a portfolio of third-party-validated security-related certifications that verify our product security claims against defined evaluation criteria. These certifications include:

Federal Information Processing Standards (FIPS). Ensuring the security of algorithms and cryptographic functions in IT security systems that protect unclassified information, these standards are used as a guideline for federal procurements and are recognized by the U.S., Canada, and other national governments. Juniper has 30 active FIPS Certifications.

ISO/IEC 15408 Common Criteria Certifications. A set of internationally recognized and accepted standards that allow vendors to make claims about the security functionality of their products and then demonstrate product performance against those claims. Juniper has 16 active Common Criteria Certifications.

Payment Card Industry Data Security Standard (PCI DDS). Our SaaS business has an active certification for our AWS- and GCP-based Mist environments.

Several other Juniper products and environments are currently preparing for certification to various standards. In 2022, we ratified a roadmap to achieving SOC2 compliance for SD Cloud, JSI/JSAS, and MIST, as well as ISO 27001 certification for CDO development infrastructure.

Click [here](#) for a list of current certifications by product.

In 2023, for the third consecutive year, Gartner named Juniper a Challenger organization in its Magic Quadrant for Network Firewalls. Juniper also takes an active role in researching threats and sharing via the Cyber Threat Alliance as both contributor and member of the governing board.

Leadership in Cybersecurity

Juniper is a thought leader in privacy and cybersecurity, engaging collaboratively with industry groups and government initiatives to enhance the security of information communication technology (ICT) products, networks, and critical infrastructure.

To combat cybercrime, improve the state of cyber defenses, and respond to international cybersecurity incidents, we engage with organizations such as the Forum of Incident Response and Security Teams (FIRST) and the Cyber Threat Alliance (CTA). Over the past decade, Juniper has engaged with FIRST in a leadership capacity, developing standards such as the Common Vulnerability Scoring System (CVSS) and programs for multi-stakeholder forums and conferences. In 2021, we helped facilitate and advise on the integration of the Industry Consortium for the Advancement of Security on the Internet (ICASI) into FIRST, a merger designed to help standardize and consolidate industry best practices. Since 2017, a senior Juniper employee has co-chaired the FIRST committees working on CVSS versions 3.1 and 4.

Juniper also is active in two U.S. federal initiatives: the Enduring Security Framework (ESF) and the Joint Cyber Defense Collaborative (JCDC). ESF is a cross-sector working group that addresses threats and risks to the security and stability of U.S. national security systems and critical infrastructure. The JCDC, led by the Cybersecurity and Infrastructure Security Agency (CISA), leads the development and implementation of shared cyber defense plans and operations with partners from the private sector and various levels of government.

To support our customers, we publish white papers, ebooks, podcasts, blogs, and articles on data protection strategies and compliance. We also operate [Juniper Threat Labs](#), a threat intelligence portal that features rapid and actionable insights from world-class security researchers.

**ENHANCE TRUST
& GOVERNANCE**

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Operational Security

Within our operations, we are diligent about data security and protecting the personal information entrusted to us by our customers, vendors, partners, and visitors to our facilities and website. Our operational security infrastructure continuously manages risk across multiple areas, including:

- Assuring the integrity of our products' intellectual property to prevent intrusion and the potential for broader backdoor attacks on our products' users
- Protecting the built environments we manage and ensuring the software and firmware they produce is trustworthy and reliable
- Acting as a trustworthy steward of sensitive information from both employees and customers
- Assuring the availability of our critical computing systems.

We require all employees to complete annual cybersecurity trainings (see following section), and all new employees to complete privacy training. Employees most likely to have access to sensitive information must also complete annual job-specific privacy trainings.

As part of our vendor compliance process, we conduct regular reviews of our key suppliers' privacy and security controls, assuring they meet our standards.



Juniper's cybersecurity goal is to enable effective risk decision-making by empowered employees and leaders to establish a culture of shared outcomes and ownership, supported by modern technology and processes.

Cybersecurity Program, Training & Oversight

Our security organization maintains the policies and controls through which all Juniper technologies are managed. Our cybersecurity program is overseen by our Chief Information Security Officer in coordination with our Chief Information Officer, and includes:

- Common security controls
- A cyber incident response plan that provides controls and procedures for timely and accurate reporting of material cybersecurity incidents
- Insurance coverage to defray any financial losses suffered by the company in the event of a cybersecurity breach

Designed to protect the confidentiality, integrity, and availability of information owned by Juniper or in our care, our cyber risk management program includes annual third-party penetration testing, secure configuration management, comprehensive compliance oversight, and tabletop simulations and scenario exercises that test our incident response capabilities.



2023 Cybersecurity Summit

In March 2023, Juniper held our first internal Cybersecurity Summit, a two-day hybrid event that drew some 800 attendees for cross-functional discussions, talks by internal experts, and keynotes from industry partners. To help foster collaboration among Juniper security professionals, we intend to make the summit an annual event.

Cybersecurity Training & Testing. Juniper mandates multiple trainings for all Juniper employees, specialized trainings based on roles (e.g., for software engineers), and surprise testing to confirm employees are implementing best practices learned during the trainings. In 2022 we updated our trainings to include cyber-range simulated attacks, which test teams' experience, skills, and teamwork in a realistic technical environment, giving practical experience in responding to various attack techniques and tactics. Our cybersecurity trainings achieved 95% participation in 2022.

Cybersecurity Oversight. Oversight of Juniper's cybersecurity program rests with the Board as part of its operational risk management responsibilities. In support of the Board's oversight duties, the Audit Committee receives regular cybersecurity reports from our Chief Information Officer, Chief Information Security Officer, and other senior executives. In addition, management provides the Board (periodically) and Audit Committee (at least quarterly) with reports detailing the results of third-party independent assessments of our company-wide cybersecurity strategy and internal response preparedness exercises.

Currently, four of our directors, including one member of our Audit Committee, have cybersecurity expertise.

**ENHANCE TRUST
& GOVERNANCE**

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES



Data Privacy Compliance in Our Products, Services & Operations

Juniper's [Privacy Notice](#) outlines individuals' rights to their personal information, how that personal information may be collected and used, and our process for notifying individuals about the information we may collect. The Notice is designed around the EU's GDPR but also addresses other country-specific requirements. Most recently, we accounted for emerging regulatory changes in the United States, including California, Virginia, Colorado, Connecticut, and Utah. As we continue to monitor emerging privacy laws, we remain committed to upholding the highest data protection standards and making our compliance policies and protocols easily accessible to our customers, partners, and the public.

To help our customers navigate the rapidly changing privacy landscape and respond to evolving data protection regulations globally, we produce and make available information about data privacy compliance related to our product and service offerings, including product-specific supplements. As our cloud offerings grow, so do customers' privacy inquiries on how we protect customer data in a secure way.

Privacy & AI: to compliance and beyond

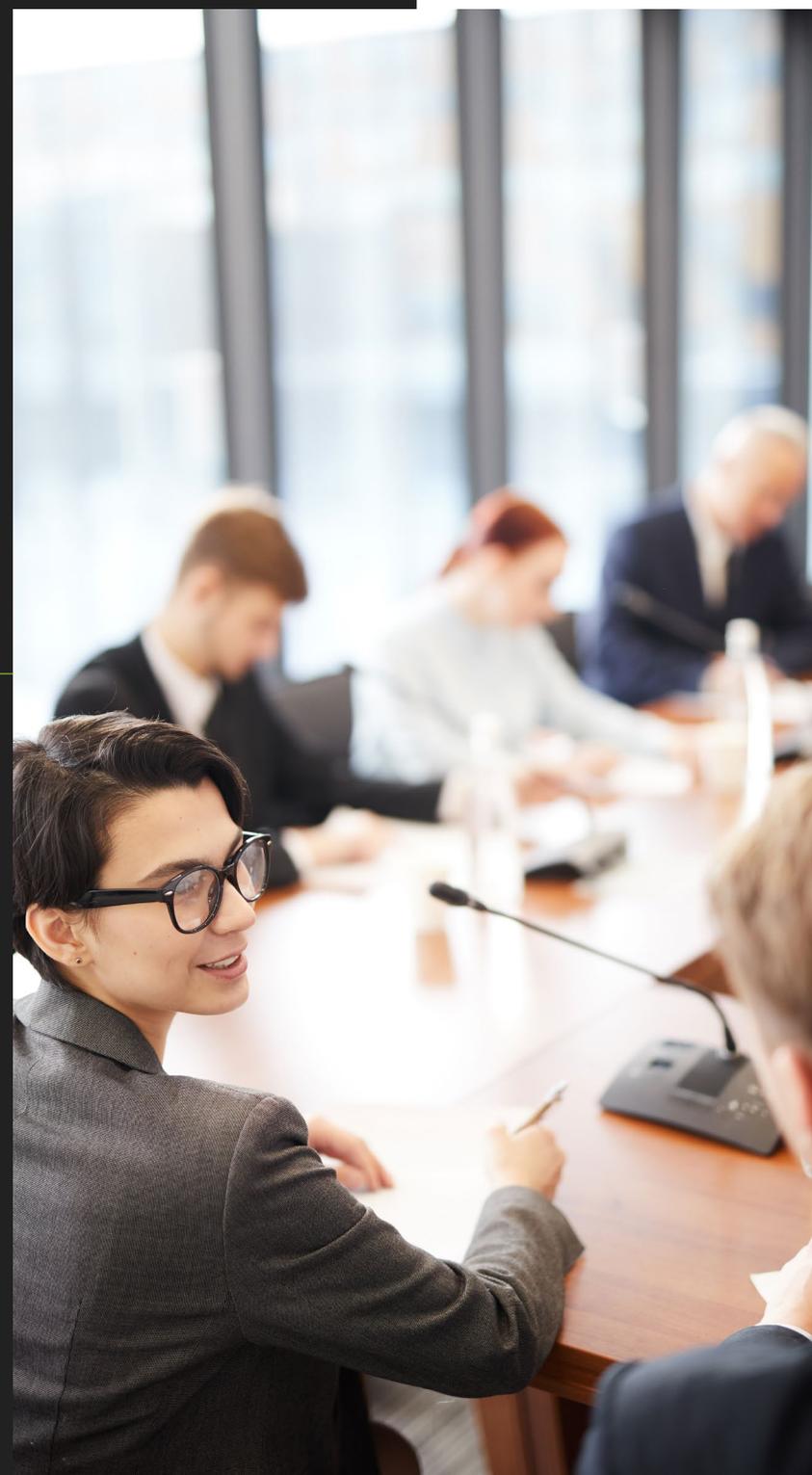
With AI advancing rapidly in systems and the public consciousness, Juniper is working to ensure that our AI practices respect ethics, responsibility, and privacy. We have established a set of AI principles for our internal operations that include:

- Tracking all AI and Generative AI (GAI) applications in use throughout the company, both internal and public-facing
- Establishing a chatbot privacy questionnaire and other GAI usage guidance to help our engineers maintain proper disclosure and consent when creating chatbots for websites
- Adding AI-related questions to our vendor due diligence questionnaire to evaluate potential suppliers' security and privacy practices in their use of AI

By facilitating cross-functional collaboration among our experts and continuously improving our processes, we aim to be a leader in privacy and AI, going beyond compliance to create a secure environment for our products, customers, and partners.

International Transfers. The international transfer of personal data between countries has been an increasingly important regulatory issue in the privacy landscape. In 2022, we successfully completed efforts to integrate the new EU Standard Contractual Clauses (SCC) into our customer, procurement, and reseller contracts, as required for transfers of EU personal data. We also completed Data Transfer Impact Assessments (DTIAs) for key countries to which we transfer EU personal data. These assessments involved a thorough legal analysis of data transfer and processing practices and applicable local laws, ensuring that EU personal data is protected when sent to other countries.

Privacy Training. We conduct regular trainings and provide mandatory learning modules to keep our employees updated on privacy matters, and collaborate cross-functionally to ensure that privacy best practices are integrated across all areas of the business. We provide an annual training to all employees along with periodic targeted trainings for business functions that handle the most personal data (e.g., marketing, human resources).



Corporate Governance

Board Composition & Structure

(GRI 2-9)

Our business is managed under the auspices of our Board of Directors (Board), which is currently composed of ten members, including three women. All of our current directors are independent with the exception of our CEO, Rami Rahim. Our stockholders elect the company's Board members annually. All our directors were elected at our 2023 Annual Meeting.

The Board has a standing Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee.

(GRI 2-11)

The Board's leadership structure is comprised of an independent Chair of the Board and a Lead Independent Director, each of whom is appointed and at least annually reaffirmed by a majority of Juniper Networks' independent directors. Scott Kriens has served as Chairman of the Board since 1996 and served as our CEO from 1996 to 2008. Christine Gorjanc became the Lead Independent Director in May 2023.

(GRI 2-10, 2-18, 2-19, 2-20, 2-21)

For additional information on the Board's governance structure and composition, Board nomination and selection procedures, procedures for annual evaluation of director performance, director compensation, executive compensation, and annual CEO compensation ratio, please see our latest [Proxy Statement](#). For more information on Board diversity, please see the [Inclusion and Diversity at Juniper](#) section of this report.

JUNIPER NETWORKS CORPORATE GOVERNANCE STRUCTURE

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

BOARD OF DIRECTORS

The Board allocates time at each quarterly meeting to engage in substantive discussions with management about areas of broad, strategic risk and opportunity. It delegates certain risk oversight responsibilities to its committees, and committee chairs report back to the full Board on these matters after every meeting.



COMMITTEES

AUDIT

- financial reporting
- compliance—legal and regulatory, including:
 - environmental
 - data privacy and security, including cybersecurity and physical
 - litigation
 - ethics and compliance
- outside auditor independence

COMPENSATION

- compensation practices and programs
- executive succession planning
- human capital management and workforce inclusion and diversity
- CEO performance
- board compensation

NOMINATING & CORPORATE GOVERNANCE

- governance structure and practices
- director independence
- board performance
- board succession planning
- oversight of applicable ESG matters

MANAGEMENT

- Design and operate risk management program, including risk identification, assessment and prioritization.
- Conduct regular, executive-level committee review of key risk areas with updates to the Board.
- Engage with Board and committee chairs on areas of assigned risk oversight.

Risk Management Oversight

Our Board has oversight responsibility for the company’s Enterprise Risk Management (ERM) framework, which is designed to identify, assess, prioritize, manage, and communicate risks to which the company is exposed, and foster a corporate culture of integrity.

To fulfill its oversight responsibility, the Board regularly reviews and holds discussions with management regarding the company’s strategic direction, challenges, and risks. It also reviews the company’s annual and quarterly financial results and forecasts. The full Board and its committees oversee the company’s management of material enterprise-level risk, primarily in the areas of strategic, operational, compliance, and financial risk. Under each of these risk areas, Board committees maintain oversight duties and provide regular reports to the full Board on the company’s risk management efforts.

- Our **Audit Committee** oversees management of all four areas of enterprise-level risk: strategic, operational, compliance, and financial. It oversees financial risks in both financial performance and financial reporting as well as overseeing financial risk management strategies and the company’s outside independent auditors. The Audit Committee oversees ESG risks, including review of ESG disclosures in financial filings and ensuring adherence to existing controls and procedures. While the Board oversees the company’s cybersecurity risk management program as part of its operational risk management responsibilities, it has delegated to the Audit Committee responsibility for

regular review of processes and procedures around managing cybersecurity risks and incidents.

- Our **Compensation Committee** assists the Board in fulfilling its oversight responsibilities with respect to the management of operational risks and compliance risks relating to and arising from the company’s executive and employee compensation plans, policies, programs, and practices, including human capital management and workforce inclusion and diversity.
- Our **Nominating and Corporate Governance Committee** assists the Board in fulfilling its oversight responsibilities with respect to the management of strategic risks associated with Board organization, membership, and structure; succession planning for our directors and management; and corporate governance, including programs, policies, and practices relating to ESG matters applicable to the company.

Management is responsible for the direct management and oversight of strategic, operational, compliance, and financial risks, and for the company’s formal program to continually and proactively identify, assess, prioritize, and mitigate enterprise risk. Critical risks are managed through cross-functional participation in the senior-level Corporate Compliance Committee (legal and regulatory compliance risks) and the Enterprise Risk Management Committee (strategic, operational, compliance, and financial risks).

Annually, management reviews with the Board a comprehensive assessment of the company's risks based upon the COSO Integrated Risk Management Framework methodology. In addition, our CEO and other members of senior management engage with the Board on at least a quarterly basis to review key strategic and operational issues, opportunities, and risks. At least quarterly, both the Board and the Audit Committee receive reports and presentations from management on the company's risk mitigation programs and efforts, cybersecurity programs, compliance programs and efforts, investment policy and practices, and the results of various internal audit projects.

For details on our Board's role in ESG oversight, see the [ESG Governance Structure](#) section of this report and the "Board's Role in Risk Oversight" section of our latest [Proxy Statement](#).

COVID-19 pandemic risk oversight

The Juniper Crisis Management Team has followed a risk-based and phased approach throughout the COVID-19 pandemic, aligning our operations with local government guidelines and national mandates. The Board has overseen crisis management policies and cross-functional responses throughout the company to ensure that we continue to identify and respond to emerging risks and provide meaningful updates to our stakeholders.

Business Continuity Planning

Our business continuity planning practices help ensure that Juniper can fulfill our promise to transform the economics and experience of networking for our customers.

We have established a business continuity management system that aligns with the requirements of ISO 22301. Our business continuity strategy is authorized by our executive management and overseen by a Corporate Enterprise Risk Management Committee and the Juniper Networks Board of Directors. Our Executive Vice President, Operations has executive responsibility for the strategy and our Vice President, Environmental, Health, Safety, and Security (EHSS) holds operational responsibility for implementation.

Our business continuity strategy includes documented processes for risk management and a Corporate Emergency Preparedness and Business Continuity Plan.

Juniper: one of the 2023 World's Most Ethical Companies™

In March 2023, Ethisphere named Juniper one of the 2023 World's Most Ethical Companies™—its fifth such recognition of our unwavering commitment to business integrity. During the assessment process, Ethisphere dug deep into five core categories: leadership and reputation, governance, environmental and social impact, ethics and compliance program, and ethical culture. The rigorous assessment included over 200 questions and an interview with Ethisphere's general counsel, digging deep into our oversight and management structures, principles and standards, resources, training programs, and track record. This year's list included 135 honorees spanning 19 countries and 46 industries.



Business Integrity

Integrity matters—in every action and every decision, every day.

We are committed to conducting business honestly and transparently, and hold our employees, partners, suppliers, and customers to the highest standards of integrity and conduct. Guided by our codes of conduct, our policies, and our values, we strive to implement intuitive operating principles, comprehensive policies and procedures, and effective educational curricula. In early 2023, our dedication to operating with ethics and integrity was recognized by Ethisphere, which named Juniper as one of the 2023 World's Most Ethical Companies™.

2022 Integrity Survey: Junivators speak up

Open to all Junivators, our annual Integrity Survey gives our people an opportunity to voice their opinions and provide feedback on Juniper's culture of compliance, including trust in senior management, training efficacy, fear of retaliation, and perception of company integrity. The anonymous survey is conducted by Gartner, allowing our results to be benchmarked against more than 30 other organizations of various sizes.

In 2022, a record 4,000+ Junivators participated, and gave our company a high 87% favorable score for Ethical Culture (up 3% from 2021). Across Ethical Culture subcategories such as "Comfort Speaking Up," "Clarity of Expectations," and "Openness of Communication," our people gave Juniper ratings that exceeded the external benchmark, mostly by double digits.



Integrity & Compliance Program

(GRI 2-24)

Our Integrity & Compliance Group (ICG) leads Juniper's efforts to promote business ethics and compliance. It is responsible for maintaining controls to prevent and mitigate potential negative impacts of corruption, engaging with Juniper employees on key issues, providing employee training on compliance policies, communicating channels for reporting ethics concerns, managing our annual Integrity Survey, and generally promoting the five principles of our **Integrity and Compliance 2.0 program**:

1. Fostering a strong speak-up culture
2. Building deeper integration with internal stakeholders
3. Aligning to the strategic direction of the company
4. Strengthening the core compliance program
5. Leading with data

ICG is led by our Chief Compliance Officer (CCO) and staffed by a team of diverse, global compliance professionals including three Theater Heads who provide compliance support and guidance to Juniper employees in their respective AMER, EMEA, and APAC regions. The CCO and Theater Heads personally attend all new-hire integrity and compliance trainings, as well as live webinar trainings for new managers that emphasize the importance of integrity and trust within the company.

ICG works closely with internal partners and core functions to address the frictionless adoption of compliance protocols that align with the company's strategic vision. By being a strong internal partner, ICG supports the development of relevant training and policies and addresses core compliance areas for each employee group.



ICG monitors the effectiveness of our full Integrity and Compliance program and/or elements of the program via:

- Periodic audits and assessments by Juniper Internal Audit and third parties
- Tracking of program objectives and key results for quarterly management review and to ensure maintenance of the program's ERM risk profile
- Quarterly reporting by management to the Corporate Compliance Committee and the Board's Audit Committee

(GRI 2-27)

We report lawsuits, investigations, and other disputes that are material to the business in our latest Form 10-K. In 2022, we experienced no significant instances of non-compliance with laws and regulations for which fines or non-monetary sanctions were incurred by the company.



Policy Commitments

Juniper's various codes of business conduct cover areas such as ethics, conflicts of interest, anti-corruption, unfair dealings, information protection, trade compliance, human rights, and fair workplace practices.

In 2022, ICG updated and revised 14 policies to make them more concise and readable, consolidated 20 separate information security policies into a single set of InfoSec standards, and developed an automated tool to streamline workflow for policy management. Showcasing Juniper's commitment to ethics and transparency, we made our [Anti-Corruption Policy](#) public for the first time, and are examining opportunities to share more of our policies publicly.

Worldwide Code of Business Conduct

Our [Worldwide Code of Business Conduct](#) (Code or Juniper's Code) provides ethical guidance for a range of stakeholders and business circumstances, and communicates our expectation that all parties will behave in a responsible, authentic, and trustworthy way, in compliance with all applicable laws and regulations. The Code covers Juniper employee responsibilities during interactions with customers, interactions with third parties, interactions with sensitive information, and interactions in the workplace, as well as employees' options for reporting ethics concerns. Key elements of the Code are enumerated below.

(GRI 2-15)

Conflicts of Interest. Juniper’s Code enjoins all Juniper employees (including the Board and Executive Leadership Team) from accepting appointments to industry groups, serving on the boards of for-profit entities, or participating in technical advisory boards without prior disclosure and written approval. Employees must first obtain approval from their manager, then disclose to the ICG by completing our Conflict-of-Interest Disclosure Form and await the ICG’s review and decision. Most approved conflicts require mitigating controls and other guidance that must be followed by the employee and their manager. If circumstances of the conflict change in a way that affects the accuracy or completeness of existing disclosures, employees are required to redisclose the conflict of interest to ensure it is appropriately managed. Juniper employees with existing disclosures are asked annually to verify whether their disclosure has changed, and update if necessary.

The Code explicitly prohibits:

- Outside employment with a Juniper business partner or competitor
- Significant financial interest in a Juniper business partner or competitor held by any Juniper employee or a family member
- Conducting business with a Juniper business partner that employs a close family member or significant other in a substantial role

- Giving or receiving gifts to influence any decision impacting Juniper’s interests

In 2022, we implemented a new process to identify a Juniper job applicant’s potential conflict of interest(s) prior to extending an offer of employment. All potential conflict of interest disclosures made by the job applicant are reviewed by ICG and discussed with the Talent Acquisition team and hiring manager before a final hiring decision is made. All conflict-of-interest disclosures for SVPs, EVPs, and the CEO are reviewed and approved by the Nominating and Corporate Governance Committee of Juniper’s Board. In addition, any conflict of interest involving a Section 16 officer or member of the Board of Directors requires approval by the Board’s Audit Committee.

Anti-Bribery & Corruption. Juniper maintains an Anti-Corruption Policy and process to address the risks of corruption and bribery in our dealings with foreign governments and state-owned entities. These include review and pre-approval of expenses for business courtesies, due diligence review and monitoring, review, and pre-approval of non-standard discounts, monitoring of high-risk spending, quarterly reviews of employee certifications and identification of high-risk activities or transactions, mandatory Code of Conduct training and refresher training, and region- or role-specific training.



(GRI 206, 3-3)

Anti-Competitive Behavior. Juniper's Code prohibits anti-competitive behavior such as horizontal price fixing, vertical reseller price maintenance, discriminatory treatment of business partners, and inappropriate gathering of competitive intelligence. These provisions of the Code reduce our risk of unfair treatment of people and communities where we do business.

Insider Trading. Juniper's employees, officers, directors, and other individuals (e.g., contractors, consultants) are prohibited from buying or selling securities, or providing trading advice to others, while in possession of any material non-public information about Juniper or another company. Our insider trading policy also prohibits hedging transactions, borrowing against company securities held in a margin account, pledging transactions, and short sales of company securities.

Additional Conduct Codes & Policies

Our Business Partner Code of Conduct applies to all business partners, including direct and indirect suppliers, vendors, and contractors. It is aligned with the Responsible Business Alliance (RBA) Code of Conduct and communicates our expectations to our suppliers on environmental and social matters, including upholding human rights. Other relevant policies and disclosures include our General Terms and Conditions of Purchase, Modern Slavery Statement, and Conflict Minerals Policy.

(GRI 2-23)

All Juniper policies consider the environments, context, industry, and business relationships unique to us and are reviewed annually against the results of annual risk assessments and Juniper's ERM program, with revision as necessary.

Compliance Training

All our employees and business partners receive regular training on the values and principles outlined in our codes of conduct.

During onboarding, we provide new employees with key compliance policies including our [Worldwide Code of Business Conduct](#), [Anti-Corruption Policy](#), and Reporting Ethics Concerns Policy, plus information on where to seek advice for responsible business conduct. All policy documents provided during onboarding are also available in the Policy Central pages of Juniper’s intranet site.

All employees are required to complete our annual, interactive **Code of Conduct training**. In 2022, we saw over 90% completion of the annual training within three weeks of launch, en route to full completion. We also offer optional quarterly refresher trainings.

Beyond the Code of Conduct, we require additional corporate compliance training for all employees on a regular cadence, accessible through online and in-person interactive sessions. To ensure that our curriculum is delivered effectively, we target compliance training based on risk profiles related to an employee’s location, job function, and department. Over the course of 2022, ICG executed approximately 40 trainings globally, targeting high-risk geographies and functions.

Building on these trainings, ICG provides additional messaging tools on core principles of priority topics, enabling managers to cascade compliance requirements to their teams in a scalable and effective manner. We release quarterly **Integrity Insights** publications that provide employees with information on key risk areas and challenges, along with examples of completed internal investigations to educate employees and demonstrate the importance of compliance in key risk areas.

In Q1 2023 we published our first annual **Speak Up report**, an internal document that spotlights various data points that contribute to our ethical culture, describes how and where to raise ethics concerns, provides insight into the investigations process, and highlights data and trends related to misconduct reporting. We also organized Juniper’s first-ever **Integrity Compliance Day** to raise awareness and stress the importance of integrity and compliance within Juniper. Themed on “Celebrating the Power of Integrity,” the event included activities such as compliance quizzes and pledges signed by our top executives.



Reporting Concerns & Anti-Retaliation Policy

We aim to empower every Juniper employee to be a champion for honesty, integrity, and compliance.

Our third-party-managed **Integrity Helpline** (+1-855-410-5445) is available to employees, contractors, stakeholders, and members of the public, anonymously or by name. The helpline is offered in several languages, with translation support available. Questions or concerns can also be submitted via an online reporting portal or emailed to our ICG team or our Chief Compliance Officer. These reporting channels are communicated and reiterated to employees via the Juniper website, ICG's intranet homepage, during onboarding and annual Code of Conduct training and documentation, in major communications to employees on ethics topics, and in ICG's quarterly Integrity Insights publications, which are distributed to all employees.

In 2022, only 4% of reports to the ICG were submitted anonymously, which we believe indicates that most employees who raise concerns feel comfortable doing so directly with ICG and HR.

Juniper maintains a zero-tolerance policy toward retaliation against any employee who reports an issue in good faith or cooperates in an investigation. The policy is detailed in our Worldwide Code of Business Conduct and communicated to workers through the ICG website, trainings, and employee communications. We have put proactive controls in place with the HR team to monitor employees who have or are participating in investigations, to protect them from retaliation attempts.

In 2022, ICG published a **manager toolkit** providing details about Juniper’s anti-retaliation policy, what constitutes retaliation, retaliation scenarios, and the investigations process, plus resources and tools to foster a speak-up culture and help employees report concerns. The toolkit is provided to employees attending new manager and new hire trainings.

(GRI 2-16, 2-25, 2-26)

Investigating Reported Violations. All reported issues are taken seriously and investigated promptly. If it is determined that a violation of the Code or other Juniper policy has occurred, we take timely remedial or disciplinary action appropriate to the severity of the offense, up to and including termination. Any employee found to be responsible for a violation is held accountable in accordance with Juniper’s policies and governing law.

In 2022, Juniper conducted 29 investigations of alleged violations including conflicts of interest, fraud and expense matters, and side agreements. Investigations substantiated 52% of the concerns raised, while available evidence failed to prove 48% with reasonable certainty. In 2022, we streamlined our organizational structure by consolidating investigations, litigation, and disputes under a single organization.

Resolving Critical Concerns. All critical concerns about business conduct in Juniper’s operations or business relationships are communicated to the Corporate Compliance Committee and the Board’s Audit Committee, which also have visibility into investigatory details for all substantiated cases. Executives from major functions within the organization may communicate critical concerns to the Chief Compliance Officer through various channels on an ad-hoc basis or during quarterly meetings of our Corporate Compliance Committee. Our Chief Compliance Officer may report critical concerns to the Audit Committee through any of these same mechanisms, depending on the nature of the concern.

In 2022, we communicated relevant anti-corruption policies to all our employees across all employee categories, in all our regions. We also provided anti-corruption training to all employees and to our sales channel partners.

Anti-Corruption

(GRI 205, 3-3; 205-1)

All of our operations are assessed for risks of corruption. Significant risks identified include direct and indirect bribery, inaccurate books and records, and improper business courtesies (i.e., gifts, travel, and entertainment). These inherent risks are considered high for the company given our volume of sales interactions with foreign government and state-owned entities in high-risk markets, our reliance on third-party partners, multiple tiers of channel transactions, and unpredictable discounting and transparency into third parties' use of funds.

To address the risks of corruption, Juniper maintains measures including review and pre-approval of expenses for business courtesies, due diligence review and monitoring, monitoring high-risk spending, review and pre-approval of non-standard discounts, quarterly reviews of employee certifications, identification of high-risk activities or transactions, mandatory annual Code of Conduct training and optional quarterly refresher training, and region- and role-specific training.

To measure the functioning of our programs, we perform periodic internal audits and third-party assessments, track objectives and key results and report these to management on a quarterly basis, and track outcomes against our ERM risk profile. The Board's Audit Committee receives quarterly reports on these efforts and their results. Improvements identified in audits, assessments, and reviews are addressed in a timely manner and incorporated into processes and policies as necessary.

(GRI 205-3)

During 2022, we recorded no confirmed incidents of bribery.



Anti-Competitive Behavior

(GRI 206, 3-3)

In our industry, there is a limited risk of anti-competitive behavior. Nevertheless, Juniper has put in place controls that aim to prevent such incidents from occurring.

The ICG makes information on anti-competitive behavior available to all employees at dedicated locations, trains employees on best practices, periodically trains targeted roles and functions, and is part of decision-making in high-risk deals.

The company has implemented deal registration, contributes to standard-setting organizations, reviews employee participation in speaking opportunities or events where competitors are present to avoid inadvertent sharing or receiving of inappropriate information, and has implemented data loss prevention technology. Trained investigators carry out internal investigations and apply remediation as appropriate.

(GRI 206-1)

In 2022, we experienced no legal actions regarding anti-competitive behavior.



Public Policy

(GRI 415, 3-3)

Public policy affects our company, sometimes by promoting network investment, stimulating economic growth, and enabling us to deliver high-performance connectivity to our customers and partners worldwide—and sometimes the opposite. To protect the interests of Juniper’s business and stakeholders, we work with governments to develop an approach that achieves the best outcomes for our business, our customers, and society. Our expertise and thought leadership allow us to contribute in areas including protecting internet freedom and innovation, closing the digital divide for a more connected and empowered world, protecting intellectual property, advancing cybersecurity and privacy, and educating the next generation of IT leaders.

Our Board’s Nominating and Corporate Governance Committee oversees our public policy, advocacy, and lobbying activities.

(GRI 415-1)

Juniper does not donate corporate funds to political candidates, political parties, or political action committees at the federal, state, or local levels, nor does the company have an employee-funded political action committee (PAC) to make such donations. In 2022, no financial or in-kind political contributions were made directly or indirectly by Juniper, anywhere in the world.

To represent the company’s interests throughout the world, we rely upon direct engagement by Juniper leaders as well as indirect engagement through registered lobbyists and trade associations. We retain registered lobbyists at the federal, state, and local government levels to promote Juniper solutions for specific public sector procurement opportunities.

Tax

Taxes are the primary source of revenue for communities and regions in which we operate. We adhere to global tax laws and regulations, apply good tax governance to the benefit of our organization and our stakeholders, and work with our internal Government Relations team to stay close to tax-related public policy issues.

(GRI 207-1)

We manage tax in line with our group governance framework and procedures, and document and report tax strategy, activities, and uncertainties on a regular basis. Aligned with our guiding tax principles, we seek to manage tax choices to provide responsible outcomes that serve the interests of all stakeholders. Views and/or concerns of stakeholders are provided to the tax team for review, and responses are drafted and reviewed by the tax team (through the VP of Taxes) and, if necessary, the broader accounting team and legal.

(GRI 207-2)

Tax Governance. The highest body in the company overseeing tax governance is the Audit Committee of the Board, whose bylaws require that it oversee financial statements, legal and regulatory compliance, enterprise risk, internal controls, and independent audit. Tax governance is covered by Juniper’s internal controls framework, and reviewable both by internal and independent audit.

The Chief Financial Officer (CFO) is the highest management position accountable for tax strategy. The Vice President of Tax reports to the CFO and oversees a global team ensuring proper administration of global tax laws and regulations governing direct and indirect taxes such as corporate income taxes, transaction taxes, and withholding taxes. Internal policies that address the company’s planning, reporting, and administration of taxes provide required foundational principles. These policies include accounting and financial reporting, tax reporting, employment, and other tax-related considerations.

(GRI 207-3)

Our Relationship with Tax Authorities. As an organization, we seek to operate with integrity, and we reflect that intention in the constructive relationships we establish with tax authorities. Juniper is under routine review by tax authorities in such jurisdictions as the Netherlands, U.K., France, Germany, Japan, China, Australia, India, and the U.S. Under certain circumstances, we offer and discuss Advance Pricing Arrangements with tax authorities to provide the consistency and certainty sought by both payer and payee.

In addition to operating with integrity, we seek where possible and appropriate to be proactive with tax authorities to ensure the efficient resolution of issues as they arise. We seek tax clearances and guidance from tax authorities where and when appropriate.



Supply Chain Management

(GRI 308, 3-3)

At Juniper, we develop trust with our customers, our employees, and our suppliers by being honest, respectful, and reliable in all our business dealings. We expect ethical business practices throughout the value chain and encourage our suppliers to adopt corporate social responsibility policies that help ensure working conditions in the technology supply chain are safe and workers are treated with respect and dignity.

Our hardware, software, and cloud solutions are developed and produced within a global network of software developers, contract manufacturers (CMs), original design manufacturers (ODMs), component suppliers, warehousing and logistics providers, and support services. We are committed to meeting our customers' expectations of responsible sourcing practices and transparency throughout this ecosystem, and we communicate these expectations to our partners and suppliers through codes of conduct and audits based on industry-leading frameworks. We are a member of the Responsible Business Alliance (RBA) and fully support the organization's vision, mission, and principles, including its collaborative approach in applying leading standards and practices throughout the supply chain. Juniper is also a member of the Joint Audit Cooperation (JAC) initiative, which **aims to raise social, environmental, and ethical standards within the ICT supply chain.**

Our suppliers are expected to support Juniper's compliance obligations, including trade compliance laws and restrictions on trade with sanctioned entities and persons.



Our Supplier Management Program is based on several key elements, including:

- **Performance Evaluation.** We use our Supplier Excellence Framework to evaluate suppliers, beginning with onboarding and continuing throughout our engagement.
- **Verification and Audit.** We conduct assessments and announced onsite audits of our CMs, ODMs, and critical partners to assess and evaluate their performance compared to Juniper standards, and communicate results during business reviews.
- **Certification.** Suppliers must certify that they have read, understood, and committed to complying with Juniper's Business Partner Code of Conduct, which communicates our expectations on important CSR standards and is informed by the RBA Code of Conduct and the Ten Principles of the United Nations Global Compact.
- **Accountability.** Both our suppliers and Juniper employees who manage supplier relationships are held accountable for upholding the Juniper Business Partner Code of Conduct and executing on the Supplier Excellence Framework. If suppliers do not follow Juniper's policies or meet Juniper's performance expectations, we may escalate the matter in the supplier business review process and take the non-compliance into account in supplier performance scorecards.

Supply Chain Integrity

We are committed to protecting Juniper's brand integrity through all stages of the product lifecycle, thereby safeguarding our own interests and those of our partners and customers. That effort encompasses our supply chain integrity program, which guards against the introduction of counterfeit or gray market components and the vulnerabilities they could create in our products, and also facilitates failure analysis of genuine products or processes if quality problems arise.

Over the past several years, we've invested in data analytics focused on component-level risk, allowing us to predict the likelihood and timeframes of risk impacts and manage environmental compliance and other sourcing risks. By incorporating an enhanced understanding of key risk factors into our lifecycle approach, we benefit from risk reduction and revenue protection throughout our design and production processes.

We work with the U.S. government and regulatory bodies around the world to meet and exceed security standards and ward off attempts to negatively influence the integrity of our products. We maintain the resilience to quickly adapt, implement, and assure compliance with all new requirements while maintaining business continuity.

To help ensure supply chain continuity, we utilize a third-party risk management platform that offers real-time information on susceptibilities, vulnerabilities, and threats. In 2022, we continued our significant investment in **supply chain cybersecurity**, developing requirements for CMs and ODMs to ensure a sufficient level of cybersecurity infrastructure, focusing on business continuity and protection against ransomware and hacking. We also began conducting site-level cybersecurity audits and scoring suppliers based on their preparedness against specific threats.

We have also worked to diversify our manufacturing footprint's **geographic distribution** beyond China and Taiwan to promote greater supply chain resiliency.

In 2012, we obtained **supply chain certification** at the highest level (Tier 3) from the U.S. Customs and Border Protection Customs Trade Partnership Against Terrorism (CTPAT).

CSR AT JUNIPER

JUNIPER CSR STRATEGY

**ENHANCE TRUST
& GOVERNANCE**

Product Security

Leadership in Cybersecurity

Operational Security

Corporate Governance

Business Integrity

Supply Chain Management

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

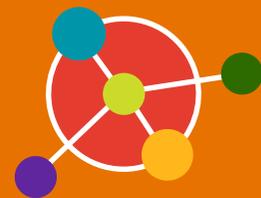
APPENDICES



10
Partners



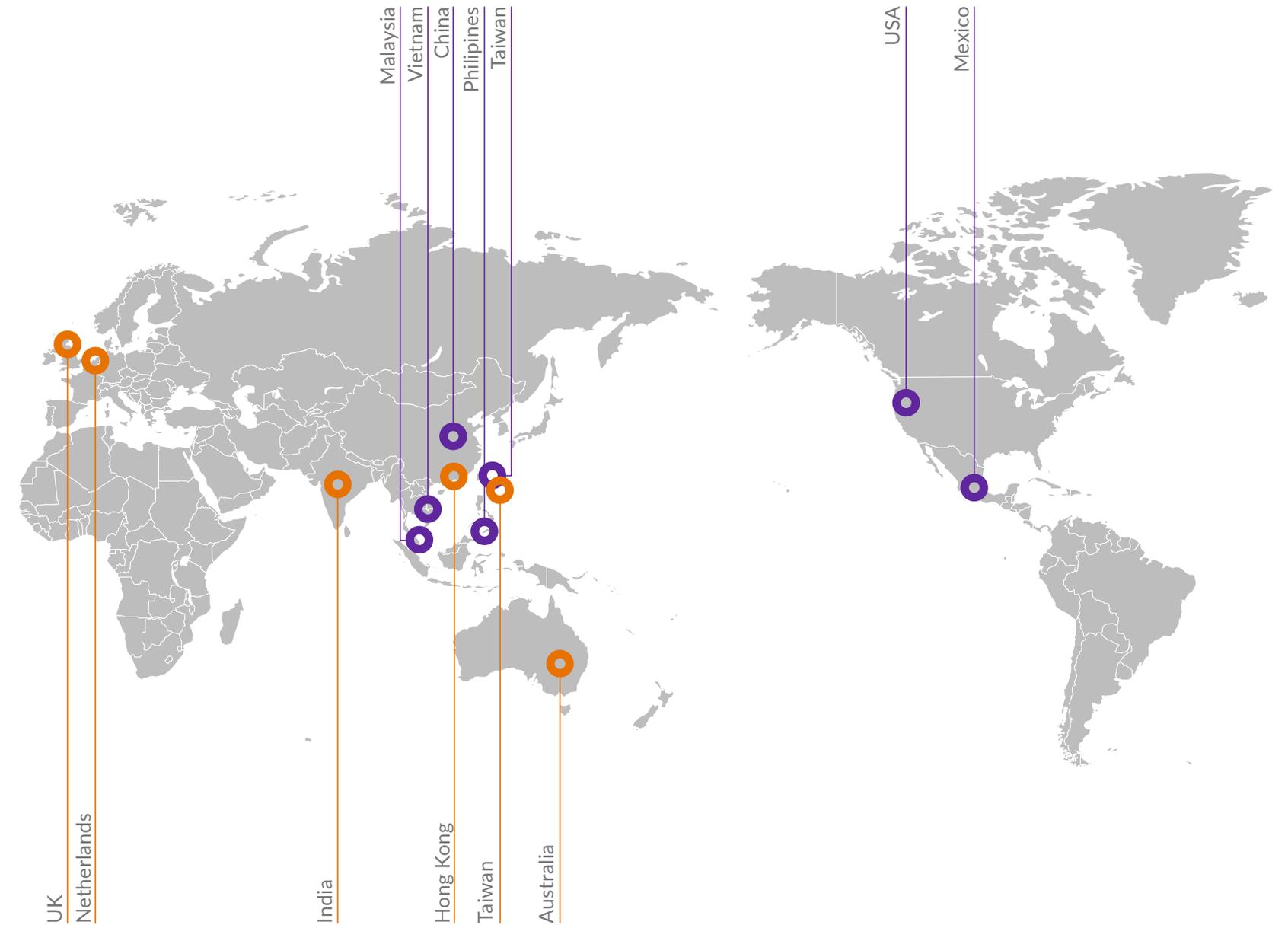
15
Sites



8
Hubs

JUNIPER MANUFACTURING SITES & LOGISTICS HUBS

○ Hubs ● Partners



Responsible Sourcing Program

(GRI 308, 3-3 / GRI 414, 3-3)

We work with our supply chain partners to build and manage a resilient and responsible supply chain. We encourage the adoption of responsible and sustainable business practices among our direct and indirect suppliers. We aim to manage the majority of our suppliers through a direct agreement, and select our suppliers using sourcing strategies drafted in coordination with our engineering teams.

We seek to create productive, long-term relationships with suppliers that align with our vision, values, and business objectives and adhere to our own high environmental and social standards. To ensure safe working conditions, fair treatment of workers, and environmentally responsible manufacturing processes, we require our suppliers to follow the **RBA Code of Conduct**, guidelines, and policies. As a member of the RBA, Juniper fully supports the organization's vision, mission, and principles and commits to working with our suppliers and conducting due diligence to help maintain compliance with responsible sourcing standards.

We support the eradication of human trafficking, modern slavery, and forced and child labor, and we expect our supply chain partners to help meet this commitment by upholding ethical business practices and complying with human rights laws. Since the largest share of Juniper's overall carbon footprint comes from our Scope 3 emissions (which include emissions resulting from our suppliers' operations), we communicate our expectations of suppliers' efforts to measure, disclose, and reduce their GHG emissions, and build strong supplier partnerships to reduce waste and realize greater sustainability in product packaging and distribution logistics.

In the past year we have made significant progress on supply chain sustainability, setting short-term and long-term emissions targets based on vendor spend. We employ sustainability requirements for supplier screening, selection, contracting, and onboarding, and plan to enhance our supplier scorecard to more heavily weigh ESG factors, including encouraging the adoption of science-based emission reduction targets.



Vetting & Monitoring Suppliers

(GRI 308, 3-3 / 414, 3-3, 308-1, 308-2, 414-1, 414-2)

At Juniper, we work to maintain a culture of integrity and ethics to inspire confidence throughout our ecosystem. It is important that our suppliers are committed to promoting fair labor practices, upholding high ethical and human rights standards, and making a positive impact on society. We screen all new direct material suppliers and manufacturing partners to confirm their commitment to these important principles through our robust vetting process for new suppliers, which includes examination of financials and compliance as well as comprehensive risk assessments and background checks.

We also monitor Tier 1 suppliers that represent at least 80% of our direct material expenditure in the relevant calendar year (based in part on forecasted spend), 100% of our CMs and ODMs, and all direct material suppliers who provide what are identified as the most critical technologies and can have a broad impact across Juniper. We verify these suppliers' compliance with the RBA Code of Conduct and the Juniper Business Partner Code of Conduct annually. Additionally, we conduct CTPAT security audits and business continuity program reviews at critical supplier sites, and use supplier self-assessments, risk assessments, declarations and certifications, and announced onsite audits to ensure supplier conformity.

Juniper has expanded its supply chain sustainability due diligence beyond the RBA assessment process using a supply chain sustainability survey to evaluate all our direct suppliers and our top 80% indirect suppliers on code of conduct implementation, climate mitigation, responsible mineral sourcing, and substance/chemicals in products.

Scheduled onsite audits at our CM, ODM, and critical component supplier facilities are crucial to the success of our supplier program. Annually, based on risk assessment results and incident and performance trends, we conduct (or partner with a third party to conduct) social responsibility, security, and loss prevention audits at select CM and ODM, Tier 1 component, and logistics supplier sites. This process aligns with industry standards, including the RBA Risk Assessment Model and Validated Assessment Process (VAP), which require an audit of 25% of suppliers categorized as high risk. All audit findings are tracked to closure in accordance with our corrective action process.

(SASB TC-HW-430a.2)

In 2022, Juniper saw completion of 31 VAP audits. We found no priority non-conformances and 30 non-priority findings, for which 14 Corrective Action Plans (CAP) were completed and closed. The remaining 16 CAPs are underway.

Our approach is to drive change through corrective measures. For all non-conformances, we have instituted actions to mitigate. Along with other members of the RBA, we pressure suppliers to bring corrective action measures to closure.



Human Rights Commitment

(GRI 407, 3-3 / GRI 408, 3-3 / GRI 409, 3-3 / GRI 407-1)

We are committed to upholding human rights, supporting just labor practices, and eradicating human trafficking, modern slavery, and forced and child labor. We collaborate with our business partners to drive performance and compliance with corporate social responsibility policies.

As a member of the RBA, we support the development of industry guidelines and resources designed to ensure that working conditions in the electronics industry supply chain are safe, that workers are treated with respect and dignity, and that manufacturing processes are environmentally responsible.

Our Juniper Business Partner Code of Conduct lays out our zero-tolerance policy for human trafficking, involuntary servitude, and child labor, and articulates our alignment with the RBA Code of Conduct on fair labor practices and human rights. This code is reviewed annually and is woven into our supplier contracts when entering into or renewing supplier master agreements.

Our Modern Slavery Statement outlines our commitment and approach to promoting a workplace and supply chain free from slavery and human trafficking, and where workers are treated with respect and dignity.

(GRI 409-1)

We have not identified any of our suppliers as having a significant risk for incidents of forced or compulsory labor. Where we have identified instances of labor non-conformances through RBA VAP audits, we are following up to seek resolution.

(GRI 408-1)

None of our 48 active suppliers on the RBA platform are at significant risk for incidents of child labor, or at significant risk for incidents of young workers exposed to hazardous work. Looking forward, we intend to expand our focus on human rights exposure among additional suppliers.



Conflict Minerals Policy

Juniper is committed to the responsible sourcing of materials used in our products. This commitment includes our policy around tantalum, tin, tungsten, and gold, commonly referred to as 3TG or conflict minerals owing to their frequent origin in the Democratic Republic of the Congo (DRC), adjoining countries, and other regions where their trade poses a risk of supporting armed conflict and human rights abuses.

We believe the only way to create a conflict-free supply chain is through multilateral support and industry alignment. We support and engage in industry-wide, multi-stakeholder efforts to promote responsible sourcing. Since 2011, Juniper has supported the development of industry tools and programs that facilitate the reporting and collection of due diligence information on the source and chain-of-custody of 3TG through our membership and participation in the Responsible Minerals Initiative and a number of its workgroups.

We expect our suppliers to exercise due diligence and source responsibly from conflict-free smelters, certified by the Responsible Minerals Initiative's Responsible Minerals Assurance Process (RMAP). We conduct due diligence by working closely with our suppliers to collect information about the sourcing of 3TG used in components. We are dedicated to ongoing engagement with our manufacturing partners and suppliers in order to share best practices, advance knowledge, and build their capacity to source responsibly and provide complete and accurate information on the origin and chain of custody of any 3TG used in the products provided to Juniper. In 2022, we began performing due diligence on cobalt using the Extended Minerals Reporting Templates (EMRTs) to gather supplier data.

Click [here](#) for our most recent SEC Conflict Minerals Disclosure and Report.



\$50M

In 2022 we spent USD \$50M
with diverse suppliers.

Juniper believes diversity is both a social responsibility and a competitive advantage. Extending this belief to our supply chain, we are committed to increasing our spend with women-owned businesses, businesses owned by underrepresented minorities, small to medium-sized businesses, and other diverse suppliers that offer the right mix of quality goods and services, innovative solutions, competitive pricing, and flexibility.

Our Supplier Diversity Program currently measures percentage of spend with diverse suppliers, percentage of diverse suppliers in

Supplier Diversity Commitment & Progress

the supply base, number of diverse suppliers invited to participate in RFXs, percentage of contracts won by diverse suppliers versus RFXs, and cost savings accrued by awarding contracts to diverse suppliers. In 2022, Juniper spent \$50M with 185 Qualified Diverse suppliers (representing 6.8% of our overall indirect supplier spend) and set a goal of increasing diverse spend by 10% annually to 2025.

Growing our relationships with diverse suppliers benefits all stakeholders in the relationship through:

- Increasing the breadth and resilience of Juniper’s supply chain
- Better reflecting Juniper’s global customer diversity
- Providing opportunity to diverse suppliers and small businesses
- Delivering economic growth and sustainability to the communities in which we do business

- Bringing innovation and fresh ideas to our supply chain operations
- Driving competition and potential cost savings

For U.S.-based enterprises, diverse businesses are defined as being at least 51% owned, operated, and managed by women, underrepresented minorities, veterans, or disabled persons (any of whom must be U.S. citizens or permanent legal residents), or businesses that operate in and employ individuals residing in an Historically Underutilized Business Zone (HUBZone), as defined by the U.S. Small Business Administration.

As part of our overall commitment to inclusion and diversity, Juniper Procurement encourages all our internal businesses to consider using diverse suppliers, and tracks program success using multiple key performance indicators, including total percentage spend, total percentage of diverse suppliers, RFPs that include diversity considerations, and number of contracts awarded to diverse suppliers.

Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

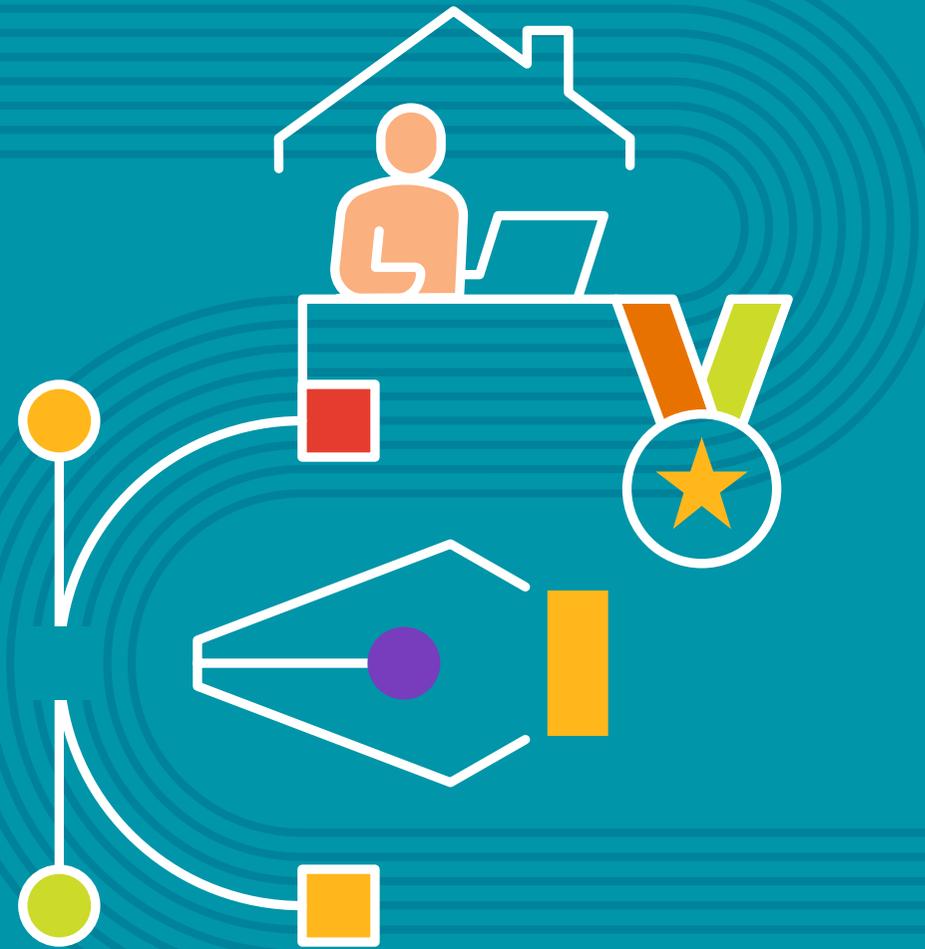
Inclusion & Diversity at
Juniper

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)

Enable the Workforce of the Future

Today, the future overtakes the present faster than at any point in human history. Ways of working and expectations of the work experience shift quickly, erasing old assumptions.



Recognized for employee support

Juniper Networks is committed to supporting our employees and communities, and in 2022 we received recognition of that commitment from top raters and rankers:

- [Great Place to Work™ certified](#)
- [Fortune World's Most Admired Companies](#)
- [Fortune Best Workplaces in Technology](#)
- [LinkedIn Top Companies in the U.S.](#)

As part of Great Place to Work™ certification, nearly 91% of Junivators located in the U.S. called Juniper a great place to work—a score 2 points higher than last year.

In this whirlwind of change, companies must thread a needle of societal, generational, technological, and environmental forces, and craft a corporate culture that channels their people's talents, energy, and humanity into innovation and united purpose.

Juniper is well positioned for that challenge. As a company built on making connections, we embrace the breadth and depth of backgrounds, experiences, identities, and thinking styles, bringing people together to build an innovative, inclusive, and value-rich culture. In 2022, that culture evolved further as we began to emerge from the COVID-19 pandemic and reckon with the protocols of a new hybrid work environment. While this transition brought significant changes, it also deepened our commitment to delivering for our employees. We called our evolving approach "The Way We Work," a concept that includes the mechanics of the workplace experience and emphasizes the importance of our people's growth and development.

At Juniper, we want to support and inspire our employees, deliver outsized results for our customers, grow our business, and expand our circle of caring to our communities and society at large. To do all that, we need to maintain an environment where talented people feel at home: welcomed, valued, challenged, encouraged, and always able to be who they are.



Evolving Our Employee Value Proposition

(GRI 401, 3-3)

Competition for talent is one of the biggest challenges in today's tech industry. We know our success rests on attracting highly skilled and creative-minded individuals, empowering them to perform their best, and bringing them together in dynamic teams to drive innovation. To do that, it's about much more than competitive compensation and benefits. Juniper has to be a company and workplace our employees can be proud of and that's proud of them in return: grateful for their talents, supportive of their passions, commitments, and life journey, and celebrates their contributions.

In 2022, as COVID-19 waned and a return to in-person work became more likely, we knew we needed to evolve our employee value proposition (EVP) to serve our people's evolving post-pandemic needs, grow as a company, and strengthen our position for employee attraction, engagement, and retention.

We conducted surveys to gauge how our employees felt about a return to the office to discern what a successful hybrid model might look like at Juniper. At the management level, we utilized our People Manager Network to create "The Way We Work" sessions where each business unit and their HR business partners could discuss specific back-to-office change-management challenges with executive leadership. Designed to enable open sharing and problem-solving, these workshops surfaced custom-tailored solutions for the new hybrid work environment, which were then adapted to align with conditions and norms at our regional offices. These solutions formed the basis of our EVP commitments to our employees for a smooth return to office for 2023.



We saw that the pandemic had amplified the search for meaning that's long been a primary motivation in people's career choices. Individuals want to do work that matters, and they want to matter: to themselves, their families, their teams, their company, and their communities. But the evolution of how we work didn't stop there. Through employee surveys, interviews, and extensive internal and external research, we learned the most common reasons people join and stay at Juniper and what sets us apart from other employers is our strong culture and values, our momentum, our reputation in the industry and our authentic leaders. At the same time, these three strengths emerged that reflect our employees' and company's sense of purpose, and now form the core of our evolving EVP:

Momentum

Advancing networks, upending expectations

This is Juniper's moment. We're changing what's possible with networking. We help the world's leading companies think fast and be on the right side of change. Our momentum is contagious, and we're just getting started.

Leadership

Engaged leaders

Our leaders are authentic, engaged, and inspiring, setting Juniper's strategic course and walking point on our culture, mission, and sustainability goals.

Culture & Inclusion

Inclusive team culture that enables innovation

Everyone is included. Everyone is empowered. Everyone is part of changing the game.



Junivator Profile
**Matthew
D. Schreiber**

My name is Matthew Schreiber and I'm Director of Legal Affairs, Americas and Assistant General Counsel. I've been with Juniper since April 2009.

For 12 years I've been involved with community work we've spearheaded from the Juniper Legal Organization, and for the past year I've been part of Juniper's Community Champions effort, a forum in which volunteer ambassadors from around the company meet bimonthly to strategize and plan community engagement initiatives. These are both examples of the kinds of grassroots work for which Juniper creates space—encouraging our people to use their energy and expertise for the greater good.

In February 2022, after Russia invaded Ukraine, I organized a legal organization fundraiser to support relief efforts. With a match from the Juniper Networks Foundation, our team raised \$7,550 that was distributed to six international non-profits, and was used to provide essential food, water, shelter, medical supplies and services, and long-term assistance to Ukrainian refugees and soldiers inside and outside the country.

We've always thought of Juniper as a community and our employee experience as a continuous evolution. From day one, we want to get in touch with who our employees really are as individuals—learning what motivates them, what they consider most challenging and rewarding, and how we can help them meet goals and aspirations for their career, their life, and their connection to a larger societal purpose. We know the growth of the tech industry is an open road of potential mobility for top talent, and that bonding our people to Juniper requires giving them an inspiring, supportive culture and an exceptional mission. In 2022, we took on that challenge, making Juniper even more of what it's always been: a place that fosters community, communication, and collaboration, and inspires our employees to innovate new solutions for the world's challenges.

*Junivators lead by example—
bringing our mission
to life with innovation,
commitment, and creativity.*



Junivator Career Connect: Our Internal Talent Marketplace

In our work to elevate Juniper's EVP, we saw that today's workforce was evolving beyond a traditional "job" focus with a defined functional and career ladder, and moving instead toward a more person-driven path that builds from today's skills to a multiverse of potential career branches and opportunities.

To enable that kind of meaningful and inspiring career development and help our employees achieve their full potential, we invested in a new people-centered, internal talent marketplace we call **Junivator Career Connect (JCC)**. Defining Juniper's cutting-edge approach to skills-based workplace transformation, JCC supports our employees' futures by helping them create customized learning journeys, explore career pathways, connect with mentors, apply for internal openings, and experiment with internal gig work.

JCC launched in March 2023, and within three months had attracted over 4,000 users (including a high percentage of repeat users) and over 100 mentors. By year-end 2023 we hope to reach 5,000 unique logins, and in year two we will track the platform's influence on internal mobility, gig opportunities, and employees' feelings about their careers at Juniper.



Each one teach one

At Juniper, we believe that everyone, regardless of seniority, has the potential to enhance another's life and career by sharing their skills, insights, and perspectives. To encourage the development of new mentoring relationships, we hosted our first-annual Mentoring Week in May 2023, highlighting mentorship stories and encouraging all our people to give back—whether through formal mentoring relationships with junior employees or by pairing up with colleagues to learn from one another.

JUNIPER CAREER CONNECT





Building the Next Generation of Tech Talent

To fulfill our mission of creating a more connected world, we need to cultivate, attract, and retain outstanding tech talent from a broad range of diverse talent pools. To do so, Juniper has created programs that offer tech training and certification at the community and university level, along with internship and early-career programs to introduce students directly to the Juniper experience.

University Talent Program

Our University Talent Program (UTP) invites talented individuals from schools around the world to join Juniper for internships and early-career positions. In 2022, we continued growing the program, welcoming 250 interns globally.

Starting the program in cohorts for a greater sense of community and collaboration, interns own challenging projects and are encouraged to offer ideas while also receiving guidance, training, and mentoring, along with various social activities and talks with company leaders. The all-encompassing UTP experience teaches about our company and industry, introduces students to new career paths, helps build professional relationships, and contributes to communities through volunteer opportunities curated specifically for our interns. A highlight of each year is our Intern Showcase, where summer interns present their projects to their cohorts and interested Junivators and are celebrated for their hard work.

Our 2022 U.S.-based intern class represented some 60 colleges and universities across the country and included 35% women interns and 6% Hispanic, Black, or Pacific Islander interns.

The Early Career Junivators (ECJ) element of our university program starts new college graduates on projects from day one. ECJs are instructed, mentored, and supported by experienced Junivators as they work to help solve customer problems, change the way people live, and lay the foundation for a rewarding career.

(GRI 401-1)

NEW EMPLOYEE HIRES BY REGION

Region	AMER								
	775								
Gender group	Male			Female			Other		
	551			220			4		
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	98	308	145	56	115	49	2	1	1

Region	APAC								
	1216								
Gender group	Male			Female			Other		
	886			330			0		
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	377	493	16	169	158	3	0	0	0

Region	EMEA								
	273								
Gender group	Male			Female			Other		
	209			61			3		
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	25	142	42	24	30	7	1	2	0



NUMBER & RATE OF TURNOVERS BY REGION

Region	AMER								
	617								
Gender group	Male			Female			Other		
		456			161			0	
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	58	247	151	43	88	30	0	0	0

Region	APAC								
	710								
Gender group	Male			Female			Other		
		540			170			0	
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	118	393	29	75	92	3	0	0	0

Region	EMEA								
	230								
Gender group	Male			Female			Other		
		188			42			0	
Age Group	< 30	30 - 50	> 50	< 30	30 - 50	> 50	< 30	30 - 50	> 50
	16	137	35	10	23	9	0	0	0



Juniper Networks Cloud & Automation Academy (JNCAA)

The JNCAA is an industry-academic partnership designed to promote education on Juniper’s products among the next generation of tech professionals. By providing students and faculty access to free, on-demand courseware, cloud-based and on-site lab access, and opportunities to earn entry-level Juniper certifications, we’re deepening Juniper’s own talent pipeline and seeding Juniper experience across the broader industry—building market access and assuring our customers a ready pool of Juniper-certified talent.

In our Americas, EMEA, and APAC regions, our regional program managers assess interested universities’ existing programs and begin building relationships at different engagement levels. At the basic level, on-demand training courses provide hands-on, lab-based technical training that supplements students’ university coursework. Each course includes self-paced, web-delivered instruction along with access to online lab exercises. At the premium engagement level, Juniper courseware and instructional materials are integrated into

the school curriculum, and branded, on-site labs give students the opportunity for hands-on work with industry-leading Juniper equipment. Students are also able to obtain vouchers that can be used toward associate-level Juniper certification exams in:

- ▣ Cloud
- ▣ Automation and DevOps
- ▣ Service Provider networking
- ▣ Enterprise networking
- ▣ Security
- ▣ Mist AI
- ▣ Design

In 2022, the JNCAA program trained over 7,800 students from more than 120 universities worldwide. Students trained in over 10,000 Juniper courses and gained over 250 Juniper certifications. During summer 2022, 76 JNCAA students were brought into Juniper directly as interns.



Juniper Open Learning

In parallel to the college-focused JNCAA, we offer the Juniper Open Learning (JOL) platform to help individuals of every age and career stage learn Juniper technologies, whether they're transitioning from another industry, another specialization, or other vendor technologies.

After completing all course modules and passing a Voucher Assessment Test with a score of 70% or higher, students receive a 75% discount on live exams, bringing the cost of certifications to just \$50 for associate-level exams and \$75 for specialist-level exams. Students may pursue Juniper Networks Certified Internet Associate (JNCIA), Certified Design Associate (JNCDA), and Certified Internet Specialist (JNCIS) certifications in products and concepts including:

- Migrating from other systems to our Junos OS
- Junos (JNCIA-Junos)
- Cloud enabled networks, service deployment concepts, and virtualized network platforms (JNCIA-Cloud)
- SRX Series firewall devices and associated security solutions (JNCIA-SEC)
- Mist AI components, configurations, and WLAN monitoring (JNCIA-MistAI)
- Network design best practices, theory, and design principles (JNCDA)
- DevOps automation tools, protocols, and technologies (JNCIA-DevOps)
- Service Provider routing and switching implementations in Junos (JNCIS-SP)
- Enterprise routing and switching implementations in Junos (JNCIS-ENT)
- Juniper Connected Security concepts (JNCIS-SEC)



Junivator Profile

Jolin Lee

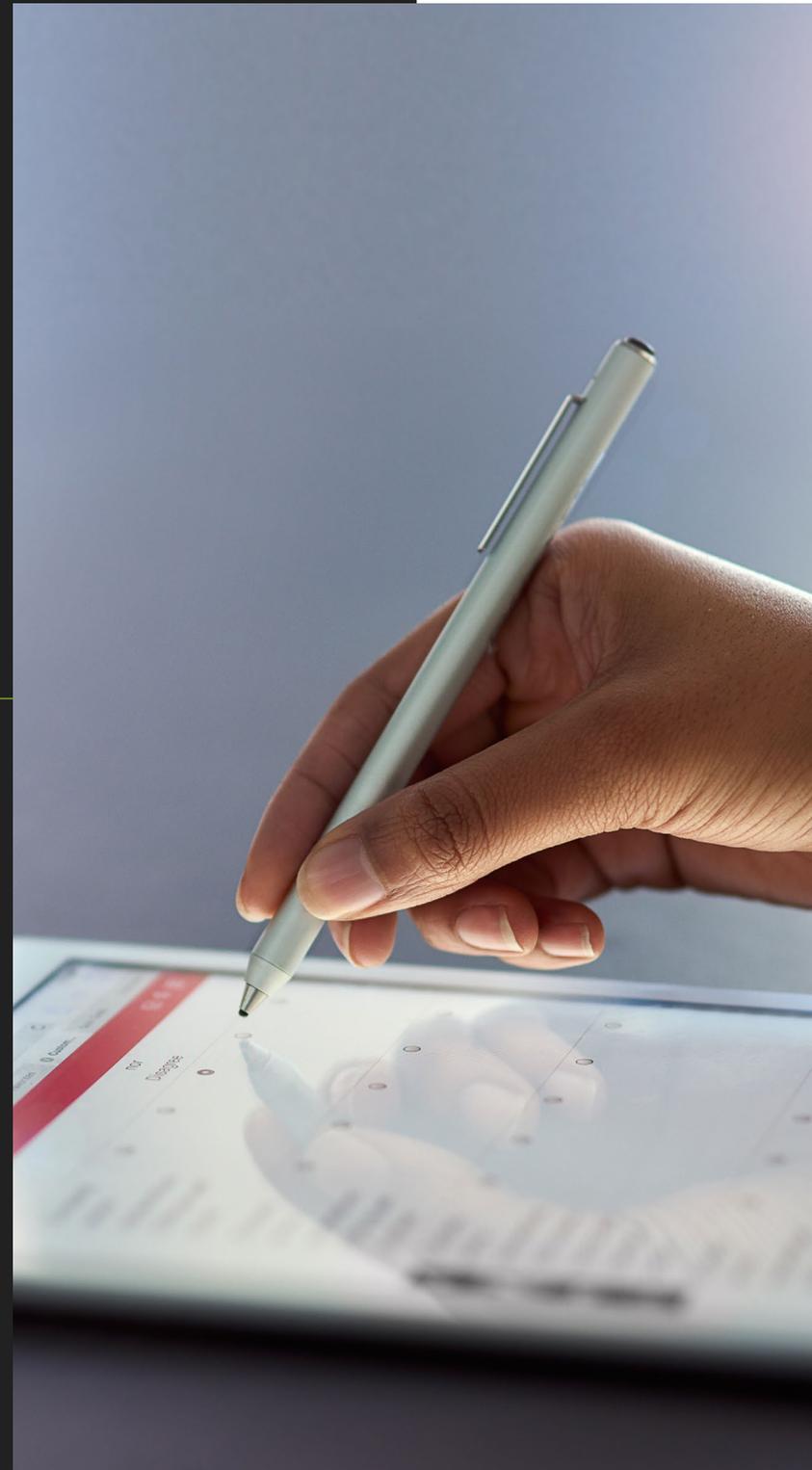
My name is Jolin Lee and I work as Senior Account Manager for the Enterprise team in our Singapore office. I've been with Juniper for a year, but even as a new hire I didn't feel new—in fact, I felt more like part of a family. People here are very willing to share their experience and knowledge about processes, product details, and technical aspects, making it easy to pull teams together and go out to the market.

When I was approached to join Juniper, I watched some training sessions about our Apstra networking software, which allows clients to use the same platform to manage multiple data centers running hardware from different vendors. I've been in the industry for 18 years and seen customers put a lot of investment into their incumbent technology but still fail to achieve a good solution, so I truly believe that Juniper's AI-driven, vendor-agnostic network automation is the way to go. This is the direction for the future, and that's why I'm here.

Juniper Voice Survey: Appraising Employee Engagement

Employee engagement helps us gauge our people's enthusiasm, connection to the organization, and motivation to go above and beyond. To better understand and improve our employee experience and capture feedback in areas such as company confidence, trust in leadership, manager effectiveness, and workplace inclusivity, we conduct annual Juniper Voice employee engagement surveys. Analysis of the results and feedback informs our focus for the following year, and in 2022 led directly to the creation of our new Juniverse Awards rewards and recognition platform.

For 2022, 93% of our employees responded to Juniper Voice (up 2% from 2021) and we saw a 48% increase in employee comments, showing our employees' comfort and willingness to share their views. Survey responses showed a shift in what employees value, with 90% of respondents viewing wellness as their top factor, followed by belonging and work environment at 86% and manager effectiveness, role enablement, and career at 85%. Overall engagement went from 79% in 2021 to 81% in 2022.



EMPLOYEE ENGAGEMENT SURVEY RESULTS



81% ^{+2 pts}

2022 engagement



93%

Response rate
9863 employees | 6812 comments



90% ^{+2 pts}

would recommend Juniper as a
great place to work

Highest Factor Scores



90%

Well-being



86%

Work environment



86%

Belonging



Training & Development

(GRI 404, 3-3 / 404-2)

We see professional development as both a responsibility and an opportunity, driving work performance, career growth, leadership skills, and an agile mindset that enables our employees' sense of personal accomplishment while contributing to corporate success.

Juniper provides our employees with role-specific internal and external technical education/training aligned to a two- to three-year strategic horizon, helping us upskill our Junivators to emerging critical competencies. We also offer management and leadership development training to drive best practices.

Additionally, all Juniper employees participate in compliance- and industry-related coursework associated with our Worldwide Code of Business Conduct and topics including human rights and environmental performance. To support an inclusive and open environment, we collaborate with partners to offer training that encourages respect, awareness, empathy, compassion, and emotional intelligence.

We regularly solicit employee input about our training courses to assess whether we are meeting their needs. In 2020, we launched **LinkedIn Learning** in response to feedback that requested more content focused on personal and skills growth.

JUNIPER NETWORKS LEARNING PLATFORMS

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

**ENABLE THE WORKFORCE
OF THE FUTURE**

Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

Inclusion & Diversity at
Juniper

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)

BUILD GLOBAL RESILIENCE

APPENDICES

**LinkedIn
Learning**

Our employees can take advantage of 8,000+ on-demand courses on LinkedIn Learning to help build professional skills across all job functions and develop leadership and management skills.



Learning Center

Juniper Networks Learning Center provides employees with access to thousands of learning opportunities—both live events and e-learning.

O'Reilly

Juniper employees get access to content from 200+ of the world's best publishers. They can gain technology and business knowledge and hone their skills with learning resources created and curated by experts, including live online training, videos, books, and coding sandboxes.



Learning Portal

The Learning Portal is used by Juniper's customers, partners, and employees to get training and earn industry-recognized certifications on Juniper's products and solutions, with employees receiving a discount on all training options.

MANAGER RESPONSIBILITIES



(GRI 404-3)

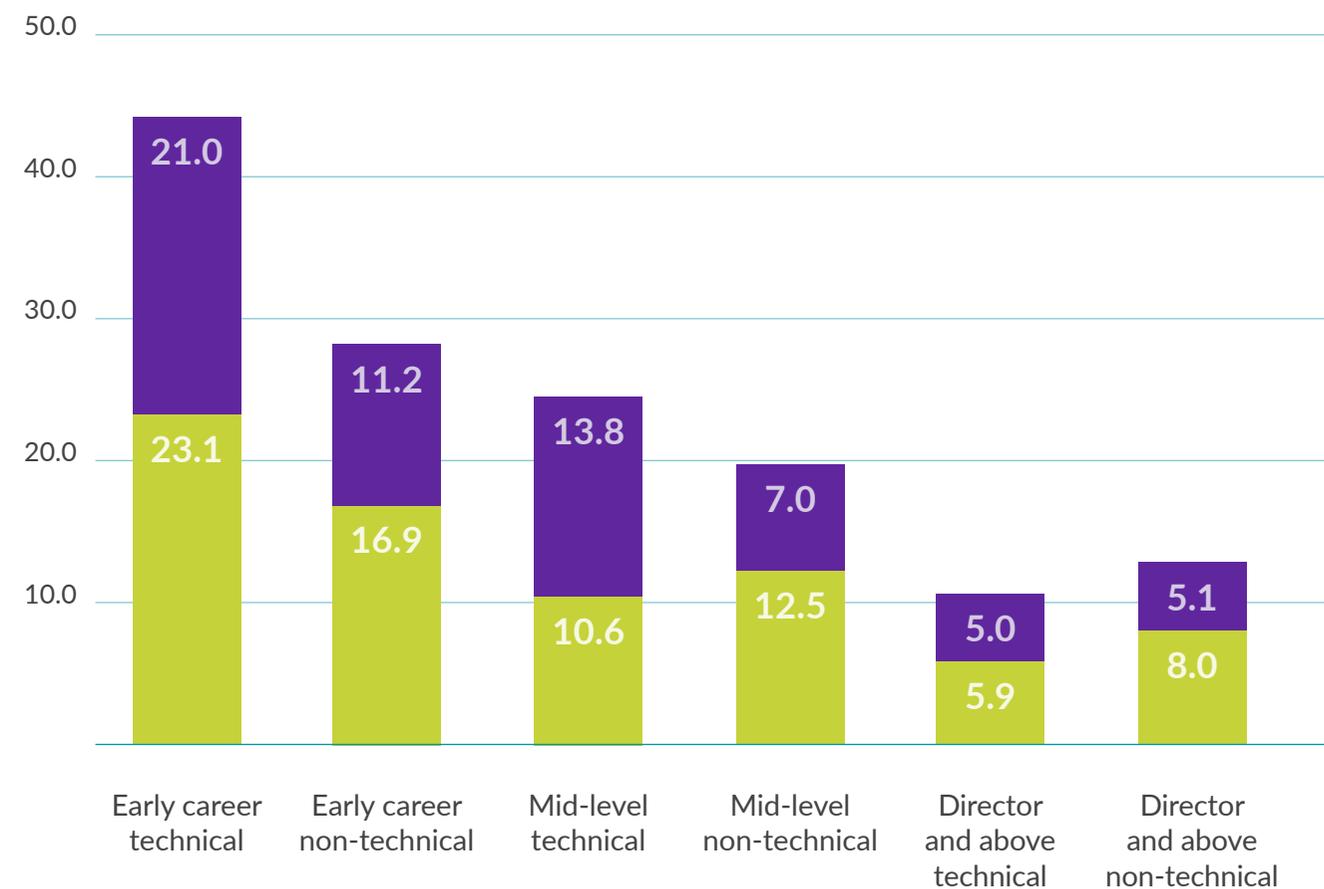
Conversation Days. To build greater openness, clarity, collaboration, and sense of purpose within Juniper, our managers facilitate semi-annual Conversation Days with their direct reports. Conversation Days are an opportunity for managers and employees to assess previous contributions and plan for future performance expectations and development opportunities. Conversations may be themed on the employee’s evolving interests and aspirations, new professional or personal goals, requests for additional manager support, potential new positions within Juniper, or strategies to better align their work to team, company, and personal objectives.

Best Boss Program. This 90-day, instructor-led development program delivers a suite of management fundamentals that help first-time people managers transition quickly and effectively from being an individual contributor to gaining the confidence, competence, and tools needed to lead a team. Workshops focus on different topics/skills and provide resources to help managers apply their new learning. In 2022, the program saw a 33% increase in participation over 2021.

(GRI 404-1)

AVERAGE 2022 TRAINING HOURS (BY GENDER & CAREER LEVEL)

● Male ● Female



People Manager Network. Our People Manager Network offers resources, development opportunities, and support to help managers at all levels build high-performing teams, hire and develop the right people, manage inclusively, and drive results.

New VP Integration Program. This six-month cohort program for newly promoted VPs focuses on competency development, self-awareness, and network building within their new role. The experience includes monthly meetings with speakers including Juniper leadership and industry experts. In 2022, about 20 new VPs participated.

VP Summit & Forums. Monthly meetings give VP+ leaders a forum for planning collective execution on our strategy, discussing potential roadblocks, and engaging on leadership development topics aligned to our corporate focus areas. In 2022, those topics included Evolving the Way We Work and Unleashing Organizational Capabilities through Career Development.

Employee Benefits, Balance & Support

(GRI 401-3)

We provide benefits and wellness programs that are holistic, flexible, and inclusive, helping each person to be their most authentic self. Our offerings are designed to be as inclusive and diverse as our employees' needs, and include supports focused on:

- **Health & Wellness.** In the U.S., we offer a variety of medical, dental, and vision plans to meet the personal needs of employees and their families. Additionally, we offer 16 weeks of paid new-parent leave globally (covering birth, surrogacy, adoption, and fostering), expanded medical coverage for gender-affirming procedures, benefits covering infertility treatments, and childcare support. Health and wellness offerings vary among our international operations.
- **Finances & Retirement.** We strive to provide compensation programs that are market-competitive and support employees' financial well-being. Plans vary by operating region but may include a 401(k) plan, employee stock purchase plan, savings and spending accounts, life insurance, and income protection through our disability plans.
- **Work-Life Balance.** Work-life support includes on-campus dining and gyms, numerous leave options, and quarterly paid wellness days giving all employees an extra day off to rest and recharge.

- **Giving Back.** All full-time employees can take one paid week per year to put their energy into a charitable project they believe in, and we match employee donations to qualified 501(c)(3) charities up to \$1,000 per year.

- **Career Development.** Our personal development program offers mentorships, conferences, and training courses to help employees strengthen their skills and follow their career passions. We also offer career transition services through RiseSmart, which provides strategic support and direction to help employees achieve their desired outcomes.

During COVID-19, we expanded our offerings to meet pandemic challenges, and we continue to evolve our employee supports to meet the times. Recent additional benefits include access to the **TaskHuman** virtual wellness coaching application for employees and their partners, and access to the **Cleo Baby** and **Cleo Kids** global concierge resources for expecting parents and families, offering live expert sessions, webinars, Q&As, and community groups as well as the services of professional Cleo Guides for every childrearing stage and topic from birth prep through age 11.



(GRI 401-2)

STANDARD BENEFITS FOR FULL-TIME EMPLOYEES

● Benefit provided to
FTE and Non-FTE

○ Benefit provided by
nationalized program

A non-FTE is any employee with fewer hours
per week, month, or year than an FTE

	US	India	Netherlands	UK	Canada	Japan	Germany	Australia
Life Insurance	●	●	●	●	●	●	●	●
Healthcare	●	●	●	●	●	○	●	●
Disability & Invalidity Coverage	●	●	●	●	●	●	●	●
Parental Leave	●	●	●	●	●	●	●	●
Retirement Provision	●	●	●	●	●	●	●	●
Stock Ownership	●	●	●	●	●	●	●	●

(GRI 401-3)

PARENTAL LEAVE RETENTION (RR) & RETURN TO WORK (RTW) RATES

	Male	Female	Other
	7,776	2,484	25
	360	302	4
	358	300	4
	317	268	4
	99% rtw, 88% rr	99% rtw, 89% rr	100% rtw, 100% rr

Inclusion & Diversity at Juniper

(GRI 405, 3-3)

Making Juniper a more diverse, equitable, and inclusive company is core to elevating our employee value proposition and strengthening Juniper's foundations for future success, making us more innovative, more resilient, and more responsible as a corporate citizen. We believe in bringing a spirit of inclusion to all aspects of our business, and are committed to transparency as we work to become the kind of workplace we have always strived to be: one where people of all races, ethnicities, ages, genders, and sexual orientations are not only free from discrimination, but are fully represented, respected, valued, and vested in the culture.

Our senior executives are committed to this work, with our Vice President, Inclusion and Diversity leading the strategy. Annually we report demographic data on gender globally as well as across technical and leadership roles. We also publish data on race and ethnicity in the U.S. This allows us to track our progress and provide transparency for our stakeholders.



Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

**Inclusion & Diversity at
Juniper**

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)

DIVERSITY, EQUITY AND INCLUSION INITIATIVES

Strengthening inclusive practices

- Employee experience
- Communications
- Learning and development
- Pay equity and total rewards
- Sponsorships and partnerships

Fostering diverse teams

- Inclusive hiring and advancement
- Employee engagement and retention
- Analytics and accountability



Cultivating Inclusion & Diversity, Every Day

We're committed to attracting, developing, and retaining a diverse and uniquely innovative workforce, and we're continually evolving our approach and capabilities to deliver on that commitment. To maximize impact, our Inclusion & Diversity (I&D) initiatives empower change on multiple levels:

- **Fostering inclusive mindsets** to promote behavioral and organizational change and build I&D understanding, trust, and accountability
- **Building diverse teams** through an I&D focus at every employment stage, from outreach to underrepresented talent to inclusive hiring and promotion practices
- **Growing an inclusive “Juniper for All” culture** and celebrating our rich diversity via our I&D Ambassadors Program, employee affinity groups, and other internal and external partnerships
- **Focusing on diversity in our external relationships and marketplace** including to grow the capacities, skills, and visibility of certified diverse suppliers (see [Supplier Diversity Commitment & Progress](#) for more information)

To promote awareness and accountability among leadership, we utilize I&D dashboards that give our leaders a comprehensive statistical view of their organization, including a demographic breakdown of the race and gender of their employee base with respect to hiring, promotion, attrition, and other qualitative data from the Juniper Voice survey. By understanding this data, leaders can evaluate both their successes and their gaps in building diversity and equity in their teams.

(GRI 406, 3-3)

To modernize our systems and eliminate bias, we continually examine structures and processes at every stage of the employee lifecycle, including annual pay equity assessments and an inclusive hiring audit. We are examining results and recommendations from these efforts and prioritizing actions for multi-year implementations that will create standardization and mitigate bias across people processes.

Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

**Inclusion & Diversity at
Juniper**

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)



In 2022, our I&D achievements included:

- Enhancing oversight and accountability by committing to company-wide I&D objectives and key results (OKRs)
- Developing a comprehensive I&D strategy focused on attracting diverse talent, mitigating bias, and creating equity across the employee lifecycle
- Setting new representation goals for women globally and underrepresented groups (URGs) in the U.S.
- Introducing diversity action plans for our leaders and building out I&D analytics to drive visibility and accountability
- Holding focus groups with women leaders and director-level employees to better understand women's experiences at Juniper
- Expanding demographics questions in our employee voice survey to better understand our people's intersectional needs

While our I&D journey is far from complete, we are dedicated to continuous improvement and learning, and remain committed to achieving a workplace where all employees can be their best selves and contribute to our collective success. Our ultimate goal is to make Juniper Networks an employer of choice and a place where every Junivator can thrive.



(GRI 405-1)

2022 DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

% of Individuals in Governance Bodies

By Gender	Male	Female	Other*
% Board	73%	27%	0%
% Executive management	75%	25%	0%
By Age Group	< 31	31-50	> 50
% Board	0%	9%	91%
% Executive management	0%	8%	92%

Other indicators of diversity

Underrepresented Groups	American Indian or Alaska Native	Black or African-American	Hispanic	Native Hawaiian or Pacific Islander	Two or More Races
% Board	0	0	9%	0	0
% Executive management	0	0	0	0	0

*Defined as employees who identify as non-binary, prefer to self-subscribe or preferred not to disclose their gender.

Advancing diversity in innovation

In 2022, Juniper’s Intellectual Property (IP) Legal Team began working to engage Junivators from diverse groups more deeply on innovation and invention through Juniper’s Patent Program.

Beginning with research into industry I&D trends and data, the initiative is creating tools that visualize and analyze inventor diversity data against various inventorship parameters (e.g., invention submission and invention filing), providing a baseline against which to gauge progress. In collaboration with the engineering I&D leadership committee, the engineering and IP teams are looking to launch small-scale programs within our R&D organizations in 2023 to improve the participation of underrepresented groups in Juniper’s invention and patent process.

In 2023, Juniper also joined **ADAPT**, a collective of corporate legal teams and industry groups focused on advancing DEI initiatives within patent legal teams and improving awareness of patent career opportunities for engineers in underrepresented demographics.

Employee Representation

By Gender	Male	Female	Other*
% Early-career technical	71.8%	27.9%	0.3%
% Early-career non-technical	45.9%	53.8%	0.3%
% Mid-level technical	87.4%	12.4%	0.2%
% Mid-level non-technical	71.2%	28.5%	0.3%
% Director and above technical	92.2%	7.7%	0.1%
% Director and above non-technical	71.7%	28.1%	0.2%
By Age Group	< 31	31-50	> 50
% Early-career technical	55.4%	41.2%	3.4%
% Early-career non-technical	32.7%	56.2%	11.1%
% Mid-level technical	1.7%	76.5%	21.8%
% Mid-level non-technical	1.4%	58.9%	39.7%
% Director and above technical	0.0%	42.2%	57.8%
% Director and above non-technical	0.4%	36.8%	62.8%

*Defined as employees who identify as non-binary, prefer to self-subscribe or preferred not to disclose their gender.

Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

**Inclusion & Diversity at
Juniper**

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)



Other Indicators of Diversity

Description	Disability	Veteran Status
% Early-career technical	2.4%	1.6%
% Early-career non-technical	3.9%	2.1%
% Mid-level technical	1.6%	2.6%
% Mid-level non-technical	2.0%	3.4%
% Director and above technical	0.1%	1.0%
% Director and above non-technical	2.1%	2.1%

Your story here.



I&D Programs & Processes: 2022 Results

Women's Sponsorship Program

Our global Women's Sponsorship Program works to promote gender parity and empower the next generation of women leaders at Juniper. Offered over the course of a year, the program gives participants opportunities for development, collaboration, visibility, and growth; increases diverse perspectives at our most senior levels; and creates an alumni community of mutual support, learning, and networking whose mentorship efforts create cascading benefits throughout the company. Participants are selected through a nomination process and work closely with leadership to apply.

Women's Leadership Development Program

Building on the success of the Sponsorship Program, our Global Women's Leadership Development Program organizes monthly workshops, group coaching, and individual coaching sessions for women at the mid-career level. The program explores leadership styles and women leaders' potential transformational effect, and provides a platform for women to share their stories and learn from others' experiences and growth over the course of their careers.



Pragati: a glidepath for women

Now in its sixth year, Pragati is an award-winning program within Juniper's India operation that offers a path for women to return to work gradually after maternity or other leave. Housed in Global Business Services and supported by Human Resources Business Partners and Talent Acquisition, Pragati attracts women looking for engaging part-time opportunities that provide work-life balance, flexibility, and the chance to learn new skills. In 2022, Pragati onboarded three employees, two of whom were converted to FTE.

Opening Doors

In 2022, Juniper launched a six-month pilot program called Opening Doors, aimed at developing URG talent. Forty-four employees from our U.S. and EMEA operations participated in modules focused on communication, conflict management, networking, and establishing a personal brand. Participants reported positive feedback, and we intend to continue the program in fall 2023.

Celebrating Cultural Diversity at Juniper

Throughout 2022, Juniper partnered with our Employee Affinity Groups to identify events that speak to the lived experience of their communities while also driving awareness and education. Programming included events and efforts around:

- Black History Month
- International Women's Day and Women's History Month
- Mental Health Awareness Month
- Asian American and Pacific Islander Heritage Month
- LGBTQ+ Pride Month
- Juneteenth
- Hispanic Heritage Month
- Veteran's Day
- Native American Heritage Month
- International Day of People with Disabilities

Employee Affinity Groups

In 2022, Juniper launched its first-ever Employee Affinity Groups (EAGs). Through programs, events, and knowledge-sharing, EAGs provide a space of connection, community, and education for employees who want to foster a diverse and inclusive work environment. Membership in these voluntary, employee-led groups is open to all employees and interns, irrespective of their personal identification with the EAG's representation. Allies and supporters are strongly encouraged to join.

Current Juniper EAGs include:

- **Juniper Neurodiversity Alliance (JNDA)**, a safe space for the neurodiverse community, those with neurodiverse loved ones, and allies

- **Juniper Pride Alliance (JPA)**, which supports the LGBTQ+ community within Juniper, creates acceptance of LGBTQ+ identities, and increases awareness of LGBTQ+ causes

- **Asian Affinity Group**, which celebrates all the different identities that comprise the global East Asian population

- **Somos Junivators**, which celebrates the global Hispanic and Latine community and its allies

- **Women@Juniper**, which strives to build an inclusive and encouraging environment that cultivates the strengths, visibility, and influence of women Junivators

**IN A THIRD-PARTY
SURVEY, U.S.
JUNIVATORS TOLD US:**



99%

feel this is a physically safe
place to work



97%

feel they are treated fairly
regardless of their sexual
orientation



95%

feel they are treated fairly
regardless of their race

Results from a third-party survey
conducted by Great Place to Work, and
only include U.S. employees.



Community Engagement & Social Impact

(GRI 413, 3-3)

As a global technology leader, Juniper creates networks of opportunity for the world’s thinkers, innovators, and problem solvers. Through our corporate social efforts and the work of the Juniper Foundation, we extend that network of opportunity to our communities and society at large.

Currently, our community engagement efforts encompass a grants program administered through the Juniper Foundation, an employee matching gift program, and an employee volunteering program, with efforts grouped into three main pillars:

- Workforce development initiatives that empower underrepresented groups and promote equitable employment, driving a diverse tech workforce in today’s digital economy
- Response to health, natural, manmade, and climate-related disasters
- Community and nonprofit support through Juniper employee volunteering and giving, including matching corporate donations

In 2022, Juniper donated \$1,235,408 to organizations supporting those pillars, some of which are included on this page.





Workforce of the Future: Advancing Education & Equity

The future of innovation is fueled by diverse teams working within inclusive, collaborative companies. That's why we invest in equitable employment opportunities in the digital economy, focusing specifically on traditionally underserved, underrepresented communities.

NPower Partnership

In 2022, we committed to a three-year strategic partnership with **NPower**, a U.S.-based nonprofit that provides free tech training to military veterans and young adults from underserved communities, helping them develop the skills to launch successful careers in the digital economy. NPower envisions a future where all people—regardless of race, ethnicity, gender, or socio-economic background—have clear pathways to success, creating a more diverse and competitive workforce.

Representing a \$ 1.9M investment over three years, the NPower partnership is a significant milestone for Juniper, eclipsing any of our previous contributions to STEM nonprofits. To add their own support for NPower's mission and directly impact young learners in 2022, Juniper employees offered virtual coaching at nine virtual volunteering events and participated in mock interviews, speed mentoring, and a 22-week mentoring program.

To help proliferate Juniper skills in the market, we also worked with NPower to enroll their students in a new 10-week, cohort-based Networking Career Quick Start (NCQS) pilot program focused on Junos and Juniper technical support fundamentals and troubleshooting knowledge. Thirteen NPower students successfully completed the program and have either obtained or are working toward certifications.

“One thing I appreciate about my workplace this year was the opportunity. I would have never imagined myself working at a networking company. It has been a great experience being able to try something new and challenging.”

— Kevin M., 10th grade

Cristo Rey San José Corporate Work Study Program

In the 2022–23 school year, Juniper continued its six-year partnership with the innovative and unique Corporate Work Study Program (CWSP) at Cristo Rey San José Jesuit High School in San José, California. Extending our commitment to investing in and cultivating the next generation of diverse professionals, we provided hands-on work opportunities for 18 students from families of limited economic means—including four students whose planned work study assignments were in jeopardy due to the unexpected collapse of Silicon Valley Bank in March 2023.

As a partner to Cristo Rey San José, Juniper Networks invested over \$150,000 in the program in 2022, offsetting operating costs for the organization. Additionally, over 50 Juniper employees dedicate their time and experience to support student learning as they integrate four years of professional work experience with four years of rigorous college preparatory academics. This partnership is highly valued within Juniper, as it allows the company’s younger internal talent to practice managerial skills by becoming a mentor or supervisor to a CWSP student. And through reverse mentoring, Juniper’s professionals can learn from the diverse perspectives and experiences of these talented young students.

Global Resilience: Responding to Disaster

Juniper's work is shaped by our commitment to a sustainable future. We seek to minimize our impact on the environment and advance the crucial climate action our communities need.

When disaster strikes—whether through climate change, other natural disasters, disease, or manmade disaster—communities need immediate and ongoing relief. To support those in need, Juniper has donated more than \$1 million to relief and rebuilding efforts since 2019.

After Russia invaded Ukraine in February 2022, the Juniper Networks Foundation donated \$75,000 to UNICEF's relief efforts and \$10,000 to the Global Fairness Initiative on behalf of the Ukrainian Freedom Fund, helping treat wounded children, civilians, and Ukrainian frontline defenders. During the year, the Foundation also provided \$5,000 each to the Hidaya Foundation, AID India, Team Rubicon, and the Australian Red Cross to respond to flooding in Pakistan, India, Florida, and Queensland and New South Wales, Australia.

Volunteering & Matching Gifts: Empowering Our People

Lending a helping hand is part of our way of working, and our people are passionate about supporting their communities. To support them in contributing their knowledge, skills, and passion to community causes, Juniper allots each of our employees 40 hours of paid time off annually. We also organize live and virtual events to help our employees fundraise for their communities. In 2022, our people logged a total of 11,040 volunteer hours with organizations on the frontlines of global disasters, tackling food insecurity and other inequalities, advancing healthcare solutions, and more.

Through the Foundation's Matching Gift program, Juniper employees worldwide may support worthy causes of their choice and have their gift doubled with corporate matching funds, up to \$1,000. In 2022, 1,015 employees participated in the program, providing 950 charities worldwide with \$462,000 in combined employee and Juniper donations.

In November, we launched our first annual **Global Week of Giving**, during which we encouraged Juniper employees to volunteer in various capacities, from organized events with nonprofits to participating in individual or family-led community cleanups. The initiative resulted in 71 volunteer activities across 20 countries and documented 2,103 hours of volunteer time off (VTO).

CSR & employee volunteering in India

In India, rules passed as part of the 2013 Companies Act requires business above a certain profitability level to spend at least 2% of their net profits (averaged over the previous three years) on CSR initiatives. To ensure meaningful engagement, Juniper takes a thoughtful approach to our CSR mandate, supporting local communities by addressing their specific needs rather than simply donating funds. Over the years, our CSR initiatives have evolved to encompass education, maternal and child health, environmental work, women's economic empowerment, waste management, and varied community supports. In 2022, our efforts encompassed numerous highlights:

- In partnership with the Association for People with Disabilities, we provided skills-training to over 100 people for full-time work in rural areas, enabling the disabled community to integrate into the mainstream.
- We launched a tree-planting initiative, aiming to plant 10,000 fruit-bearing trees in the areas where we work, increasing green cover and supporting local farmers economically.
- Continuing a six-year relationship, we worked closely with a cluster of villages in the Bengaluru Rural region to effect significant improvements in education, nutrition, sports, community health, shared-use facilities, and reproductive and child health.
- In education, we've focused on STEM and English-language learning, placing English-speaking teachers in *Anganwadi* (government-run pre-primary schools) to encourage enrollment and save families the cost of private nurseries.
- In women's economic empowerment, we provide skills training to over 1,400 people each year in areas including computer skills, accounting, tailoring, and beautician work, and have sponsored scholarships for 100 eighth- to twelfth-grade girls affected by the COVID-19 pandemic.

Our work is guided by the communities we serve, and we conduct baseline surveys, midline surveys, and impact assessments to ensure that our initiatives align with community needs. Our team is comprised of dedicated volunteers from various departments within our company, working together to create lasting change in the lives of the people in these villages.

Evolving Our Employee
Value Proposition

Building the Next Generation
of Tech Talent

Training & Development

Inclusion & Diversity at
Juniper

Community Engagement
& Social Impact

Environmental, Health, Safety
& Security (EHSS)



Environmental, Health, Safety & Security (EHSS)

(GRI 403, 3-3)

Juniper's global Environmental, Health, Safety, and Security Policy articulates our pursuit of excellence in maintaining healthy, safe, secure, and respectful working conditions and ensuring that our products and operations are environmentally responsible.

(GRI 403-1, 403-3, 403-8)

Our EHSS management system provides a framework to reduce and eliminate potential hazards, risks, and negative impacts to our employees, partners, customers, communities, and the environment. It is developed and implemented in conformance with the globally recognized ISO 14001 and ISO 45001 standards. Our Sunnyvale Corporate Headquarters is ISO 14001 certified, and our Amsterdam facilities are ISO 14001 and ISO 45001 certified. Local management systems are in place across other locations globally. We comply with all applicable local rules and regulations. In 2022, Juniper received no fines or citations for non-compliance with laws and regulations relating to environmental, health, or safety.

(GRI 403-4)

Our Corporate EHSS Department is responsible for the management, execution, and monitoring of our EHSS management system’s performance. EHSS conducts environmental, health, safety, and security investigations and reports findings and recommendations to the appropriate personnel. Additionally, Juniper maintains formal Safety Committees in all locations required by law. Safety committees meet on a quarterly basis and communicate minutes and pertinent information to team members. Safety Committees are comprised of representatives from operational organizations who have a focus on safety as it relates to their specific job function.

(GRI 403-2)

To assess the performance of our EHSS management system, we conduct inspections/audits and measure and monitor workplace safety using our global Total Recordable Incident Rate (TRIR). Juniper has consistently maintained a low global incident rate due to the policies, processes, proactive measures, and controls we have implemented to eliminate and manage workplace hazards. As in previous years, the predominant recordable injury in 2022 was associated with exposure to ergonomic risk factors. To address these risks, we work with our employees to ensure a productive and comfortable work environment, providing ergonomic assessments and appropriate office equipment and furniture.

In 2022 we reported one workplace injury. Per our policies, all injuries and incidents, including near-misses, are investigated and corrected to prevent recurrence. To date, Juniper has not experienced a workplace fatality.

(GRI 403-9)

2022 WORK-RELATED INJURIES (ALL EMPLOYEES)

	#	Rate
Fatalities as a result of work-related injury	0	0
High-consequence work-related injuries	0	0
Recordable work injuries	1	0.01
Main types of work-related injuries	Ergonomic	
Total # of employees	10,901	
Number of hours worked	25,737,920	

1. TCIR is calculated as (total number of OSHA Recordable injuries and illnesses x 200,000) / total hours worked by employees



(GRI 403-5, 403-7)

Employees are not required to perform any job that they feel could cause injury or health issues. Employees may report any safety issue without fear of reprisal, as detailed in our Worldwide Code of Business Conduct. Employees may also provide feedback on potential improvements to processes, procedures, and training. EHSS reviews all safety programs and employee feedback comprehensively at least annually and adds any new processes requiring safety training to the Job Hazard Analysis summary. Through ongoing program evaluation, inspections/audits, and investigation of incidents, negative OH&S impacts are assessed and mitigated. This includes root cause analysis and corrective and preventive actions, as appropriate.

EHSS training is delivered during onboarding of employees via our learning management system. Records are kept in that system and training is re-assigned/recurring as scheduled. All employees receive some level of general health and safety training, with specific health and safety training available and assigned to those whose duties require such training. Examples of specific EHS trainings include: Chemical Safety Overview, Workplace Hazardous Materials Information System (Canada), Hand and Power Tool Safety, Office Ergonomics, EHSS Services Overview, Lab Equipment Installation, and Electrical Safety: General Awareness. Health and Safety at Juniper allows for employees to provide feedback on potential improvements to processes, procedures, and training. EHSS personnel review feedback and programs to identify and mitigate gaps and implement required actions.

(GRI 403-6)

All employees have access to non-occupational medical and healthcare benefits, based on region. Juniper hosts occasional healthcare promotion fairs, and our benefits division ensures that all non-work-related health benefits are explained and available for each region.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

APPENDICES

Build Global Resilience

Resilience is the end product of sustainability, the superpower that enhances organizational and workforce agility, creativity, and adaptability to business and societal needs. Whether that means embracing opportunity, evolving with new technology, or responding to global emergency, Juniper and its people are ready for the challenge.



Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

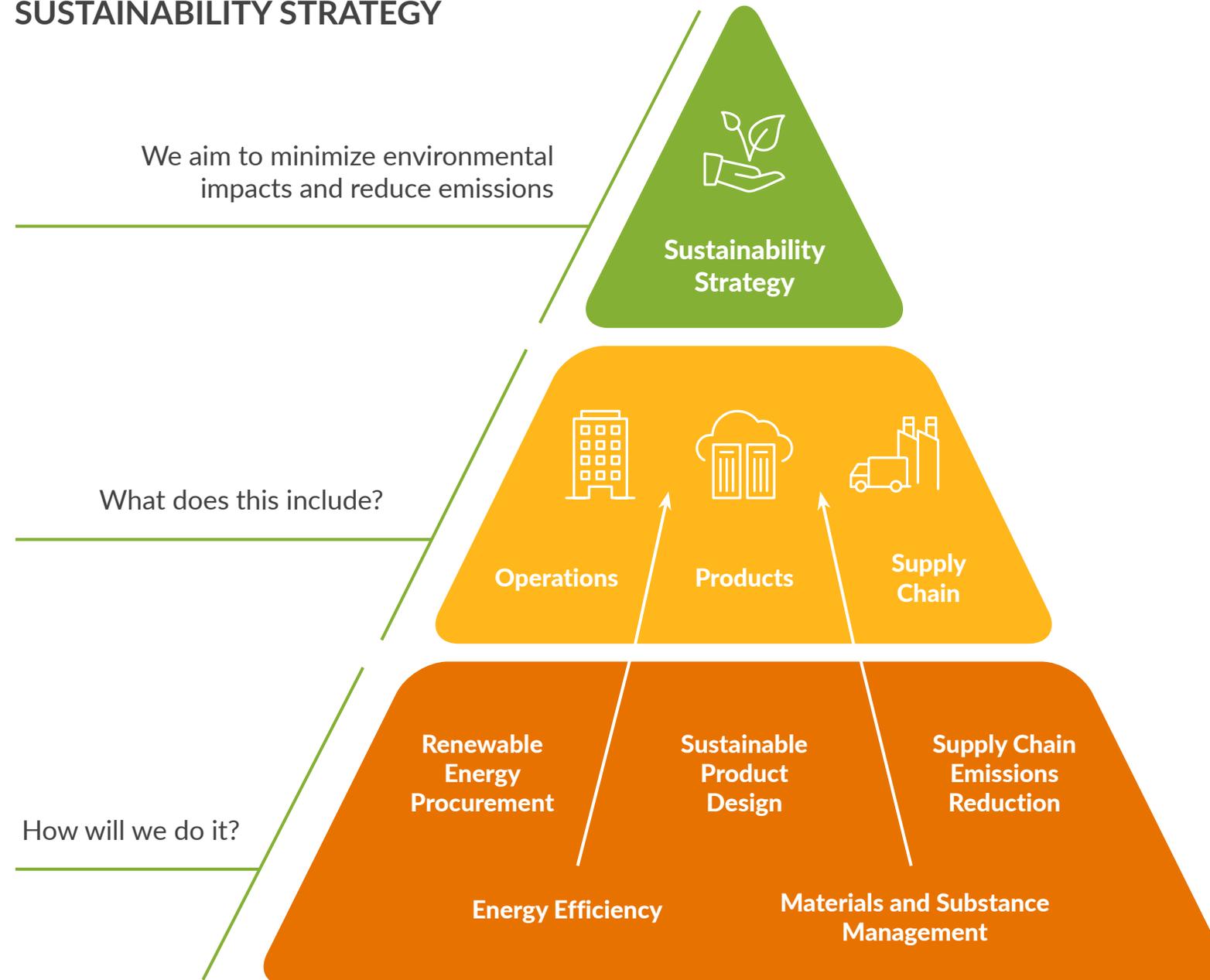
Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

JUNIPER'S ENVIRONMENTAL SUSTAINABILITY STRATEGY



At Juniper, building global resilience is one of the three pillars of our Corporate Social Responsibility framework. This pillar focuses our efforts to mitigate business environmental impacts, advance climate solutions, and respond to global disasters—from pandemic to war, flood, fire, and beyond. Over the past year, we have been developing and implementing our strategic roadmap geared primarily toward achieving carbon emissions reduction. This roadmap creates a more cohesive, holistic environmental strategy across our key impact areas: operations, products, and supply chain. By achieving an integrated view of our challenges and opportunities in those impact areas and how they interplay, we can be more proactive in identifying improvement opportunities and operationalizing solutions in alignment with all stakeholder needs.

**Our Carbon Neutral
Commitment**

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

Our Carbon Neutral Commitment

(GRI 305, 3-3)

Climate change is the greatest threat to our planet, and at Juniper Networks, we believe our industry must play a huge role in reducing planet-warming greenhouse gas (GHG) emissions.

Today's information technologies have created revolutionary efficiencies in sectors from communications to logistics to industrial production, but those efficiencies have been offset by a surge in energy demand to power data centers and other information and communications technology infrastructure. Most of that energy still comes from burning fossil fuels, so the more we ask of our digital networks, the worse these dependencies become—unless we create change.

In January 2022, Juniper CEO Rami Rahim pledged to achieve carbon neutrality across global operations by 2025. Our carbon neutral strategy is focused on two long-term strategies: increasing our use of clean energy sources and leveraging energy efficiency measures. To further these efforts, we are currently evaluating renewable power procurement opportunities in North America. We have also completed decarbonization assessments of our North American lab and offices buildings. We plan to review potential energy-saving measures during the second half of 2023.

Our Carbon Neutral
Commitment

**Reducing Our Operational
Footprint**

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



Reducing Our Operational Footprint

Energy efficiency is good for business and good for the planet. We are also taking measures to reduce our waste and water footprints, the latter being a priority in water-scarce operating locations like California, USA, and Bengaluru, India.

To manage our sustainability performance and keep ourselves accountable, the Juniper real estate team leverages energy management software to monitor building-level energy demand in real time based on 15-minute interval data. This data-driven approach allows utility rate optimizations, and identification of energy demand optimization opportunities.

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

**Reducing Our Operational
Footprint**

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



Leveraging Renewable Power

(GRI 305-5)

In Bengaluru, India—Juniper’s most emissions-intensive location—we have implemented strategic initiatives to source renewable energy through mechanisms including solar power purchase agreements (PPAs), which helped supply 87% of the site’s power needs in 2022. In April 2023, a solar farm commissioned by Juniper came online, which will provide approximately one third of the energy required to power our Bengaluru offices and labs. Located in the Chitradurga district of Karnataka, the installation consists of 26,628 solar modules and is expected to avoid approximately 571,492 tons of CO₂ emissions over the project lifetime—the annual equivalent emissions of 127,174 gasoline-powered passenger vehicles. The clean energy resulting from the solar power plant contributes to the greening of Karnataka’s electricity grid, and demonstrates our commitment to making renewable energy a mainstream power source in the region.

The plant is structured as a group captive model: it is built and operated by a private developer. Juniper’s equity investment in the plant secures exclusive power consumption rights and a competitive supply of renewable energy units for the next 15 years.

Reducing Greenhouse Gas Emissions

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

**Reducing Our Operational
Footprint**

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

APPENDICES

For more than 15 years, Juniper has worked with CDP, a nonprofit organization whose global disclosure system helps companies, cities, and states/regions measure and manage risks and opportunities related to climate change, water security, and deforestation. This work has helped us identify better ways of reporting and reducing our carbon footprint. For comprehensive reports on Juniper’s climate change and GHG emissions management program, please refer to our [CDP disclosures](#).

The most significant portion of our overall carbon footprint derives from our **Scope 3 emissions**, primarily from activities outside of our direct operations such as use of sold products, supply chain emissions, and upstream transportation and distribution, which in 2022 accounted for approximately 97% of our total GHG inventory.

Since supply-chain-related emissions represented approximately 21% of our total reported Scope 3 emissions in 2022, we engage with our suppliers¹ to encourage measurement and disclosure of their own GHG emissions. Since 2009, we have engaged our top material suppliers to request they measure and report on their GHG emissions. We strive to achieve an 80% response rate on CDP Supply Chain climate change and water security questionnaires and increase the overall number of suppliers reporting on key data points in those questionnaires.

Through our partnership with CDP, we provide our suppliers¹ with free training and resources to support them in submitting their CDP climate change and water security disclosures and developing their internal programs. We are committed to partnering with suppliers who share our goals and will work collaboratively to mitigate risks, identify opportunities, and reduce emissions across our value chain. To reduce our supply chain carbon footprint, we issued our supply chain climate expectations to direct and indirect suppliers, targeting a 10% reduction by 2025 and a 25% reduction by 2030 from a 2021 baseline. From baseline emissions and supplier progress reported to date, we are on track to meet these goals.

Beyond our operations, our climate focus demands that we continually re-imagine our products’ sustainability performance, driving energy efficiency and GHG reduction in our supply chain.

In 2023, we launched a cross-functional sustainable product forum that will focus on: 1) energy efficiency improvements in products, 2) sustainable packaging and 3) circularity.

1. Identified as tier-one component suppliers, logistic partners, contract manufacturers, and original design manufacturers who represent approximately 99% of total annual direct and indirect material expenditure.

Our Carbon Neutral
Commitment

**Reducing Our Operational
Footprint**

Energy Management

Water & Wastewater
Management

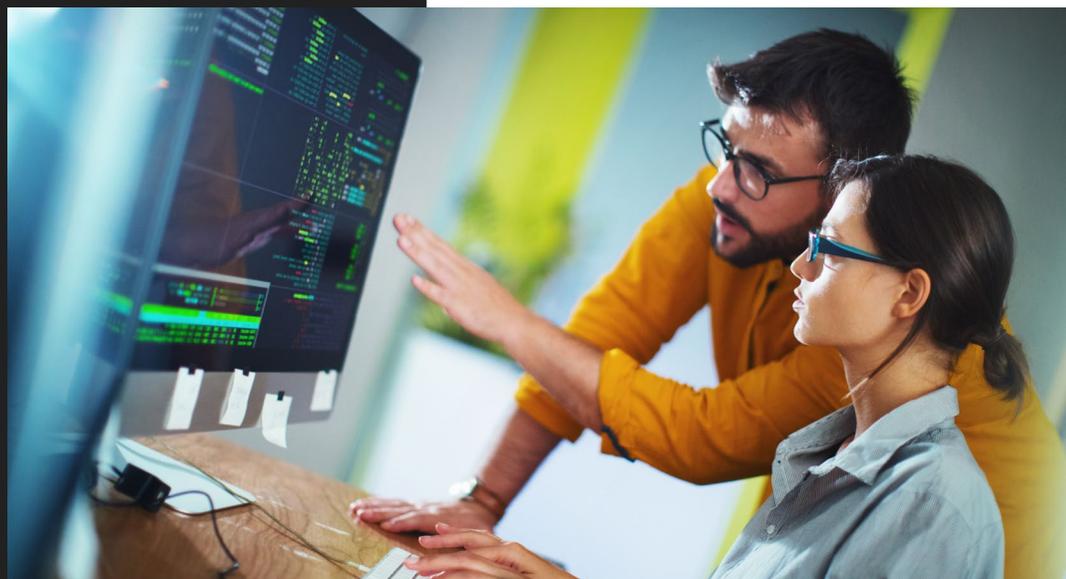
Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



Data-driven decision making

Juniper has invested in new data management processes and procedures to collect, review, calculate, and manage our 2022 ESG data. We have implemented GHG data management and calculation software that calculates our emissions based on the GHG Protocol. This software allows for standardization in our calculations year-over-year, reduces human error, and allows for improved efficiency in tracking and managing our environmental data and emissions goals. We are committed to consistent improvement in our CSR program and making data-driven decisions.

(GRI 305-1, 305-2, 305-3)

JUNIPER'S GHG EMISSIONS PROFILE (METRIC TONNES CO₂)

	2021*	2022
Scope 1	7,151	6,733
Scope 2 (market based)	43,906	48,559
Scope 2 (location based)	100,884	99,341
Scope 3	1,515,616	1,648,224

Note: Calculations are performed using the World Resources Institute GHG Protocol.

*Emissions data for 2021 is restated from prior publications to reflect improved measurement methods and enhanced data quality, with better quantification of certain emittance, revised product transport data, revised purchased goods and services data, and more complete use of sold products data. Use of sold products constitute the majority of our total Scope 3 emissions. We have enhanced the method for calculating use of sold products, which is reflected in our reported 2021 Scope 3 emissions. Changes calculated across all three scopes were needed to provide data sufficient for comparability, consistent with the CDP Technical Note on Restatements. Emissions data reported in, or related to, prior years should not be relied upon as they do not reflect updated measurement methods and enhanced data quality. The emissions restatement resulted in a higher Scope 1, Scope 2 (location-based and market based), and lower Scope 3 emissions.

Note on conversion factors: All emissions of non-CO₂ greenhouse gases are converted to CO₂-equivalent emissions by multiplying by the global warming potential (GWP). As per U.S. EPA factors published in March 2018, Juniper uses the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) GWPs. Global Fuel and Energy-related emissions are assessed using emissions factors from IEA (2021), and regional emissions factors from EPA eGrid (2021) and the UK DEFRA/BEIS (2021).

Juniper's GHG Emissions Profile

Direct (Scope 1) emissions result from sources owned or controlled by the organization. Indirect (Scope 2) emissions result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed within the organization. Other Indirect (Scope 3) emissions are all indirect emissions (not included in Scope 2) that occur outside of the organization. Activities accounted for in Scope 3 emissions include purchased goods and services, upstream and downstream transportation and distribution, business travel, employee commuting, and use of sold products.

Our reported GHG emissions inventory scope includes all owned or leased Juniper Networks facilities. Sites containing labs, data centers, and other IT infrastructure for R&D and customer support figured into our Scope 1 and 2 calculations and our non-lab/IT sites are counted as Scope 3 upstream leased assets.

Juniper has received limited assurance of its 2022 Scope 1, Scope 2, and Scope 3 Category 4 Upstream Transportation and Distribution emission totals from an independent third party verifier in accordance with the ISAE3000 standard.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

**Reducing Our Operational
Footprint**

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

APPENDICES



Encouraging alternative transportation

For more than 20 years, Juniper has encouraged our employees to make sustainable travel decisions that can benefit their health, the environment, and our corporate emission reduction efforts. Through the Juniper Networks Employee Transportation Program, we provide monetary rewards and non-monetary incentives and amenities for sustainable commuting that include:

- Rideshare services
- Charging stations and preferred parking for electric vehicles
- Rewards for biking, walking, and other active commuting options
- Secured bicycle storage lockers, emergency bike repair, and cycling apparel, gear, and merchandise
- Subsidy for commuting on mass transit including bus, light rail, train, and vanpool

We survey employees annually on their commuting methods to track progress and better encourage sustainable transportation options.

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



Energy Management

(GRI 302, 3-3)

At our facilities around the world, we seek optimum energy efficiency in buildings and operations, and have implemented sophisticated monitoring and management systems to encourage sustainable behaviors and drive continuous improvement.

Green Building

Energy efficiency is an integral part of our campus and office design process, with our design, construction, and facilities management approach integrating LEED principles of energy efficient systems, resource conservation, and environmentally preferred materials. From our 635,000-square-foot corporate campus in Sunnyvale, California, to our India Excellence Center in Bengaluru and other global facilities, our green building efforts have been codified through LEED certifications.

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



597,000 kWh

Our facilities in Bengaluru, India, have achieved annual energy-use reductions of 597,000 kWh and associated emissions reductions through optimization of data center UPS units and building transformer systems, automation of lab lighting, and installation of LED light fixtures and electronically commutated (EC) HVAC system fans.

Energy Efficiency in Our Labs

Juniper’s building operations, from lighting controls to lab cooling systems, are designed and managed for efficiency. At our lab sites in Wenatchee and Quincy, Washington, we use chiller-less mechanical cooling systems that employ natural outdoor air to achieve significant efficiency gains. At our Sunnyvale campus, computer rooms gain efficiency through the use of computer room air handlers (CRAHs) that use fans, cooling coils, and a water chiller system to remove heat, plus in-rack air conditioning units that draw air directly from the hot side of the hot aisle / cold aisle layout and discharge it to the cold side. Control is self-contained but monitored by a building management system.

Almost all of Juniper’s major labs employ an **Automated Power Management Tool** that enables shutoffs during periods of low power-use. In combination with an aggressive education program that promotes energy efficient practices among lab equipment users, the tool has been instrumental in saving considerable energy across our lab operations.

(GRI 302-1)

2022 ENERGY CONSUMPTION

Total fuel consumption from non-renewable sources, onsite & mobile fuels	26,490 MWh
Energy consumed, by use	
Electricity, from non-renewable sources	162,639 MWh
Electricity, from renewable sources	73,414 MWh
Heating	0
Cooling	0
Steam	0
Total	262,543 MWh

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

**Water & Wastewater
Management**

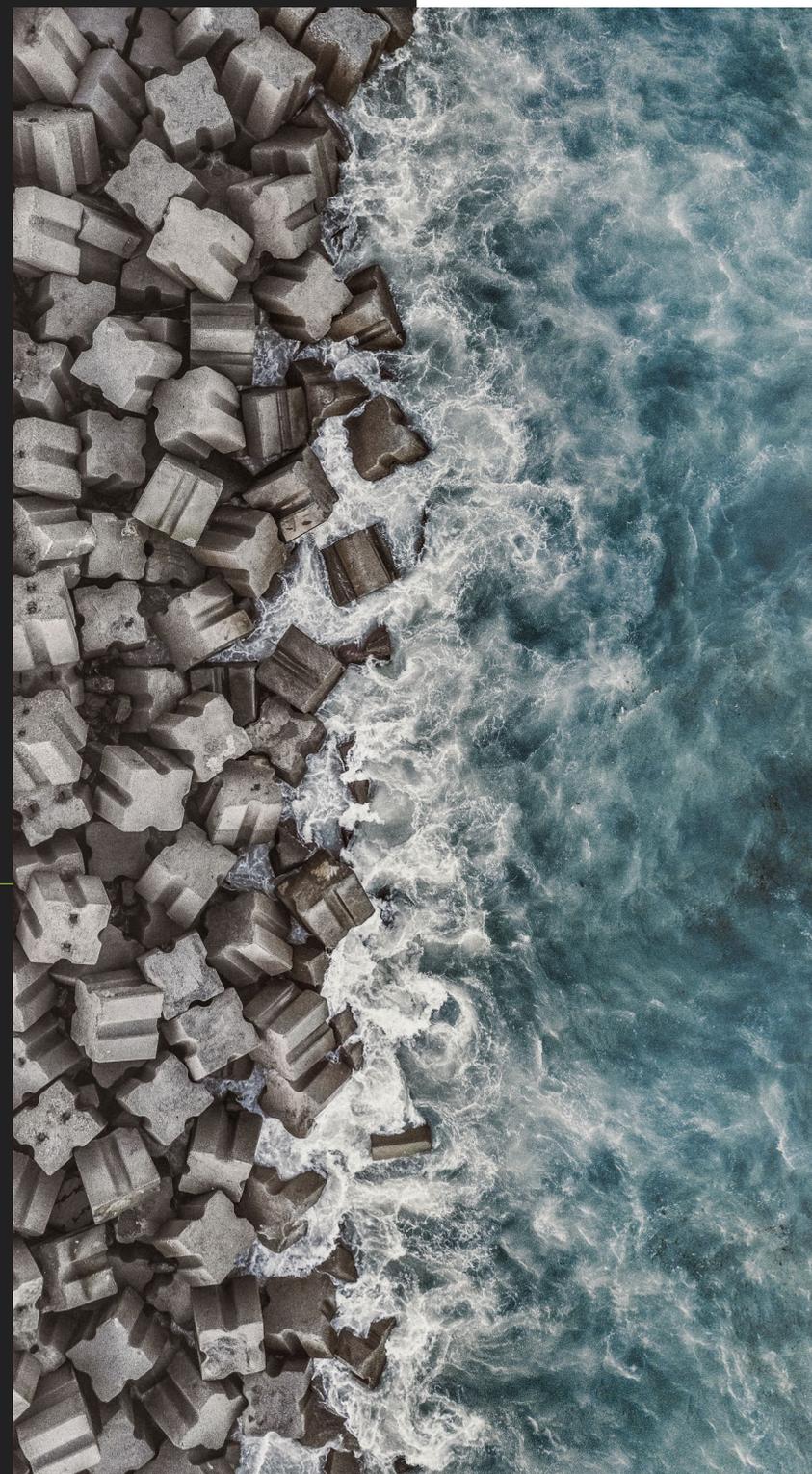
Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation



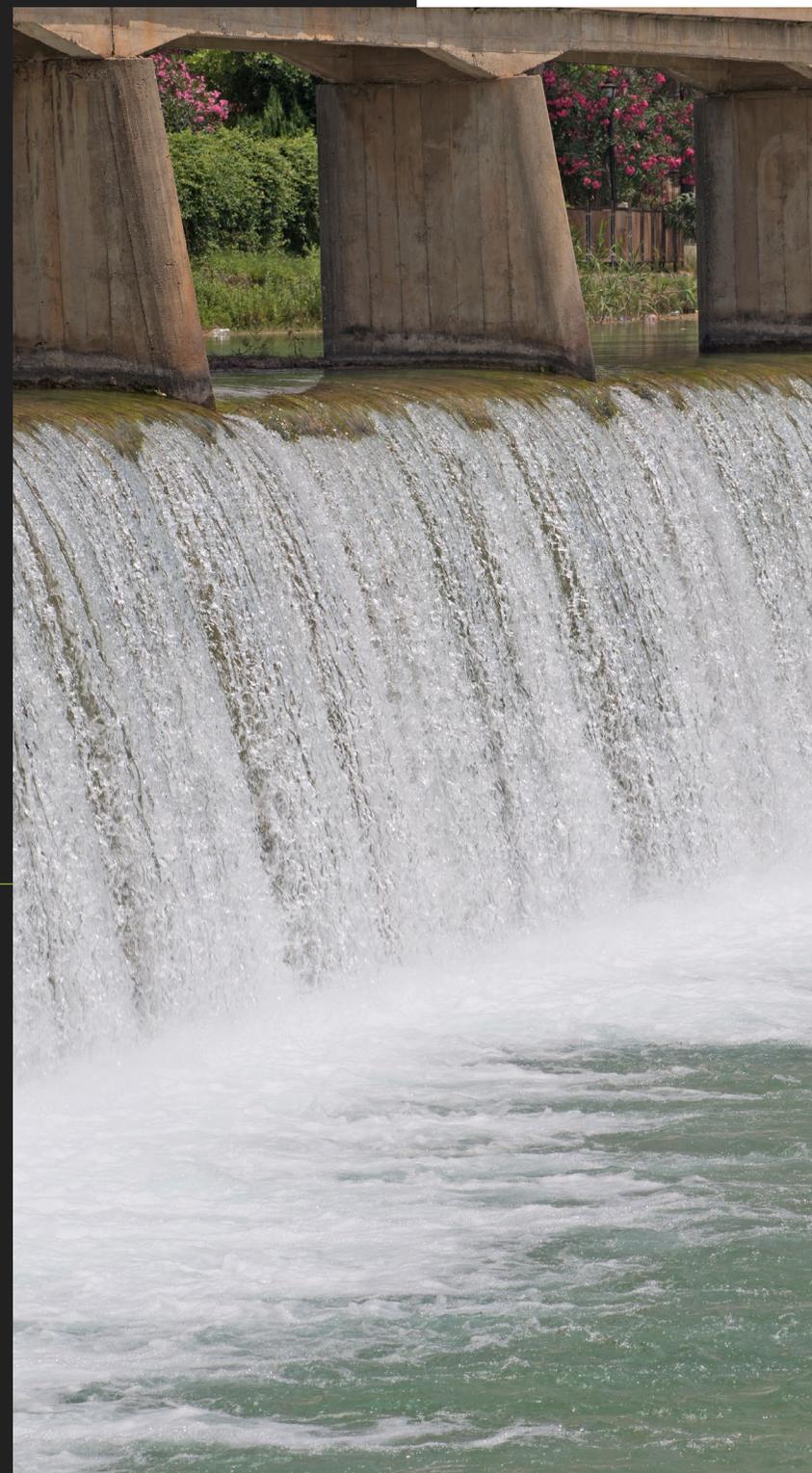
Water & Wastewater Management

(GRI 303, 3-3 / 303-1)

As a global company headquartered in drought-prone California, Juniper is committed to responsible water consumption and stewardship practices across our footprint. Our operational goal is to use water as efficiently as possible and to use reclaimed water wherever possible.

We track annual water use data from our major facilities in India, Japan, the Netherlands, and the U.S., where potable water uses include canteen and breakroom operations and cooling systems. At our headquarters facility in Sunnyvale, California, our buildings are equipped with low-flow fixtures, and we use reclaimed wastewater from a local renewable supply for all toilets and landscaping. In Bengaluru, India, our facilities have conserved water through the use of a new water conservation solution for building HVAC systems that uses water collected by the dehumidifiers installed at labs and data centers. Water flow meters have also been installed across all Bengaluru facilities to monitor domestic water consumption patterns.

Juniper's reporting and operational boundary includes facilities supporting administrative and server lab activities. All water used by facilities within the reporting boundary comes from municipal suppliers. Potable water consumption, discharge, and withdrawal are associated primarily with cafes and break rooms, cooling, and water, sanitation, and hygiene (WASH) services.



(GRI 303-1)

Recognizing the significant water impacts stemming from our supply chain, we communicate our water-use expectations to all our suppliers and measure their performance. To gain visibility, we ask all our contract manufacturers, original design manufacturers, and a subset of our tier-one direct material suppliers (based on spend) to report annually on their water management practices and potential water-related risks to our business (e.g., supplier access to high-quality clean water) using the CDP Supply Chain water questionnaire.

For comprehensive reports on Juniper’s water management program, please refer to our annual [CDP disclosures](#).

(GRI 303-3, 303-4, 303-5)

2022 WATER PERFORMANCE

	Units	2022
Third-party water withdrawal	ML	178.3
Third-party water discharge	ML	93.3
Total water consumption (from all areas)	ML	84.9

Water consumption is calculated based on an estimation of water that we use for landscape irrigation and in cooling towers.

For 2022, we revised and improved our water withdrawal, consumption and discharges tracking method, utilizing more data from metered sources. We also included a data center location in our water withdrawals data for the first time, to better align with our operational boundary for Scope 1 and 2 emissions reporting. This has resulted in our reported withdrawals for 2022 being ‘much higher’ than 2021. We consider increases of >50% to be ‘much higher’. We anticipate future water withdrawals to be approximately the same as our 2022 figures, as we do not anticipate changes to our business operations that will significantly impact water withdrawals.

Waste Reduction & Recycling

(GRI 306, 3-3)

Our campuses worldwide participate in waste reduction and recycling. In some locations, we track the weight of waste produced and monitor waste diversion. At our headquarters we divert waste through recycling and also collect and recycle food and other organic waste, which is then converted for uses such as animal feed, fertilizer, and energy generation. Our food service vendor in Sunnyvale, Bon Appetit, follows a farm-to-fork policy that requires chefs to purchase at least 20% of their ingredients from small farmers, ranchers, fisherman, and food producers located within 150 miles of their kitchens.

(GRI 306-3)

2022 WASTE GENERATION

Total weight of waste generated and breakdown by composition

Waste breakdown, by composition

Waste	868.57 metric tonnes
Recycled	770 metric tonnes
Recycled - Metals	31 metric tonnes
Recycled - Cardboard	17.07 metric tonnes
Recycled - Wood	8.58 metric tonnes
Waste - Hazardous*	230.34 metric tonnes
Waste recycled - E-waste	70.86 metric tonnes
Compost - Food scrap	46.44 metric tonnes
Yard waste	18.14 metric tonnes
Other small waste categories	35.14 metric tonnes
Total	2078 metric tonnes

Our waste is reported for our eight major sites to mirror the operational boundaries established in our GHG accounting methodology; therefore this data is not inclusive of all our operating locations. Waste data is not inclusive of all of Juniper's waste streams. We are committed to continuous improvement and plan to further evolve our waste collection methodology and reporting.

*Hazardous waste includes state batteries, engine oil, grease, compressor oil as reported by a third-party vendor.

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

**Advancing Product
Sustainability**

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

Packaging Innovation

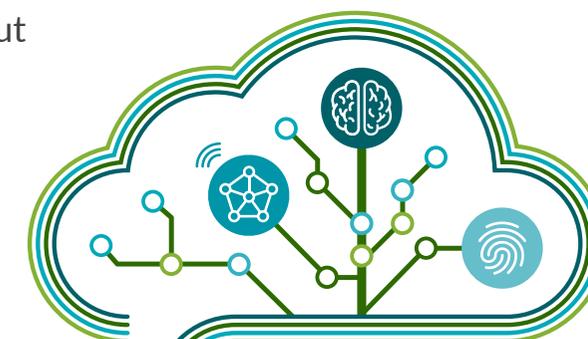
Cloud Metro portfolio: full-scale optimization

In summer 2022, we announced our expanded Cloud Metro solutions portfolio optimized for enabling business growth and achieving significant energy and emissions reductions. A new solutions category, Cloud Metro represents one of our most significant product sustainability improvements for 2022, applying cloud principles to architecting, building, and operating sustainable metro networks, allowing for more sustainable systems that deliver lower power and space consumption and longer system life to reduce carbon footprint and e-waste.

Advancing Product Sustainability

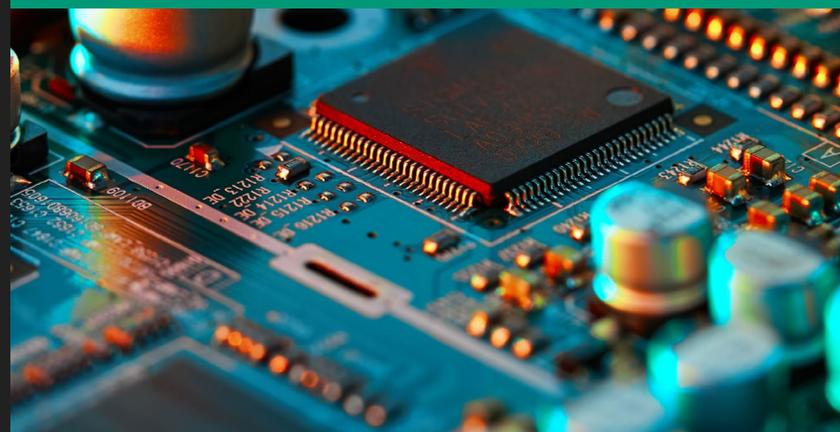
At Juniper, we're committed to enabling networks that deliver performance, automation, scalability, and security while constantly moving the needle toward lower energy consumption and greater overall sustainability. By focusing on performance and efficiency throughout our hardware and software products' lifecycle—from architecture to systems to operations—we improve our own environmental performance while empowering our customers to lower their operating expenses, reduce energy use, and meet their ambitions for carbon neutrality and net zero. Through the Juniper Certified Pre-Owned program, we contribute to the formation of a circular economy, and through our sustainable packaging initiatives we contribute to waste reduction.

We measure product energy efficiency in throughput per watt—a metric on which we've improved year after year, with each product iteration—and we include energy consumption specifications on all of our product technical sheets.



Sustainability through silicon

Our approach to custom chips in our ASIC design uses the latest and most efficient silicon technology, giving better yield in the cutting and use of silicon, with little waste. Given the energy-intensive nature of silicon chip creation, this represents valuable energy savings. To assure functionality, our “silicon flow test” during manufacturing places every newly produced chip on a non-permanent circuit board for testing, saving on product returns.



Creating Sustainable Architecture

Our focus on efficiency begins during the first phases of R&D and product design. All products that go through our New Product Introduction (NPI) process are assessed quantitatively to track improvements in energy usage, and are independently tested for performance against industry energy-efficiency standards. Our efficiency focus also keeps us ahead of evolving product efficiency standards in countries and jurisdictions worldwide.

We use the latest and most efficient silicon technology to reduce power consumption, cooling needs, and electricity requirements, and our sustainable network architecture provides future-proof performance with the highest IP services fabric scalability.

Trio & Express Silicon. For years, Juniper has embraced a multi-silicon strategy that offers our customers platforms with different chipsets optimized for different roles in the network. Ongoing design innovations with our Trio and Express Silicon—the two custom chipset families driving Juniper’s flagship MX and PTX families—deliver significant new features, performance, and scale with increasing power efficiencies to help our customers achieve sustainable, responsible digital transformation.

The Trio 6 chip set powers the industry’s highest-performing multi-service edge solutions portfolio with uncompromising logical scale, and Express 5 delivers the industry’s highest non-blocking throughput. Both use 7-nanometer fabrication technology and advanced architecture and design to deliver power-efficiency improvements of 73% and 49%, respectively, over previous-generation chipsets. Together, these new application-specific integrated circuits (ASICs) offer the flexibility to deploy platforms optimized for the most demanding logical scale or throughput requirements that different parts of the network require.

Increasing throughput via efficient thermal design

For nearly 60 years, chip technology progressed roughly in line with Moore’s Law that maintains that the number of transistors on a microchip doubles about every two years, the miniaturization bringing with it improvements in power, processing speed, and energy efficiency. But as semiconductor process technology approaches molecular limits, the associated efficiency gains are not enough to offset the effects of the massive increase in bandwidth/traffic through our systems. The net effect is newer systems with higher capacity but greater resulting heat generation. Since semiconductor components work reliably only within a specific temperature range, keeping their temperatures down requires continual innovation in thermal management.

Juniper’s thermal and mechanical teams have stepped up to the challenge. Starting from the feasibility study for ASICs, the thermal team works closely with the ASIC team to determine the ASIC’s thermal resistance based on the power map, and conducts a board- and system-level thermal simulation using a Computational Fluid Dynamics (CFD) simulation tool based on the system’s operating conditions. The thermal team then drives

the optimum design for effective and efficient heat dissipation, using thermal components such as heatsinks, thermal interface materials (TIM), and air movers based on the latest technology. The mechanical team works in tandem with the thermal team to build the heatsink assembly, keeping structural integrity and manufacturability in mind.

To reduce overall thermal resistance and provide better cooling of the high-power multi-chip module, Juniper moved from a lidded to lidless package in BT ASIC, allowing direct attachment of heatsinks to the die. And to address the different maximum temperature requirements between the ASIC and the high bandwidth memory (HBM), the mechanical team devised an innovative double-deck heatsink design that mounts an independent heatsink on both ASIC and HBM in the same package, providing thermal isolation.

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

**Driving Sustainable Systems
and Operations**

Product Lifecycle Management
& Circularity

Packaging Innovation



Driving Sustainable Systems and Operations

We aim to increase the lifespan of our products by building modular systems that can be easily upgraded and maintained. This approach allows our products to remain in the network for additional years, reducing maintenance, transportation, and other associated costs. We also create new and upgraded hardware designs that ensure thermal dynamics support optimal packet transport through the silicon and system.

For our Juniper ACX7000 Cloud Metro router family, we leverage adaptive power innovations that automatically turn off forwarding engines and software functions when not in use. Additionally, when comparing the ACX700 Cloud Metro router to competitor products our power consumption is up to 77% lower. Additionally, our Cloud Metro systems are expected to be in service four to seven years longer than alternatives on the market, protecting customer investment while reducing new manufacturing impacts and e-waste.

Our Paragon Automation works to reduce both direct and indirect emissions by minimizing the need for field visits. It achieves this by providing our customers with guided device field installations, automated onboarding workflows, and the ability to continually validate performance against objectives while remotely locating, troubleshooting, and fixing issues. By offering programmable, active testing, and monitoring that transform physical, hybrid, and virtual networks into 'sensors,' we enable our customers to reduce the network's physical footprint. This reduction is achieved by eliminating the need for separate appliances or servers for service quality monitoring.

Juniper's solutions built off Juniper Cloud relieves customers of the need to buy, deploy, and power additional on-premise servers, which avoids overbuilt networks and reduces the embodied carbon impacts of physical equipment. Cloud deployment also better assures that all servers are running at peak capacity, which lowers overall power consumption.

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

**Driving Sustainable Systems
and Operations**

Product Lifecycle Management
& Circularity

Packaging Innovation

A self-serve guide to our product lifecycle impacts

To meet increasing demand for Juniper product carbon footprint data, Juniper launched a customizable Power & CO₂ Calculator in January 2023 to help customers, partners, and employees understand the carbon footprint of products across the Juniper portfolio.

The Power & CO₂ Calculator breaks down carbon emissions across the different product lifecycle phases, based on the inputs of various product characteristics. The output includes GHG emissions estimates tied to the products' raw materials extraction and manufacturing, transportation, and other logistics, along with end-of-life/disposal. To inform the tool's calculations, Juniper worked with the internationally recognized sustainability consulting group Anthesis to gauge each Juniper product's approximate footprint across its lifecycle. These estimates are based on a combination of internal data and a benchmark review of available networking technology industry life cycle assessments (LCAs) for products similar to Juniper's. That review and analysis established connections between certain attributes of the product (such as product weight) that were demonstrated to have a close relationship with carbon emissions across the product lifecycle.

Juniper will seek customer feedback and continue to review alternative carbon footprint reporting approaches to enhance this methodology over time, as the industry works to converge on a standardized approach to calculating lifecycle impacts.



Product Lifecycle Management & Circularity

Juniper supports the vision of a circular economy that extracts the maximum possible value from all products and materials through planned reuse, remanufacturing, and recycling. We support this vision by designing for the complete product lifecycle, across six stages:

- 1. Engineering.** We design products with sustainability in mind, making them more efficient, reliable, and long-lasting.
- 2. Manufacturing.** We select suppliers and business partners that share our values and our commitment to environmental sustainability.
- 3. Use.** We build our products for flexibility, interoperability, and scalability, which we believe drive long-term customer value.
- 4. Repair.** We create modular designs that make our products easy to dismantle and service.
- 5. Refurbishment.** The Juniper Certified Pre-Owned Program lets our customers extend the life of their existing Juniper architecture, helping save e-waste from landfills and reduce carbon emissions.
- 6. Recycling.** We design products to be easily dismantled, and our parts are labeled to encourage recycling.

As part of our commitment to environmentally responsible behavior, our products comply with standards such as the European Union's Waste Electrical and Electronic Equipment (WEEE) Directive, the 2011/65/EU Restriction of Hazardous Substances (RoHS II) Directive, and the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation.

Juniper Circular Economy Programs

The durability and quality of Juniper’s hardware products contributes to the ideal of a circular economy, which minimizes waste and retains the intrinsic value of materials either in their original product configuration or, following the product’s usable life, as components or raw materials for new products.

Juniper’s MX240/480/960 family exemplifies our product longevity. These systems were introduced in 2007 – 10 years before the 400G standard was even ratified in 2017. And yet we delivered on 400G for these products. They continue to be deployed in hundreds of networks after all these years, and serve our customers especially well, given the tried, stable and rich feature set of the product family (software development is still ongoing after over 15 years).

To help our customers begin the transition to a circular economy and achieve their sustainability goals, Juniper has partnered with PureWrx to offer three circular

economy programs that cover the full spectrum of their product lifecycle needs:

Try & Buy Program. The circular Try & Buy program gives our customers a risk-free opportunity to try new Juniper products and get up and running faster while eliminating the e-waste that’s typical in lab and evaluation environments. At the end of their 60- to 90-day trial, customers can choose to purchase and keep the product or simply send it back to PureWrx in the original packaging. All returned products are then recertified and eligible for reuse by another customer or internal department.

Juniper Certified Pre-Owned (JCPO) Program. JCPO is the engine that drives Juniper’s circular economy offerings, allowing customers to purchase excess or previously used products that have undergone a rigorous remanufacturing, testing, and component/software updating process to ensure like-new quality and security. JCPO products are backed by Juniper’s warranty and eligible for the same world class J-Care support as new products.

To date, our Juniper Certified Pre-Owned program has helped over 1,000 Juniper customers avoid 3,629 metric tons of CO₂ emissions and prevent 66 tons of e-waste from going to landfill.

Sustainable Sourcing Program. Sustainable Sourcing helps customers get the greatest value out of end-of-use products while minimizing environmental impact. Customers wishing to sell decommissioned assets can request an offer from PureWrx and receive either cash payment or a higher-value credit for the purchase of another Juniper product, either new or through the JCPO program.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

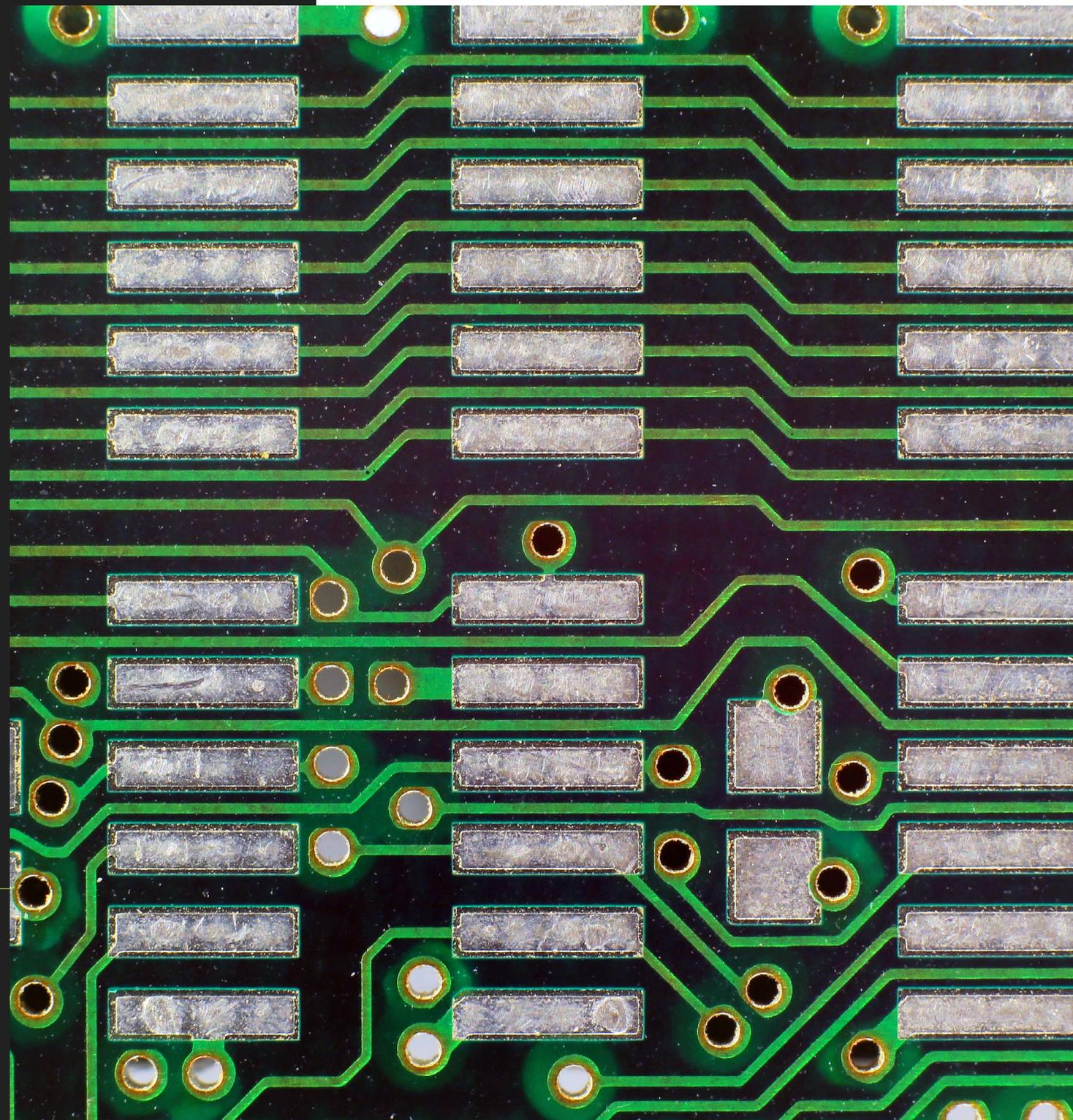
Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

**Product Lifecycle Management
& Circularity**

Packaging Innovation

APPENDICES



Product Repair & Recyclability

Juniper's modular product design makes repair simple and scalability possible. Our regional Global Return Centers give our customers a way to return products without incurring high logistics miles, travel costs, and air transport emissions. Our Juniper Certified Pre-Owned program (see above) extends the life of hardware products with the warranty and support that Juniper customers expect. In countries with producer-responsibility programs for components and products that can no longer be used, we partner with an industry leader in responsible electronics recycling to mitigate the resulting e-waste.

BUILD GLOBAL RESILIENCE

Our Carbon Neutral
Commitment

Reducing Our Operational
Footprint

Energy Management

Water & Wastewater
Management

Waste Reduction & Recycling

Advancing Product
Sustainability

Driving Sustainable Systems
and Operations

Product Lifecycle Management
& Circularity

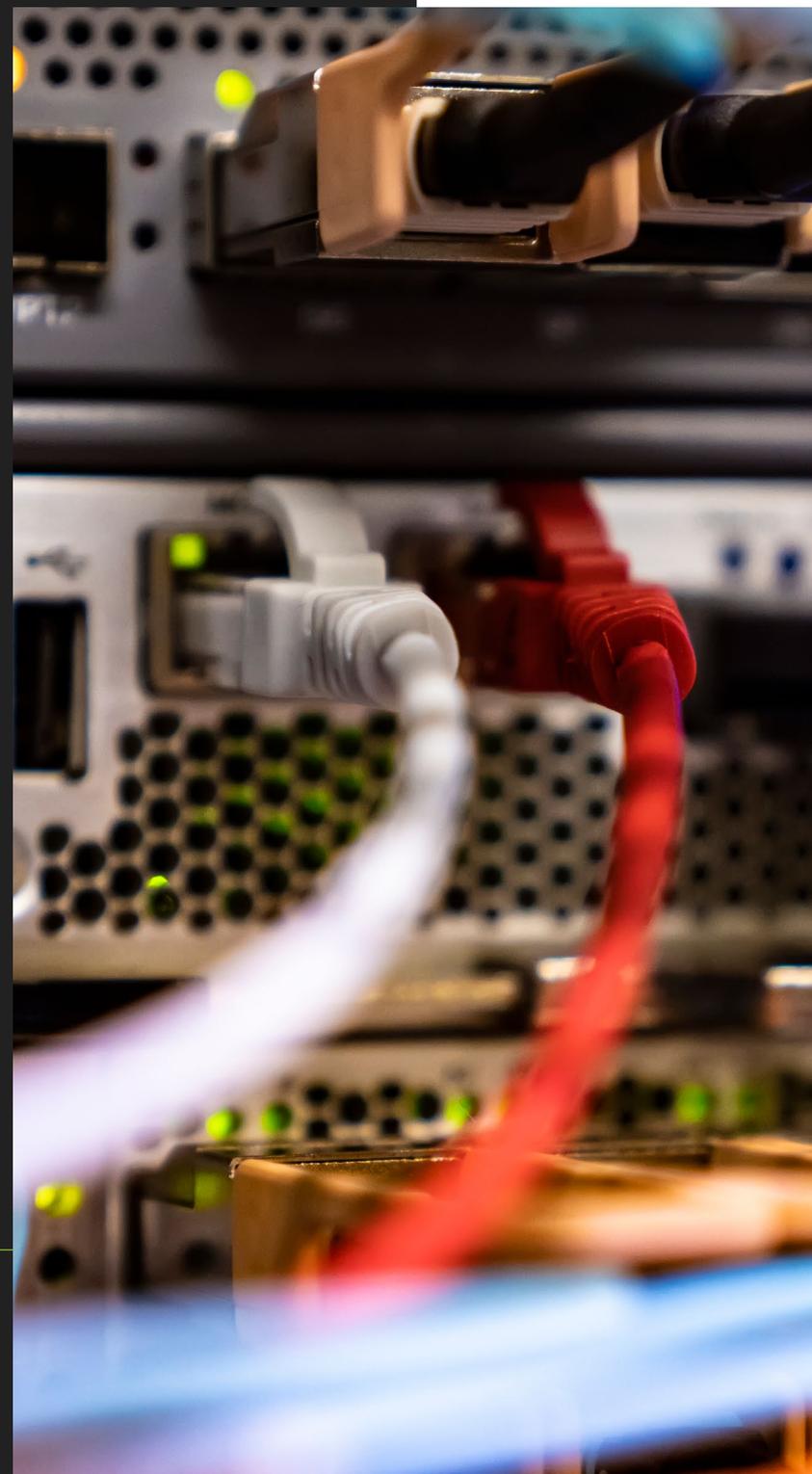
Packaging Innovation



Packaging Innovation

We are consistently working to create more sustainable packaging, meeting our customers' dual needs for environmental performance and effective product protection. We partner with our suppliers to encourage greater use of recycled recyclable and compostable content; work to reduce emissions by delivering lighter, more compact packaging for product transport; and reduce waste-to-landfill by replacing virgin polyethylene foam with recycled and recyclable materials.

In 2022, approximately 76% of the polyethylene (PE) foam used for Juniper packaging was made with recycled plastic content as a sustainable alternative to virgin plastic and we will work to continue making progress on increasing this. We increased our use of 100% recycled high-density polyethylene (HDPE) and continued to use ocean-bound plastic (OBP), subject to material availability, where possible. We also introduced and implemented 100% compostable/biodegradable packaging solutions on new systems packaging for products weighing less than 70 pounds.



Simplicity Engineered: Reducing E-Waste Out of the Box

In 2022, we conducted a field survey to better understand the customer unpacking and setup process for Juniper products, and capture valuable insights:

- Because our customers often want power cords of specific lengths or colors, they would routinely discard the cords included with their order. Customers frequently discarded the accessory kits we included with our switches.
- Customers were frustrated at the time and effort required to unbox individual optics and wanted simpler solutions.

In response, we began offering the option not to include power cords with our network switches and changed our Bill of Materials to remove infrequently needed accessories (making them separately orderable instead). To address unboxing frustration, we improved our communication to inform customers of our option to order optics in a bulk package to save time and reduce waste. We are considering a policy of changing the default for direct customers and partners who don't hold inventory to allow for bulk ordering, and are working on a similar solution for distributors.

These efforts have led to a larger movement toward waste reduction at Juniper, with teams across the company sharing information to ensure all departments can collect customer perspectives, change our processes to better meet their needs, and reduce product and shipping waste. We are currently tracking metrics on e-waste reduction and CO₂ emissions to inform these efforts.

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

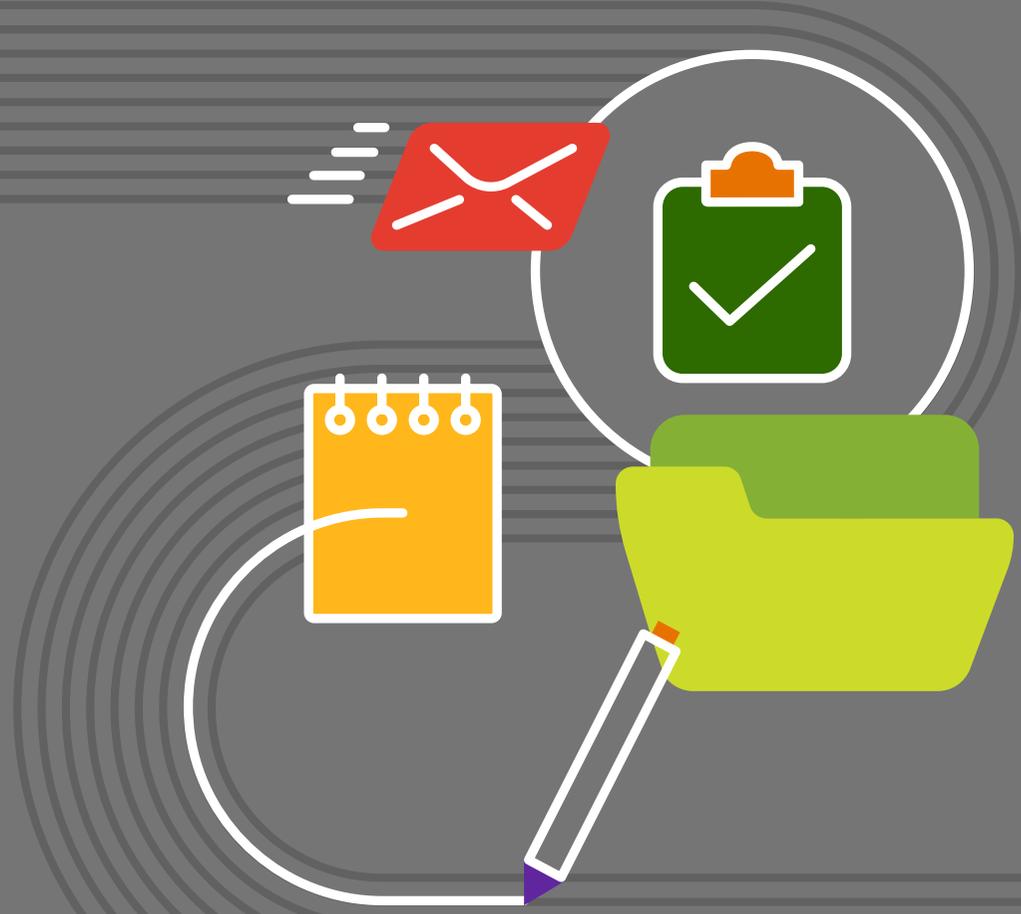
Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index



Appendices

APPENDICES

**Memberships, Associations
and Partnerships**

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

(GRI 2-28)

Memberships, Associations and Partnerships

Public Policy and Government Affairs

- Information Technology Industry Council
- US-India Business Council
- US-India Strategic Partnership Forum
- TechNation Canada
- Open RAN Policy Coalition
- IT Sector Coordinating Council
- Communications Sector Coordinating Council
- DHS Joint Cyber Defense Collaborative

CSR / ESG

- RBA (<https://www.responsiblebusiness.org>)
- CDP (<https://www.cdp.net/en>)
- RMI (<https://www.responsiblemineralsinitiative.org>)
- UNGP (<https://unglobalcompact.org/>)
- JAC (<https://www.sgs.com/en/services/joint-alliance-for-csr-jac>)

Supplier Diversity

- Western Regional Minority Supplier Development council
- Women Business Enterprise Council

Open Source

- LFN – Linux Foundation for Networking (<https://lfnetworking.org>)

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

**Memberships, Associations
and Partnerships**

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Optics Network Technology Memberships

- COBO (www.onboardoptics.org)
- EA (www.ethernetalliance.org)
- OIF (www.oiforum.com)
- IEEE (<https://www.ieee.org/>)
- ETC
- SNIA-SFF-TA (www.snia.org)
- 100G Lambda MSA
- OpenEye MSA
- OpenZR+ MSA
- OSFP MSA
- QSFP-DD MSA
- SFP-DD MSA
- CPO JTCA

Technology Sector Memberships

- 3GPP (www.3gpp.org)
- Accellera (<https://accellera.org/>)
- ATIS (www.atis.org)
- BBF (www.broadband-forum.org)
- BLE SIG (<https://www.bluetooth.com/>)
- ETSI (www.etsi.org/)
- FIRST (www.first.org)
- GSMA (www.gsma.com)
- IEEE (<https://www.ieee.org>)
- IETF (www.ietf.org)
- IOWN (www.iowngf.org)
- ISOC (www.isoc.org/)
- ITU-T (www.itu.int/ITU-T)
- MEF (www.mef.net/about-mef)
- NetSecopen (www.netsecopen.org)
- NGMN (<https://www.ngmn.org>)
- OnGo Alliance (<https://ongoalliance.org/>)
- O-RAN Alliance (<https://www.o-ran.org>)
- Open RAN Policy Coalition (www.openranpolicy.org/)
- PCI SIG (<https://pcisig.com>)
- QuEST Forum (www.tiaonline.org)
- TCG (<https://www.trustedcomputinggroup.org>)
- TIP (www.telecominfraproject.com)
- TM Forum (<https://www.tmforum.org>)
- WI FI ALLIANCE (WFA) (www.wi-fi.org)
- Wireless Broadband Alliance (WBA) (www.wballiance.com)

Material Topic Boundaries

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Material Topic	Topic Boundaries	Relevant GRI Disclosures
Environmental Topics		
Climate Strategy	Efforts to address risks and opportunities presented by climate change, reduce energy consumption and greenhouse gas emissions across the value chain including product energy use, our own operations, and those of our suppliers. Includes product efficiency, operational energy efficiency and conservation, and renewable energy.	GRI 301 GRI 302 GRI 303 GRI 305 GRI 306 GRI 308
Operational Footprint	Refers to compliance to environmental regulations/legislations and adopting principles, practices and processes that minimize, eliminate, and manage the negative environmental impacts and waste generated (hazardous and non-hazardous) from the organization's own activities and in its value chain through circularity measures.	GRI 302 GRI 303 GRI 305 GRI 306
Social Topics		
Social Impact	Giving back to communities and society to effect positive change within communities in which we and our suppliers operates. This includes company philanthropy and donations, community engagement, employee volunteering and fundraising in support of hunger relief, disaster relief, and other causes that impact local communities.	GRI 413
Inclusion & Diversity	Developing a conscious culture that promotes diversity, inclusion, and equitable opportunities at all levels of the organization and throughout our value chain through policies, training and engagement. This includes initiatives aimed to ensure equality inclusive of gender, generation, race, ethnicity, orientation, ability, nationality, religion, veteran status, background, culture, experience, strengths, and perspectives.	GRI 401 GRI 404 GRI 405 GRI 406 GRI 407
Human Rights & Labor Practice	Efforts to protect human rights, including the eradication of human trafficking, modern slavery, and forced and child labor as well as promote wellbeing of employees, laborers, contractors, contingent workforce and workers in our supply chain which encompass ethical, fair, and responsible sourcing and supplier conduct. Social compliance by suppliers; fair working conditions; fair wages; human rights; ethical sourcing of raw materials (e.g., conflict minerals); and contractor training, incentives, benefits, health and wellbeing are all included under this topic.	GRI 407 GRI 408 GRI 409 GRI 414

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Material Topic	Topic Boundaries	Relevant GRI Disclosures
Human Capital Development	Refers to the mental and physical condition of employees with respect to their health, happiness, comfort and morale. It includes initiatives that promote healthy lifestyles, offer physical and social activities within a company, and support mental health, as well as work arrangements that allow employees a level of autonomy to follow a work schedule aligned with a work-life balance that best suits them.	GRI 403 GRI 404
Governance Topics		
Business Integrity	Ethical and transparent conduct by Juniper in its business dealings, and among employees, suppliers, business partners. Includes regulatory compliance; anti-corruption and anti-bribery; fair business, marketing, and competition; non-retaliation; transparent participation in elections and policy.	GRI 205 GRI 206
Corporate Governance	Corporate governance policies that include corporate strategy, risk management, executive compensation, accountability, transparency and security.	GRI 201 GRI 415
Cybersecurity & Data Privacy	Maintaining strong protections for Juniper's customers, solutions, workers and company by safeguarding the security and reliability of the network, promoting security and privacy in the development of our solutions, processes, systems, and services, and securing our value chain.	N/A
Transparency & Disclosure	Emphasizes transparency in reporting the company's sustainability and corporate social responsibility goals, progress, and programs using relevant, benchmarked, and easily accessible public disclosures.	GRI 207
ESG Governance	Emphasizes the responsibility of the Juniper's leadership for decision-making on economic, environmental, social, and governance topics, and that leadership's consultation of stakeholders on these topics including ESG strategy, objectives, and goals. This refers to the governance bodies and organizational structures that define and manage Juniper's ESG strategy, objectives and goals.	GRI 2-12 GRI 2-14
Customer Satisfaction	Refers to the degree to which end-users feel Juniper products meet or exceed performance expectations and emphasizes sustained product quality.	GRI 416 GRI 417
Business Continuity	Refer to business planning and preparation to ensure that Juniper can continue to operate in case of serious incidents or disasters and is able to recover to an operational state within a reasonably short period of time.	N/A

GRI Content Index

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Statement of use: Juniper Networks Inc. has reported the information cited in this GRI content index for the period January 1st, 2022 to December 31st, 2022 with reference to the GRI Standards.

GRI 1 used “GRI 1: Foundation 2021”

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 2-1	Organizational details	Juniper At a Glance on p. 8
Disclosure 2-2	Entities included in the organization’s sustainability reporting	About this Report on p. 2 and the 2022 Form 10-K .
Disclosure 2-3	Reporting period, frequency, and contact point	About this Report on p. 2
Disclosure 2-4	Restatements of information	Emissions data for 2021 is restated from prior publications to reflect improved measurement methods and enhanced data quality, with better quantification of certain emittance, revised product transport data, revised purchased goods and services data, and more complete use of sold products data. Changes calculated across all three scopes were needed to provide data sufficient for comparability, consistent with the CDP Technical Note on Restatements. Emissions data reported in, or related to, prior years should not be relied upon as they do not reflect updated measurement methods and enhanced data quality. The emissions restatement resulted in higher Scope 1 and Scope 2 (location- and market-based) emissions, and lower Scope 3 emissions for 2021.
Disclosure 2-5	External assurance	The General Counsel/SVP takes part in deciding both internal and external assurance of data in the CSR Report. In terms of Board-level oversight of ESG data/disclosures, see p.15 in our 2022 Proxy Statement . Juniper has received limited assurance of its 2022 Scope 1, Scope 2, and Scope 3 Category 4 Upstream Transportation and Distribution emission totals from an independent third-party verifier in accordance with the ISAE 3000 standard. For more details, please request a copy of our limited assurance report.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 2-6	Activities, value chain and other business relationships	2022 Form 10-K on p.4-19.
Disclosure 2-7	Employees	Our Business and Operations on p. 11
Disclosure 2-8	Workers who are not employees	Our Business and Operations on p. 11
Disclosure 2-9	Governance structure and composition	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 4-10.
Disclosure 2-10	Nomination and selection of the highest governance body	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 10-12.
Disclosure 2-11	Chair of the highest governance body	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 1-12.
Disclosure 2-12	Role of the highest governance body in overseeing the management of impacts	ESG Governance Structure on p. 29 and 2023 Proxy Statement on p. 13-17.
Disclosure 2-13	Delegation of responsibility for managing impacts	ESG Governance Structure on p. 29 and 2023 Proxy Statement on p. 13-17.
Disclosure 2-14	Role of the highest governance body in sustainability reporting	ESG Governance Structure on p. 29
Disclosure 2-15	Conflicts of interest	Business Integrity on p. 58 and Worldwide Code of Business Conduct on p. 16-17.
Disclosure 2-16	Communication of critical concerns	Business Integrity on p. 62, 2022 Form 10-K on p. 55, and Worldwide Code of Business Conduct on p. 6.
Disclosure 2-17	Collective knowledge of the highest governance body	ESG Governance Structure on p. 30 and 2023 Proxy Statement on p. 15.
Disclosure 2-18	Evaluation of the performance of the highest governance body	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 11-12.
Disclosure 2-19	Remuneration policies	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 20-21 & 46-54.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 2-20	Process to determine remuneration	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 20-21, 33-34 & 46-54.
Disclosure 2-21	Annual total compensation ratio	Corporate Governance on p. 50 and 2023 Proxy Statement on p. 81.
Disclosure 2-22	Statement on sustainable development strategy	Message from Our CEO on p. 6
Disclosure 2-23	Policy commitments	Business Integrity on p. 59
Disclosure 2-24	Embedding policy commitments	Business Integrity on p. 55
Disclosure 2-25	Processes to remediate negative impacts	Business Integrity on p. 62
Disclosure 2-26	Mechanisms for seeking advice and raising concerns	Business Integrity on p. 62
Disclosure 2-27	Compliance with laws and regulations	Business Integrity on p. 56. Any instances that meet our threshold of significance are reported in our 2022 Form 10-K on p. 31.
Disclosure 2-28	Membership associations	Membership, Associations and Partnerships on p. 139
Disclosure 2-29	Approach to stakeholder engagement	Stakeholder Communication & Engagement on p. 27
Disclosure 2-30	Collective bargaining agreements	7.13% (+/- 0.5%) of Juniper employees are covered by collective bargaining agreements.
GRI 201: Economic Performance 2016		
Disclosure 3-3	Topic Management Disclosure	2022 Form 10-K on p. 60.
Disclosure 201-1	Direct economic value generated and distributed	2022 Form 10-K on p. 58-62.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 201-2	Financial implications and other risks and opportunities due to climate change	2022 Form 10-K , Item 1A.
Disclosure 201-3	Defined benefit plan obligations and other retirement plans	2022 Form 10-K on p. 93.
Disclosure 201-4	Financial assistance received from government	We received no financial assistance from government in 2022.
GRI 205: Anti-corruption 2016		
Disclosure 3-3	Topic Management Disclosure	Business Integrity on p. 63 and our Anti-Corruption Policy .
Disclosure 205-1	Operations assessed for risks related to corruption	Business Integrity on p. 63
Disclosure 205-2	Communication and training about anti-corruption policies and procedures	In 2022, 100% of Juniper employees and our Audit Committee members (3) were provided the FY22 Code of Conduct Training, which includes references to anti-corruption policy. 100% (2,376) of new business partners in FY22 were provided with the Business Partner Code of Conduct.
Disclosure 205-3	Confirmed incidents of corruption and actions taken	There have been no confirmed incidents of bribery.
GRI 206: Anti-competitive Behavior 2016		
Disclosure 3-3	Topic Management Disclosure	Business Integrity on p. 59
Disclosure 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	In 2022, there were no legal actions against Juniper regarding anti-competitive behavior.
GRI 207: Tax 2019		
Disclosure 3-3	Topic Management Disclosure	Please see our Global Tax Strategy .
Disclosure 207-1	Approach to tax	Business Integrity on p. 66 and our Global Tax Strategy .

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 207-2	Tax governance, control, and risk management	Business Integrity on p. 66
Disclosure 207-3	Stakeholder engagement and management of concerns related to tax	Business Integrity on p. 66
Disclosure 207-4	Country-by-country reporting	Juniper Networks' only resident tax jurisdiction is the United States. The U.S. competent authorities then share this information with other tax authorities and governments either automatically via data exchange or upon request.
GRI 301: Materials 2016		
Disclosure 3-3	Topic Management Disclosure	We are omitting this disclosure in 2023, as we are working to ensure data accuracy.
Disclosure 301-1	Materials used by weight or volume	We are omitting this disclosure in 2023, as we are working to ensure data accuracy.
Disclosure 301-2	Recycled input materials used	We are omitting this disclosure in 2023, as we are working to ensure data accuracy.
Disclosure 301-3	Reclaimed products and their packaging materials	We are omitting this disclosure in 2023, as we are working to ensure data accuracy.
GRI 302: Energy 2016		
Disclosure 3-3	Topic Management Disclosure	Energy Management on p. 123
Disclosure 302-1	Energy consumption within the organization	Energy Management on p. 124
Disclosure 302-2	Energy consumption outside of the organization	Scope 3 emissions were calculated using spend-based calculation methodology, not energy-use data.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 302-3	Energy intensity	262,546.55 MWh / \$5,301,200,000 unit total revenue = 0.000049 We currently only track energy consumption related to Scope 1 and 2 emissions.
Disclosure 302-4	Reduction of energy consumption	Data to calculate energy use reduction is not tracked at this level of detail.
Disclosure 302-5	Reductions in energy requirements of products and services	Data to calculate energy requirement reductions is not tracked at this level of detail.
GRI 303: Water and Effluents		
Disclosure 3-3	Topic Management Disclosure	Water & Wastewater Management on p. 125
Disclosure 303-1	Interactions with water as a shared resource	Water & Wastewater Management on p. 125-126
Disclosure 303-2	Management of water discharge-related impacts	Water discharges from 100% of sites under Juniper operational control are to the local utility operated sanitary system. There are no additional water treatment standards beyond local regulatory requirements.
Disclosure 303-3	Water withdrawal	Water & Wastewater Management on p. 126
Disclosure 303-4	Water discharge	Water & Wastewater Management on p. 126. Due to a lack of data, we did not include data for breakdown of total water discharge, discharge to areas with water stress, or priority substances of concern for which discharges are treated.
Disclosure 303-5	Water consumption	Water & Wastewater Management on p. 126. Change in water storage is not identified as a significant impact. Total water consumption from all areas with water stress could not be disclosed due to data not being available.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
GRI 305: Emissions 2016		
Disclosure 3-3	Topic Management Disclosure	Our Carbon Neutral Commitment on p. 117
Disclosure 305-1	Direct (Scope 1) GHG emissions	Reducing Our Operational Footprint on p. 121
Disclosure 305-2	Energy indirect (Scope 2) GHG emissions	Reducing Our Operational Footprint on p. 121
Disclosure 305-3	Other indirect (Scope 3) GHG emissions	Reducing Our Operational Footprint on p. 121
Disclosure 305-4	GHG emissions intensity	<p>Scope 1 and Scope 2 emissions intensity: 2021: 108,035 tCO₂e / \$4,735,000,000 unit total revenue = 0.000023 2022: 106,075 tCO₂e / \$5,300,000,000 unit total revenue = 0.000020</p> <p>Scope 3 emissions intensity: 2021: 1,515,616 tCO₂e / \$4,375,000,000 unit total revenue = 0.00032 2022: 1,648,224 tCO₂e / \$5,300,000,000 unit total revenue = 0.00031</p>
Disclosure 305-5	Reduction of GHG emissions	Reducing Our Operational Footprint on p. 119
Disclosure 305-6	Emissions of ozone-depleting substances (ODS)	Juniper does not produce, import or export ODSs. We do use and track certain ODS refrigerants (e.g. R22) in chiller equipment with potential for refrigerant losses. In 2022, losses were substantially under 1 MT CFC-11E.
Disclosure 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	We are omitting this disclosure in 2023, as we are working to ensure data accuracy. We expect to disclose this information in future reporting.
GRI 306: Waste 2020		
Disclosure 3-3	Topic Management Disclosure	Waste Reduction & Recycling on p. 127
Disclosure 306-1	Waste generation and significant waste-related impacts	We are omitting this disclosure in 2023, as we are working to ensure data accuracy. We expect to disclose this information in future reporting.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 306-2	Management of significant waste-related impacts	We are omitting this disclosure in 2023, as we are working to ensure data accuracy. We expect to disclose this information in future reporting.
Disclosure 306-3	Waste generated	Waste Reduction & Recycling on p. 127
Disclosure 306-4	Waste diverted from disposal	We are omitting this disclosure in 2023, as we are working to ensure data accuracy. We expect to disclose this information in future reporting.
Disclosure 306-5	Waste directed to disposal	We are omitting this disclosure in 2023, as we are working to ensure data accuracy. We expect to disclose this information in future reporting.
GRI 308: Supplier Environmental Assessment 2016		
Disclosure 3-3	Topic Management Disclosure	Supply Chain Management on p. 67
Disclosure 308-1	New suppliers that were screened using environmental criteria	100% of new component or contract manufacturing suppliers were assessed for environmental criteria by our internal tool and by our third-party risk service during 2022.
Disclosure 308-2	Negative environmental impacts in the supply chain and actions taken	105 suppliers assessed for environmental impacts. None were identified as having significant actual and potential negative environmental impacts.
GRI 401: Employment 2016		
Disclosure 3-3	Topic Management Disclosure	Evolving Our Employee Value Proposition on p. 79
Disclosure 401-1	New employee hires and employee turnover	Building the Next Generation of Tech Talent on p. 85
Disclosure 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Training & Development on p. 96
Disclosure 401-3	Parental leave	Training & Development on p. 95

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
GRI 403: Occupational Health and Safety 2018		
Disclosure 3-3	Topic Management Disclosure	Environmental, Health, Safety & Security (EHSS) on p. 112
Disclosure 403-1	Occupational health and safety management system	Environmental, Health, Safety & Security (EHSS) on p. 112
Disclosure 403-2	Hazard identification, risk assessment, and incident investigation	Environmental, Health, Safety & Security (EHSS) on p. 113
Disclosure 403-3	Occupational health services	Environmental, Health, Safety & Security (EHSS) on p. 112
Disclosure 403-4	Worker participation, consultation, and communication on occupational health and safety	Environmental, Health, Safety & Security (EHSS) on p. 113
Disclosure 403-5	Worker training on occupational health and safety	Environmental, Health, Safety & Security (EHSS) on p. 114
Disclosure 403-6	Promotion of worker health	Environmental, Health, Safety & Security (EHSS) on p. 114
Disclosure 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Environmental, Health, Safety & Security (EHSS) on p. 114
Disclosure 403-8	Workers covered by an occupational health and safety management system	Environmental, Health, Safety & Security (EHSS) on p. 112
Disclosure 403-9	Work-related injuries	Environmental, Health, Safety & Security (EHSS) on p. 113
Disclosure 403-10	Work-related ill health	In 2022, Juniper had one recorded work-related illness resulting in fatality or ill-health.
GRI 404: Training and Education 2016		
Disclosure 3-3	Topic Management Disclosure	Training & Development on p. 91
Disclosure 404-1	Average hours of training per year per employee	Training & Development on p. 94

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
Disclosure 404-2	Programs for upgrading employee skills and transition assistance programs	Training & Development on p. 91
Disclosure 404-3	Percentage of employees receiving regular performance and career development reviews	Juniper Networks conducts “Conversation Days” twice per year. See Training & Development on p. 93
GRI 405: Diversity and Equal Opportunity 2016		
Disclosure 3-3	Topic Management Disclosure	Inclusion & Diversity at Juniper on p. 97
Disclosure 405-1	Diversity of governance bodies and employees	Inclusion & Diversity at Juniper on p. 101
Disclosure 405-2	Ratio of basic salary and remuneration of women to men	We are omitting this disclosure in 2022, as we are working to ensure data accuracy. We expect to disclose this information in future reporting for 2023.
GRI 406: Non-discrimination 2016		
Disclosure 3-3	Topic Management Disclosure	Inclusion & Diversity at Juniper on p. 99
Disclosure 406-1	Incidents of discrimination and corrective actions taken	Due to confidentiality, Juniper does not report details regarding specific incidents of discrimination during the reporting period.
GRI 407: Freedom of Association and Collective Bargaining 2016		
Disclosure 3-3	Topic Management Disclosure	Supply Chain Management on p. 74
Disclosure 407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Supply Chain Management on p. 74 and our Modern Slavery Statement
GRI 408: Child Labor 2016		
Disclosure 3-3	Topic Management Disclosure	Supply Chain Management on p. 74
Disclosure 408-1	Operations and suppliers at significant risk for incidents of child labor	Supply Chain Management on p. 74

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
GRI 409: Forced or Compulsory Labor 2016		
Disclosure 3-3	Topic Management Disclosure	Supply Chain Management on p. 74
Disclosure 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	We have no reported incidents of forced labor, however we are aware there are risks. Some of the risks we flag in our supply chain include: working hours that go beyond allowable rates, inappropriate worker fees, and holding of worker identity documents. These are all remediated if found.
GRI 413: Local Communities 2016		
Disclosure 3-3	Topic Management Disclosure	Community Engagement & Social Impact on p. 107
Disclosure 413-1	Operations with local community engagement, impact assessments, and development programs.	4 out of 9 of our large operation sites (100+ employees) engage with local communities through work councils, OHS committees and other worker representation bodies. 2 out of 9 of our large operation sites participate in social impacts assessments.
GRI 414: Supplier Social Assessment 2016		
Disclosure 3-3	Topic Management Disclosure	Supply Chain Management on p. 71
Disclosure 414-1	New suppliers that were screened using social criteria	100% of new component or contract manufacturing suppliers were assessed for social criteria by our internal tool and by our third-party risk service during 2022.
Disclosure 414-2	Negative social impacts in the supply chain and actions taken	In 2022, 43 suppliers were assessed and none were found to have significant negative social impacts.
GRI 415: Public Policy 2016		
Disclosure 3-3	Topic Management Disclosure	Business Integrity on p. 65
Disclosure 415-1	Political contributions	We did not make any political contributions in the reporting period.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

GRI Disclosure	Topic	2022 Report Location / Narrative Response
GRI 416: Customer Health and Safety 2016		
Disclosure 3-3	Topic Management Disclosure	The health and safety impacts of Juniper products are assessed during the certification and manufacturing/production lifecycle phases. Juniper is committed to providing products that undergo EMC safety testing for all markets it sells. Juniper provides assurance materials in its products and packaging conform with the EU Waste Directive, and the RoHS and REACH product environmental health regulations.
Disclosure 416-1	Assessment of the health and safety impacts of product and service categories	100% of hardware product categories receive EMC safety testing (electromagnetic) and 99.96% of categories are evaluated for RoHS/REACH/Prop 65 and TSCA (toxic/harmful materials). This is due to a single SKU that is not sold into the EU market.
Disclosure 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	In 2022, there were no incidents reported on health and safety grounds to our compliance hotline.
GRI 417: Marketing and Labeling 2016		
Disclosure 3-3	Topic Management Disclosure	Juniper provides the information our customers need through marketing and labeling. We ensure proper labeling of all products in accordance with applicable laws.
Disclosure 417-1	Requirements for product and service information and labeling	Juniper's Process Engineering Department issues specifications establishing prerequisites and processes for associated information and labeling of products. Juniper designs, manufactures, and tests our products to be fully compliant with environmental material requirements. Juniper's prerequisites for the CE Label means we carry out EMC safety testing of all product types we ship.
Disclosure 417-2	Incidents of non-compliance concerning product and service information and labeling	We did not register any incidents during the reporting period.

SASB Disclosures Index

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

SASB Hardware 2018

TC-HW 230 – Product Security

TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products	Product Security on p. 33
--------------	---	---------------------------

TC-HW 330 – Employee Diversity & Inclusion

TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	Content disclosed as part of GRI 405-1. Refer to GRI Index for additional information.
--------------	--	--

TC-HW 410 – Product Lifecycle Management

TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	94%
TC-HW-410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	0%
TC-HW-410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	0%
TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	Among the sources of e-waste identified, we recovered 233 tons of e-waste, of which 70% (69.55) was directed to a recycling service.

APPENDICES

Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

SASB Hardware 2018

TC-HW 430 – Supply Chain Management

TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	For the Tier 1 suppliers for which we requested an audit, 96% of those manufacturing facilities were audited. 100% of Tier 1 suppliers' manufacturing facilities categorized as high-risk were audited.
TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Supply Chain Management on p. 73

TC-HW 440 – Materials Sourcing

TC-HW-440a.1	Description of the management of risks associated with the use of critical materials	Juniper's Environmental Product Design (EPD) team is tasked with managing the regulatory compliance of Juniper products throughout the product lifecycle. Currently, there is no regulation requiring the management of risk around critical materials and therefore Juniper EPD is not tracking critical materials and managing risk.
--------------	--	--

TCFD Index

Governance: Board Oversight of Climate-Related Risks and Opportunities

Our Board exercises oversight of climate matters both through the Audit Committee and Nominating and Governance Committee, and the full Board receives education on the potential effect of climate change on the company, expectations on disclosure, as well as regulatory requirements for climate governance. The Audit Committee oversees our ESG and climate-related risk management as part of our overall risk management, as well as reviews ESG disclosures in SEC filings to ensure that we are adhering to our existing controls and procedures. The Nominating and Governance Committee is responsible for oversight of ESG and climate change mitigation programs, including policies, disclosures, and practices. Members of the Legal Department routinely provide ESG knowledge development to the Board. The Board receives an annual report on CSR activities, which includes an in-person update on climate risk management. In 2022, separate from the CSR briefing, the Board received two presentations on climate-related risk management from external experts covering coming climate regulations including the SEC’s proposed climate disclosure rule.

The Audit Committee considers financial matters related to reaching the Company’s climate goals. For example, in 2023, the Audit Committee was counseled on Virtual Power Purchase Agreements (VPPAs) as an opportunity to assist the Company in facilitating the creation of new renewable energy capacity, which would serve the broader market. The Board also receives a quarterly scorecard on progress toward carbon reduction goals.

Governance: Management’s Role in Assessing and Managing Climate-Related Risks and Opportunities

Juniper has multiple levels of management involved in assessing and managing climate-related risks – please see the climate-related risk management oversight structure on the following page. However, management’s role in assessing climate opportunities is not limited to this structure, as management also uses the strategy review process to identify where opportunities exist and on what timetable. In 2022, the Executive Committee participated in a strategy session that examined the sustainability attributes that certain customers seek in Juniper operations and products.

CLIMATE RISK MANAGEMENT OVERSIGHT STRUCTURE

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST
& GOVERNANCE

ENABLE THE WORKFORCE
OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

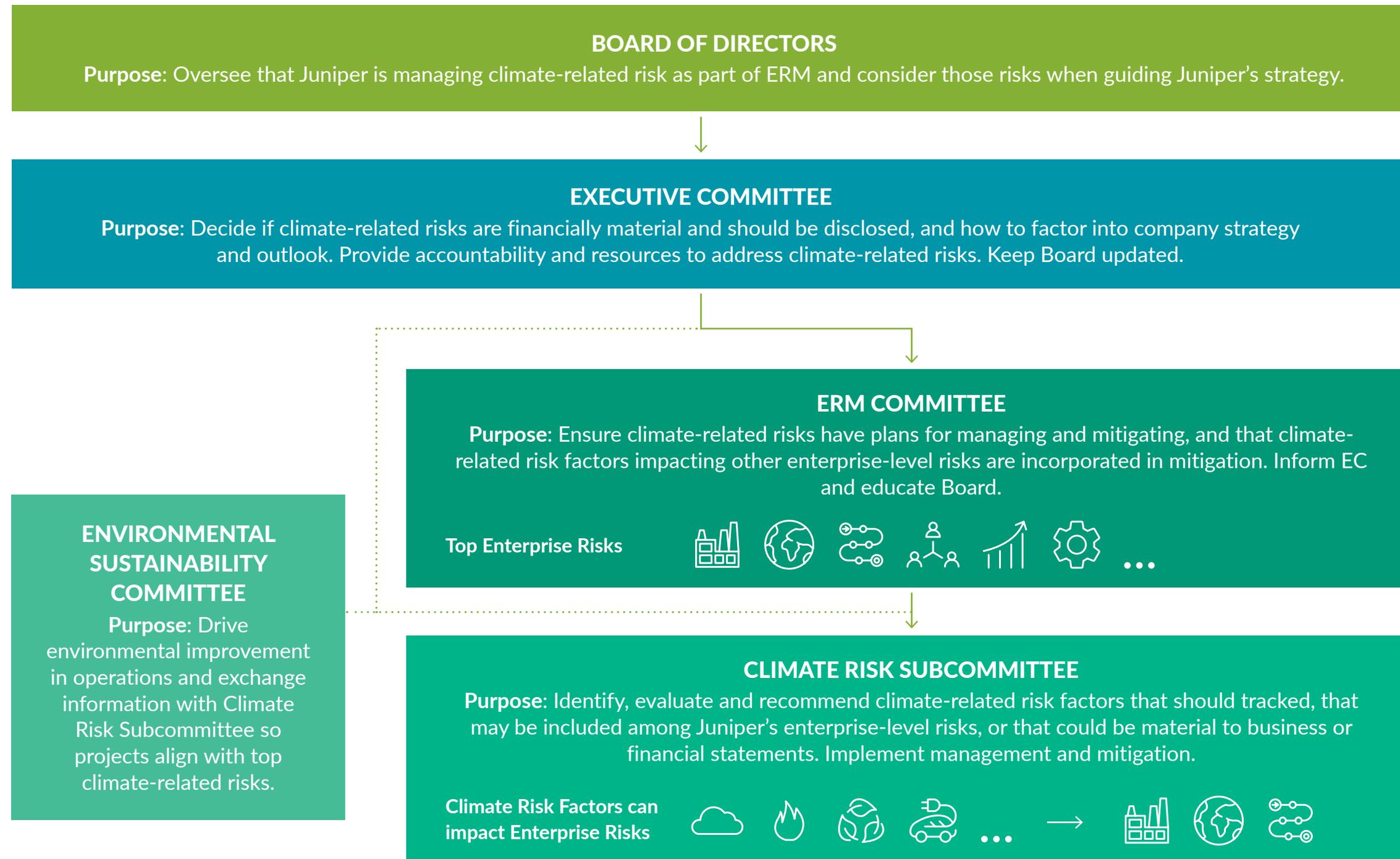
Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index



APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Strategy: Identified Climate-Related Risks and Opportunities

Juniper has not yet interpreted any of the identified climate-related risk factors as financially-material to the company or its outlook. We use the following planning horizons for purposes of assets and infrastructure and climate impact:

	From (years)	To (years)
Short-term	0	3
Medium-term	4	5
Long-term	More than 5 years	

The following climate-related issues (what we call climate factors) are those identified as possibly impacting Juniper within the stated planning horizons:

Short-term	Physical	Heat/Drought Frequency or Severity affects availability of power or water for suppliers
Short-term	Physical	Tropical Storm Frequency or Severity affects production, distribution, or operations in value chain
Short-term	Physical	Monsoon Season Severity affects production, distribution, or operations in value chain
Short-term	Physical	Fire/Smoke from wildfires affects operations and customer support of Juniper

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Short-term	Opportunity	Product Energy Efficiency requirements posed by customers
Short-term	Transition	Site and Cloud Hosting Selection for Juniper and value chain impact carbon emissions
Short-term	Opportunity	Site Consolidation reduces energy footprint through optimization/virtualization
Short-term	Transition	Climate Laws and Regulations that exist or emerge must be costed for and incorporated
Short-term	Transition	Climate Goals/Metrics/Reporting not viewed as effective, accurate, complete, or in compliance with laws and regulations
Short-term	Transition	Poor Climate Data from value chain actors affects accuracy and completeness of reporting
Short-term	Transition	Carbon Offset/RECs unable to be used due to cost/scarcity or regulatory/policy change
Short-term	Transition	Site Energy Efficiency Upgrades needed for regulations/cost savings affect value chain
Short-term	Physical	Severe Weather Events broadly disrupt IT network traffic
Medium-term	Physical	Blackouts/Brownouts affects operations and customer support of Juniper
Medium-term	Transition	Higher Fossil Fuel Costs affect parts of value chain slow to adopt clean energy
Medium-term	Transition	Effectiveness of Emissions Reduction given changing offset/REC landscape and contingent and non-contingent financial obligations
Medium-term	Opportunity	Regulations and Incentives for energy efficient products in the networking space
Medium-term	Transition	Customer Requirements for Energy Efficiency including third-party certifications
Long-term	Physical	Sea Level Rise causes flooding threat to parts of value chain
Long-term	Transition	Product Hardware/Software must support energy efficient applications and be climate resilient

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

The process for interpreting if these risk factors are financially-material involves:

1. Identifying and collecting climate-related risk factors through input from members of the Climate Risk Management Subcommittee and their departments, items identified through a third-party risk identification tool, items identified by our insurance provider, and examining whether illustrative examples apply to Juniper. (consulting Appendix 1 of the *Task Force on Climate-related Financial Disclosures Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures (2021)*; Figure E1, Table E2, and Figure A2-5 of the *Task Force on Climate-related Financial Disclosures Guidance on Scenario Analysis for Non-Financial Companies (2022)*; and the Digital Futures Society's *Risks and Opportunities of Emerging Tech in the Climate Decade (2020)*).
2. Interpreting links to financials through Appendix 1 of the *Task Force on Climate-related Financial Disclosures Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures (2021)* and Appendix 3 of *CDP Technical Note on Scenario Analysis (2023)*.
3. Closely analyzing the risk factors against financial line items with relevant company subject matter experts to better understand the likelihood of financial impact using our stated time horizons.
4. Leveraging our existing ERM definitions and guidelines to assess whether such climate-related risk factors are low, medium, medium-high, or high risk against the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Framework categories of Strategic Impact, Operational Impact, Financial Impact and Compliance Impact—where Financial Impact has clear thresholds for what can be suggested as financially-material.

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Strategy: Impact of Climate-Related Risks and Opportunities on Business, Strategy, and Financial Planning

Although Juniper has not yet identified any material climate-related risks, Juniper has integrated climate considerations into our corporate strategy. In 2021, we made a public commitment to be carbon neutral (Scope 1 and 2 GHG emissions) across our operations by 2025 through increased energy efficiency and renewable energy procurement, and we have set Scope 3 targets for our suppliers to reduce their GHG emissions by 2% by 2023, by 10% by 2025 and by 25% by 2030 from a 2021 base year.

Juniper regularly dedicates executive strategy sessions to analyzing potential climate-related risks and opportunities relating to its products. In the Fall of 2022, a market survey was completed on climate-benefits in products sought by customer segments and the timetables for preparation, culminating in an executive strategy session that identified high-priority climate-beneficial attributes for our products. Juniper has a cross-functional working group to advance the energy efficiency of our products which is led by our engineering group.

As part of our financial planning and to meet our commitment to carbon neutrality by increasing renewable energy procurement,

Juniper has reviewed a host of on-site and off-site energy sourcing and offset options for our global locations. Most recently, we examined in both a session of our Executive Committee and a session of our Audit Committee the use of VPPAs to offset a portion of our emissions. These conversations examined potential project-level revenues or expenses as an off-taker given expected future prices of energy, benefits and drawbacks of project locations, and the cost/benefit surrounding timing and the instrument.

With respect to operational risks and associated planning, flooding that affected a Juniper site in India resulted in mitigation steps to ensure business continuity, specifically the relocation of critical equipment at that site to alternative locations that should not be affected by flooding under likely climate scenarios. As early as 2015 Juniper began considering climate in its strategic decisions – in 2015, we chose to move 1,500 racks of servers to a location with greater use of clean energy.

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Strategy: Resilience of Our Strategy Given Climate Scenarios

Juniper is currently conducting a qualitative scenario analysis that is our first end-to-end scenario analysis based on a comprehensive group of climate-related risk factors and a specific timeline and warming assumption. In the past, we have conducted targeted scenario analysis for company sites based upon individual climate-related risks. We intend to build from the qualitative scenario analysis to quantitative scenario analysis exercises.

Juniper chose to examine 1.5 degree Celsius warming by 2030 in our first scenario analysis. We chose this because 2030 is a date that better connects with corporate planning timelines and the availability of quality data that facilitates analysis and assumptions across economic, environmental, social, political and technological factors. This scenario also seems most in-line with “business-as-usual” assumptions over the near term. Juniper used the basis of Intergovernmental Panel on Climate Change’s Representative Concentration Pathways of 4.5 and 6.0, as elements of both of those form the business-as-usual case. Juniper used energy data from the International Energy Agency’s World Energy Model and Global Energy and Climate Model using current policies/business as usual scenario selection. And for economic, socio-economic, and political

conditions during the times leading to 2030, documents like the World Economic Forum’s Global Risks Report (18th Edition) were consulted.

Separate from the scenario analysis process, Juniper is evaluating the impact of more than 20 climate-related risk factors on financial line items per guidance from the TCFD and other sources that link climate-related risks to potential financial line items. Our evaluation results in scores according to financial impact, strategic impact, operational impact, and compliance impact following the same COSO risk scoring framework used for other ERM topics.

We are in the stage of evaluating whether our strategy could be affected, and if any strategic imperatives would need to be changed. Thus far we have not identified any such changes that need to be made. In part, this is due to the fact that we have identified and begun to mitigate certain climate-related risks as a result of our existing ERM efforts, and because our market analysis and strategic planning has already prioritized products that are energy efficient.

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Risk Management: Organizational Processes for Identifying and Assessing Climate-Related Risks

The following is a flow chart explaining our process for identifying and assessing risks. The Climate Risk Subcommittee catalogs each risk factor, documents how it was identified, notes its location, scores it according to the COSO framework, prioritizes it as appropriate, and mitigates it as needed. Members of the Climate Risk Subcommittee collect risk factors from departments of the company as a bottom-up means of identifying climate-related risk factors. The subcommittee also reviews climate-related risk factors identified by third-party materials (e.g., TCFD guidance) and validates if they apply to Juniper. Regulatory requirements, including proposed regulations, as well as voluntary guidance (like that produced by TCFD) are used as tools for risk factor identification and assessment. These requirements and guidance materials provide examples of climate-related risks that could affect Juniper's financial statements and provide rationales for why the financial statements could be affected by those climate-related risks.

We establish the relative significance of climate-related risks by scoring them using the same definitions and guidelines used for other ERM risk factors – financial impact, strategic impact, operational impact, and compliance impact.

ONGOING CLIMATE RISK MANAGEMENT AND ILLUSTRATIVE OUTPUTS

CSR AT JUNIPER

JUNIPER CSR STRATEGY

ENHANCE TRUST & GOVERNANCE

ENABLE THE WORKFORCE OF THE FUTURE

BUILD GLOBAL RESILIENCE

APPENDICES

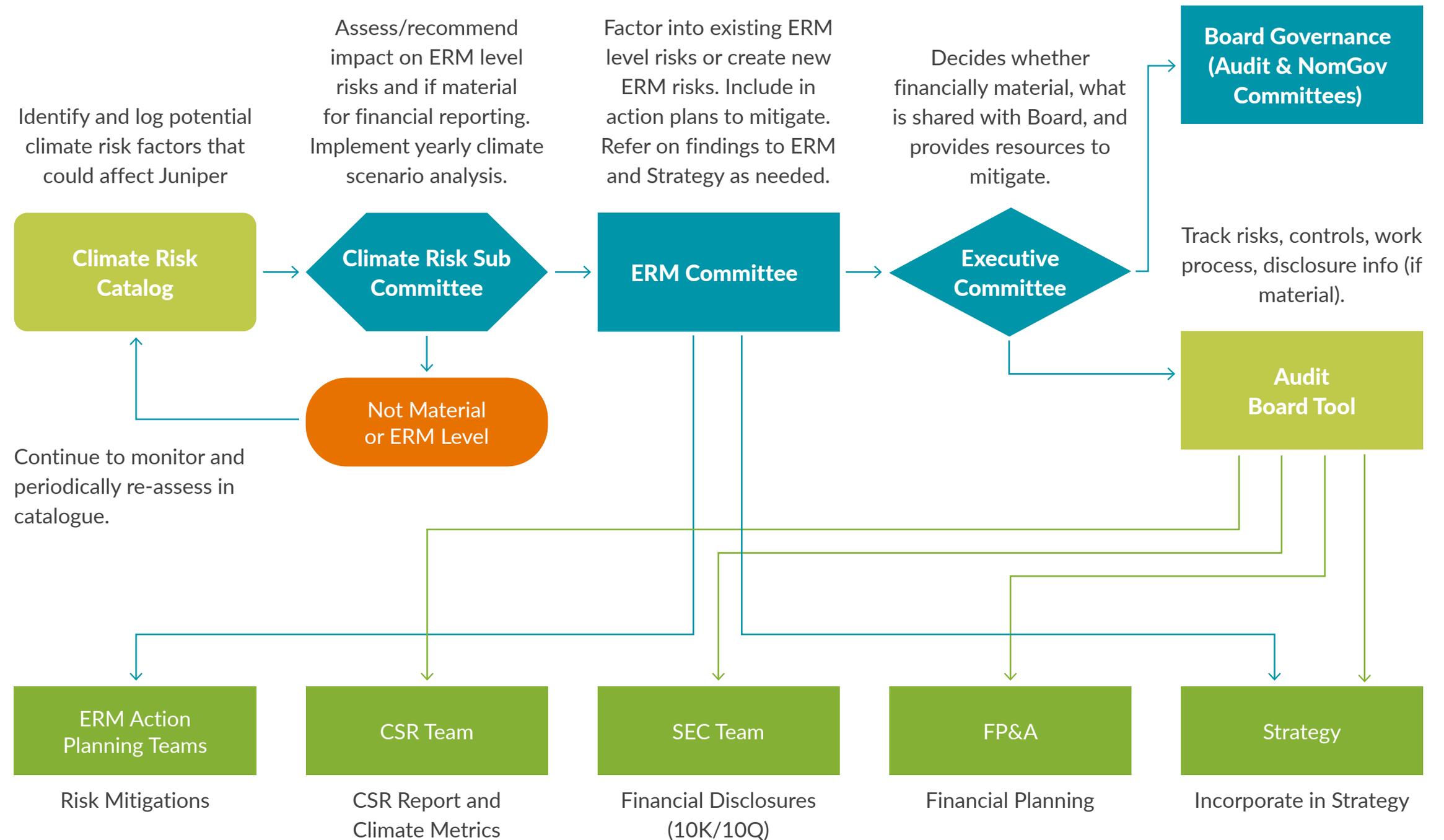
Memberships, Associations and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index



APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Risk Management: Organizational Process for Managing Climate-Related Risks and Integrating Climate-Related Risks into ERM

The previous flow chart describes our organizational process for identifying, assessing, and managing climate-related risks and integrating those risks into ERM. Decisions on whether to mitigate, transfer, accept, or control climate-related risks are made by the ERM Committee, or escalated to the Executive Committee if financially-material. In all cases, the Climate Risk Management Subcommittee will have assessed the risk factor and offered a recommendation.

Metrics and Targets: Metrics Used to Assess Climate-Related Risks and Opportunities in Line with Strategy and Risk Management Process

1. Price of offsets/credits in concerned markets
2. Wholesale electricity price in concerned markets
3. Percentages of Juniper energy derived from renewable and fossil fuel sources
4. New customer requirements for energy efficient products
5. Absolute Scope 1, 2 and 3 emissions reduced by Juniper
6. Amount of Scope 3 emissions reduction expected by customers
7. Raw material costs in energy intensive sectors in supply chain
8. Environmental ratings of Juniper from widely used ESG investor tools
9. Frequency and severity of weather events in concerned markets and logistic pathways
10. Cost and availability of carbon saving modes of logistics
11. Insurance costs associated with assets and locations
12. Business interruption costs and loss expectancy as estimated by insurer
13. Juniper product energy efficiency gains at the silicon/circuitry level
14. Juniper product energy efficiency gains at the full system level
15. Energy efficiency ratio scores of new Juniper products
16. Percent of Juniper services migrated or started with cloud hosting
17. Price of carbon (external cost of GHG emissions borne by public)

APPENDICES

Memberships, Associations
and Partnerships

Material Topic Boundaries

GRI Content Index

SASB Disclosures Index

TCFD Index

Metrics and Targets: Disclose Scope 1, 2, and 3 GHG Emissions and Related Risks

Please see Scope 1, 2 and 3 emissions estimates on page 121 of this report.

Metrics and Targets: Targets Used to Manage Climate-Related Risks and Opportunities and Performance Against Targets

The following represents our primary targets to help ensure we are managing climate-related risks and opportunities, and through which we measure our own performance:

- Progress toward reaching carbon neutrality across our operations by 2025 (Scope 1 and 2) through increased energy efficiency and increased renewable energy procurement.
- Progress toward reducing supply chain and upstream transportation and distribution emissions by 10% by 2025 and 25% by 2030 from a 2021 base year.
- % of energy contributing to Scope 1 or 2 emissions that comes from renewable sources.
- Use of Product Carbon Footprint Calculator tool increases year over year.
- % improvement in power efficiency by hardware product family.
- Mitigate all climate risk factors that rise above medium risk within our ERM's COSO framework.
- Maintain placement in top 25% (or equivalent) in environmental scores of major ESG ratings.
- Maintaining zero disruptions to business continuity and customer services and support.
- Reduction in insurer climate risk score through implementing climate risk mitigation recommendations.



Corporate & Sales Headquarters

Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
www.juniper.net

APAC & EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.207.125.700