

# Sustainability Report 2023

# CEO foreword

December 2023



We are delighted to present to you our annual Sustainability Report, in which we reflect on our achievements and share future commitments towards a more sustainable future. At NTT Ltd., we are proud of the progress we have made over the years, and we are resolute in our continued journey to drive positive change and mitigate our environmental impact.

Two years ago, we set an ambitious target to achieve operational net-zero emissions across our operations by 2030, and across our value chain by 2040. Today, we reaffirm our commitments to these goals. Through our approach, guided by the United Nations Sustainable Development Goals and using Science-Based Targets, we aim to create a sustainable and inclusive future for all.

Some of our achievements include:

- In FY22, **we have successfully reduced our total emissions by an impressive 21%**, resulting in the saving of over 1.6 million tonnes of carbon.
- We were among the first IT companies to achieve external validation from the Science Based Targets initiative (SBTi) for our target to achieve net-zero emissions in our operations by 2030 and across our value chain by 2040. The SBTi have classified our net-zero ambitions in line with the Paris Agreement of limiting the earth's warming to 1.5°C.
- We have **developed a data waste assessment solution** to assist companies in evaluating their data storage and eliminating duplicates, offering an effective means to reduce data clutter. The reduction in data storage requirements for companies will result in reduced data center needs and lowering emissions in the long term.
- We are using innovative **Direct Chip Liquid Cooling and Liquid Immersion Cooling technologies** to make our data centers more sustainable as the need for computing power increases with the introduction of Generative AI.
- We offer **three days paid volunteer leave** annually for our employees to support education and conservation projects within their local communities. In FY22, we contributed **22,604 hours of volunteering time** and during the most recent World Cleanup Day our employees collected more than **12,000 kgs of litter** – this is four times

what we collected in 2022. In addition, we are committed to improving our communities around the world including supporting a girls' school India, our Saturday school in South Africa, and IT Academy for Women in Brazil among many others.

- We were awarded the **EY Global Equality Standard certificate** for our commitment to fostering diversity, equity, and inclusion (DEI) within our organization. Our GDC Americas division was honored with the **2023 Disabled Veterans Award**, and we have successfully doubled gender diversity in our Executive Leadership team over the past two and half years.

As we come together as NTT DATA Inc. in 2024, we recognize the importance of embedding sustainability into the fabric of our new entity. As a trusted global innovator we will continue to use technology for good to create a more affluent and harmonious society. Our brand promise to transform businesses for success, disrupt industries for good, and shape a better world for all informs our combined future approach to sustainability.

- **Transform businesses** and society for successful growth with sustainable services and solutions involving our end-to-end value chain.
- Lead by example to **disrupt industries** for good innovating services and solutions to regenerate our planet.
- **Shape a better world for all**, applying our digital capabilities to improve livelihoods and contribute to a diverse, equitable and inclusive society.

This report reflects our unwavering commitment to sustainable practices and our dedication to making a positive difference in the world. We thank you, our valued stakeholders, for your continued support and collaboration as we strive to create a more sustainable future for generations to come.

Sincerely,

**Abhijit Dubey**  
Chief Executive Officer - NTT Ltd.

# Our sustainability ambition

**We launched our sustainability ambition in 2021, in line with our purpose to use technology to enable a better, more connected future for all.**

Through our solutions, operations and people, we connect the planet, economies and communities in innovative and sustainable ways that positively impact the world.

We've set ambitious targets for net-zero, circularity, social impact, and diversity and inclusion across our global communities.

Following a materiality assessment, we identified areas where our people, operations and solutions can have the greatest impact across our three interconnected themes:



Connected  
Planet



Connected  
Economy



Connected  
Communities

# Our Sustainability Ambition

Our approach to sustainability is guided by the United Nation's Sustainable Development Goals (SDGs). We've identified three interconnected themes to which we are dedicating our resources. They are planet, economy and communities.



## Connected Planet

Using technology solutions to help protect, restore and regenerate the natural world, and conserve precious natural resources for future generations.



### Climate change

Reducing our own emissions to net zero, abating our clients' emissions and proactively responding to climate-related risks.



### Biodiversity

Using technology to protect the natural world and regenerate ecosystems and oceans.



### Circularity

Building circularity and regenerative principles into the way we operate, reducing waste, emissions and water usage across our value chain.

### Our commitment

- Net-zero emissions across our operations by 2030, and across our value chain by 2040
- 100% renewable energy in our data centers by 2030, and in our offices and facilities by 2035
- Solutions for biodiversity on every continent where we operate by 2025
- Incorporate circular design into the way we operate by 2026 to reduce waste and carbon emissions



## Connected Economy

Using our trusted technology to help organizations thrive and make their contributions to a sustainable and resilient digital future.



### Smart solutions

Creating secure digital solutions with our partners to tackle social and environmental issues for clients across multiple sectors.



### Privacy and data security

Ensuring the maximum security and privacy of our solutions, to enable the safe running of services and critical infrastructure.



### Ethics, values and governance

Acting transparently and responsibly to build a connected, trusted economy.

### Our commitment

- Grow our portfolio of smart solutions to support our clients and partners in reducing 200 million tonnes of greenhouse gas emissions by 2026
- Establish a Sustainability Innovation Fund and mentorship program for climate technology and smart solutions
- Maintain the best standards of cybersecurity, data privacy and data protection
- Ensure high standards of ethical behavior in line with our Code of Business Conduct and Ethics and underpinned by our values of integrity, trust and connect



## Connected Communities

Supporting diverse and inclusive communities where we operate, enabling access so everyone has the opportunity to realize their potential.



### Digital access

Enabling accessible and inclusive connections, to ensure everyone benefits from a digital economy.



### Education and upskilling

Facilitating access to education and building skills for the future.



### Diversity, equity and inclusion

Building a more diverse and inclusive workforce and world, through targeted efforts with marginalized groups.

### Our commitment

- Provide 5 million young people and children from underprivileged areas with digital access and education opportunities by 2030
- Contribute 1 million hours of employee volunteering every year from 2025, focused on education and conservation
- Have more than 50% of employees belonging to one or more diversity categories by 2025
- Double the diversity of our executive leadership team by 2025





# Connected Planet

Using technology solutions to help protect, restore and regenerate the natural world, and conserve precious natural resources for future generations.



## Overview of our commitments



### Net-zero

We have committed to net-zero emissions across our operations by 2030, and across our value chain by 2040.



### Renewable energy

We have committed to 100% renewable energy in our data centers by 2030, and in our offices and facilities by 2035.



### Circular design

We have committed to incorporate circular design into the way we operate by 2026 to reduce waste and carbon emissions.



### Biodiversity

We have committed to solutions for biodiversity on every continent where we operate by 2025.



## Net-zero

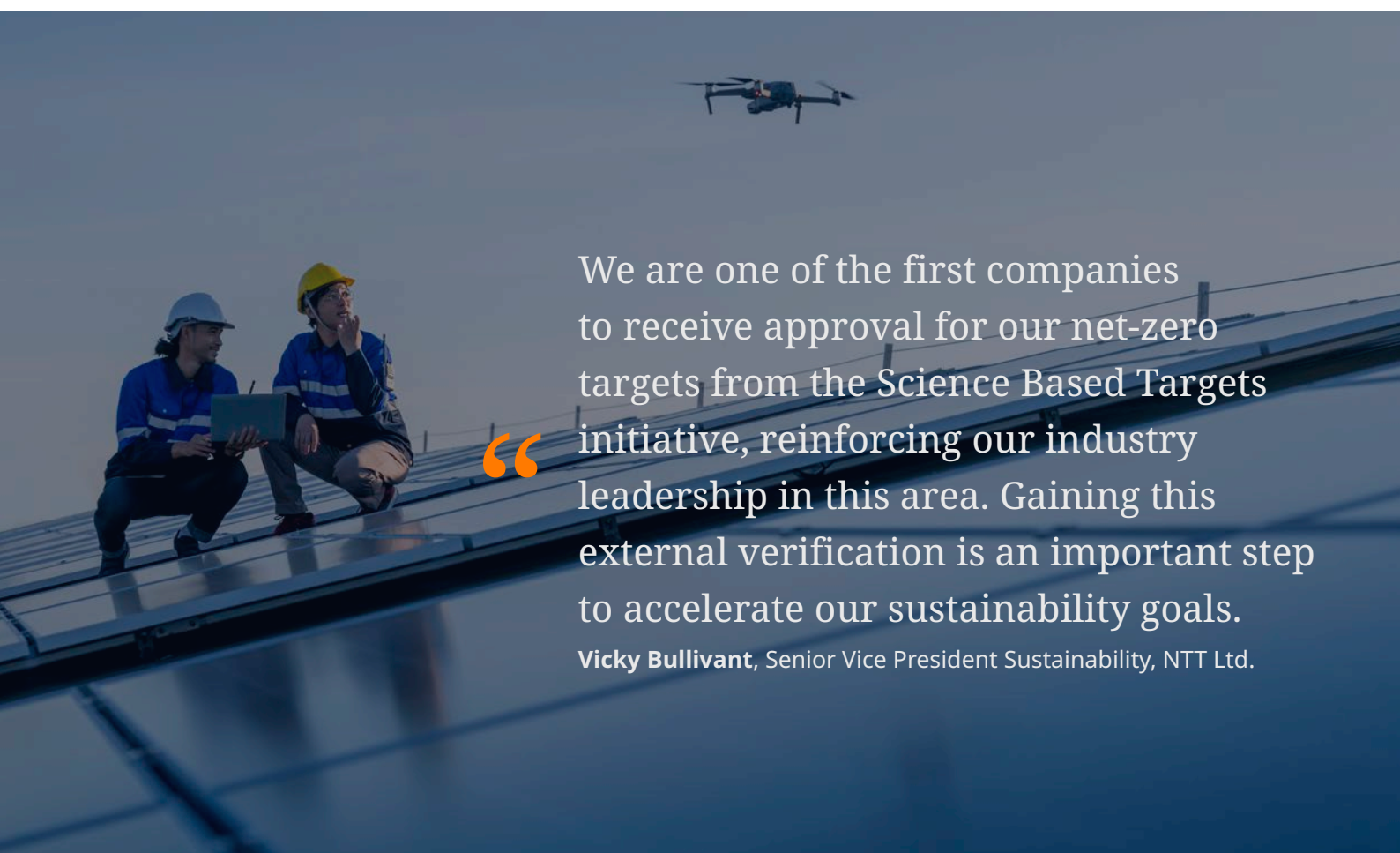
Our commitment is to reduce our own emissions, help to reduce our clients' emissions and respond proactively to climate-related risks. We have committed to net-zero emissions across our operations by 2030 and across our value chain by 2040.

### Validation of net-zero targets

Achieving our ambitious targets requires long-term planning and investment to decarbonize. We've received external validation of our commitment from the Science Based Targets initiative (SBTi), a partnership between the Carbon Disclosure Project (CDP), the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature.

**Read more:** [NTT's net-zero targets get SBTi validation](#)

Following a detailed assessment, the SBTi has determined that our greenhouse-gas reduction targets are in line with the Paris Agreement, which 195 countries adopted in 2015. This recognition from the SBTi is significant because it shows that our net-zero targets are credible.



“ We are one of the first companies to receive approval for our net-zero targets from the Science Based Targets initiative, reinforcing our industry leadership in this area. Gaining this external verification is an important step to accelerate our sustainability goals.

**Vicky Bullivant**, Senior Vice President Sustainability, NTT Ltd.

## Understanding our carbon emissions

Scope 1	Scope 2	Scope 3	
<p><b>Fuels we burn</b> Emissions from energy sources controlled or owned by us</p> <hr/> <p>Company vehicles</p> <hr/> <p>Back-up generators in data centers</p> <hr/> <p>Fugitive emissions in data centers</p>	<p><b>Power we consume</b> Indirect emissions from purchased electricity, steam, heat and cooling</p> <hr/> <p>In our own facilities and offices</p> <hr/> <p>Cooling of our data centers</p>	<p><b>Upstream</b> What we buy from suppliers</p> <hr/> <p>Carbon embedded in production and transportation of IT hardware, software and services we purchase</p> <hr/> <p>Capital goods (e.g. building data centers)</p> <hr/> <p>Employee business travel and commuting</p>	<p><b>Downstream</b> What we sell to clients</p> <hr/> <p>Electricity usage (IT load) by clients in our co-location data centers</p> <hr/> <p>Electricity used by hardware sold to clients</p> <hr/> <p>End of life of hardware we sell to clients</p> <hr/> <p>Investments</p>

Emissions (tCO2e)	FY21 <sup>1</sup>	FY22 <sup>2</sup>
Scope 1 <sup>3</sup>	14,882	36,831
Scope 2 (market-based) <sup>4</sup>	365,837	338,464
Scope 2 (location-based) <sup>4</sup>	508,676	504,512
Scope 3 <sup>5</sup>	7,457,431	5,845,238
Total <sup>6</sup>	7,838,150	6,221,532

Carbon emissions are reported against a criterion of operational control. Carbon emissions are reported in units of carbon dioxide equivalent (CO2e) and include all greenhouse gases, as required by the GHG Protocol. Further detail can be found in our [basis of reporting](#).

The increase in scope 1 emissions was due to the need to purchase more diesel for the back-up generators in South Africa due to the instability of the electricity grid and increased load shedding. The decrease in total emissions was due to the drop in scope 3 emissions.

1. FY21 NTT Ltd. Rebaselined according to SBTi criteria.

2. Limited external assurance by Lloyd's Register Quality Assurance (LRQA) (qualified opinion) using the assurance standard ISAE 3000 and based on NTT Ltd. using the Corporate Greenhouse Gas Protocol for FY22 data as indicated.

3. Scope 1 covers all direct emissions from our own business operations, across all sites.

4. Scope 2 covers all indirect emissions associated with our electricity and heat consumption, across all sites. Scope 2 (location-based) and scope 2 (market-based) are as defined in the WRI/WBCSD GHG Protocol Scope 2 Guidance, 2015.

5. Scope 3 categories such as category 8 (Upstream leased assets), category 14 (Franchises), category 15 (Investments) were excluded as they are not applicable to NTT Ltd.

6. Total emissions figure includes scope 2 (market-based) data.

## Reporting climate risk

We are a supporter of the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#), and you can see our second TCFD report [here](#).

## Engaging our employees to take action

**The climate crisis is a critical business issue that is of fundamental importance to our people.**

Engaging our employees to effect change is fundamental to our company values and aligns very strongly with our employee value proposition, “Here you can”.

One of our EVP pillars is “Here you can make a difference”. We encourage employees to make a contribution either through helping our clients realize their ambitions or helping to shape a better world and make an impact on their local community.

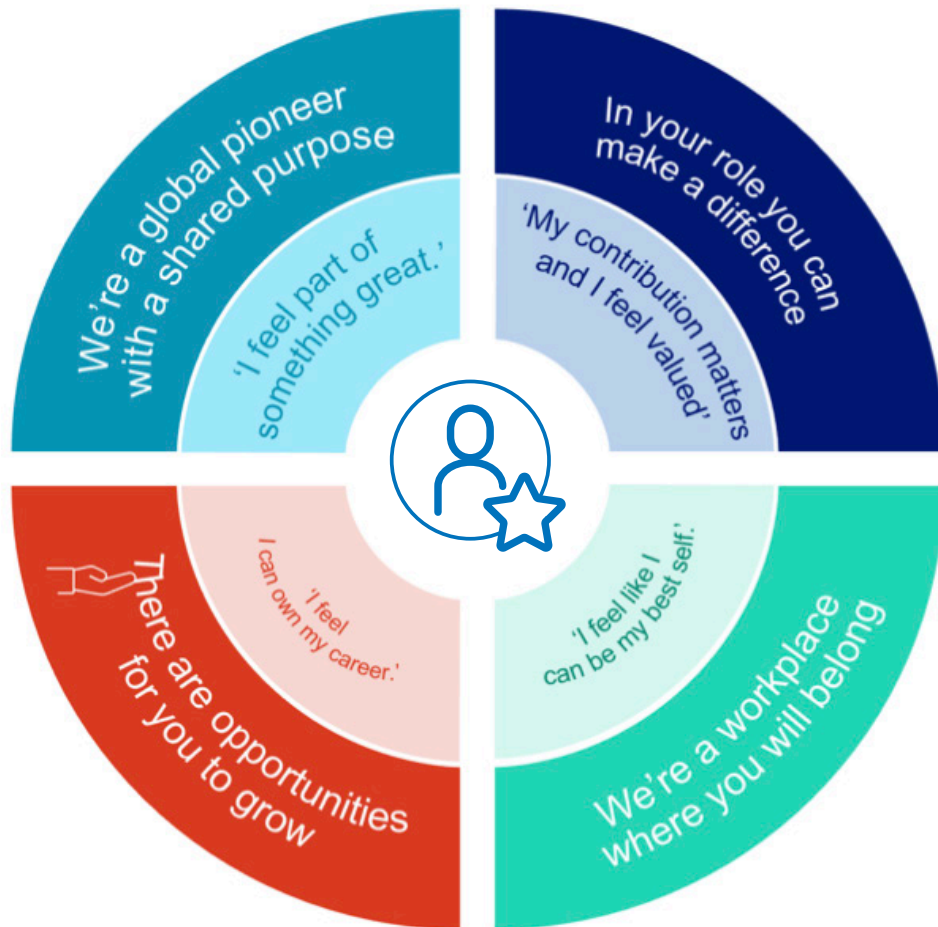
Our Sustainability Changemaker program encourages people to work on projects that will protect, restore and regenerate the natural world, and our people have three days’ paid volunteering leave annually.

**Read more: [Sustainability impact](#)**





## Volunteering aligned to EVP - make a difference



- Reinforcing our commitment for our people to contribute 1 million hours of volunteering every year by 2025
- We've launched NTT Sustainability Changemakers aligned to the EVP empowering our people to make a difference
- Encouraged to use their 3 days of paid volunteering leave in their communities
- Also supports "belong" with leadership sponsorship and teambuilding as well as talent attraction via social advocacy

**NTT Sustainability Changemakers**  
get involved and make a difference!

## Finding creative solutions to pressing problems

Across the globe, we are finding creative ways to adopt more sustainable company policies and practices.

In the Netherlands, for example, it's mandatory for our company cars to be electric.

In Germany, electric cars are now part of the company car policy, and our employees can purchase a subsidized ticket for all forms of local and regional public transport as part of our green-mobility transition, saving around 30% of the cost for a monthly ticket.

In South Africa, we've applied our own IoT and smart-office solution experience and allocated time and effort to a local Cape Town start-up, which helped to improve both our employee wellbeing and sustainability. Features include measuring air quality and occupancy levels in office locations, and providing optimum fresh air, cooling and lighting relative to occupancy. The automated solution has increased energy efficiency and reduced electricity costs by 51% and the overall facilities cost by 35% (excluding real estate). The smart workplace solution shared data that allowed NTT to discuss a green lease approach with the landlord focussing on sustainability and implementing technology to achieve the reductions. The solution also ensures key metrics including natural light, sound levels, temperature, humidity, TVOC (Chemicals) CO2 levels are optimal and transparently displayed to the employees at the digital kiosk.

In our sustainability journey  
the first step in this project  
was the adjustment of  
our company car policy to  
leasing electric vehicles only.



**Jeroen van Hamersveld**, Country Managing  
Director, Netherlands



# Renewable energy

**We have committed to 100% renewable energy in our data centers by 2030, and in our offices and facilities by 2035.**

## Data centers

As the majority of our scope 1 and 2 emissions come from the purchase of energy used to power our data centers, it is critical to move to 100% renewable energy to reach our operational net-zero target by 2030.

**At the end of March 2023 our Global Data Center (GDC) business was running on 35% renewable energy.**

Our GDC business has accelerated its efforts to a strategy to procure vast amounts of renewable energy using a diverse range of market mechanisms and is now on course to meet our stated targets on time and cost-effectively. We are cognizant of regional variations both in legislation and market maturity and we have established a taskforce that looks to share best practice and knowledge across all GDC regions.

In addition to increasing our renewable energy volume, we are also looking at enhancing renewable energy generation on site through various initiatives including 1) increasing the deployment of PV to support secondary functions such as EV charging; 2) pilots testing the application of energy storage systems (i.e. batteries) that improve grid resilience; 3) assess new technologies in clean generation, heat re-use and emission reduction.

In Oregon, USA, our GDC business is required to pay a 1.5% surcharge on all electricity consumption under the Public Purpose Charge, which contributes to a trust pool. This trust pool allocates 56% of its funds to energy-efficiency projects, 27% to supporting low-income and school-energy offsets, and 17% to renewable-energy initiatives. We are working with our utilities provider to direct the funds raised to programs aligned to our commitments.

In June 2023 we launched a pilot backup generator using hydrotreated vegetable oil (HVO) at our [Sacramento Data Center](#) in the US and in our Vienna Data Center in Austria to reduce our reliance on diesel and lower our emissions, with a view to expanding the pilot across the GDC business.



## Offices and facilities

In the Netherlands we have invested around EUR 200,000 in solar panels for charging company electric vehicles, and surplus will be used to power the Barneveld office. The panels will deliver 65,610kWh of solar photovoltaic power annually.

In Europe, we increased the percentage of renewable energy in our energy mix from 67% in FY21 to 73% in FY22, driving a global increase to 35% renewable energy in FY22.



## Circular design

**We have committed to incorporate circular design into the way we operate by 2026 to reduce waste and carbon emissions.**

Building circularity and regenerative principles into the way we operate will help us to reduce waste, emissions and water usage across our value chain.

**We are accelerating our efforts to incorporate circular-economy and regenerative-design principles into our client solutions and the way we operate, working in partnership with stakeholders across our operations and our value chain.**

In the United Kingdom and Ireland (UK&I) we work with n2s and Bioscope Technologies, leaders in urban mining for precious metals who have an innovative and sustainable way to approach device end-of-life for IT assets, helping organizations achieve circularity.

With only 15% of e-waste being properly mined, finding an innovator that not only has developed a closed loop for recovering increasingly rare minerals, but does so without toxic acids and excess energy could be a game changer for the technology sector.

**Stephen Kelly**, Vice President – Sustainability, Europe



# Biodiversity

**We have committed to solutions for biodiversity on every continent where we operate by 2025.**

Through technological innovation and partnership, we are working to address the world's biodiversity crisis and protect natural habitats and species, using technology to protect the natural world and regenerate ecosystems and oceans.

In South Africa Dimension Data is developing a solution to measure negative impacts on biodiversity by using computer vision, 5G, IoT and LoRa and smart-pole solutions to track plastics, algae growth, dying fish and water pollution, and protect aquatic life on the endangered species list.

## Earth to Ocean campaign

We ran an innovative seven-week Earth to Ocean campaign, beginning on Earth Day in April and finishing on World Ocean Day in June. Our people in Germany, India and the Philippines took time to make bee hotels, bird feeders and seedballs, all with the intent of increasing the biodiversity in their local areas. In Germany, employees launched an urban gardening project on an area of land behind their head office in Bad Homburg, creating a rich habitat for insects and a natural space for colleagues to relax.



Our people made bee hotels in Germany.



Our people making seed balls in the offices in India.



# Connected Economy

Using our trusted technology to help organizations thrive and make their contributions to a sustainable and resilient digital future.



## Overview of our commitments



### Clients and Smart Solutions

We have committed to grow our portfolio of smart solutions to support our clients and partners in reducing 200 million tonnes of greenhouse-gas emissions by 2026.



### Privacy and data security

We have committed to maintain the best standards of cybersecurity, data privacy and data protection.



### Ethics, values and governance

We have committed to ensure high standards of ethical behavior in line with our Code of Business Conduct and Ethics and underpinned by our values of integrity, trust and connect.



## Clients and smart solutions

**We aim to grow our portfolio of smart solutions to support our clients and partners in reducing 200 million tonnes of greenhouse-gas emissions by 2026.**

We know our greatest opportunity to make a positive impact is through our core business and the work we do with our clients, vendors and partners: helping organizations drive sustainable business performance through the smart solutions and services we deliver. By creating secure digital solutions with our partners, we can tackle social and environmental issues for clients in multiple sectors.

### Client success stories

In India, our GDC business has partnered with PhonePe to upgrade the cooling technology in use in their [server operations](#). Implementing the Liquid Immersion Cooling (LIC) technology has enabled them to continue consuming the latest high-end servers while ensuring optimal cooling levels and reducing their environmental impact.

Our [private 5G network for the City of Las Vegas](#) is making roads safer and giving local children access to online resources. The City of Las Vegas municipality, its stakeholders and the business community will benefit from the capabilities of a private 5G network: ultralow latency, greater reliability, massive capacity, seamless security and flexible management. As additional use cases arise, the network will become a framework for revenue generation that can improve the city's bottom line while supporting network maintenance, expansion and enhancement.

### Research and solution development

By solving the problem of overfilling recycling containers, we contributed to reducing illegal dumping. In collaboration with Cisco, our team in Belgium optimized the replacement of recycling containers by combining a camera with AI technology. The AI in the camera reads the amount of recycling in real time and analyzes it together with historical data, making it possible to predict the optimal timing of container replacement. This solution has already attracted interest from various industries, including the food industry, that are looking to improve resource allocation, and operational efficiency and reduce their environmental impact.

Alongside NetApp and Omdia, our research to understand the sustainability impact of data strategies found that unnecessary data storage is impacting sustainability. The research found that 60% of businesses say their data goes unused. This represents a significant opportunity for data removal – and, with that, an opportunity to reduce the power consumption associated with storing this data.

**Read more: [The unseen environmental cost of data](#)**

**Read more: [Want to be more sustainable? Rethink your data storage](#)**

Following on from this research, we have developed a Data Waste Assessment that's designed to give clients a realistic view of their current data-storage environment, in the cloud and on-premises, across all storage vendors. Our dashboard delivers insights and reports on data usage, including the associated costs and carbon footprint.

**Read more: [Data Waste Assessment](#)**

### Supporting healthcare

The digitalization of healthcare has the potential to improve health outcomes and lives by helping to better predict and avoid disease. A digital healthcare ecosystem needs to be borderless, resilient and accessible to all, seamlessly connecting people to high-quality care and creating equitable experiences and outcomes.

NTT Ltd., Nihilent and NTT Innovation Laboratory collaborated with Schneider Children's Hospital, Pharmacy Services to reduce pollution and inventory losses. Together, we developed an algorithm to calculate the use of pharmaceuticals over time based on the quantity purchased and quantity discarded. This has enabled optimal pharmaceutical inventory forecasting and a system that can reduce environmental pollution and inventory losses. During the pilot scheme, the hospital saved over USD 38,350 from the disposal of expired pharmaceuticals.

We assisted Schwarzwald-Baar Klinikum to prepare for Hospital 4.0 with a new network structure. Our solution automates the delivery of end-to-end services, simplifies network management and serves as the base for future mobile applications. Network separation and leveraging a central firewall also help the hospital to meet high security requirements for critical infrastructure.

Read more: [Network modernization for Schwarzwald-Baar Klinikum](#)

We implemented and managed a contact center for the Canadian Red Cross.

This has simplified the complexity of their services and allows them to add agents and change operating times in an emergency, and scale down again when circumstances return to normal.

Read more: [Managed contact center supports the Canadian Red Cross](#)







## Smart buildings

**In Shenyang, China, we deployed a LoRa network for health, safety and environmental monitoring to help reduce energy consumption and waste.** The solution reduced the need for on-site visits by 75%, as one employee can virtually monitor four sites in different locations. LoRa's intelligent monitoring of temperature and humidity and automated use of air-conditioning achieved a 20% power saving. With LoRa's dust-monitoring program, the client can now monitor the dust in key areas of the painting workshop, reducing the repair rate.

**In Singapore we supported a client in the construction industry by providing a smart-building solution in their global R&D hub.** The building is equipped with various advanced smart devices and IoT sensors. To connect and collect IoT data from equipped devices, our team has leveraged the latest advancements in technology and implemented a software-defined infrastructure (SDI)-based campus network and IoT platform for the building. As a result, the building now has the Building and Construction Authority (BCA) Super Low Energy certification. This certification designates a Green Mark building, one that achieves energy savings of at least 60%.

**We are the key IT technology partner of KI Park in Berlin, a nonprofit association that aims to connect diverse stakeholders and bring innovative AI solutions to life.**

AI is a crucial tool for tackling major societal challenges and achieving the UN SDGs, and KI Park's mission is to accelerate AI innovations made in Germany and Europe, with the aim of making Germany and the EU a globally leading innovation location for AI by 2030. We support KI Park's members with expertise as well as infrastructure, setting up a private 5G network in combination with an edge-to-cloud infrastructure at Marienpark Berlin.

**Our GDC is running a pilot at our Chicago Data Center in the USA, developing a system to measure, display and report on emissions, water usage and waste.** This data center pilot initiative aims to aid in the optimization and improvement of tracking our sustainability goals by using data to show where we can improve efficiency. It is used as a model to potentially scale to other data centers.



## IoT is driving sustainability transformation

The Internet of Things (IoT) is changing our world for the better. Up to now, measuring carbon and sustainability has primarily relied on manual processes that were time-consuming and prone to human error. IoT enables the real-time collection of this data, ushering in the era of IoT for sustainability.

**Read more: [Four use cases for IoT in sustainability](#)**

Working with Cisco and the Compagnie Intercommunale Liégeoise des Eaux (CILE), we deployed a series of gateways to securely connect their sensors and water meters to the regional LoRaWAN network, providing them with real-time insights into the state of their water delivery network and boosting water conservation with IoT.

**Read more: [CILE boosts water conservation with IoT and LoRaWAN](#)**

In the UK&I, we used Cisco technology to develop an innovative IoT solution for haulage providers that can deliver sustainability across their logistics supply chain by optimizing usage and energy efficiency. We're also helping clients in the energy and natural resources sector to support the transition to electrification, decarbonization and the decentralization of energy through digitalization.

**Read more: [IoT jolts energy and utility providers into a new era](#)**



## Privacy and data security

**We are committed to maintain the highest standards of cybersecurity, data privacy and data protection, ensuring the maximum security and privacy of our solutions to so our services and critical infrastructure can run smoothly.**

The volume and severity of cyberthreats is rising around the world amid the adoption of hybrid working and an increasing number of digital transactions. NTT has joined the Microsoft Intelligent Security Association (MISA), an ecosystem of independent software vendors and managed security service providers who are integrating their solutions with Microsoft's security technology.

**Read more:** [Microsoft Intelligent Security Association \(MISA\)](#)

Our new Managed Detection & Response (MDR) security service helps organizations achieve their business objectives by improving their cyber resilience. This cloud-native, analytics-driven MDR service combines human and machine expertise with threat intelligence and leading technologies such as machine learning to reduce the time taken to detect and respond to cyberattacks.

**Read more:** [Managed Detection & Response](#)

We have over 2,000 cybersecurity specialists who manage 15,000 security engagements each year with clients spanning 57 countries. Over 2 billion security threats are mitigated every year, and 6.2 billion attacks were analyzed across our global Security Operations Centers.

In a connected economy, trust is key. Our global Data Privacy and Protection (DPP) program ensures we respect the trust our people, clients and communities place in us when we process their data. We are committed to processing personal data in a transparent, fair, ethical and lawful way.

### Implementing Zero Trust for 50,000 employees.

As part of our broader agenda to implement an identity-based Zero Trust architecture in our own business, we implemented a Zscaler tool that allows our employees to be productive from anywhere, at any time, without compromising security. We rolled it out to 50,000 people within 30 days – one of the fastest deployments of all Zscaler functions to so many users.

**Read more:** [Enterprise-wide Zscaler architecture for NTT DATA employee](#)





## Ethics, values and governance

We are committed to ensure high standards of ethical behavior in line with our Code of Business Conduct and Ethics and underpinned by our values of

integrity, trust and connect.

### Acting transparently and responsibly to build connected, trusted economies.

Our Business Code of Conduct and Ethics sets out what we expect from and for all employees. Mandatory training on the Code and on the topics of antibribery and corruption is undertaken annually.

Each of our employees has a duty to SpeakUp promptly if they suspect that anyone in NTT has violated our policies or our Code or are acting in a way that is not in keeping with our values. We rely on each of our people to SpeakUp using the anonymous platform and tell us about any known or suspected misconduct or unethical behaviour so that we can act to protect our people, clients, communities and NTT.

Read more: [Our Business Code of Conduct and Ethics](#)

Our Sustainability Policy focuses on improving sustainability performance across the organization. It outlines our approach to integrating effective sustainability management and climate-related risks and opportunities into everyday decision-making and the execution of our business strategy.

Read more: [Our Sustainability Policy](#)

We stand against modern slavery, uphold fundamental human rights, and comply with all laws, regulations and codes that apply to our business.

Read more: [Modern slavery statement](#)

Our Supplier Code of Conduct ensures our suppliers do the same.

Read more: [Our Supplier Code of Conduct](#)

## Risk management

The integrated Risk and Sustainability function is led by the Chief Risk and Sustainability Officer who is a member of the NTT Ltd. Group Executive Leadership Team.

Read more: [Meet our leadership team](#)

We have a robust governance structure in place to oversee our sustainability strategy and performance, with processes and roles assigned to manage sustainability risks, and approve and implement our strategic framework and commitments relating to sustainability.



The Group Risk and Compliance Committee, which reports to the Board Audit and Risk Committee, is also responsible for driving risk management programmes across the business, and reviewing and approving risk identification, assessment and mitigation plans and activities.

Sustainability is identified as one of the company's 13 Principal Risks, and along with the other risks is managed through the enterprise risk management process that promotes an integrated view of the Risks in our business. This approach supports accountability and performance measurement, thus promoting operational efficiency at all levels. In establishing and operating our risk management framework, management are assured that its risk management arrangements will be clearly understood and practiced by its Employees.

Our Risk Management Framework is aligned with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Framework and the ISO31000 Risk Management Standard. It places an emphasis on value creation generated through the adoption of an appropriate appetite for Risks we are willing to take, and value preservation through the implementation of appropriate governance and processes to manage Risks that may adversely affect the achievement of our objectives.

Read more: [Why risk and sustainability go hand in hand](#)

“

At NTT, our risk and sustainability portfolios come together to create a stronger business and a better world.

**Zellah Fuphe**, Chief Risk and Sustainability Officer



## Let's talk sustainability

An article series features stories about volunteering, mental health and gender equality and how people are making a difference.

- [Conserving the Birds of the Everglades](#)
- [Exercise with a difference: Plogging](#)
- [Plastic Warriors Clean Cornwall's Beaches](#)
- [Saving our soil for a healthier world](#)
- [Getting Back from Giving Back](#)
- [Enabling Resilience in the Elderly](#)
- [The NTT Ltd Mental Health Avengers](#)
- [Celebrating Diversity](#)
- [Breaking the bias](#)
- [Empowering female leadership through Girl Scouts](#)



## Reinforcing our values

In 2022 we joined the [UN Global Compact \(UNGC\)](#), the world's largest corporate sustainability initiative, and in 2023 we will submit our first Communication of Progress, reaffirming our commitment to the UNGC's Ten Principles covering human rights, labor, the environment and anticorruption.

In 2023, 96% of our people completed our Code of Conduct training, reinforcing our values, ethical behavior and responsibilities.

REGLA®, our flagship automation compliance product, gives banks and financial institutions a platform for compliance in a changing regulatory landscape.

Read more: [REGLA® - your platform for regulatory compliance](#)





## Health, Safety and Environment (HSE)

**We support initiatives that improve the health, safety and wellbeing of people and the environment in which we operate.**

Our Health, Safety and Environment program extends to our employees, contractors, clients, supply-chain partners and communities of interest, and is detailed in our latest [Health, Safety and Environment Policy Statement](#).

### **HSE in our data centers**

Our GDC business is committed towards maintaining a safe workplace and consistently extends this requirement throughout our supply chain including construction and expansion projects. We only work with partners that demonstrate the same commitment towards effective management of health, safety and wellbeing of people.

Occupational health and safety is visibly led by senior leadership in the GDC business and through consultation and communication. The injury frequency rate in FY22 for GDC was 0.27, a 20% reduction from FY21. The framework of governing occupational health and safety is designed around ISO45001, that undines our approach of continuous improvement.



# Connected Communities

Supporting diverse and inclusive communities where we operate, enabling access so everyone has the opportunity to realize their potential.



## Overview of our commitments



### Digital access

We have committed to provide five million young people and children from underprivileged areas with digital access and education opportunities by 2030.



### Education and upskilling

We have committed to facilitating access to education and building skills for the future.



### Diversity, equity and inclusion

We have committed to have more than 50% of employees belonging to one or more diversity categories by 2025, and to double the diversity of our executive leadership team by 2025.



### Employee volunteering

We committed to contribute one million hours of employee volunteering every year from 2025, focused on education and conservation.





## Digital access

**We have committed to provide five million young people and children from underprivileged areas with digital access and education opportunities by 2030, enabling accessible and inclusive connections so that everyone benefits from a digital economy.**

### Digital skills

Our people across the globe have initiated or partnered with local programs to support our commitment to provide five million young people and children from underprivileged areas with digital access and education opportunities by 2030. Here is a sample of some of the work our employees have been involved in:

Supporting inclusive IT education and employment and partnering with our vendors and NGOs, NTT in Brazil delivered IT technical training and free certifications for those wanting to make a career change to IT, as well as a program focused on increasing the number of women in IT. Overall, the initiative has impacted more than 5,000 lives.

#### Inspiring the technology users of today and leaders of tomorrow

Work Life Digital (WLD) in Singapore focuses on people aged 50 and above, building their confidence in using technological devices and by helping them acquire essential digital skills to actively engage in the digital age. Thirty of our employees in Singapore assisted a group of people to become confident in using technological devices and in acquiring the necessary digital skills. Additionally, we have helped to construct a full curriculum for computer workshops, which includes educating people on identifying risks and engaging with technology safely.

Together with HotTopics, we're the founding partner of Tech Girl 2023, an initiative designed to expand the skills and jumpstart the careers of girls considering entering the technology sector. It will provide girls in the UK aged 16 to 18 the opportunity to showcase their innovative ideas and equip them with the mentorship and experiences essential for a successful career in tech.

**Read more:** [HotTopics Partners with NTT on TechGirl](#)

### Keeping the internet safe

In Luxembourg, we worked with local educational institution Lycée Guillaume Kroll to cocreate a two-year academic course in cybersecurity. We invited students on the course to visit our Luxembourg Lab and simulated different kinds of cyberattacks, demonstrating how to protect networks against these types of threats in a real-life scenario.

In Belgium we are working with a local NGO, Child Focus, to support three different programs. We will launch an internal hackathon at the beginning of 2024 to identify ways to use technology to support the organization. We will deploy an ethical hacker to investigate where their systems and tools are deficient, and a team of engineers and architects to increase their IT systems maturity. We will also support their Internet Safe & Fun Program through our paid volunteer days, raising awareness of safe internet use for primary-school children through fun workshops.

### Donating devices that enable digital access

Around the world, we regularly donate laptops, monitors and docking stations to local schools and charities to enable digital access. The UK has donated 216 laptops, 25 monitors and 25 docking stations to 15 different schools and charities to support children's digital access to education. The Netherlands has donated 157 laptops to a foundation called Allemaal Digitaal to support less fortunate families to participate in the digital world.



# Education and upskilling

**We have committed to facilitating access to education and building skills for the future.**

From supporting young learners eager to complete their schooling to building career skills through internships and apprenticeships, our employees are involved in a range of local initiatives that focus on education.

## Investing in the talent of tomorrow

**For over 20 years, Dimension Data in South Africa has operated a successful Saturday School program.** The company's focus is primarily on making education accessible to young people through digital inclusion and developing skills in order to unleash the vast potential we see in the youth of South Africa. Our youth programs ecosystem, of which the Saturday School is a part, has been instrumental in Dimension Data's growth and success by providing a continuous pipeline of young talent into the organization.

**Six years ago, India launched a unique program working with an all-girl school in Mumbai to transform the lives of its students.** The program has grown and developed each year and has helped over 3,500 students since its inception. We are delighted to share that in the past year we hired our first former student from the school: play the video for the full story.

**Learn more:** [Supporting girls in education](#)

**We worked with the World's Largest Lesson at Project Everyone, in conjunction with UNICEF & UNESCO, to support a global survey of children on the current state of education.** Our colleagues across NTT companies were asked to share our unique link to the survey with children in their lives. We also shared the survey with the girls' school in India that we support and helped to translate the survey into Japanese to expand its reach. Of all the supporting organizations, NTT had the most responses via our unique link: 37,000 responses from children in 115 countries, sharing over 25,000 ideas for improving education. The results were published in a report that has been shared with UNICEF, UNESCO, global policymakers and world leaders at the UN.

**Read more:** [Transforming Education Report](#)



“ Empowering women leaders in tech is not just about breaking barriers, it is also reshaping the future of innovation and paving the way for inclusivity and diversity.

Ivy Chew, Vice President – Human Resources, APAC

### Guiding the talent of today

**In Singapore we support Dell's MentorConnect program, which has benefited over 270 high-performing women mentees.** Ivy Chew, VP of Human Resources at NTT Ltd. Singapore, is both a mentor and a strong advocate for women tech leaders. She currently guides five mentees who are working for companies such as JP Morgan, Infocomm Media Development Authority (IMDA) and ST Engineering. The program consists of six sessions over six months and promotes diverse leadership development through networking and the exchange of company-to-company best practices.

**Our GDC business is fully committed towards its communities.** One of our programs was established in close partnership with a local technical college based close to our London 1 Datacenter, offering educational experience to young people aged 14-19 who are interested in Engineering, Design, Science, Math and Technology. Through this partnership, we offered a two-week work placement for six students who worked with our various teams, learning what it means to be a part of a data center organization. Due to the success of the initiative, we developed our first data center apprenticeship program, onboarding nine apprentices, based in Dagenham, Hemel Hempstead and Frankfurt. Our focus remains on increased cooperation with local colleges to enable commitment towards our local communities and boost social mobility amongst workers from less advantaged backgrounds.



## Supporting talent in transition

Our India business launched its **Academy for Women Empowerment**, a dedicated learning program for women returning to work after a career gap. Specially designed by our own people, the content of the program helps to bridge the skills gap and provide career opportunities for women in technology. We have trained and upskilled 28 women through this program, and 26 of them are now working as full-time employees across various business units.

Through a global NGO, we launched a virtual volunteering initiative for our people to support students from underprivileged backgrounds to develop the skills required to succeed in the transition from education to career. The program covers key aspects of preparing for a career, finding and landing a job, and excelling in your career. In the first three months, almost 200 of our people, from 28 countries, signed up to become mentors. We have supported students from Australia, Ghana, India, Jamaica, Kenya, Lebanon, Mauritius, Morocco, Nicaragua, Pakistan, Rwanda, Senegal, Sierra Leone, Sri Lanka, Syria, Tunisia, the US and Zambia.

“

I am a strong advocate that through guidance, support, and positive role modeling, mentoring equips young people with the skills, confidence, and opportunities they need to thrive, succeed, and make the transition to the workplace. This program was not just an investment in the future, but a commitment from NTT to help empower and transform the lives of young individuals worldwide, and I thoroughly appreciated the opportunity to play a role.

**Victoria Ward**, Senior Vice President –  
Human Resources, Europe



## Diversity, equity and inclusion

**We have committed to have more than 50% of employees belonging to one or more diversity categories by 2025, and to double the diversity of our executive leadership team by 2025, building a more diverse and inclusive workforce and world through targeted efforts with marginalized groups.**

We committed to have more than 50% of employees belonging to one or more diversity categories by 2025, and to double the diversity of our Executive Leadership Team by 2025.

We're committed to gender diversity and equality at all levels and are proud to say that 86% of our board is from minority or vulnerable groups, as per the UK Government's definition of ethnic minority.

The hiring of a more inclusive workforce is a priority for NTT. Currently, 23% of our managerial positions are held by women and we are committed to increasing this figure through initiatives such as identifying biases in our hiring and promotion processes, eliminating pay disparities, and sponsoring and mentoring leaders from different demographics to build a diverse leadership team. We also believe strongly in holding our leaders accountable for diversity and inclusion and have defined clear targets and metrics to drive accountability in leadership building a more inclusive and equitable organization.



### Showcasing the talent of women cyclists

We're proud to be the Official Technology Partner of the Tour de France and Tour de France Femmes avec Zwift, which is breaking gender and tech barriers. We supported the women's race, now in its second year, with the same full technology solution, edge technology and data analytics used for the men's race.

By showcasing their abilities in this world-class race, women cyclists now have more of an opportunity to build careers as professional athletes. Raising the profile of women cyclists and women's races more broadly also helps to develop the racing calendar and drive equality in coverage, career opportunities, pay and prize money, which is typically a fraction of the men.

“ I work in the technology industry and I'm also a keen cyclist, so these are issues very close to my heart that I want to help resolve. I am fortunate to work for an organization that is addressing those challenges to become more inclusive and equitable.

**Joan Kuhrmann**, Director: Program Management New Ventures & Innovation at NTT

Read more: [Tour de France Femmes breaks gender and tech barriers](#)

## Taking action for communities

We have an important role to play in contributing to reconciliation in Australia, and our Reflect Reconciliation Action Plan (RAP) is a key part of preparing us for engaging in reconciliation initiatives that are meaningful, mutually beneficial and sustainable. Our RAP provides us with a strategic framework, programs and tangible, measurable actions to effect sustainable and positive change in our pledge for a better future for our Australian First Nations peoples and communities. At its heart, reconciliation is about strengthening relationships between Aboriginal and Torres Strait Islander peoples and non-Indigenous peoples, for the benefit of all Australia.

In our MEA region, Dimension Data's youth programs are designed to address our critical skills, diversity and equity gaps in a strategic manner. Our programs provide young people with the technical skills and knowledge they need to succeed in the tech industry, while also helping to create a more diverse and inclusive workforce.

GDC won the 2023 Disabled American Veterans (DAV) Midsize Employer of the Year Award in the USA. The not-for-profit organization highlighting our "noteworthy efforts in hiring, supporting and developing veteran talent in the workforce". We are proud that more than 24% of our US workforce within GDC identifies as veterans, and we engage in robust recruitment practices to engage with job candidates who are or have been in military service.

Read more: [NTT's Global Data Centers awarded for veteran support](#)





# Employee volunteering

**We committed to contribute one million hours of employee volunteering every year from 2025, focused on education and conservation.**

We empower our employees to use their three days of annual volunteering leave and their time, energy and professional skills to make a difference. Whether it's through fundraising, developing a new solution or helping their local community in times of need, we encourage our people to support causes they care about.

## Our global activities drive international action on common themes

In FY22, we tracked volunteer leave across the company and reported our data for the first time.

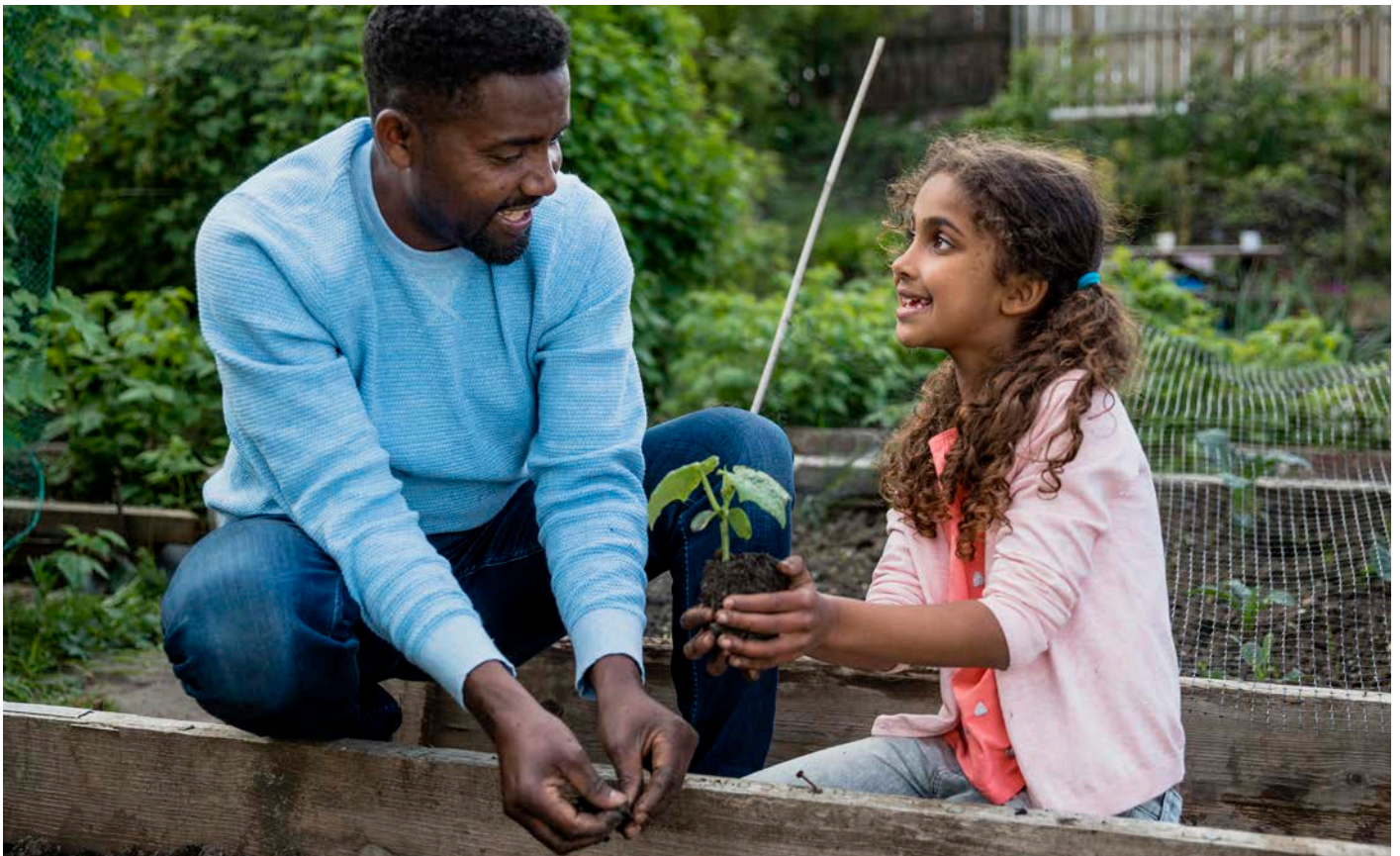
From 1 April 2022 to 30 March 2023:

- 3,530 (15%) of our permanent employees used their volunteer leave.
- Contributing 22,604 hours (2,825 days) of volunteering.

## Global Giving: 70,000+ donations

The end of the year is a time when many of us around the world focus on giving back to our local communities and helping those in need, which is why we hosted a two-week Global Giving initiative in December 2022.

- 2,095 employees
- 76 events
- 24 countries
- 65 different charities and causes
- 70,000+ donations (of goods and in kind)



## From Earth to Ocean: Over 90 events in 7 weeks

This year we changed how we celebrated Earth Day. Instead of running programs on just one day, we ran a seven-week campaign of environmental action. Starting on Earth Day on 22 April, we encouraged our people to organize and get involved in environmental activities until World Oceans Day on 8 June, taking us “From Earth to Ocean”. Each week had a specific topic to generate discussions and activity in the areas of environmental education, climate change, biodiversity, conservation, plastics, recycling and sustainable fashion.

From launching our new sustainability training to organizing sustainable fashion shows and building bee hotels, together we took action and armed ourselves with new knowledge.

- **India:** Beach cleanup in Mumbai to support World Ocean Day, collecting a phenomenal 1,297kg of waste, of which 950kg was recyclable
- **US:** Helped Central Texas Food Bank to prepare food packages, combining our resources to help package 3,458 meals for local people
- **Australia:** Raised over AUD 1,011 for the Great Barrier Reef Foundation
- **Malaysia:** Worked with the United Nations High Commissioner for Refugees (UNHCR) and UNIQLO to sort and distribute over 10,000 donated items of clothing; worked with L’Occitane to collect skincare and shampoo bottles from any brand to be recycled
- **Philippines:** Built bird feeders, planted trees, hosted a sustainable fashion show and ran an in-office honesty thrift shop selling clothes donated by our people to raise money for charity



Our people worked with UNIQLO to help sort donated clothes at a distribution center in Malaysia as part of our “From earth to ocean” campaign.



## World Cleanup Day: 12,700kg of litter

After organizing successful events in 2022, in 2023 we asked our people to support World Cleanup Day for the second time. Over two weeks, we collected a total of over 12,700kg of litter, more than four times the amount we collected in 2022.



**3,018+** employees

(including NTT DATA)



**120** events



**15,000+**  
hours of volunteering



**34** countries



Our people getting ready to pick up litter around the Bad Homburg office in Germany.

## Local initiatives for local impact

We believe every contribution, no matter how small, can make a difference. The enthusiasm, empathy and creativity of our people is reflected in the wide range of projects and events that took place throughout our regions in the last year. A selection of these is given below.

### Supporting local organizations

In China we supported Sweet Home, an organization that reaches many Beijing residences to support disabled communities improve their quality of work and life through education services, communication, general interaction and other activities.

In Belgium our people organized a Ride for Charity event in September 2023 which saw over 100 cyclists of all levels riding the Zolder race circuit to raise EUR 6,000 for Villa Clementina and De Verwondeertuin, two charities supporting children with special needs.

In Spain we worked with the Randstad Foundation, volunteering to reforest in Coruña, and collaborated with people with intellectual disabilities. Together, the team managed to plant 90 native trees in one morning.

In Singapore our people used their volunteer leave to conduct blood-donation drives with the Health Sciences Authority Blood Bank. They also prepared, packed and delivered 3,500 meals to underprivileged communities in partnership with Willing Hearts.

In our Johannesburg offices in South Africa, we have launched a collection point for plastic bottle tops and bread tags, to be donated to The Sweethearts Foundation, collecting 15kg so far. For every 450kg of bottle tops or every 50kg of bread tags donated, the foundation exchanges the collected items with a local recycler for a standard adult-sized wheelchair.

In the UK&I, our people worked with the Wythall Community Association, responsible for managing the 37-acre Wythall Park, supporting the organization with a range of volunteer work, including Microsoft Office 365 training, planning, design, build and migration; supporting documentation; security control implementation; PowerBI app creation and support; and supporting a local festival held on the grounds.

In South Africa, our people came together for a walk to commemorate the 20,000 women who marched to the Union Buildings on 9 August 1956 to protest against proposed "pass laws". The walk was also an opportunity to raise awareness of the importance of menstrual hygiene. Over 100 employees participated and over 1,000 sanitary pads were donated to Palesa Pads, a local social enterprise that provides safe and reusable sanitary pads to girls from disadvantaged backgrounds.



## Inspiring our people to volunteer

Our Europe region challenged all countries to use as much of their available volunteer leave as possible and offered a donation of EUR 10,000 to the charity of their choice as a prize to the country that used the highest percentage of their available leave. Switzerland took the crown in FY22 and chose to donate the EUR 10,000 to the Union for International Cancer Control (UICC).

Our Americas region also challenged their people to use as much of their volunteer leave as possible during their Changemaker Challenge. The region was split into eight teams, with the winning team receiving a USD 50,000 donation to the charity of their choice. The challenge was won by the Tennessee River Team, who voted to donate their prize to St Jude Children's Research Hospital.

## Donations and fundraising

In Australia, our people took on the Push-up Challenge, aiming to complete 3,144 push-ups over 23 days to raise funds for and awareness of mental health organizations. We had 90 staff who joined the NTT Australia team and helped raise an amazing AUD 18,169 over the 23 days.

Our APAC team has been sponsoring children with World Vision since 2005. We adopted 16 children from the World Vision Child Sponsorship program, and our contributions provide these children and their communities with access to basic needs in five main areas: child protection; education; health and nutrition; livelihoods and microfinance; and clean water and sanitation. We currently sponsor children in Cambodia, Ethiopia, Sri Lanka, Myanmar, Nepal, Philippines and Vietnam.

After the earthquake in Turkey and Syria in February 2023, NTT Ltd. Germany donated over EUR 36,000 to the emergency response effort via Aktion Deutschland Hilft. Our colleagues in Luxembourg also ran an appeal and raised EUR 1,550, which was topped up to EUR 3,200 by NTT Ltd. Luxembourg.

UK&I employees completed a fire walk, walking across coals at a temperature of more 1,200 degrees Fahrenheit to raise GBP 14,292 for 26 different charities.

To celebrate Mandela Day, our team in South Africa raised ZAR 100,000 for solar backpacks that provide school children in underserved areas with access to light amid the country's electricity crisis.



## Making a difference: Changemakers of the Year

We recognized outstanding individuals for their use of volunteer leave. Our three Changemakers of the Year for 2023 are:

**Beth George** from the Americas region, for her continued work at the Audubon Center for Birds of Prey in Florida over the past year, including releasing an American Kestrel back into the wild.

**Read more:** [Conserving the Birds of the Everglades](#)

“

My advice to others is try to be present in nature. Take a minute, put your phone down, and look up; you never know what you'll see!



**Nicole Beale** from the MEA region for her intuitive and humanitarian use of volunteer leave to support a local hospital in Johannesburg after a deadly gas-tanker explosion caused significant damage and loss of life.

“

Using my volunteer leave makes me feel empowered, connected and fulfilled, knowing that I am able to make a positive impact in my community, contribute to important causes and foster a culture of giving back.



**Carmelo Ople** from the APAC region, for creating an initiative called Technology in the Eyes of a Child (TECH) to support underprivileged children in his native Philippines with donated laptops from his current office in Singapore, to aid in access to online schooling.

“

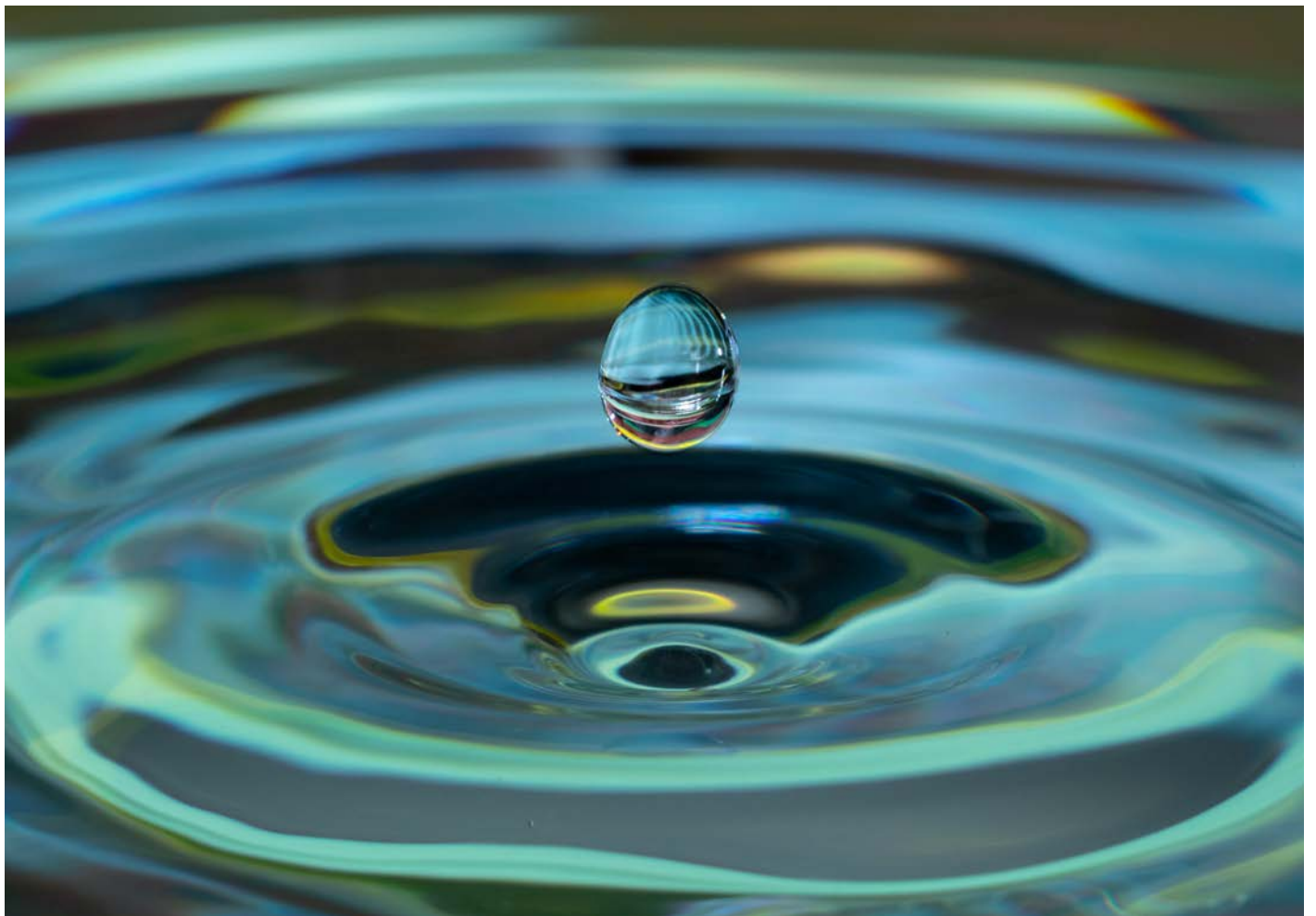
NTT has been a blessing to me for 17 years now and in return I would like to be a blessing that others need especially the less fortunate children. Be the hand that lifts others up in time of need. Many things can be a waste of my effort, but a helping hand is not.

# Partnering for a sustainable world

## Public transparency and accountability

We're proud to be in the top 25% of all companies assessed globally by EcoVadis and a leader in carbon management and environmental criteria.

We support the United Nations Sustainable Development Goals and have signed the UN Global Compact. Our net-zero targets are externally validated by the Science Based Targets initiative (SBTi), aligned to the 1.5-degree pathway (Paris Agreement).



# List of abbreviations

<b>AI</b>	artificial intelligence
<b>APAC</b>	Asia Pacific
<b>BCA</b>	Building and Construction Authority
<b>CDP</b>	Carbon Disclosure Project
<b>CILE</b>	Compagnie Intercommunale Liégeoise des Eaux
<b>CoP</b>	Communication of Progress
<b>DPP</b>	Data Privacy and Protection
<b>EVP</b>	employee value proposition
<b>GDC</b>	Global Data Center
<b>GHG</b>	greenhouse gas
<b>HSE</b>	Health, safety and environment
<b>HVO</b>	Hydrotreated vegetable oil
<b>IMDA</b>	Infocomm Media Development Authority
<b>IoT</b>	Internet of Things
<b>MDR</b>	Managed Detection & Response
<b>MEA</b>	Middle East and Africa
<b>RAP</b>	Reconciliation Action Plan
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures
<b>TECH</b>	The Eyes of a Child
<b>UICC</b>	Union for International Cancer Control
<b>UK&amp;I</b>	United Kingdom and Ireland
<b>UN</b>	United Nations
<b>UNGC</b>	UN Global Compact
<b>WLD</b>	Work Life Digital

