

ST TELEMEDIA GLOBAL DATA CENTRES



# ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) REPORT 2022

POWERING ADVANCEMENT



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# POWERING ADVANCEMENT

Innovation and resilience



# ABOUT STT GDC

ST Telemedia Global Data Centres (STT GDC) is a leading data centre provider founded and headquartered in Singapore since 2014. It is wholly owned by ST Telemedia, a direct and wholly-owned subsidiary of Temasek Holdings Limited.

STT GDC offers a full suite of best-in-class and end-to-end data centre solutions designed to help our customers respond dynamically to change and adapt to growing demand for colocation, connectivity and support services.

Our portfolio includes over 60 data centres with an IT load of more than 900 megawatts across mature and emerging business markets including Singapore, United Kingdom (UK), Germany, India, Thailand, South Korea, Indonesia, Japan and the Philippines. STT GDC is also the largest shareholder in GDS, which operates over 100 data centres across China, Hong Kong SAR and Malaysia.

As one of the world's fastest-growing data centre providers, STT GDC is committed to driving a sustainable digital future by offering our customers a differentiated service built on scalability, resilience, and operational excellence. Since 2014, we have experienced rapid growth and have prioritised sustainability by fostering technological advancements through innovation, skill development, and robust governance.

Since our previous report, we have built upon our local and global capabilities, in line with our goals and core values to continuously improve upon our sustainability performance and bring positive change by challenging assumptions to help us innovate and generate new solutions. Our innovation with sustainable storage and water solutions that aim at optimising scarce land and power resources for societal advancement and minimisation of environmental impact is a case in point.

STT GDC is committed to power societal advancement by designing, building and operating innovative, environmentally responsible, secure and resilient data centres.



# OUR VALUES

## Deliver Consistency

By creating responsible, dependable, and replicable business processes across our network, we will establish trustworthiness and demonstrate accountability.

## Strive For Excellence

By challenging assumptions and pushing boundaries through a culture of innovation, we will continuously improve and excel.

## Act With Integrity

By committing to our promises and genuine transparency, we will operate with a productive spirit of candour and openness.

## Be Socially Responsible

By adopting a socially responsible mindset and respecting the differences that define us, we will always do right by people and planet.

## Have Grit

By embracing a can-do attitude and going the extra mile, we persevere through complex challenges with the passion and strength of character needed to succeed.



# CONTINUING TO SUPPORT OUR CUSTOMERS' GROWTH

More than 60 assets of over 1GW spanning 9 geographies

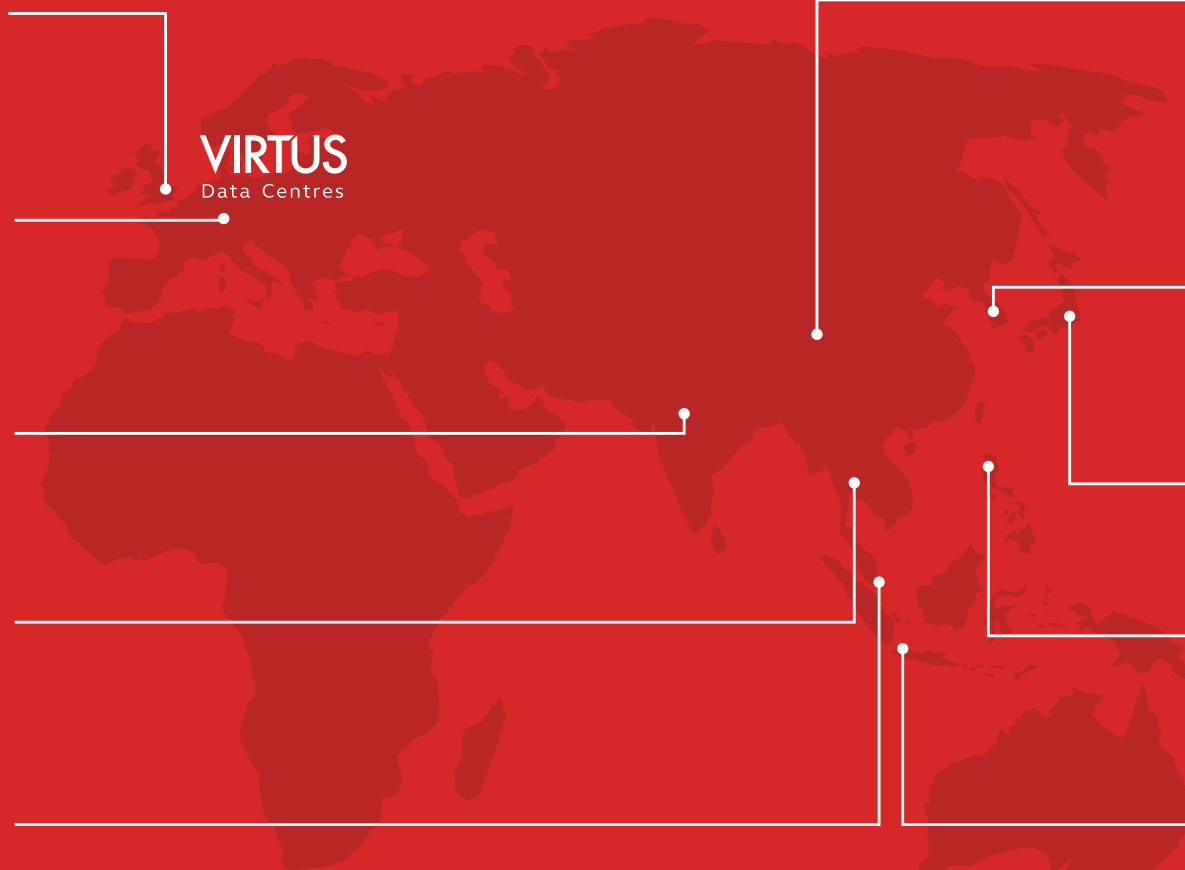
13 Data centres in the UK

4 Data centres in Germany

21 Data centres in India

3 Data centres in Thailand

7 Data centres in Singapore



**VIRTUS**  
Data Centres



STT GDC is largest shareholder of GDS  
>100 data centres  
>700,000 sqm of NLA  
across China, Hong Kong SAR & Malaysia

2 Data centres in South Korea

2 Data centres in Japan

6 Data centres in the Philippines

3 Data centres in Indonesia

\*Number of data centres operating in China is as of 31 December 2022 and includes third-party data centres.

## Enabling Our Digital Future

### Proven track record as a trusted provider for digital leaders locally and globally



Sovereign-owned and deep-rooted in Singapore, with global strength matched by our local expertise



Strong presence across 9 critical business hubs of varying growth stages (Singapore, India, Thailand, Philippines, Indonesia, Japan, South Korea, the UK and Germany.)



Actively manages a global portfolio of

- >60 data centres
- >1 gigawatt of IT load
- Largest shareholder in GDS



Built and operated to global standards of excellence



Vast network of strategic partnerships across markets



Well-reputed industry recognition for operational reliability, energy efficiency, leadership & employee engagement practices

## Built for..

### Innovative & new technologies

Cloud computing, machine learning, 5G, media, Industry 4.0, Internet of Things (IoT), artificial intelligence, e-commerce, networking & more.

### Our world-class customers

Large tech/hyperscalers, financial institutions, government, content & digital media, network service providers & enterprises.

### Enabling digital economies

Harnessing technology to enable the digital transformation of how people and businesses live, work and play, delivering a digital society, economy and government.








## Our contribution to powering advancement

In today's digital landscape, the demand for uninterrupted and secure digital infrastructure and services has never been greater. The need for reliable data infrastructure has become paramount. As a leading data centre operator, we are aware and take responsibility to address the increasing demand for our services in a sustainable way by strengthening our effort to create value whilst safeguarding our social license to operate.



Across all our geographies, we commit ourselves, our business partners, suppliers and employees to contribute to value creation by implementing sustainable practices focusing on the areas where STT GDC's business decisions and operations may materially impact on people, communities and environment.

In today's world where resources are increasingly constrained, our social license to operate is a direct result of our efforts and commitment and leadership in all facets of sustainability.

Material Topics	Focus areas	Powering advancement
 <b>Energy</b>	Focus on energy efficiency, energy security and renewable energy	We design and operate scalable, resilient and efficient data centres while protecting the environment
 <b>Climate Risk Resilience</b>	Ability to withstand extreme weather conditions and events which are predicted to be more likely in the future	We foster innovation and implement leading technologies
 <b>Human Capital Management</b>	Enhancement of development and training, along with insights about our needs, to attract skilled labour and prioritise career development for key talents	We invest in a future-ready workforce
 <b>Health, Safety &amp; Wellbeing</b>	Implementation of our world class, ISO 45001 certified standards across the construction and operational lifecycle in every region of our business	We promote inclusion, deepen stakeholder engagement, and manage supply chains to strengthen our social license to operate responsibly
 <b>Governance &amp; Integrity</b>	Strong board governance of ESG and health and safety issues, complemented by a newly introduced STT GDC Group ESG Committee (GESGC) to strengthen our governance and focus to adopt and implement sustainability principles and practices	We embed sustainability principles and codes of conduct into our decision-making process and operations as a whole



As part of our contribution to advancement, STT GDC recognises the importance of partnerships and collaborations with like minded organisations. We are working together with universities, business associations, non-profit organisations and companies to drive responsible and sustainable business practices.

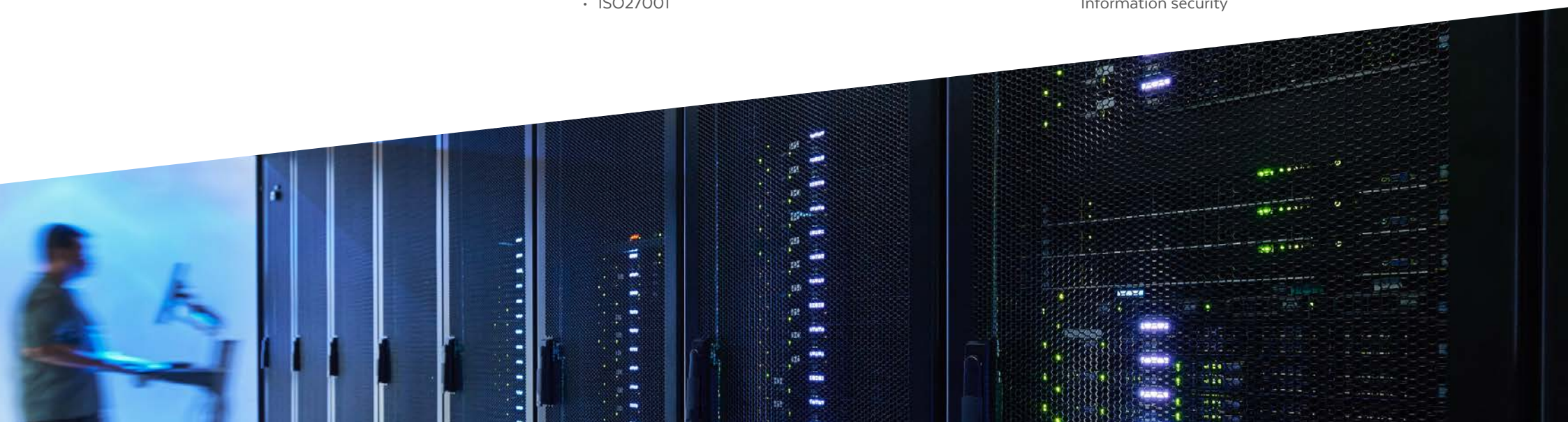
Country	Organisation	Description
India 	Tata Communications Ltd	A part of the Tata Group, Tata Communications (NSE: TATACOMM; BSE: 500483) is a global digital ecosystem enabler powering today's fast-growing digital economy in more than 190 countries and territories. Leading with trust, it enables digital transformation of enterprises globally with collaboration and connected solutions, core and next gen connectivity, cloud hosting and security solutions and media services. Tata Communications is committed to be carbon neutral by 2030 and net zero by 2035 across its global operations.
UK 	Macquarie Asset Management	Global asset manager trusted by institutions and individuals to manage more than A\$870 billion in assets globally, investing responsibly to generate long-term value and drive positive outcomes in the communities in which we operate. MAM is committed to achieving net zero emissions across its investment portfolio by 2040.
Philippines 	Globe Telecom	<p>Globe aims to lead with purpose and innovation to create a more inclusive and sustainable world. In line with the United Nations' Sustainable Development Goals, the company strengthens its contribution to nation-building through three strategic pillars.</p> <p>In 2021, Globe became the first publicly-listed Philippine company to commit to the Science Based Target initiative (SBTi).</p>



At STT GDC we follow and comply with relevant international policies and conventions. As part of our social responsibility, we want to influence and encourage sustainable practices across our value chain, through the implementation of policy commitments into our operations, business decisions and supply chains.

The publication of our [Supplier Code of Conduct](#) is a concrete step taken by STT GDC to ensure the implementation of responsible practices whilst safeguarding the rights of employees, vulnerable groups and communities.

Laws & Policy Commitment	Description
<ul style="list-style-type: none"> <li>• Singapore’s Prevention of Corruption Act 1960</li> <li>• UK Bribery Act</li> <li>• United States Foreign Corrupt Practices Act</li> <li>• India’s Prevention of Corruption Act, 1988</li> </ul>	Anti-corruption, anti-money laundering and anti-terrorism financing
<ul style="list-style-type: none"> <li>• Singapore’s Personal Data Protection Act (PDPA)</li> <li>• European General Data Protection Regulation (EU GDPR)</li> <li>• UK General Data Protection Regulation (UK GDPR)</li> <li>• Indian Digital Personal Data Protection Bill</li> </ul>	Data security
<ul style="list-style-type: none"> <li>• International Labour Standards (ILO)</li> </ul>	Fair employment and human rights practices
<ul style="list-style-type: none"> <li>• Modern Slavery Act</li> </ul>	Prohibition of child, forced or compulsory labour
<ul style="list-style-type: none"> <li>• ISO45001</li> </ul>	Safe conditions
<ul style="list-style-type: none"> <li>• ISO14001</li> <li>• ISO 50001</li> </ul>	Environmental protection
<ul style="list-style-type: none"> <li>• ISO27001</li> </ul>	Information security



# ABOUT THIS REPORT

We are pleased to share with you  
our third annual Environmental,  
Social and Governance (ESG) Report



## REPORTING SCOPE

Our approach towards reporting is progressive. This year, we have referenced the Task Force on Climate-Related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB) Standards as bases for our disclosure, as well as being prepared in accordance with the Global Reporting Initiative (GRI) 2021 Standards. This report sets the scene for deeper disclosure of STT GDC sustainability strategy, and our progress in advancing our contributions towards the United Nations Sustainable Development Goals (UN SDGs).

We have performed an extensive materiality assessment and stakeholder engagement, and enriched our data measurement techniques and assumptions across the geographies in scope. To enhance data credibility, we have engaged an independent third party to assure this report **(Please also refer to page 70.)** and attached the assurance report at the end of our ESG Report. In future reporting cycles, we will keep improving on our disclosures.

## DATA COVERAGE & SCOPE

We have documented our ESG performance based on the Group's financial year from 1 January to 31 December 2022. It covers all STT GDC's operations during the year, including Singapore, India, South Korea<sup>1</sup> and the UK. For our new geographies and locations, we will progressively share more information and case studies in our future sustainability reports. Since year end we have launched businesses in Indonesia, Germany and Japan for which we have operational control. These will be included within our 2023 scope.



For suggestions and feedback related to the sustainability report, please contact us at [ESG@sttelemediagdc.com](mailto:ESG@sttelemediagdc.com).



# LETTER FROM OUR CEO

Dear Stakeholders,

As one of the world's fastest-growing data centre providers, we are committed to grow responsibly by securing the necessary resources to innovate and invest in our people and technologies.

We expect our data centres to be leading edge in terms of sustainability, efficiency, security and resilience to the impacts of climate change. We are committed to innovate and invest in renewable energy sources, and technologies that actively contribute to energy and water efficiencies.

**In 2022, we have increased the use of renewable energy across the Group, achieving 52% penetration. We are reaffirming our commitment to carbon neutrality by 2030.**

As we witness more intense competition for human capital, we are also committed to foster a culture of care for our people through best-in-class health and safety processes, training and development programmes and partnerships with higher education institutions to attract and retain the best talents whilst contributing to future-proof relevant competencies and skillsets for the industry.

**This year, as part of our materiality process, we have engaged with our key stakeholders, both internal to the organisation, and those external but who we have a key impact on or who could impact**

**our long term business. These engagements help us validate and prioritise the sustainability issues of relevance to STT GDC.**

Finally, as we come head-to-head with more environmental, social, governance and regulatory risks, we are committed to investing into strengthening our governance structure. **(More about our ESG governance can be found on page 25.)**

**In 2022, we have introduced a dedicated sustainability committee, who will ensure that sustainability considerations are fully integrated into our decision-making processes and that we are constantly pushing ourselves to improve and do better.**

I am very pleased with the progress made by STT GDC, but I recognise that navigating these challenges requires a nuanced approach, as we will be facing business tensions and trade-offs which need to be carefully assessed and addressed. For example, how do we overcome the challenge in securing renewable energy sources in the geographies where we build and operate, some of which have limited renewable energy capacity?

Our commitment is clear. Only by embedding sustainability into everyday activities, anticipating the risks and opportunities ahead, acting with

integrity, fostering innovation, and equipping our people with the right skills and competencies will we empower STT GDC to power advancement.

I am excited about the strong market demand and expanding opportunities across the economies where we operate, but being adequate is not enough. In light of pressing global challenges and the inherent business tensions and trade-offs, it is insufficient to simply meet the minimum sustainability expectations. It is imperative for us to set a leading example and demonstrate our unwavering commitment to doing what is right. Each one of us plays a critical role in driving responsible business growth and caring for our planet and our people. Together, we can make a difference.



**Bruno Lopez**

President and Group CEO,  
ST Telemedia Global Data Centres

# ESG AT STT GDC

## Powering advancement

Powering advancement is about creating a better future by driving innovation, connectivity and progress. To do so, we are securing access to reliable and renewable energy sources, investing in technologies for efficient energy management, building skills and competencies for a resilient future.



## ESG FRAMEWORK

Guided by STT GDC's ESG strategy introduced back in 2020, we are making strong progress towards our commitments to:

- 1 Achieve carbon-neutral data centre operations by 2030
- 2 Ensure we maintain a safe and secure, diverse and inclusive workplace
- 3 Uphold the highest standards of ethics and responsibility across our operations

## 2022 GROUP HIGHLIGHTS

### Carbon Neutrality by 2030



52%  
Renewable energy  
penetration



24%  
carbon intensity  
improvement



7%  
PUE improvement  
since 2020

### Safe and secure, diverse and inclusive workplace



13.7M  
construction  
and operations  
hours recorded



0.15  
Total recordable  
incident rate (TRIR)



0  
work related  
serious injuries

## This report builds on our previous commitments and progress made since first introducing STT GDC's ESG Framework in 2020.

This report is structured around these commitments, the respective material aspects and how STT GDC is managing ESG materiality topics across geographies with integrity and in the best interests of people and planet.

As we are accelerating our commitment to provide responsible digital infrastructure across all our existing data centre platforms, this year's report includes more information and disclosures at a country level. **Please also refer to page 61 for more details on each of our countries' efforts.**

Furthermore, as we are determined to contribute to building a more sustainable and equitable global economy, we have reassessed our ESG materiality topics, and engaged internal and external stakeholders through in-depth interviews and extensive surveys. Our questions to stakeholders have been formulated to consider the impacts of STT GDC's material topics on both its financial and sustainability performance, so that we capture overall stakeholder value.

This is relevant in ensuring that our values and priorities are aligned to those of our stakeholders, for example, in how the fight against climate change is motivating our innovation efforts, operations and investments to secure renewable sources and build circular models around securing key resources, such as water.

Equally important is also our understanding of STT GDC's non-financial value drivers such as reputation, sustainability governance, talent management and supply chain relationships. For example, how equitable employment practices increase employee retention and productivity in a sector where skills and competencies are being continuously developed.

**More about our materiality approach and assessment can be found on page 18.**

### Regional highlights in 2022

#### UK



- Continue to secure 100% renewable energy to power its operations with zero market-based scope 2 emissions
- RoSPA (The Royal Society for the Prevention of Accidents) Gold Award, reflecting the high quality safety programme of the business
- 99.96% of waste was diverted from landfill

#### India



- Renewable energy use continues to increase with further local PPA's signed. On track to reach 50% renewable energy penetration in India by 2026 and achieve carbon-neutral data centre operations by 2030
- Annual reduction of over 6% in fuel usage
- Rainwater harvesting systems in place for STT Bengaluru DC 3, STT Chennai DC 2 and STT Mumbai DC 3
- New initiative "War on waste" implemented to divert waste to recyclers

#### Singapore



- Supporting local and international projects, increased in renewable energy use to 18%
- AI-enabled energy optimisation deployed in a live data centre environment
- MoU signed to collaborate on a clean hydrogen energy proof of concept with leading energy players
- Immersion cooling pilot deployed in a live data centre environment



### ESG Framework

**ENVIRONMENTAL TOPICS**

13 CLIMATE ACTION  
7 AFFORDABLE AND CLEAN ENERGY  
6 CLEAN WATER AND SANITATION

**SOCIAL TOPICS**

3 GOOD HEALTH AND WELL BEING  
5 GENDER EQUALITY  
8 DECENT WORK AND ECONOMIC GROWTH

**GOVERNANCE TOPICS**

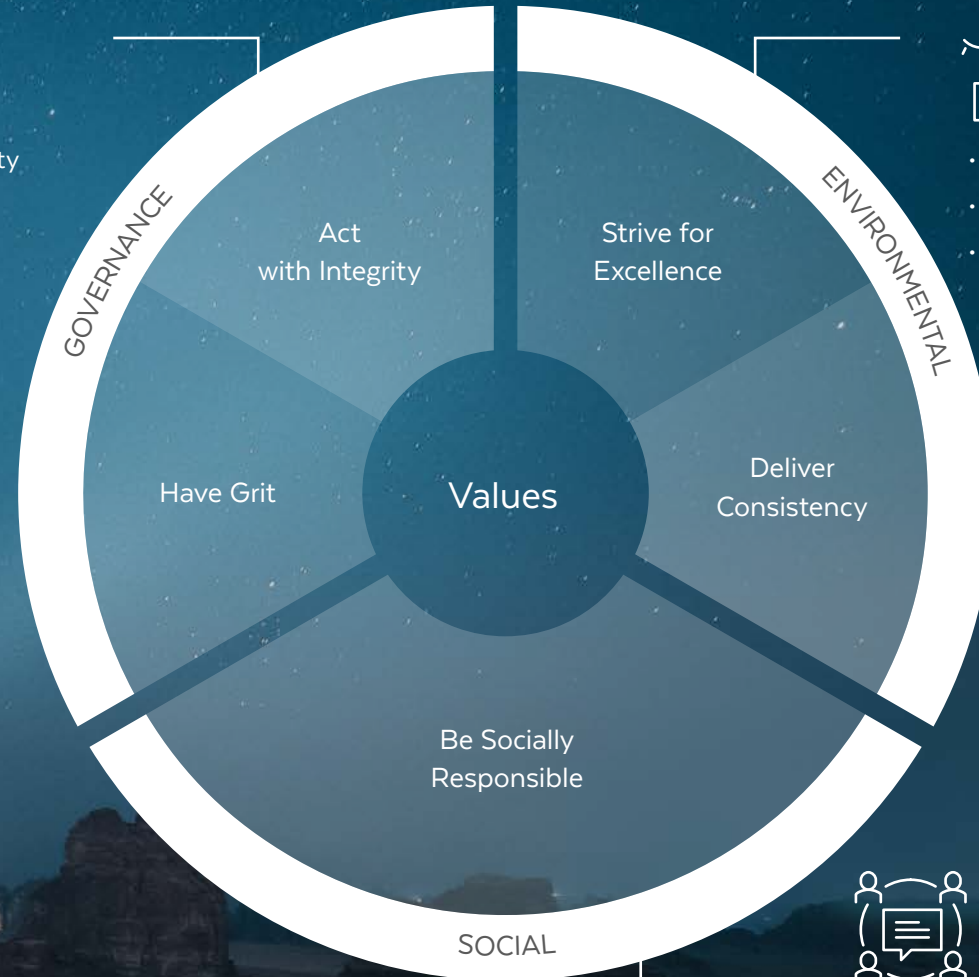
16 PEACE, JUSTICE AND STRONG INSTITUTIONS  
12 RESPONSIBLE CONSUMPTION AND PRODUCTION  
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



- Governance & integrity
- Economic vitality of communities & supply chain
- Climate risk resilience
- Responsible procurement
- Cybersecurity



- Energy efficiency
- Energy management
- Water



- Health, safety & well being
- Diversity & inclusion
- Human capital management



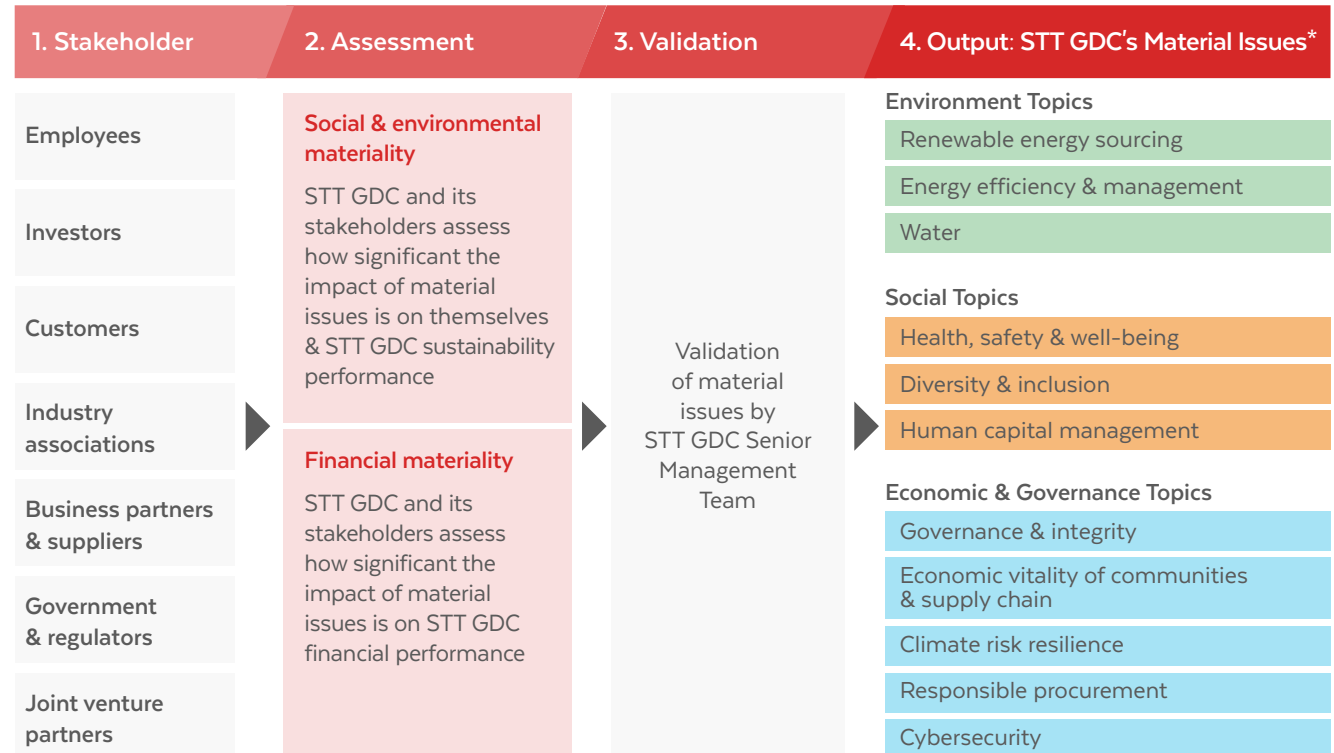
## Materiality assessment

We have conducted a comprehensive review of our material issues, following a structured and dynamic approach based on the AA1000 Accountability Principles<sup>2</sup> and GRI 2021 Standards<sup>3</sup>.

Our goal was to assess the relevance and impacts, both positive and negative, of Environmental, Social, and Governance issues on STT GDC's financial and sustainability performance.

This review and update to our material issues enables us to remain focused on the key current and emerging issues. The sustainability risks that any business faces changes over time. We place a strong emphasis on ensuring that we consult a wide group of stakeholders to help ensure that our areas of ESG focus are aligned with our key stakeholders' expectations (see page 23), as well as our wider business strategy.

Figure 1: GDC Material Issues



STT GDC's financial metrics such as its revenue generation, cost base and cost of funding is possibly impacted by the costs of climate transition and the risks of climate change. We recognise this is a challenge faced by most if not all large businesses today. Similarly, our investments in mitigating climate change, such as sourcing renewable energy, implementing cooling solutions, and adopting circular business models, can have a significant positive impact on our long-term value.

STT GDC's social and environmental materiality such as its reputation, governance, talent attraction, management, and supply chain relationships are increasingly impacted by our sustainability processes, procedures and practices. We have seen enormous traction and positive support for our sustainability programme and firmly believe this will be a key differentiator and driver of long-term value creation.

The materiality approach that we have applied provides a holistic inside-out and outside-in perspective, assessing our sustainability impacts on our stakeholders and business. The assessment was facilitated by our consultant and validated by senior management based on a multi-stakeholder approach considering global trends and insights causing shifts in priorities.

The process of reviewing our material topics and our actual and potential impacts is based on an extensive ESG health check, scanning of reporting, regulatory expectations and peer benchmarking.

To gather stakeholder feedback, online surveys were circulated to key stakeholder groups. Through interviews with senior management, shareholders, industry and sustainability experts and tenants, we obtained additional insights into how STT GDC is presently managing materiality as well as which topics are potentially gaining importance in the near future.




Our ESG health check assessment has identified improvement areas around our disclosures, policies and procedures, in line with global best practice. Based on this health check, we have identified a roadmap of actions to ensure that we are continuously driving towards best practice.

We have decided to refer to the Sustainability Accounting Standards Board (SASB) Standards within this report, to bring industry-specific rigour and comparability to peers to our sustainability disclosures. We are monitoring the upcoming global ISSB reporting standards, and where relevant have included disclosures in line with these upcoming standards.




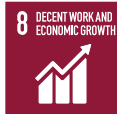


## Material topics






### Environmental impact

Material topic	Definition	Our commitments	SDG	Our contribution
<b>Energy efficiency &amp; management</b>	Energy efficiency & energy management in terms of sourcing renewable energy, improvements and consumption are vital to the achievement of the United Nations Sustainable Development Goal (UN SGD) of affordable and clean energy.	We have committed to carbon neutrality by 2030 including interim targets of a) sourcing minimum 60% carbon-free energy by 2026, b) reducing our carbon emission intensity by 40% by 2026 from 2020-level in line with SBTi trajectory and c) reducing by 10% our overall power usage effectiveness (PUE) by 2025.		Page <a href="#">31</a>
<b>Water</b>	With growing water scarcity, it is pertinent for the data centre industry to manage water usage to ameliorate water loss and mitigate the impact on local water supplies.	We are committed to promoting the responsible use of water across all operations to relieve water stress on the local environment and hedge against future physical water risks related to climate change.		Page <a href="#">37</a>
<b>Waste</b>	Waste is a pressing concern, particularly in Singapore, with its only active landfill expected to run out of space by 2035. The Singapore government launched the Zero Waste Masterplan in 2019 to reduce waste by 30% by 2030 and has identified e-waste as a key focus.	We are driving a “zero-waste” culture by aiming to reduce waste arising at source.		Page <a href="#">40</a>

## Social impact

Material topic	Definition	Our commitments	SDG	Our contribution
<b>Health, safety &amp; well-being</b>	<p>Many potential hazards exist in data centre, which can pose injury risks to workers if safety procedures are overlooked or not followed. Similarly our large construction programme requires active management of health and safety. Protecting the health, safety and well-being of stakeholders should be an integral part of day-to-day operations.</p> <p>Equally, data centres need to safeguard worker rights within their extended supply chains to ensure all who contribute to our business can enjoy safe and dignified conditions, safeguarding their human rights.</p>	<p>The health, safety and well-being of STT GDC's employees is always one of our top priorities and is managed through a comprehensive global framework of certified standards, resources, systems, check and balances.</p> <p>STT GDC communicates a zero-tolerance policy for human rights violations within its Supplier Code of Conduct.</p>		Page <a href="#">44</a>
<b>Diversity &amp; inclusion</b>	<p>Diverse and inclusive workplaces create a more respectful environment that helps to attract and retain a wide range of talent, while enhancing capacity for innovation. Gender equality is one of the UN's Sustainable Development Goals.</p>	<p>Diversity and inclusion principles are incorporated into our recruitment practices, performance appraisal policies and workplace conduct policies against discrimination.</p>		Page <a href="#">47</a>
<b>Human capital management</b>	<p>Data centre companies need to invest the training and development of their workforce to help them keep abreast of industry developments, knowledge, and technological trends. The competitiveness of the company will be enhanced with improvements in human capital and increased operational efficiency and cost savings.</p>	<p>We provide comprehensive employee benefits, and competitive and innovative wage packages to attract, retain and manage its strong pool of talents.</p> <p>We contribute to training and upskilling of the next generation of talent through our collaboration with educational institution such as UTC Heathrow in the UK.</p>	 	Page <a href="#">49</a>

## Responsible Business (economic & governance)

Material topic	Definition	Our commitments	SDG	Our contribution
<b>Governance &amp; integrity</b>	High quality corporate governance practices establish trust in operations and company brand and reputation.	Corporate integrity and responsible business practices govern STT GDC's values and culture. We have a zero-tolerance policy on bribery, kickbacks, and corruption.		Page <a href="#">53</a>
<b>Economic vitality of communities &amp; supply chain</b>	Labour markets are still recovering from the impacts of COVID-19, continued supply chain shocks, and geopolitical conflicts. During the construction and operation stages, especially within developing countries, data centres can engage local businesses to channel economic capital to local communities. Local sourcing creates job opportunities and visibly delivers positive community impacts.	We are committed to supporting the basic needs of local communities, including access to healthcare and to economic opportunity.		Page <a href="#">54</a>
<b>Climate risk resilience</b>	Climate risk and resilience is increasingly in focus for regulators, investors, and businesses. Climate change impacts on businesses are increasingly visible, prompting mandatory requirements from regulators for businesses to undertake climate risk assessments using scenario analysis.	We have conducted a high-level scenario analysis to identify its climate risks and opportunities, and we are looking to expand the existing risk assessment process to deepen its analysis.		Page <a href="#">56</a>
<b>Responsible procurement</b>	Globally, responsible procurement is rising up the agenda for data centres. Conflict minerals within supply chains have attracted reputational backlash. Data centres may increasingly come under scrutiny for conflict minerals present in procured equipment.	STT GDC condemns the usage of conflict minerals, as laid out in its Supplier Code of Conduct. STT GDC assesses existing and new suppliers using our Supplier Code of Conduct that is in line with international standards and certifications.		Page <a href="#">57</a>
<b>Cybersecurity</b>	Cybersecurity is critical to the protection of data stored within data centres. Cybersecurity breaches have the potential to incur heavy reputational and financial impacts.	100% of employees receive training and communications on data privacy and cybersecurity upon recruitment.		Page <a href="#">58</a>

# STAKEHOLDER ENGAGEMENT

STT GDC's commitment to power value creation for a sustainable digital future is sparked by feedback we receive from our continuous engagements with stakeholders. We conduct these ongoing engagements through multiple channels.

For the materiality review, we engaged stakeholders via interviews and surveys to gauge their feedback on ESG issues with financial, social and environmental impacts on STT GDC's operation and performance.

We have included some of the feedback received and the actions taken here below.

Material topic	Views & feedback received	Actions taken
Energy efficiency & management	Need to access renewables more readily and possibly consider infrastructure investments in renewables to ensure that there is a sustainable and reliable energy source.	Continuously securing access to renewable energy sources.
Health, safety & wellbeing	This topic has always been a top priority for STT GDC; there is potential to perform better in this topic by inculcating a culture of safety across all regional operations.	Continuing to evolve our already comprehensive, certified, health and safety frameworks.
Climate risk resilience	<ul style="list-style-type: none"> <li>Climate risk is a must-have for the business particularly as there are growing concerns around the built resilience of data centres in the face of more extreme weather conditions.</li> <li>The importance of green financing is a strategic area to strengthen, given that capital sourcing risk is one of the most critical risks identified under STT GDC's Enterprise Risk Management framework.</li> </ul>	Climate risks are being embedded in our Enterprise Risk Management Framework.
Human capital management	Attracting a strong pool of skilled talents is a critical issue that STT GDC is facing, against the backdrop of fierce global competition for human capital in the IT sector. There is consensus that more needs to be done by the organisation to understand the motivations of employees and offer them exciting learning opportunities and generous remuneration.	<ul style="list-style-type: none"> <li>Investing into a dedicated Learning and Knowledge centre facility, for example the Dr. APJ Abdul Kalam Knowledge Hub in India, wherein employees undergo capability enhancement programmes and learning experiences.</li> <li>Established a Centre of Excellence (CoE) initiative to combine classroom learning with on-the-job training in a live simulation environment, preparing students in India to navigate future operational scenarios.</li> </ul>

## Besides materiality, STT GDC is engaging the following stakeholders regularly:

Stakeholder group	Forms of engagement	Actions taken
Employees	<ul style="list-style-type: none"> <li>• Direct engagement with managers and co-workers</li> <li>• Training and support programmes</li> <li>• Employee satisfaction survey</li> <li>• Meeting with global teams</li> <li>• Employee wellness programme</li> <li>• Annual performance review</li> </ul>	<ul style="list-style-type: none"> <li>• Professional training and career opportunities</li> <li>• Diversity and employee inclusion</li> <li>• Philanthropic activities</li> <li>• Corporate data security</li> <li>• Economic performance and future outlook</li> <li>• Ethical business conduct</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• Open channels of communication</li> <li>• Sales and strategic account management</li> <li>• Collaboration on efficiency and clean energy project</li> <li>• Annual customer satisfaction survey</li> </ul>	<ul style="list-style-type: none"> <li>• Availability and resiliency</li> <li>• Consistent customer communication and relationship management</li> <li>• Growth plan</li> <li>• Data privacy and cybersecurity</li> <li>• Green building and energy efficiency certification</li> </ul>
Investors	Quarterly reporting	Communication and transparency of performance, outlook and strategy
Business partners & suppliers	<ul style="list-style-type: none"> <li>• Regular meetings, calls and performance reviews</li> <li>• Contract development and ongoing interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Product cost, availability, backlog</li> <li>• Transparency and communication of company economic performance</li> <li>• Economic performance and future outlook</li> </ul>
Industry associations	<ul style="list-style-type: none"> <li>• Membership and participation in trade associations, working groups</li> <li>• Conference and event attendance</li> </ul>	<ul style="list-style-type: none"> <li>• Economic development</li> <li>• Energy and environment</li> <li>• Community impact</li> </ul>
Government & regulators	Regular dialogue related to project permitting and other business matters	<ul style="list-style-type: none"> <li>• Compliance with permitting and reporting for operational assets</li> <li>• Compliance with financial and other corporate reporting</li> </ul>
Joint venture (JV) partners	Engagement on matters relevant to JV investments and management of the JV	Transparency and communication of company financial, business and sustainability performance



# OUR ESG GOVERNANCE

We have strengthened our sustainability governance structure to effectively implement our ESG strategy and initiatives, and to invest into sustainable growth.

The governance of sustainability issues is a fundamental consideration, as we continue our efforts in embedding sustainability principles into our decision-making process and operations.

Whilst the Board continues to have oversight of relevant ESG and Health and Safety matters at STT GDC, we have introduced the STT GDC Group ESG Committee (GESGC) to further bolster our governance of this critical subject.

## The purpose

The GESGC is formed with the intent to serve as the main platform for shaping STT GDC's ESG strategies and narratives. This is achieved through:

- Adopting a structured, coordinated, and cross-functional approach to ESG management;
- Collaborating and assisting in the swift implementation of ESG initiatives across the entire Group;
- Networking with relevant internal and external stakeholders;
- Providing clear visibility and accountability to the organisation's leadership.

## Objectives & Expectations

- Provide valuable inputs and feedback on various ESG initiatives and programmes
- Define the direction and scope for STT GDC's Group ESG Framework, Strategy, Reporting and related initiatives
- Foster ESG knowledge development and awareness by communicating and disseminating ESG knowledge throughout respective functions and geographies
- Establish effective communication avenues and channels with units across the Group and externally
- Conduct reviews of ESG programmes and initiatives
- Influence Leadership/Board to obtain direction, approvals, and support regarding ESG matters
- Contribute effectively to creating and promoting a culture within the Group that integrates ESG, where ESG is visible, understood, and intrinsic to business operations and functions



## The GESGC is divided into two components:

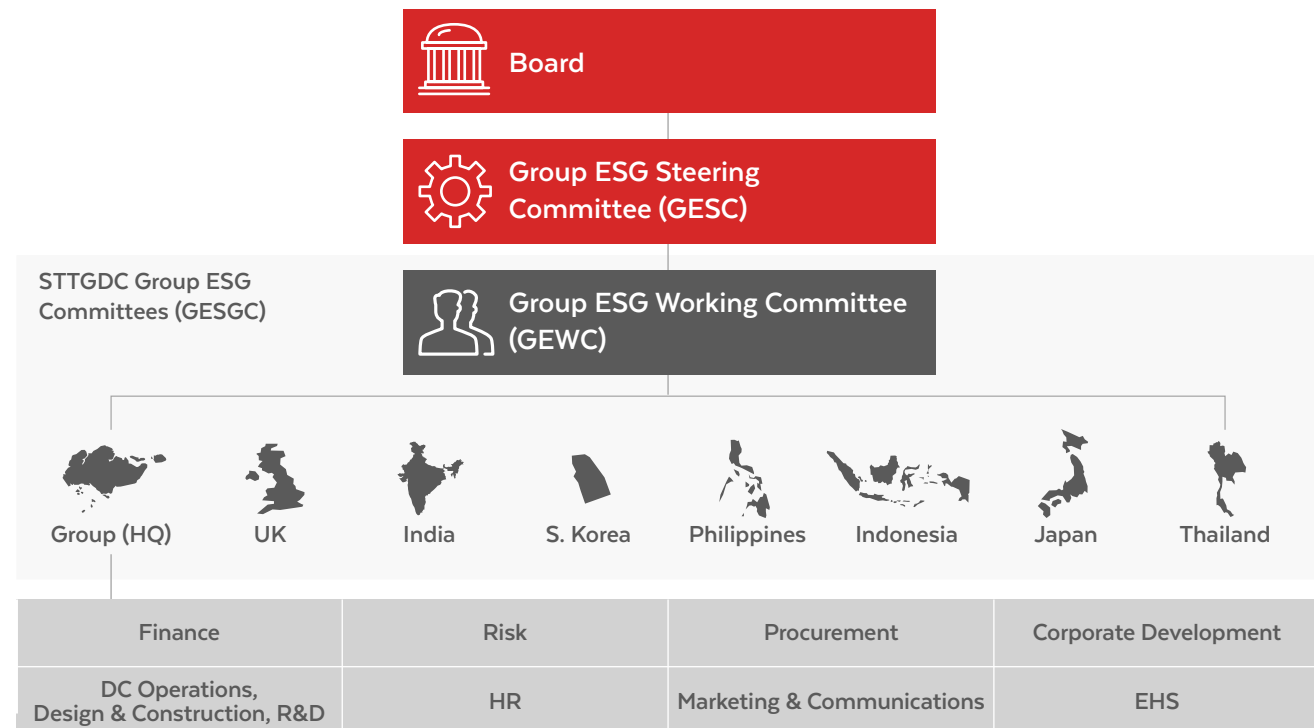
### 1. Group ESG Working Committee (GEWC)

represented by key contact points across diverse functions in Singapore (HQ) and across operating companies and geographies. The GEWC will serve as the main platform to interact, network and adopt best practices, enabling a more structured, coordinated and cross-functional approach towards ESG management. The GEWC is also concerned with accelerating the implementation of STT GDC ESG plans and initiatives across the Group and to highlight any key challenges or roadblocks for resolution.

### 2. Group ESG Steering Committee (GESGC)

represented by STT GDC Senior Management and country CEOs. The GESGC will serve as the primary platform for obtaining guidance, direction, and approvals on all ESG matters discussed within the Group ESG Working Committee (GEWC).

Figure 2: STT GDC ESG Governance Framework



The GEWC meets on a monthly basis to track on updates, attain feedback and inputs, as well as align to action areas. To enhance accountability of the Group’s sustainability governance, the GESGC intends to present updates to the GESGC on a quarterly basis and to the Board (the highest governance body) on a half-yearly basis.

This cross-functional approach is required to coherently address and manage sustainability matters across all our businesses and locations. Collaboratively, the various components and functions within the GESGC are intended to set the tone for our sustainability direction and initiatives, anticipating and addressing ESG risks, stakeholder engagement, and ensuring continuous progression in ESG management across the Group.

# TRENDS AND OUTLOOK

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## Anticipating risks ahead

We value our purpose in continuing to unlock social value by preparing for regulatory risks in the areas of cybersecurity, green buildings and supply chain management. As cybersecurity risks continue to escalate, our data centres face heightened scrutiny from governments, necessitating compliance with more stringent regulations. This includes updating security measures and upholding transparency and accountability in our operations.

Globally, stricter regulations on the energy performance of buildings are to be expected as governments embrace the decarbonisation of built environment to meet climate goals.

Furthermore, stricter market and regulatory expectations to disclose accurate and verifiable ESG data are expanding, to encompass not only direct operations, but also across wider supply chains.

To align ourselves with these regulatory changes and expectations, we are deepening our commitment to adopt the technology of green buildings. We will further strengthen risk management systems in our supply chains to anticipate, detect and avoid human rights abuses.

## Being future-ready

With the continued growth of cloud computing, artificial intelligence and IoT, we recognise that there will be greater demands on the physical and digital infrastructure of data centres to withstand sustainability risks brought about by climate hazards, regulatory pressures and social expectations.

Digital connectivity is instrumental to societal advancement. Data centres enable high levels of efficiency in our digitally connected world, thereby enabling companies to reduce emissions at scale and tap into low carbon, energy efficient, innovative data storage solutions.

As the demand for automation grows, traditional industries are able to transform and innovate by utilising highly efficient, low carbon data centres.

## Building foresight capabilities

In anticipation of these environmental, social and governance risks and opportunities, STT GDC is determined to build resilience by strategically integrating sustainability across key aspects of our business. With the evolution of AI and blockchain technologies, the metaverse and Web 3.0, data centres are expected to become an even more prominent source of energy demand. We are boosting our capacity to drive innovation to optimise the use of energy and cooling. We will continue to invest in renewable energy projects and continue to demonstrate our social responsibility by implementing transparent and ethical business practices.

# MOVING FORWARD

We will build and operate data centres that will address the trends and climate risk potentially impacting STT GDC, such as the erratic movement in temperatures. There are many reported cases where the current operating and design standards are not able to cope with the large swings in temperature that are increasingly becoming the norm.

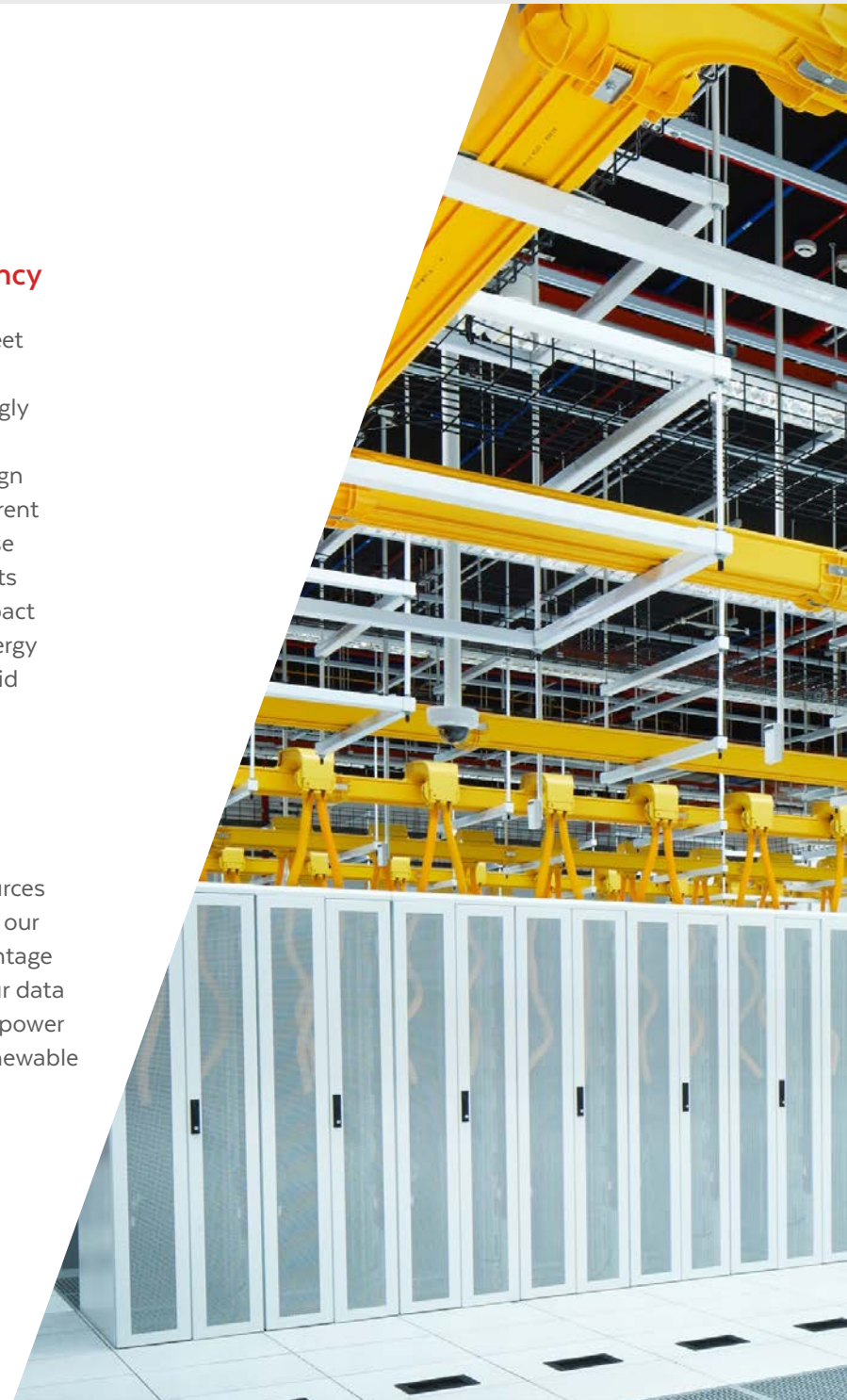
Other risks we are carefully assessing and managing are construction and development risks. Considering the rising occurrences of events that disrupt supply chains, it is crucial for us to anticipate higher cost and longer lead times for all equipments needed. Securing our supply chain and competitive financial resources are key to move forward in our world facing shortages, delays, price volatility and higher interest rates. Our Sustainability Linked Financing Framework (see page 59) will contribute to build and run data centres with better efficiency.

## Build and operate with better efficiency

We are enhancing our operating efficiency to meet growing demand for data storage. Keeping data centres cool in a warming world is an increasingly complex issue. Harnessing innovative cooling technologies is imperative for STT GDC to design and operate future-proof data centres. Our current use of artificial intelligence allows us to optimise energy consumption with real-time adjustments of cooling equipment. As we maximise our impact in climate action, we aim to achieve sizable energy reduction with the progressive adoption of liquid cooling technology.

## Fuel our data centres with renewable power

We are securing access to renewable power sources in the geographies where we build and operate our data centres. We will keep increasing the percentage of carbon-free electricity sources that power our data centres, by appropriate and verified renewable power purchase agreements (PPAs) and reputable renewable energy certificates (RECs).





# ENVIRONMENTAL IMPACT

Connecting environmental impact  
to advancement

Energy efficiency  
& energy management

Water

Waste



Data centres account for approximately 1.5%<sup>4</sup> of global electricity consumption, surpassing the usage of many individual countries, and contribute to nearly 1% of global energy-related greenhouse gas emissions. To meet the growing demand for data centres and ensure that we are on track to meet our carbon neutrality goal, decarbonisation is a key priority. We have deepened our commitment to meet our mid-and long-term sustainability goals with the establishment of a Sustainability-Linked Financing Framework (SLFF) in July 2022.

### Key highlights



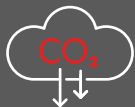
# 52%

of renewable energy  
penetration across the Group



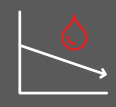
# 7%

reduction for PUE  
performance since 2020



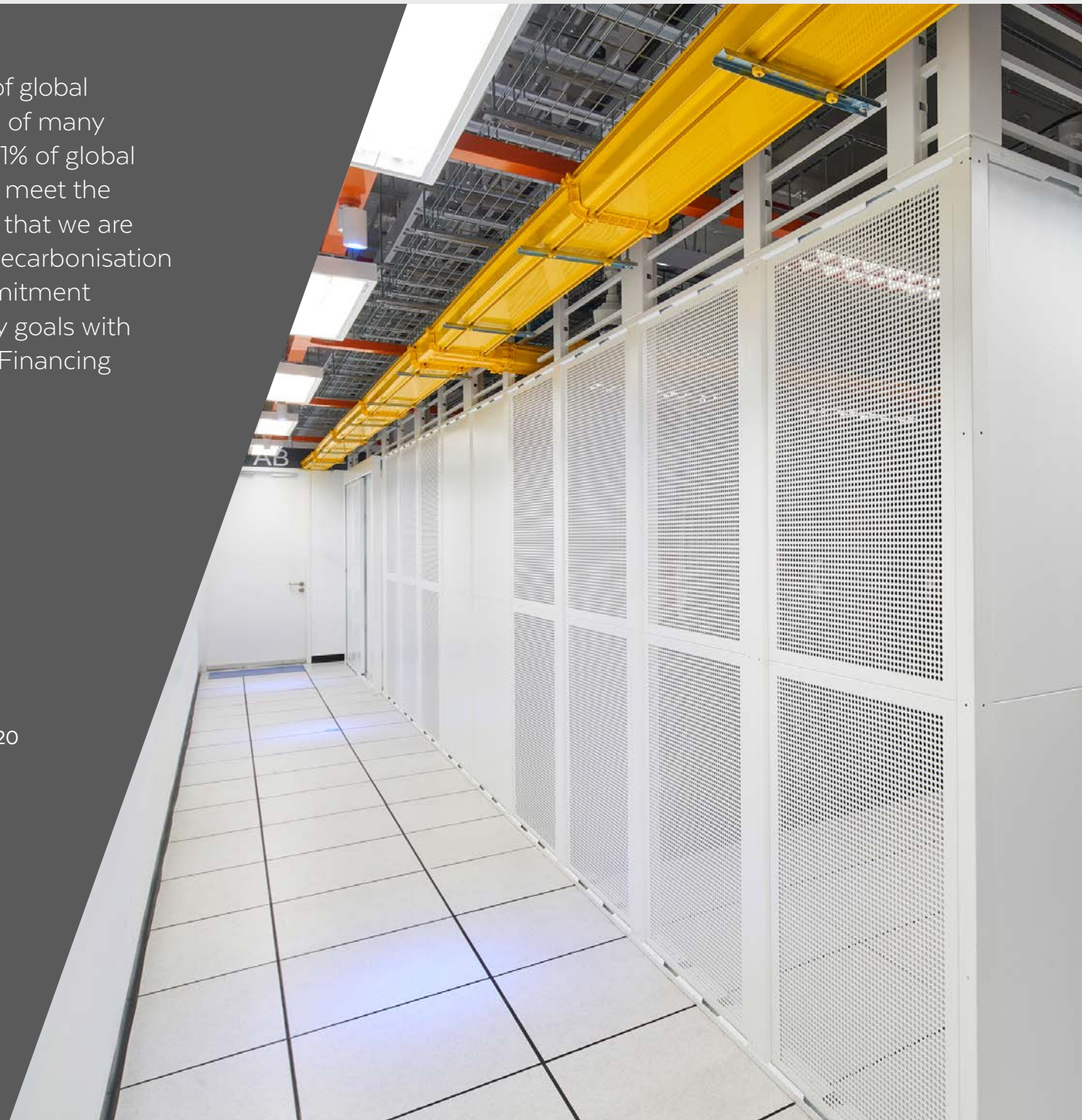
# 24%

improvement in carbon  
intensity year on year



# 18%

WUE improvement  
since 2020



# ENERGY

## Our role in powering advancement

We understand our role in advancing energy efficiency and energy sourcing improvements to meet the UN SDG of affordable and clean energy. With the accelerating demand for digital services, we recognise our role as a data centre to drive progress on reducing carbon emissions.

## Approach

STT GDC has pledged to decarbonise its operations and achieve carbon neutrality by 2030<sup>6</sup>.

We aim to do so by:

- Fostering innovation in sustainable energy-efficient and cooling solutions to achieve sizable reductions in energy consumption and emissions.
- Increasing the share of carbon-free electricity sources by appropriate and verified renewable power purchase agreements (PPAs) or reputable renewable energy certificates (RECs).
- We compensate for our remaining impact by purchasing and retiring carbon credits.
- Efficient management of resources



### Targets



# 60%

Carbon-free energy by 2026



# 40%

Reduction in emission intensity within data centre operations by 2026 against our 2020 baseline



Carbon neutral  
**by 2030**



# 10%

Reduction in PUE by 2025 against our 2020 baseline



## Target 1: 60% carbon free energy by 2026

As high quality and accurate data is the backbone of our journey to net-zero carbon, we continued to build on our data collection systems in 2022 to measure STT GDC's monthly carbon footprint in accordance with the GHG Protocol<sup>7</sup>.

Figure 3: % of carbon-free electricity in total electricity consumption (GWh)

Type of electricity	2021	2022	YoY change (%)
Carbon-free electricity (GWh)	605	878	45%
Non-renewable electricity (GWh)	775	810	5%
<b>% of carbon-free electricity</b>	<b>43%</b>	<b>52%</b>	<b>9%</b>

Figure 4: Renewable energy penetration: actual vs projected

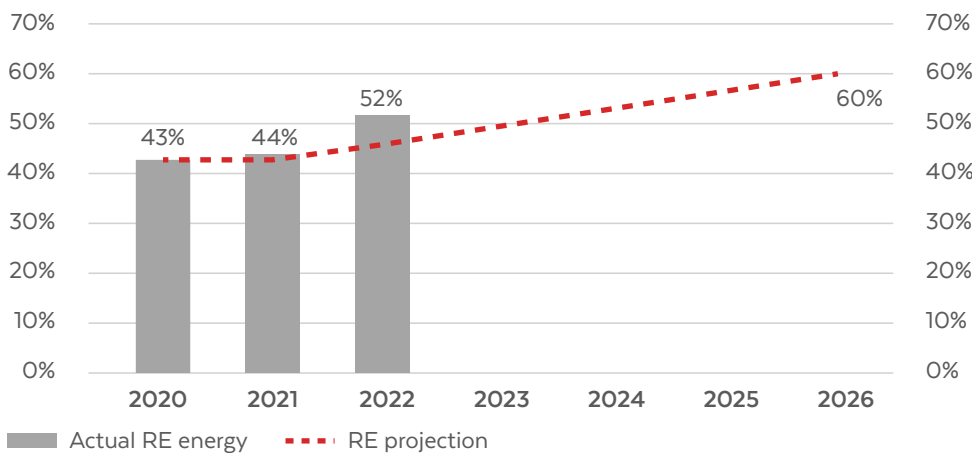
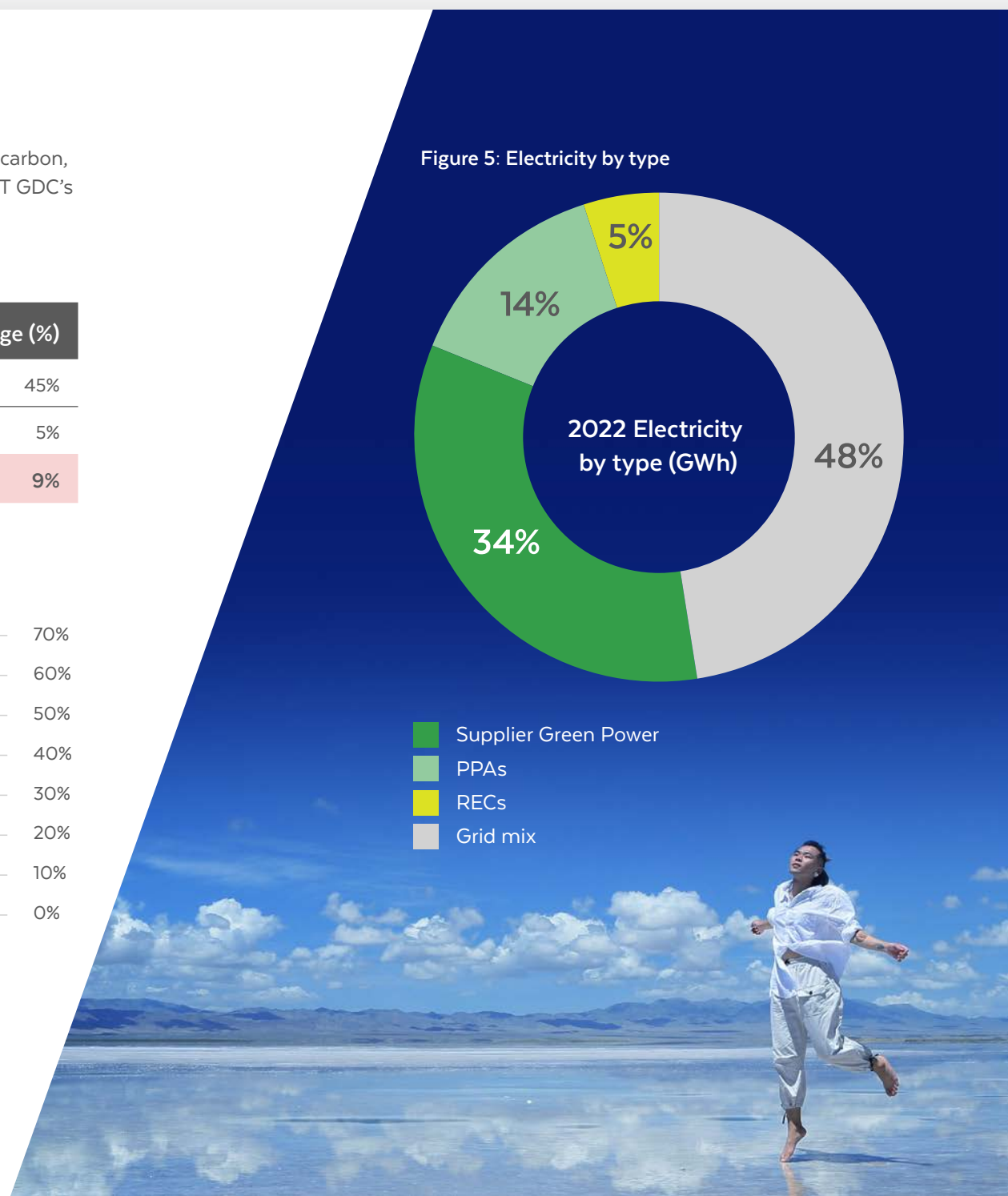
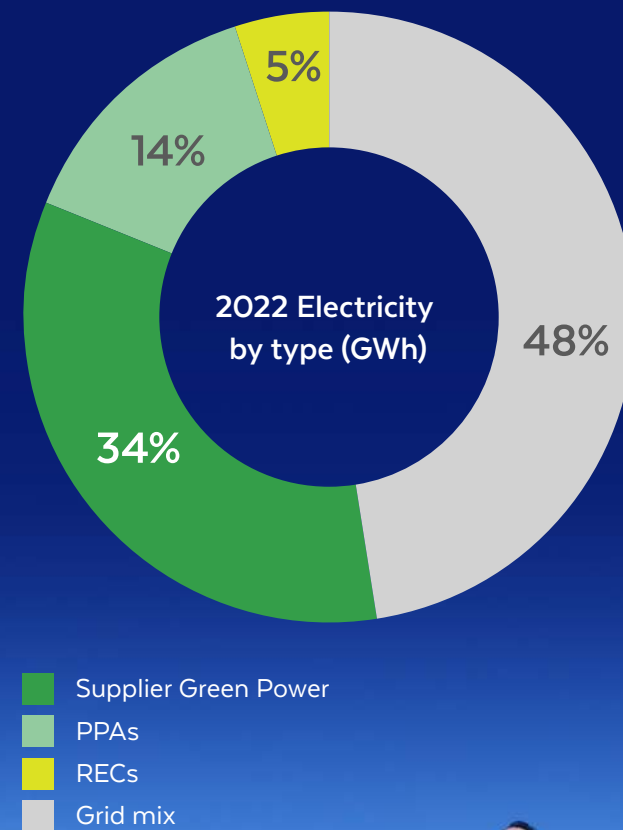


Figure 5: Electricity by type





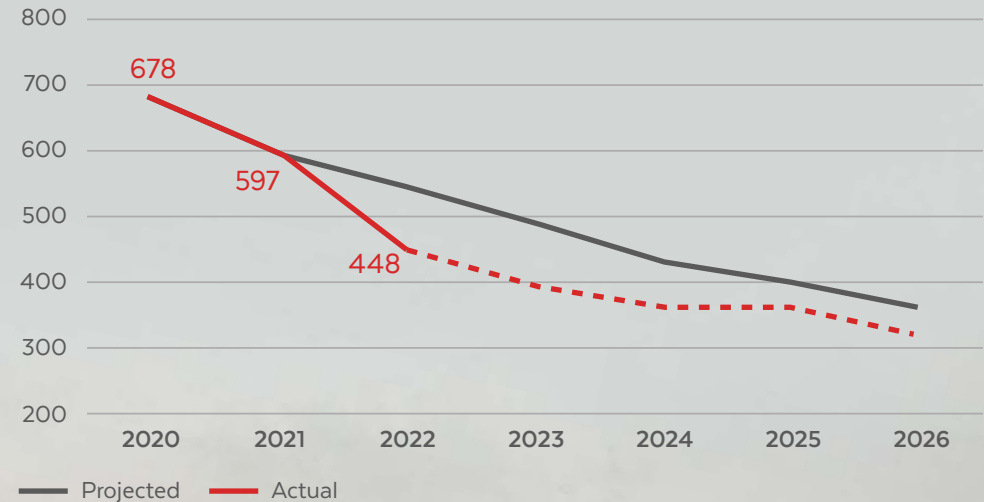
## Target 2: 40% reduction in carbon emission intensity by 2026

While carbon emissions are an important facet of our environmental impact, we use carbon intensity as another metric to understand our decarbonisation efforts and identify new improvement pathways where we can transition to more efficient processes on page [61](#).

Given the energy-intensive nature of our data centre operations, we have identified the reduction of Scope 1 and 2 carbon intensity as one of the three key performance indicators under our SLFF. We elaborate on this framework later in this report.

As high quality and accurate data is the backbone of our journey to net-zero carbon, we continued to build on our data collection systems in 2022 to measure STT GDC's monthly carbon footprint in accordance with the GHG Protocol<sup>7</sup>.

Figure 6: STT GDC's carbon emission intensity

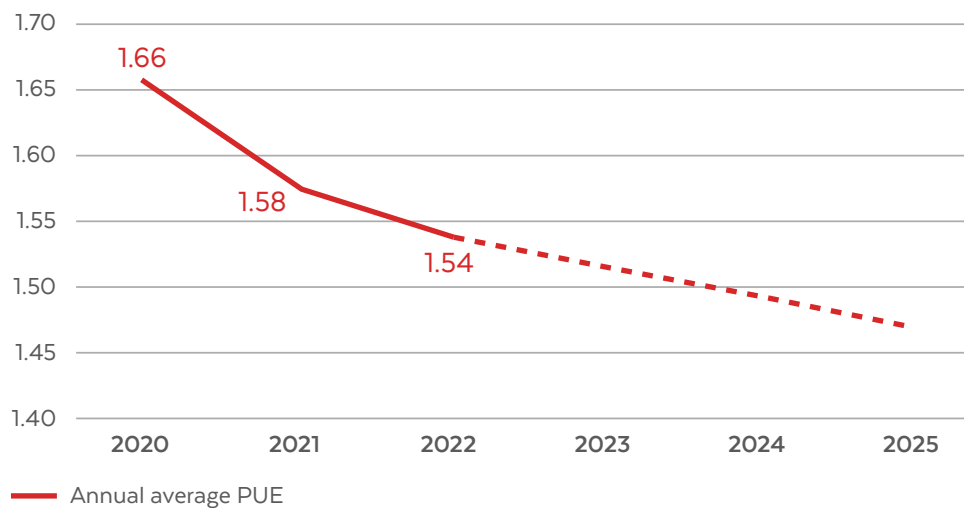


## Target 3: Reduction of PUE by 10% by 2025 (2020 base)

We have established tracking and benchmarking of power usage effectiveness (PUE)<sup>8</sup> for all facilities to effectively measure and manage our energy use.

We are committed to pushing the boundaries of data centre design to provide best in-class PUE for the facilities. We are engaged with our partners to bring leading technologies such as immersion liquid cooling technologies in current and future data centre designs.

Figure 7: Power usage effectiveness (PUE)



## Furthering renewable power penetration in India

Continuing to support development of renewable energy in India and increase STT GDC India renewable energy penetration, STT GDC India entered into a partnership with O<sub>2</sub> Renewable Energy (amongst others) to invest in and offtake renewable energy under a captive structure. This renewable energy will power STT GDC India's Bengaluru facility in the state of Karnataka.

Announcing the partnership, Sumit Mukhija, CEO at STT GDC India said, "Environment, Social and Governance are at the core of whatever we do as we continue to contribute towards achieving inclusive and responsible growth. From designing and constructing green buildings to tapping on renewable energy and implementing innovative and efficient cooling technologies in our data centres, sustainability remains an imperative as we grow and expand.

We firmly believe that sustainability is a responsibility that we share with our partners, customers and government and will work closely with these stakeholders as we strive to achieve carbon-neutral data centre operations across our facilities in India by 2030."

This partnership with O<sub>2</sub> Power, one of India's leading renewable energy platforms, further demonstrates

our resolve in adopting and promoting sustainable best practices in our facilities and steering the overall sector in the same direction. We are also actively collaborating with regulators, government and energy generation firms and opportunities and frameworks eventually to help us achieve carbon-neutral data centre operations across our facilities in India by 2030.

By 2026, STT GDC India expects to achieve a yearly reduction of over 380,000 tonnes of CO<sub>2</sub> emissions through a combination of best practices and operational excellence, and cooperation with renewable energy suppliers and partners including O<sub>2</sub> Power. This carbon reduction is equivalent to eliminating almost 25,000 passenger cars from the roads in a single year. The company is working towards taking the share of renewable energy to ~60% over the next four years.



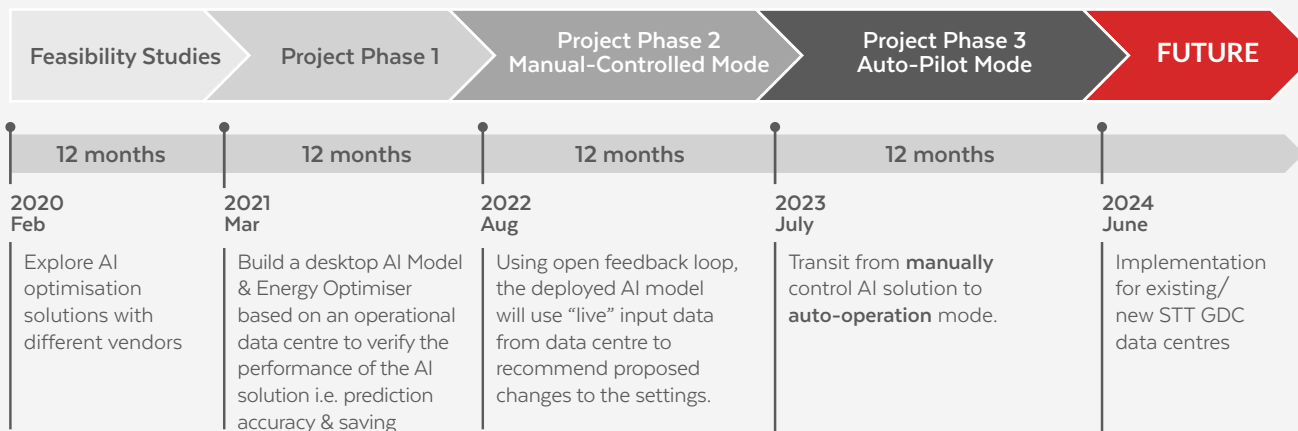
## Furthering our usage of AI to reduce DC energy consumption

Since 2019, STT GDC has been working on an initiative to use artificial intelligence to optimise data centre cooling efficiency. As powering the cooling system constitutes a significant proportion of a data centre's total energy usage, optimisation in this area can lead to substantial improvements in overall PUE and carbon efficiency. From early 2021, STT GDC has partnered

with ABB, a leading global technology and automation company to further this research and development.

Phase Two of the development of this technology which is currently underway will see the AI model and optimiser deployed in an operating data centre environment.

Figure 8: AI Project Milestone and Progress



# WATER



## Our role in powering advancement

Estimates show that data centres account for around 2%<sup>10</sup> of global water consumption, with a data centre consuming significant amount of water per year to cool our infrastructure and other equipment, where traditional cooling is used.<sup>11</sup> With growing water scarcity, we see the pertinence of maintaining responsible use of water in all our operations to meet the UN SDG of increasing water-use efficiency across all sectors.

## Approach

Given the nature of our operations, our environmental footprint is water intensive. To this end, we track water usage effectiveness (WUE) for all data centres, and we are driving innovative cooling-solutions and promoting water efficiency in data centre front-end design. We continue to implement water usage efficiency programmes and actively seek out partners to achieve breakthroughs in structural solutions—to create new cooling systems that requires minimal water usage.

### Targets achieved



Measure and track water usage effectiveness (WUE) for all data centres by 2022



Implement water usage efficiency programmes



We will conduct a Global Water Stewardship Assessment for all properties operated by STT GDC, refreshed every two years and in line with international protocol



## FY2022 Progress

Figure 9: Average WUE by year per country

Country of operations	2020	2021	2022	Change from 2020 (base year) to 2022
UK	0.11	0.07	0.13	
India	1.37	1.21	1.02	
Singapore	1.95	1.97	1.96	
Across all countries	1.11	1.03	0.95	-15%

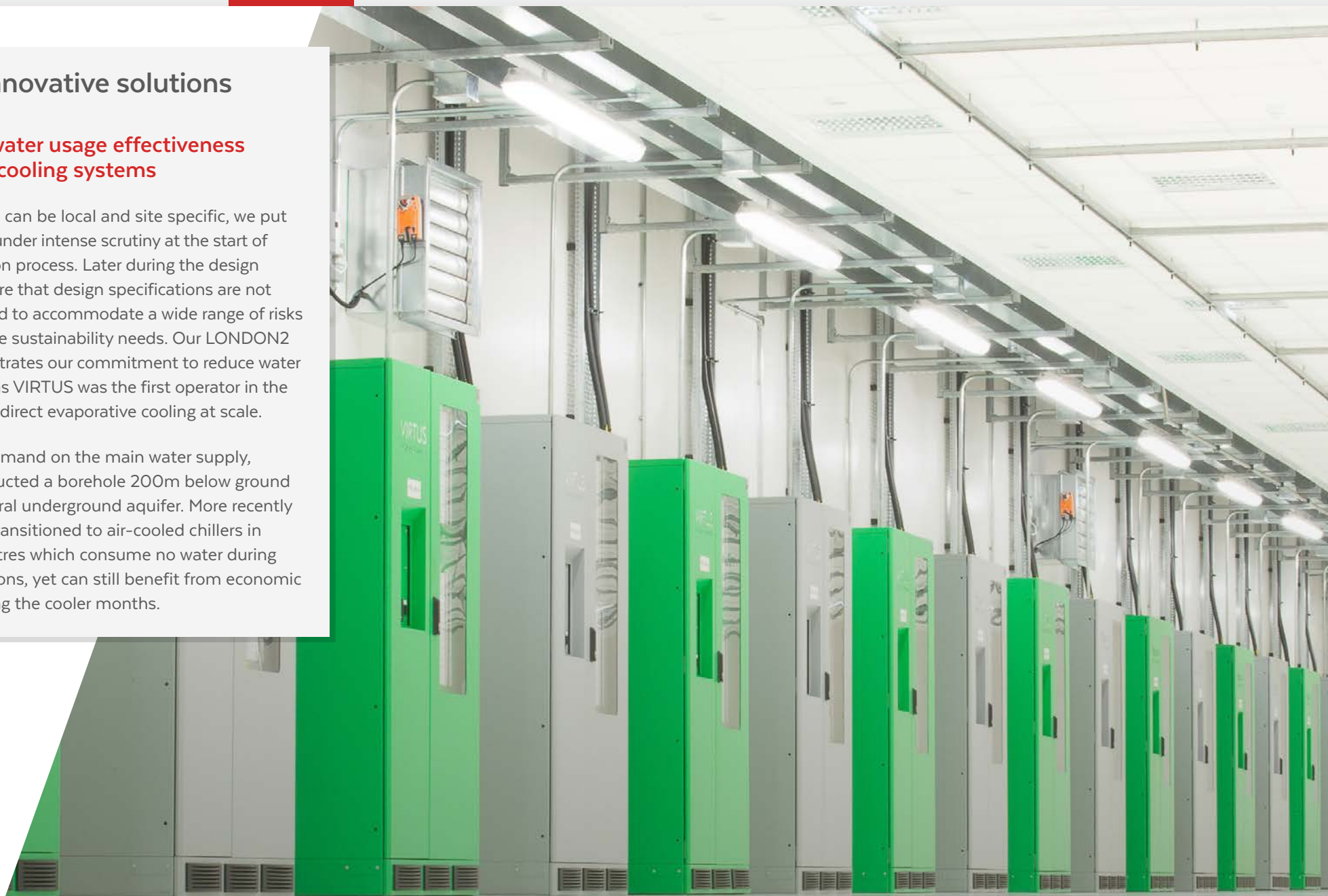


## Driving innovative solutions

### Improving water usage effectiveness with better cooling systems

As water issues can be local and site specific, we put potential sites under intense scrutiny at the start of the site selection process. Later during the design phase, we ensure that design specifications are not only customised to accommodate a wide range of risks but also balance sustainability needs. Our LONDON2 facility demonstrates our commitment to reduce water consumption, as VIRTUS was the first operator in the UK to deploy indirect evaporative cooling at scale.

To minimise demand on the main water supply, VIRTUS constructed a borehole 200m below ground to reach a natural underground aquifer. More recently VIRTUS have transitioned to air-cooled chillers in many data centres which consume no water during normal operations, yet can still benefit from economic operation during the cooler months.



# WASTE



## Our role in powering advancement

Data centres generate waste in varied forms, mainly e-waste. We recognise our responsibility in improving waste management, which presents a risk to our planetary health. Together with our customers we are working towards the promotion of a 'Zero Waste' culture at STT GDC, with waste being a pressing concern. Our 'Zero Waste' culture is in line with the Singapore government's Zero Waste Masterplan to reduce waste by 30%<sup>12</sup>. Singapore's only active landfill is expected to run out of space by 2035, so the issue is particularly pressing locally.

## Approach

Our 'Zero Waste' culture guides us to create actionable decarbonisation targets through non-energy means to achieve our carbon-neutral goal. We continue to improve on our data gathering and tracking processes in waste management by engaging a third party to gain a better understanding of our day-to-day decisions on waste.

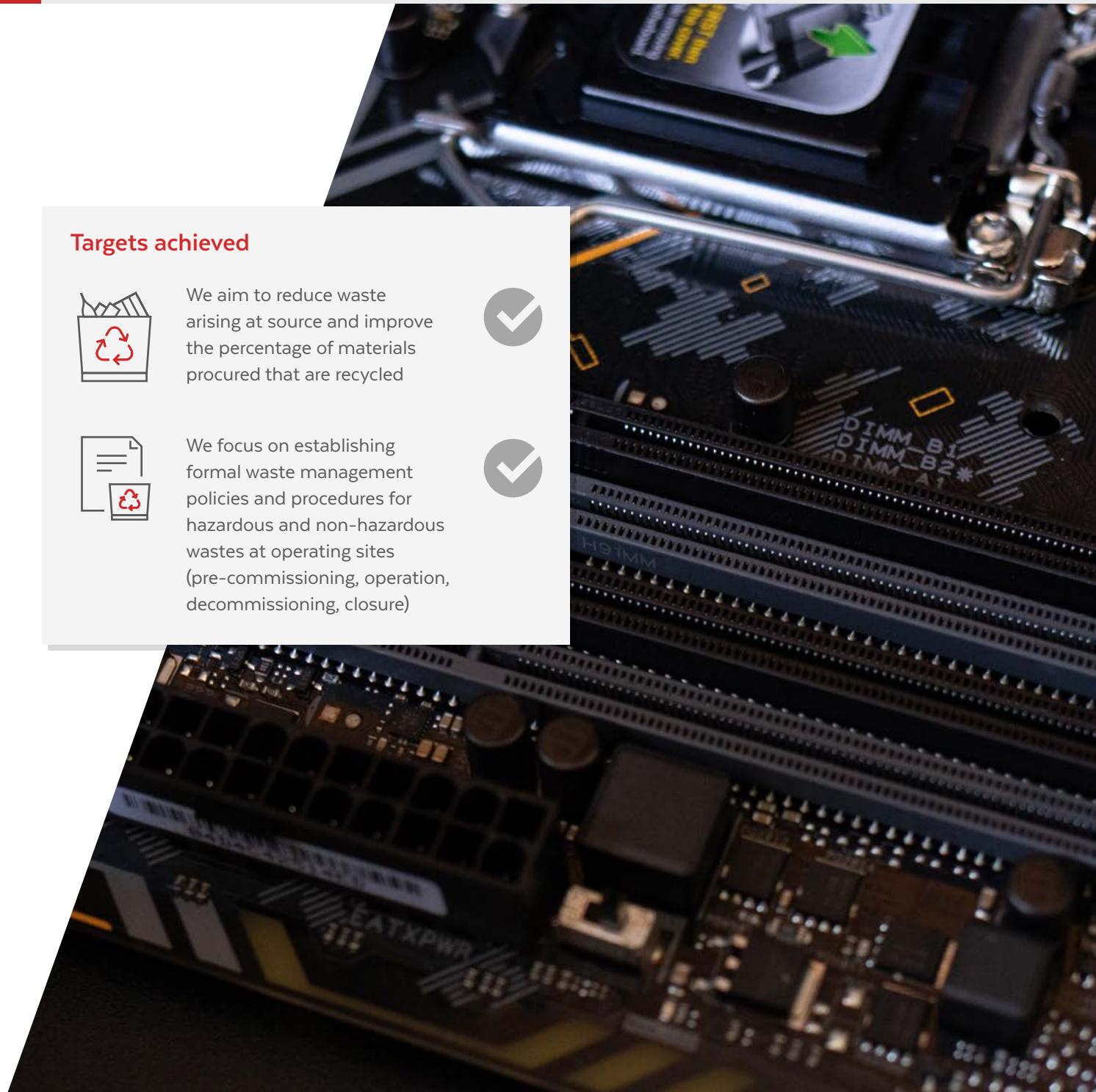
### Targets achieved



We aim to reduce waste arising at source and improve the percentage of materials procured that are recycled



We focus on establishing formal waste management policies and procedures for hazardous and non-hazardous wastes at operating sites (pre-commissioning, operation, decommissioning, closure)





## FY2022 Progress

In 2022, we continue to improve our waste data collection process by appointing a third party recycler has been appointed wherever possible to help with the facilitation of our data gathering and tracking processes. The better visibility explains the increase in our waste compared to last year.

## War on Waste projects

Under an initiative called “War on Waste”, STT GDC India digitised over 2,369kgs of old records in paper. Similar initiatives will be performed every year. Instead of handing over paper/wood waste to municipal garbage collectors we are onboarding an NGO partner so that we are assured of waste being recycled as per statutory norms. To start off, we worked with Chintan Environmental Research and Action Group, an NGO partner based in Delhi. Our plan is to expand this collaboration to similar partners across India throughout the year 2023.

In UK, 99.96% of VIRTUS waste was diverted from landfill and either recycled or used in energy recovery. Waste is monitored on a monthly basis, and projects are implemented for each site to standardise the waste management system at the local level. The full life cycle is considered to ensure that recycling rates are improved each month. Additional training has been provided to VIRTUS staff for the FY2022 to raise awareness across all sites as well as stakeholder engagement. All plastic has been removed from sites. VIRTUS is currently achieving zero waste to landfill and aim to be accredited by June 2023.





# SOCIAL IMPACT

Connecting social impact  
to advancement

Health, safety and wellbeing

Diversity & inclusion

Human capital management

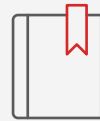


Safeguarding the health, safety and well-being of our workers and employees has always been the top priority for us given the nature of our operations. With growing competition in the resource market, we are keenly aware that we need to ensure our employees feel safe and accepted as well as invigorated by their work to acquire and retain the best talent.

**Targets achieved**



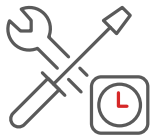
Less than 0.5 total recordable incident rate (TRIR) globally



ISO 45001 certification of data centre operations in 100% share of sites by the end of 2022 and maintained in future years

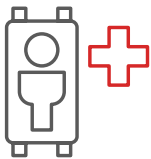


**FY2022 Progress**



13.7M

construction and operations hours recorded



0

related serious injuries



0.15

Total recordable incident rate (TRIR)

# HEALTH, SAFETY & WELLBEING



## Our role in powering advancement

There are numerous potential hazards associated with data centre equipment and backup power systems that can pose injury risks to workers. Additionally, as the frequency of heatwaves increases globally, our data centres are also susceptible to overheating, which can lead to unforeseen malfunctions and endanger the safety of our workers. Protecting the health, safety and well-being of our people is an integral part of day-to-day operations.

STT GDC has Environmental, Health, and Safety (EHS) Management systems within each of our global businesses. As part of our continuous improvement programme across all geographies, we align the company's safety culture, procedures, and systems by adopting a common global standard.

We aim to achieve exemplary status under the EHS Maturity Assessment Tool by the end of 2023.

## Approach

Safeguarding the health, safety and well-being of our employees is always one of our top priorities. Within each of our global businesses, we have Environmental, Health, and Safety (EHS) Management systems with tailored policies and programmes to support our people. We continue to standardise our improvement programmes across all geographies to follow a common safety culture, procedures and systems. We create an environment with fair working conditions, so that our employees and workers can thrive professionally and personally. Our Mental Health Support Programme provides an array of resources that promotes physical, social and mental well-being of our employees.

100% of our data centre operations have been certified to the ISO 45001: Occupational Health and Safety standards. STT GDC extends the same high level of standards to all contractors and migrant

workers working on construction site worldwide with the mandatory endorsement of its Global Minimum Standards (GMS). We proactively engage third-party construction management, even in challenging jurisdictions to enhance contractors' working conditions and ensure that they suffer from zero harm. We maintain strict oversight of the contractors and sub-contractors on STT GDC controlled sites to ensure compliance with GMS requirements and local laws and regulations.

We display a clear commitment to respect all labour and human rights by addressing all underlying welfare and labour rights issues and introducing positive practices that promotes social resiliency for all of our employees, workers and the local communities in which we operate.

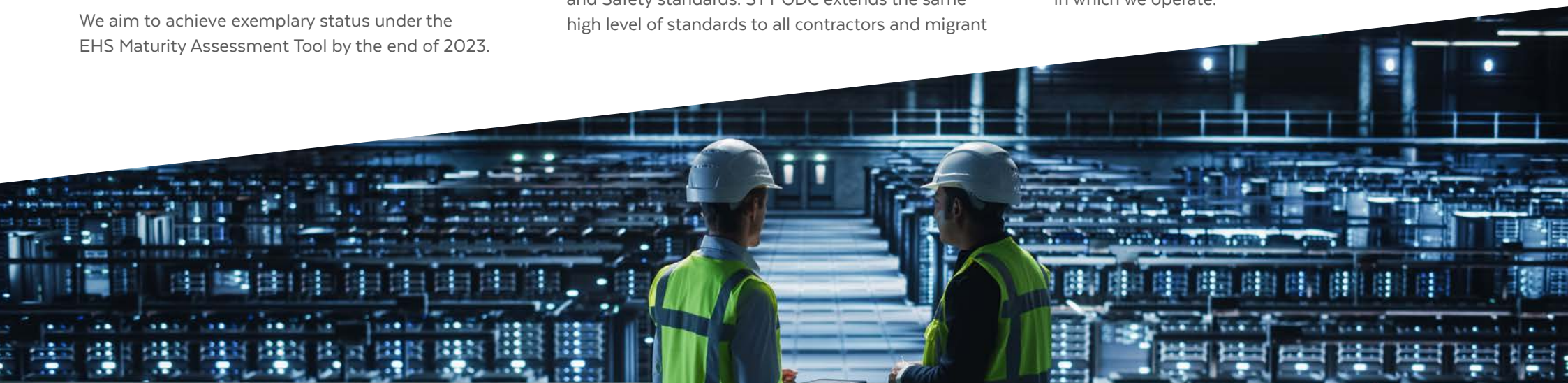


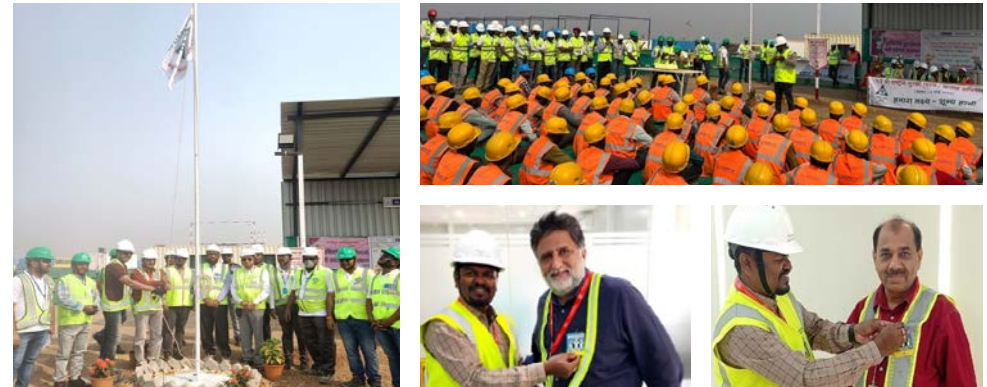
Figure 10: STT GDC's Global Minimum Standard defines a rigorous health and safety framework across the construction and operations lifecycle



## Our contribution to advancement

In STT GDC India, we have implemented Group Standards for construction activities. Together with our contractor, we are providing sites equipped with all the necessary facilities like beds, fans, washing facilities, drinking water and indoor games. Proper illumination and noise level monitoring activities are provided on each site. Besides basic requirements, EHS induction and training rooms are provided, in addition to first aid centres and ambulances should it be required.

### Safety Week programmes in India



### EHS Induction and training facilitation - India



## VIRTUS earns RoSPA Gold award

VIRTUS was awarded the RoSPA Gold Award for its exceptional management of Health & Safety Practices, Policies and Standards.

The RoSPA Awards scheme, the longest-running of its kind in the UK, attracts entries from organisations worldwide, making it one of the most sought-after achievement awards for Health and Safety worldwide. Currently, around 7 million people are directly impacted by the RoSPA Awards programme, but the scheme's global influence is even wider with nearly 2,000 organisations from 50 countries represented this year.

Organisations receiving a RoSPA Award are recognised as being world-leaders in Health and Safety practice.

In order to achieve the accolade, VIRTUS had to provide comprehensive evidence of a workable and effective health and safety management system by answering key performance questions and supporting the answers with a concise portfolio of relevant and evidence-based documentation.

Neil Cresswell, VIRTUS Data Centres CEO commented: "The RoSPA Awards encourages improvement

in occupational Health and Safety management and contributes to raising standards overall. As an organisation, Health & Safety is paramount and VIRTUS places the utmost importance on workplace safety, ensuring that anyone working at any of our sites can operate in the safest possible environment."

VIRTUS clearly showed the RoSPA awards panel that it is leading the way in ensuring that both VIRTUS employees, together with the Supply Chain Partners Team, operate to the most stringent and impeccable health and safety practices.



||

It's a terrific accomplishment and an endorsement of the entire organisation's commitment to safe working. VIRTUS is not only a great place to work, but also a very safe one! We're focused on consistently delivering a safer environment to work in for our employees, customers and anyone who visits our site."

**Vijendra Jhanjhar**

VIRTUS' Health and Safety Manager



# DIVERSITY & INCLUSION



## Our role in powering advancement

We pride ourselves on creating a respectful environment at work by ensuring diversity and inclusivity. This helps us to attract and retain a wide range of talent, while spurring innovation amongst our people. We firmly believe that achieving the UN SDG of gender equality requires greater engagement as, globally, only 28% of women are in managerial positions.

## Approach

At STT GDC, we are committed to fair treatment and non-discrimination in the workplace and attracting employees that reflect the diverse communities in which we live. We welcome each employee to bring differing perspectives to work. Diversity and inclusion principles are incorporated into our recruitment practices, performance appraisal policies and workplace conduct against discrimination.

We conduct training for hiring managers around 'unconscious bias' during hiring and performance reviews. We aim to promote gender diversity in the workforce by increasing the number of women in managerial roles by the end of 2025.

As a company, we respect one another's cultures and heritages. We have people from different backgrounds, and regularly we interact with colleagues across different geographies. Our diversity and inclusion go beyond gender diversity. Our culture allows STT GDC to be open to not just having one way of doing things.

### Targets achieved



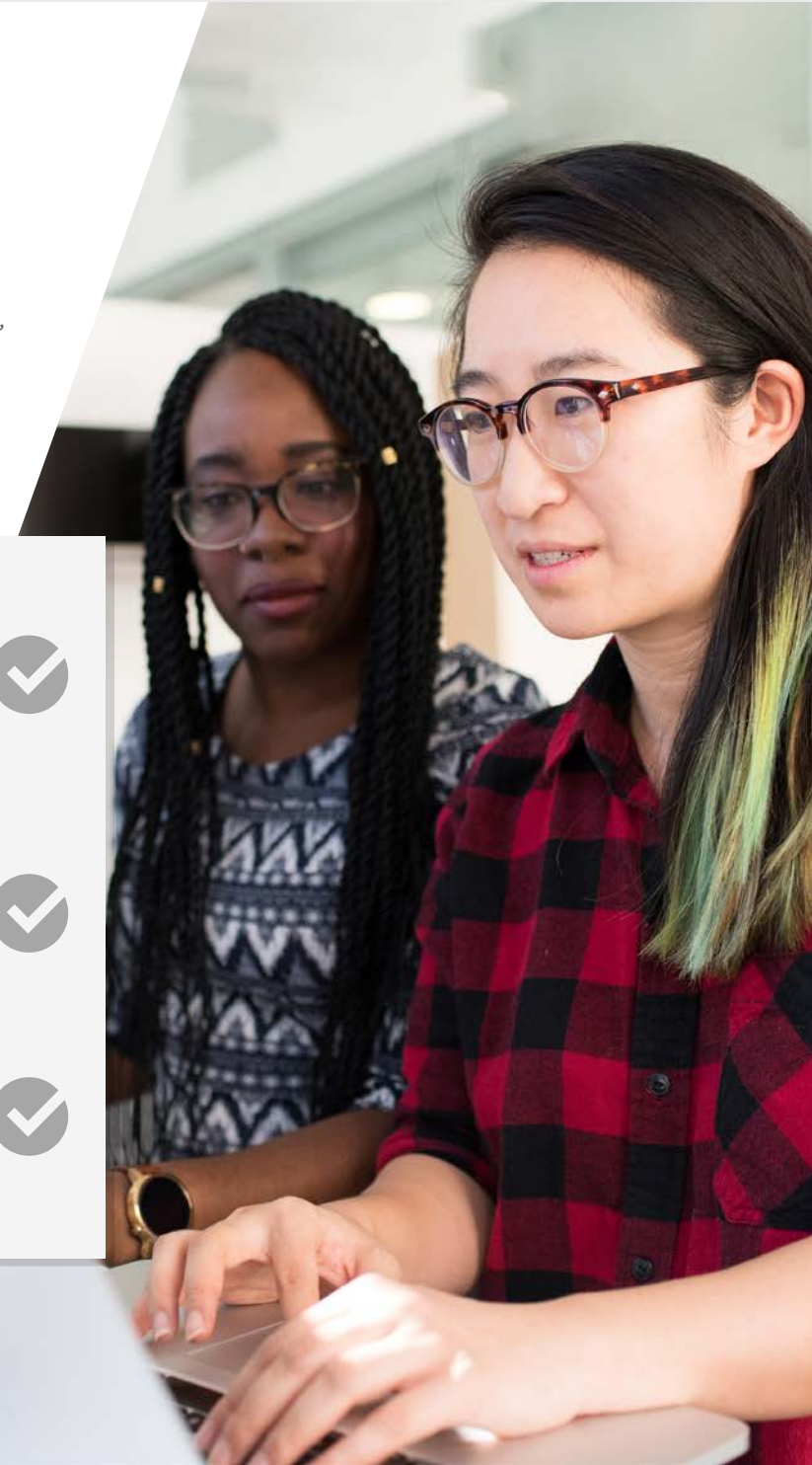
Increase the percentage of women across group employees and the number of women in management roles in the workforce by the end of 2025.



Conduct training around 'unconscious bias' during hiring and performance reviews per hiring manager per year.



Setting goals for diversity in hiring/employees (focus on gender, ethnicity and geographical elements).

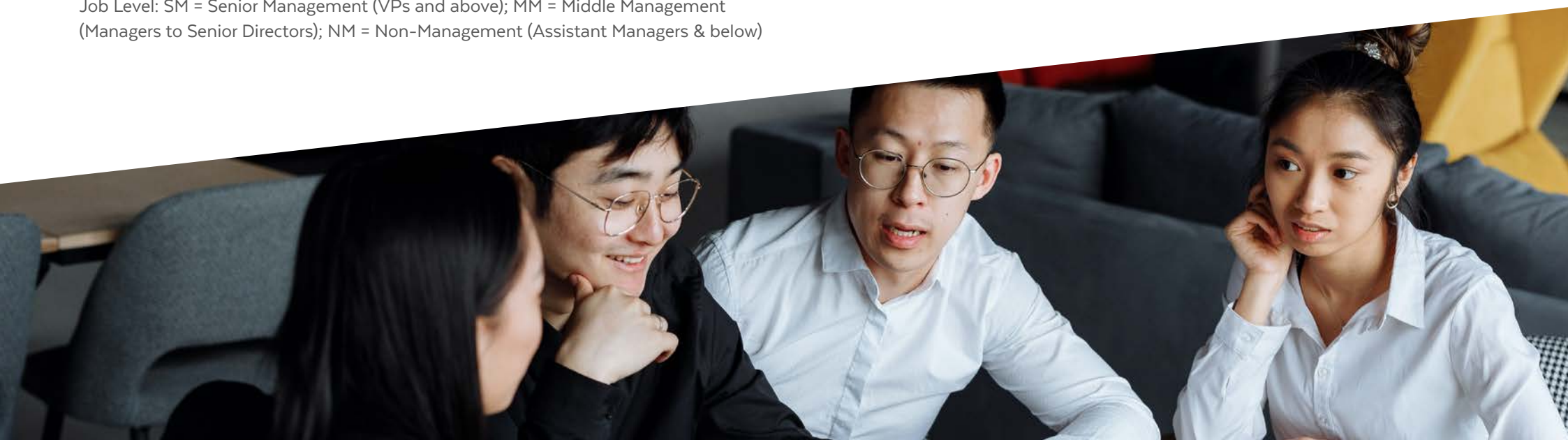


## FY2022 Progress

Figure 11: Employee information by gender, age and employment type

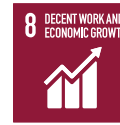
STT GDC Group						
Gender	MALE (79%)			FEMALE (21%)		
Job level	SM	MM	NM	SM	MM	NM
	5%	50%	45%	6%	42%	52%
Permanent/ Temporary	Permanent	Temporary		Permanent	Temporary	
	99.5%	0.5%		96%	4%	
Full time/ part time	Full time	Part time		Full time	Part time	
	99.8%	0.2%		99%	1%	
Age range	Below 30	30-50	Above 50			
	10%	78%	13%			

Job Level: SM = Senior Management (VPs and above); MM = Middle Management (Managers to Senior Directors); NM = Non-Management (Assistant Managers & below)





# HUMAN CAPITAL MANAGEMENT



## Our role in powering advancement

Attracting and retaining data centre staff has been a significant industry challenge. We are acutely aware of how the lack of qualified staff to operate our data centre facilities can lead to massive business losses in the cases of downtime and outages. As we are confronted with the shortage of skilled labour, we are taking action to attract, develop and manage our strong pool of talent at STT GDC.

We recognise the need to invest in the training and development of our workforce to keep them abreast of industry developments, knowledge, and new technological trends. We are committed to continually bolster our competitiveness by investing in human capital the same way we invest in physical capital, increase operational efficiency and cost savings.

## Approach

Beyond creating an unrivalled, diverse and inclusive environment for our people, we provide comprehensive benefits and competitive wages to attract and retain the best talent. Ensuring that our employees are excited and fulfilled at work underpins our commitment to accelerate sustainable growth. We are partnering with local governments, for instance other relevant technical academic organisations in India to develop nationally recognised qualifications in data centre management to strengthen investment in our talented and qualified employees.

In this way, we can meet the evolving business needs and stay resilient with the emergence of complex technologies, we ensure sufficient depth and breadth in our regular training programmes to help employees excel professionally.

STT GDC raises the skill sets and expertise of its staff through targeted training programmes. Such training includes EPI's globally accredited data centre professional courses, ISO training on matters such as EHS (ISO 45001) and information security management (ISO 27001) and ITIL framework related courses.

## Targets



Run awareness programmes in all STT GDC geographies



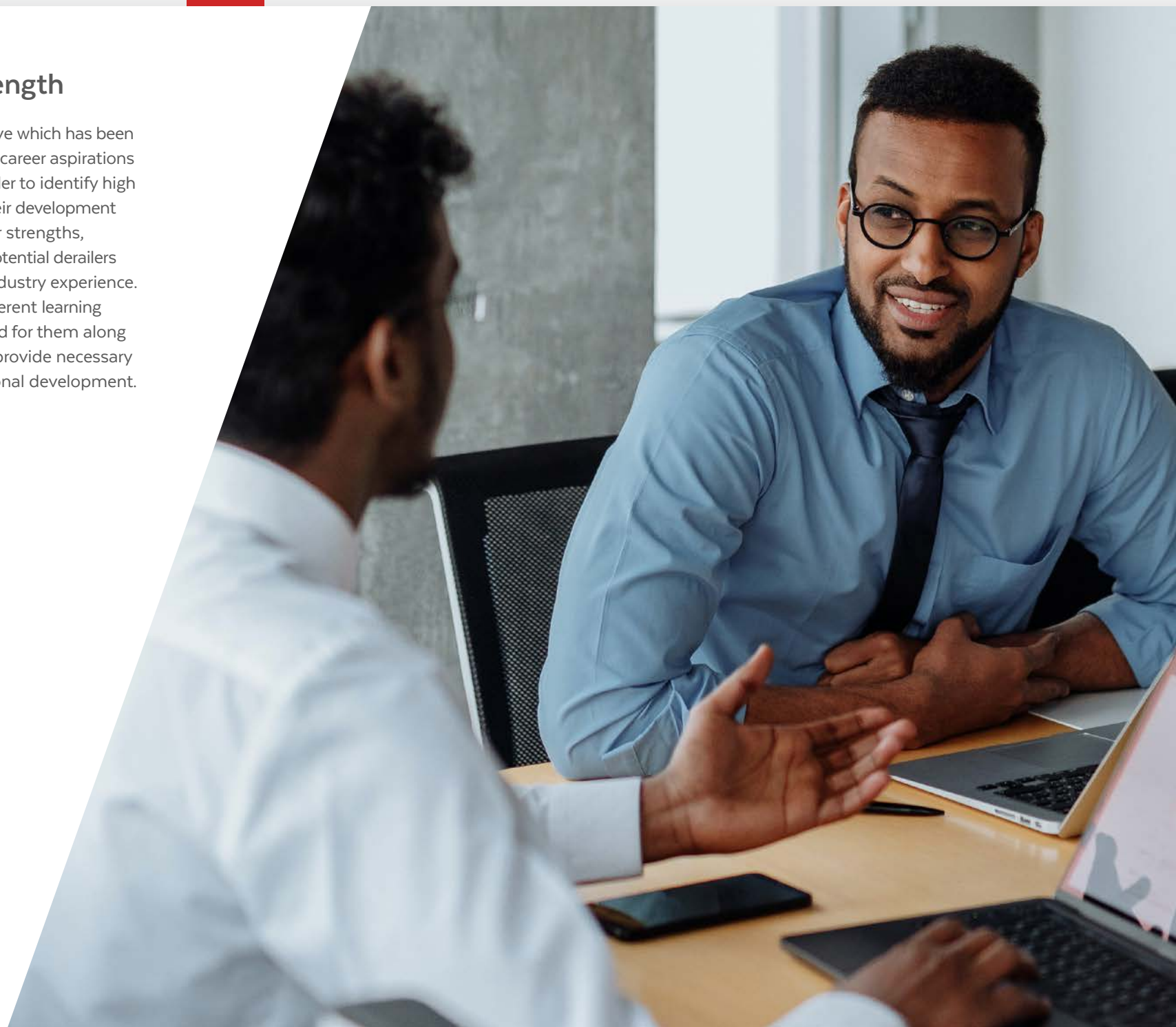
Establish partnerships with academia to attract students into Science, Technology, Engineering and Mathematics (STEM) disciplines through targeted primary and high school programmes



Regularly schedule internal training sessions for all employees

## Building our bench strength

In India, Talent Conclave is the initiative which has been implemented for managing talent and career aspirations of employees at STT GDC India. In order to identify high potential employees and chart out their development plans, employees are assessed on their strengths, developmental areas, motivators & potential derailers over and above their qualification & industry experience. The high potentials then undergo different learning programmes which are specially curated for them along with other interventions designed to provide necessary exposure and experience for professional development.





# RESPONSIBLE BUSINESS

Connecting governance to advancement

Governance & integrity

Cybersecurity

Economic vitality of communities  
and supply chain

Responsible procurement

Climate risk resilience

SLFF



# GOVERNANCE & INTEGRITY



## Our role in powering advancement

High quality corporate governance practices establish trust in operations and company reputation. We expect our people at STT GDC to exhibit proper business conduct and comply with our policies.

Anti-corruption includes a zero tolerance approach to unethical practices such as bribery, facilitation payments, fraud, extortion, collusion, and money laundering; the offer or receipt of gifts, loans, fees, rewards, or other advantages as an inducement to do something that is dishonest, illegal, or represents a breach of trust. It can also include taking a stand against practices such as embezzlement, trading in influence, abuse of function, illicit enrichment, concealment, and obstruction of justice.

### Effective control and ethical conduct



100%

employee completion of  
Ethic and Anti Bribery trainings

## Approach

Corporate integrity and responsible business practices govern our values and shape our culture. We have a zero-tolerance policy on bribery, kickbacks, and corruption. We uphold the highest standards of conduct and expect all our people acting on behalf of STT GDC to conduct business activities in compliance with our policies and the anti-corruption laws of all the jurisdictions in which we operate.

STT GDC upholds the highest standards of conduct through ongoing training and communication programmes on data privacy and cybersecurity, anti-corruption and ethics. As of 2022, the Group Code of Conduct for Suppliers was rolled out to all our geographies indicating our clear commitment to maintain the highest standards in all the jurisdictions we operate in.

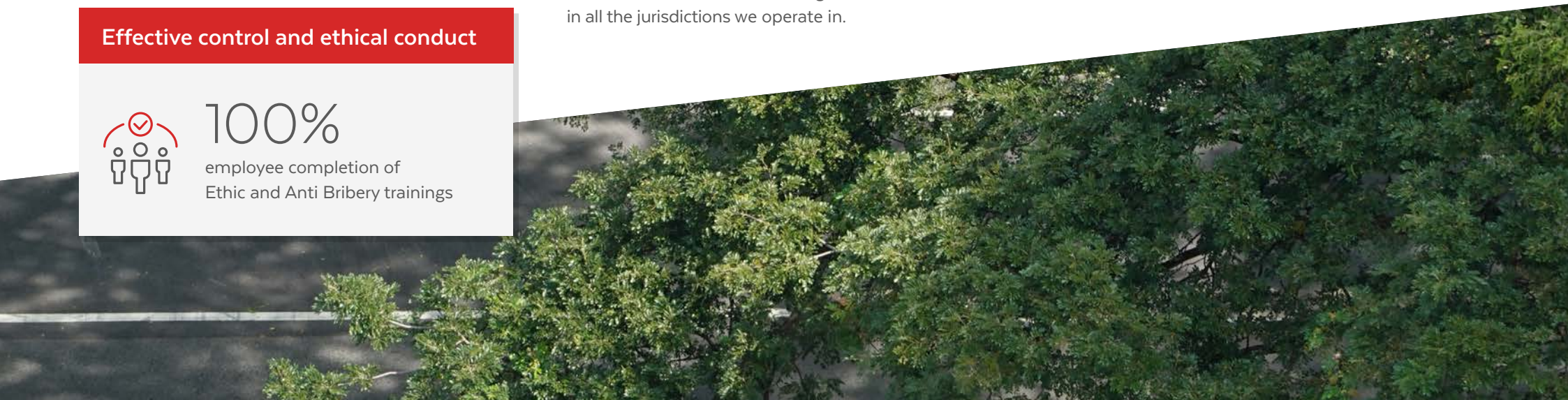
### Targets achieved



Increase the percentage of employees receiving training and communications on anti-corruption and ethics, at recruitment and annually.



Increase the percentage of first-tier suppliers formally acknowledging STT GDC's code of conduct in 2022.



## Green building certification

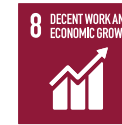
For green buildings, we commit to increase the proportion of LEED Gold certifications to 55% by 2026, and have so far achieved 44%. STT GDC has also integrated green data centres as one of the Key Performance Indicators into its Sustainability-Linked Financing Framework, [see page 60](#).

### Targets

- We aim to have all newly acquired buildings under our operational control to be certified to LEED Gold, or to an equivalent local standard.
- We renew our commitment to increase the proportion of data centres LEED Gold certified (or local equivalent) to 55% by 2026.
- We will ensure that 100% of newly constructed buildings under the control of STT GDC achieve and maintain LEED Gold certification (or local equivalent) as minimum.



# ECONOMIC VITALITY OF COMMUNITIES & SUPPLY CHAIN



## Our role in powering advancement

We are confronted with a multitude of crises, as the challenging global economic outlook is exacerbated by persistent supply chain disruptions, a slow recovery from the COVID-19 pandemic, and ongoing geopolitical conflicts<sup>14</sup>. Amidst this backdrop of low challenges, our data centres can engage local businesses to channel economic capital to local communities during the construction and operation stages. Local sourcing promises better reliability of supply, shorter delivery times and improved quality oversight while aligning with our pursuit of shared value. Local procurement also creates job opportunities and delivers visible positive community impacts. We consider our economic contribution to local communities an integral part of our efforts to continue to unlock social value and strengthen our social license to operate.

By channelling economic capital to developing communities, businesses can improve social cohesion and support a just transition. Business benefits include a strengthened social license to operate and local support for data centre operations within the area, which could mitigate increasing risks of data centre activism. Other business benefits include better reliability of supply, shorter delivery times, and improved quality oversight.

## Approach

We aim to promote economic and social development through the establishment of local community investments targets, prioritisation of lower-income host countries and local procurement of goods and services. We aim to promote sector-specific entrepreneurship with the establishment of an innovation incubator to help local entrepreneurs commercialise innovations such as energy efficient cooling and renewable energy.

We value our commitment to support the basic needs of local communities, including access to healthcare during the pandemic, and access to economic opportunity. To support local education, we will partner with governments to develop a future talent pool in data centre design and management.

## Targets achieved



Effective, locally relevant contribution to economic and social development



Local procurement of goods and services where practicable



Partnerships and engagement on education/skills



Promotion of sector-specific entrepreneurship



## Investing in our Singapore SMEs for the greater good

STT GDC's direct investment into Singapore of S\$2.5b over the past eight years has been channelled almost entirely to Singapore SME contractors and suppliers i.e., all of the five greenfield builds were awarded to and built by Singaporean contractors.

Singapore SMEs have also benefited from the capital and knowledge transfer which has enabled them to expand across the region following STT GDC's footsteps in being a Singapore home-grown regional success story. This has brought about a valuable contribution to the Singapore GDP.

### A Singapore SME success story

STT GDC was one of the first few data centres to have engaged home grown data centre constructor Acme Associates. As a result of the capital contribution and the knowledge that they have gained from building our data centres, they have now expanded outside of Singapore to Thailand, Indonesia and Malaysia.

In Thailand, they are working with STT GDC to build its flagship data centre in Bangkok. As a result of the knowledge gained from this project, they now have a headstart in expanding further in Thailand and in winning more construction projects across SEA.

”

Since 2015, we have grown with STT GDC in Singapore and are now expanding with STT GDC into new markets such as Thailand, Indonesia and Malaysia. We were able to use the knowledge gained from building STT GDC's data centres in Singapore to develop our businesses overseas and we find ourselves as competitive as the established international contractors. As a Singaporean SME, it makes us proud to be able to compete on the regional stage.

**Jennie Tan**

Founder and Managing Director of Acme Associates Pte Ltd.

**acme**

# CLIMATE RISK RESILIENCE



## Our role in powering advancement

The Task Force for Climate-related Financial Disclosures (TCFD) recommendations are designed to help companies disclose information about the risks and opportunities presented by climate change. Developed around four core elements—governance, strategy, risk management, and metrics and targets—the recommendations support STT GDC in communicating how we are responding to climate change risks and build the resilience of our risk management and strategy planning.

## Approach

We have conducted a high-level scenario analysis and identified climate risks and opportunities in line with the reporting recommendations of the TCFD. As we continue to evolve our capabilities, we seek to expand our existing risk assessment process.

The analysis highlighted the climate-related risks that STT GDC could be exposed to under two climate scenarios: the worst-case (4°C warming) and best-case (<2°C warming). These scenarios were modelled with IPCC RCP 8.5 (business-as-usual), IPCC 2.6 (with stringent mitigation) and NGFS Delayed Transition (most common scenario used to assess transition risks). We identified and assessed both physical and transition risks.

We are incrementally including climate risks into our risk processes when reviewing and assessing our own operational resilience, supply chain and construction processes and will progressively invest in internal measures to mitigate any potential climate risks.

Our workers are the core of our operations and we understand the pertinence of implementing proper standards and management to protect them from these physical risks.

To further inform our risk processes, we have identified legal and regulatory transition risks such as the implementation of a carbon tax, restrictions on existing products and services as well as net zero operations. After evaluation, we understand that we may face rising operational costs, revenue loss and evolving expectations. Following the analysis, we are taking action to strengthen the resilience of our strategy to promote sustainable growth, enhance our efforts to be more energy-efficient and create a safe and secure environment for our people.

A robust ERM underpinned by an understanding of climate change impacts that will shape the next 10 years or more is likely to be material for the company in the future.





# RESPONSIBLE PROCUREMENT



## Our role in powering advancement

Globally, responsible procurement is rising up the agenda. Conflict minerals within supply chains have attracted reputational backlash. We understand that data centres may come under increased public scrutiny for conflict minerals present in procured equipment. We view the strengthening of our procurement practices as pivotal for us to promote sustainable and inclusive growth. We aim to do so by supporting our suppliers in improving the environmental and social impact of the goods and services they offer and ensure they consistently operate with integrity.

Responsible procurement includes support for local suppliers, or those owned by women or members of vulnerable groups. It also covers how the organisation's procurement practices (such as the lead times it gives to suppliers, or the purchasing prices it negotiates) cause or contribute to negative impacts in the supply chain.

Data centres are also using significant amounts of cement and steel in construction, which are amongst the most carbon-intensive construction materials. The Paris Agreement commits the steel and cement industries to reach net zero by 2050. Building sustainable data centres begins with integrating green cement and steel into building design and construction.

## Approach

We expect our suppliers to share our commitment to human rights and sustainability. Our Supplier Code of Conduct defines our expectations for suppliers, including the condemnation of the use of conflict minerals. To maintain transparency and identify risk exposures timely, we assess existing and new suppliers with our Supplier Code of Conduct that is aligned with international standards and certifications. As we strengthen our supply chain management, we will continually update procurement processes to identify areas where the right to freedom of association and collective bargaining may be at risk.

STT GDC is committed to the implementation of low-carbon practices. We aim to improve the percentage of recycled materials procured, and our research and development team is currently researching ways to embed more carbon within concrete through Carbon Capture, Utilisation & Storage (CCUS) technology.

### Targets achieved



Launch supplier code of conduct



Assessing suppliers during tender pre-qualification phase on specific ESG criteria in line with international standards certifications



# CYBERSECURITY



## Our role in powering advancement

Cybersecurity is critical for the protection of data stored within data centres. With the rise of geopolitical tensions and remote working here to stay, cyber threats have accelerated. Cybersecurity breaches have the potential to incur heavy reputational and financial impacts. As the UK Government considers bringing data centres within the remit of the Network and Information Systems Regulations (NIS), we anticipate stricter regulatory approaches towards cybersecurity. This year, we have identified cybersecurity as a new material topic as we seek to improve our cyber resilience.

## Approach

Our cybersecurity strategy centre around people, processes and the technology we have in place to secure the data we store and process. Besides designing secure physical parameters, we are strengthening IoT security via comprehensive cybersecurity tooling and techniques. We recognise that the IoT devices we use to monitor temperatures, energy usage and for surveillance in our data centres need particular focus and protection.

### Target achieved



100%  
of employees to  
receive training



# SUSTAINABILITY- LINKED FINANCING FRAMEWORK (SLFF)



We have transformed our commitment to achieve carbon neutral data centre operations by 2030 into concrete action plans with the launch of a dedicated financing framework in July 2022.

We have selected three relevant and material Key Performance Indicators (KPIs) to include in the SLFF which align with our sustainability strategy, namely:

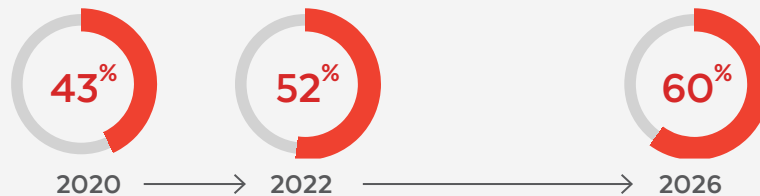
For each of the key performance indicator, we set Sustainability Performance Targets (SPTs) that reflect material improvements.

KPI 1	KPI 2	KPI 3
Increase the percentage of renewable energy in total electricity consumption	Reduction of Scope 1 and 2 carbon intensity	Increase the proportion of data centres certified under recognised green building certification schemes

SPT 1	SPT 2	SPT 3
Increase the percentage of renewable energy in total electricity consumption to 60% by 2026	Reduce scope 1 and 2 carbon intensity by 40% by 2026	Increase the percentage of data centres certified under recognised green building certification schemes to 55% by 2026

**Progress against targets**

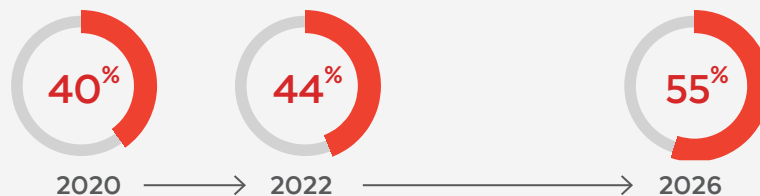
Percentage of renewable energy



Carbon intensity



Green data centres



Refer to [SLFF](#) document for specific definitions and criteria

We have committed to report on our KPI and SPT performance annually, after assurance of the information, in our annual ESG report

# COUNTRY SPOTLIGHT

UK

India

Singapore



# UK & EEA



## GHG emissions

Scope 1 emissions 1,852 tonnes  
of CO<sub>2</sub>e

Location based  
Scope 2 emissions 106,231 tonnes  
of CO<sub>2</sub>e

Market based  
Scope 2 emissions 0 tonnes of CO<sub>2</sub>e

Scope 3 emissions (Business  
travel and employee commute) 155 tonnes CO<sub>2</sub>e

Water consumption (m<sup>3</sup>) 54,308

## Operational waste

Waste generated 452 tonnes

Waste recycled 433 tonnes

Diversion rate 99.96%

## Environmental highlight: Waste management

**99.96% of our waste was diverted from landfill and either recycled or used in energy recovery.**

Waste is monitored on a monthly basis. Certain projects are implemented for each site to standardise the waste management system. The full life cycle is considered to ensure that recycle rates are improved each month and that any waste is recovered to energy. Additional training has been provided to all staff for the FY2022, awareness on all sites as well as stakeholder engagement. All plastic has been removed from sites. VIRTUS are currently achieving zero waste to landfill and aim to be accredited by June 2023.

Recycling rates alone in 2022 have increased from 20% site wide to average of 80% across all sites due to a reduction of general waste skips being removed and waste stream segregation.

## Social highlight: Human capital management

**During the 2021 year, VIRTUS Data Centres were engaged with University Technical College (UTC) Heathrow supporting their Digital Futures programme. With the rapid digital transformation of business, communities and society, the data centre sector is experiencing rapid growth, and is facing an on-going skills shortage.**

The Digital Futures programme will train young people as engineers to build out the digital highways that enable the world to communicate securely, and at speed. Data centres require engineers with mechanical and electrical engineering skills, knowledge of IoT devices and cabling infrastructure, and project management.

This exclusive programme will provide young people with the opportunity to start training for a world-class career, in a course designed by some of the industry's biggest companies.

VIRTUS as well as partners who have supported UTC Heathrow were recognised and won '**Best Talent Developer**' awarded at this year's Data Centre World event.

It has been a challenging journey, with many hours invested, but receiving this recognition is a genuine compliment that validates all the hard work dedicated to the students.

## INDIA



## GHG emissions

Scope 1 emissions 13,727 tonnes  
of CO<sub>2</sub>e

Location based  
Scope 2 emissions 472,833 tonnes  
of CO<sub>2</sub>e

Market based  
Scope 2 emissions 303,265 tonnes  
of CO<sub>2</sub>e

Scope 3 emissions (Business  
travel and employee commute) 287 tonnes of  
CO<sub>2</sub>e

Water consumption (m<sup>3</sup>) 419,204

## Operational waste

Waste generated 167 tonnes

Waste recycled Data not available

Diversion rate -

### Environmental highlight: Waste management

Under an initiative called “War on Waste” we shredded 2,369 kgs of old records in paper/register form and handed it over to waste recyclers.

A similar initiative will be performed every year.

Instead of handing over paper/wood waste to municipal garbage collectors we are onboarding NGO partners so that we are assured of waste being recycled as per statutory norms. To start off, we worked with Chintan Environmental Research and Action Group, an NGO partner based in Delhi. Our plan is to expand this collaboration to similar partners across India throughout the year 2023.

### Social highlights: Skill development

The programme focuses on providing training in ‘Infrastructure Management Services’ to unemployed youth, empowering them with the skills needed for sustainable livelihoods. By combining classroom learning with on-the-job training in a live simulation environment, this initiative enhances employability among students.

**Implementation period:** April 2022 to March 2023  
(programme to be completed by March 2023)

**Location:** Bengaluru, Karnataka

As a leader in the data centre colocation market, STT GDC India has always believed in pioneering initiatives that add value to the ecosystem. Skilled manpower has been a persistent challenge faced by the industry that needs to be addressed. Our Centre of Excellence in Bengaluru is a vital step in that direction. The purpose of this Experience Centre at Centre of Excellence is to provide a platform for interested candidates to up-skill in alignment with industry requirements complete with practical learning opportunities, thereby enabling them to increase their employability quotient.

- We trained around 150 students at our 11,000 sq. ft. area housed in the STT Bengaluru DC 3 facility that was dedicated to training and development.
- The Centre of Excellence (CoE) initiative combines classroom learning with on-the-job training in a live simulation environment, preparing students to navigate future operational scenarios.
- A comprehensive and relevant curriculum integrates STT GDC India’s deep industry experience with the faculty expertise of Don Bosco Tech (D.B. Tech) and Nettu Technical Training Institute (NTTF) in a year-long process. We have also leveraged our extensive industry reach, engaging both Schneider Electric and Sterling & Wilson for feedback on pertinent topics to be included in the curriculum.

- Behavioural and soft skills training will also be embedded in the course content to ensure a holistic learning experience and industry readiness among the participating students.
- STT GDC India has initiated a mentor-mentee programme where STT GDC India and potential partners assign mentors to small groups of students to guide and coach them through the initial phase of their careers.
- An accredited Data Centre Professional Certificate will be awarded to students upon successful course completion and qualifying test results. A defined process and criteria for potential employment placement in data centre providers, potential partners, or other adjacent industries will also be established for trained students

This essentially enables STT GDC to reach out to every segment of society with the necessary training and education programmes required for tech empowerment and sustainable livelihood.

## Rural development

This project aimed at the promotion of agriculture development, high-value cropping, trellis intervention, training and knowledge extension activities, technology intervention, water resource development, livestock development, etc., and create sustainable and socio-economic development to create better income and livelihoods for tribal farming communities.

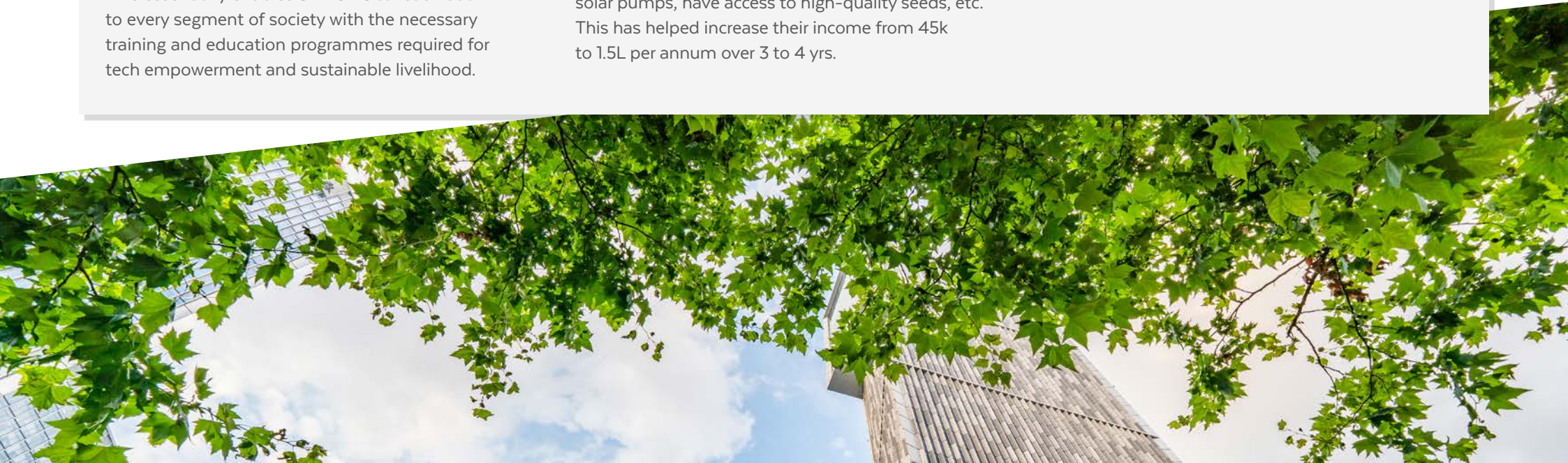
**Implementation period:** April 2022 to March 2023  
(programme to be completed by March 2023)

**Location:** Dahod District, Gujarat

We have been working on helping the tribal villages that have small land parcels of half an acre or so, facing acute water shortages as their agricultural practices are dependent only on rain. They annually used to earn 40-50K. Through our intervention, we have helped them build wells, store water, and solar pumps, have access to high-quality seeds, etc. This has helped increase their income from 45k to 1.5L per annum over 3 to 4 yrs.

Through the Lakhpati Kisan project, we have touched the lives of, 1000 families, in association with Tata Trust.

- 8 community-owned solar lift irrigation systems bring in 64 acres under irrigation for a minimum of at least two seasons during the year;
- 0.75 million cubic feet of groundwater recharged annually;
- Precision farming with the concept of more crop – per drop with the use of technologies like drip irrigation, mulching, etc. and promotion of higher value crops for enhanced returns;
- Ensure to achieve enhanced income up to 3X-4X from approx. 50K per year in 3-5 years for enrolled 250 HHs through the above interventions.





# SINGAPORE



## GHG emissions

Scope 1 emissions 1,353 tonnes  
of CO<sub>2</sub>e

Location based  
Scope 2 emissions 189,351 tonnes  
of CO<sub>2</sub>e

Market based  
Scope 2 emissions 155,272 tonnes  
of CO<sub>2</sub>e

Scope 3 emissions (Business  
travel and employee commute) 394 tonnes of  
CO<sub>2</sub>e

Water consumption (m<sup>3</sup>) 581,226

## Operational waste

Waste generated 73 tonnes

Waste recycled 64 tonnes

Diversion rate 87%

## Environmental highlight: Supporting the future of Hydrogen in Singapore

In June 2022, STT GDC Singapore entered into a Memorandum of Understanding (MOU) with YTL PowerSeraya to collaborate on a clean hydrogen energy proof-of-concept (POC) that will contribute to Singapore's sustainability efforts.

Singapore's power sector currently accounts for about 40% of the country's overall scope 1 emissions. According to the latest Energy 2050 Committee report, commissioned by industry regulator Energy Market Authority (EMA), it is possible for the country's power sector to achieve net-zero emissions by 2050 while still maintaining energy security and affordability. Under the Energy Reset pillar of the Singapore Green Plan 2030, the adoption of low-carbon alternatives such as clean hydrogen will be a key contributor to the energy transition.

Through this partnership, Linde, STT GDC, and YTL will explore the feasibility of using clean hydrogen to power the data centre ecosystem in Singapore. This MOU marks a pivotal step towards enabling the use of low-carbon power through hydrogen for Singapore's power and data centre sectors, complementing Singapore's plans to import renewable electricity.

"Sustainability has always been a priority for STT GDC, especially in recent years where climate concerns have been more prevalent. However, to really make an impact with decarbonisation, we need to tackle the issue at the source of the power ecosystem. As one of the leading global data centre providers, we are delighted to spearhead this change with our partners and energy ecosystem. Together with industry leaders like Linde and YTL, we are confident that this will further our ESG commitment by allowing us to deliver sustainable clean energy to support data centre needs and the clean energy sector, and more importantly, help to strengthen Singapore's foothold as a global sustainability hub," said Bruno Lopez, President and Group Chief Executive Officer, ST Telemedia Global Data Centres.

This partnership is aligned to the organisations' goals and commitment to building a sustainable global economy.

## Social highlight: Climate Risk Resilience

In December 2022, STT GDC employees came together for a Plant-A-Tree and Family Day outing at Singapore's Pasir Ris Park.

The objective of the programme is to restore nature in the city by increasing natural shade and ecological connectivity to help mitigate climate change.

STT GDC is proud to support our City in Nature as part of the #OneMillionTreesSG movement by National Parks Board as we continue to align ourselves with national and international sustainability agendas.



# ANNEXURES



# 2022 ENVIRONMENTAL AND SOCIAL DATA SNAPSHOT

STT GDC Group including subsidiaries

## GHG emissions

Scope 1 emissions 16,931 tonnes  
of CO<sub>2</sub>e

Location based  
Scope 2 emissions 772,073 tonnes  
of CO<sub>2</sub>e

Market based  
Scope 2 emissions 458,541 tonnes  
of CO<sub>2</sub>e

Scope 3 emissions (Business  
travel and employee commute) 1670 tonnes CO<sub>2</sub>e

Water consumption (m<sup>3</sup>) 1,055,973

## Total number and rate of new employee hires during the reporting period by age group and gender

Total new hires 233

Overall new hire rate 30%

### New hires, by age group

	<30 years	30-50 years	>50 years	Total
No. of new hires	36	182	15	233
Rate of new hires (Denominator: total number of employees)	5%	24%	2%	
Rate of new hires (Denominator: no. of employees in age group)	49%	30%	15%	

### New hires, by gender

	Male	Female	Total
No. of new hires	188	45	233
Rate of new hires (Denominator: total number of employees)	24%	6%	
Rate of new hires (Denominator: no. of employees in gender category)	31%	28%	

**Total number and rate of employee turnover during the reporting period by region, age group and gender****Total**

Overall turnover rate

15%

Overall voluntary turnover rate for benchmarking with national rates (e.g. MOM in Singapore)

13%

**Turnover by age group**

&lt;30 years

30-50 years

&gt;50 years

Rate of voluntary &amp; non-voluntary turnover (Denominator: total number of employees)

1%

12%

2%

Rate of voluntary &amp; non-voluntary turnover (Denominator: no. of employees in age group)

9%

16%

13%

**Turnover by gender**

Male

Female

Rate of total turnover (Denominator: total number of employees)

12%

2%

Rate of voluntary &amp; non-voluntary turnover (Denominator: no. of employees in gender category)

16%

12%



# INDEPENDENT ASSURANCE REPORT





## Independent Assurance Statement

### Introduction

DNV Business Assurance Singapore Pte. Ltd. ('DNV') has been commissioned by the management of STT GDC Pte. Ltd. ('STT GDC', or 'the Company', a company registered with the Accounting and Corporate Regulatory Authority, Singapore (UEN: 201228542D)) to carry out an independent assurance over assertions relating to GHG emissions (Scope 1 and 2), energy consumption, new employee hires and employee turnover, Work-related injuries & ill health and Total number of assets that have achieved a Sustainability certification. These assertions are relevant to the 2022 calendar year.

STT has sole responsibility for preparation of the data. DNV, in performing verification work, is responsible to the management of STT. This opinion, however, represents DNV's independent opinion and is intended to inform all stakeholders including STT.

### Scope of Assurance (Data only)

- 2022 Greenhouse Gas (GHG) emissions inventory Scope 1 and 2
- 2022 Energy Consumption
- 2022 New employee hires and employee turnover
- 2022 Work-related injuries & ill health
- 2022 Total number of assets that have achieved a Sustainability certification

### Organizational Boundary

Company's operations in Singapore, India, South Korea & the United Kingdom (UK).

### Verification Protocols used to conduct the verification

- GHG Protocol
- GRI guidelines, for the definition of the indicators in scope
- International Standard on Assurance Engagements (ISAE) 3000 revised – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information'
- DNV's Verification Protocol VeriSustain™

### Level of Assurance

Limited

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement; and consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.



### Assurance Methodology

We had planned and performed our work to obtain the evidence considered necessary to provide a basis for our opinion as part of the engagement. We adopted a risk-based approach, i.e., we concentrated our efforts as per Scope of Assurance. A team of specialists reviewed assertions relating to GHG emissions (Scope 1 and 2), energy consumption, new employee hires and employee turnover, Work-related injuries & ill health and Total number of assets that have achieved a Sustainability certification related to the data centers at Singapore, India and UK based on DNV's sampling plan. We undertook a physical site visit at STT GDC Headquarters in Singapore, Defu 1 in Singapore and conducted the audit in line with DNV's assessment methodology.

We perform the following activities:

- Review of the assertions relating to GHG emissions (Scope 1 and 2), energy consumption, new employee hires and employee turnover, Work-related injuries & ill health and Total number of assets that have achieved a Sustainability certification.
- Performed desk review of selected sustainability parameters for sampled entities and discussed findings and resolved with the Corporate Sustainability Team.
- Conducted interviews with data owners from STT GDC Singapore, India and UK to understand the key processes and controls for reporting business units' performance data.
- Carried out physical site visit at the Company's head office in Singapore, Defu 1 in Singapore and remote assessment in India and UK locations, to review the processes and systems for preparing site level sustainability data.
- Conduct data checks for calculation spreadsheets provide to support the numbers.
- Evaluation of whether the evidence and data are sufficient and support STTs claims.

### Data Verified

Greenhouse Gas Emissions	
Scope 1 Emissions	16931.10 MTCO <sub>2</sub> e
Scope 2 Emissions	458541.80 MTCO <sub>2</sub> e
Energy Consumption	
Stationary Fuel (Diesel) Consumption	1591674 Liters
Refrigerant Consumption	7379.44 Kg
Grid Electricity Consumption	893870831.95 KWh
Green Electricity Consumption	794398656.04 KWh
RECs Purchased	84000000 KWh
Employment	
New employee hires	233
Employee turnover	114
Occupational Health and Safety	
Work-related injuries	Nil for Employees
Work-related ill health	Nil for Employees
Sustainability Certification	
Total number of assets that have achieved a Sustainability certification	14

**Assurance Opinion:**

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the STTs assertions with respect to the Scope for the year ended 31 December 2022 are not materially correct and are not a fair representation and that the information quantification, monitoring and reporting have not been prepared in accordance with the reporting criteria. The organizational boundaries are determined correctly, and all data and relevant sources are identified and included appropriately.

**Purpose and Restriction on Distribution and Use**

This opinion including our conclusion has been prepared solely for the Company in accordance with the agreement between us. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company for our work or this opinion.

**For and on behalf of DNV Business Assurance Singapore Pte. Ltd.**

**Nagarajan,  
Sathishkumar** Digitally signed by  
Nagarajan, Sathishkumar  
Date: 2023.06.12 10:09:45  
+08'00'

N Sathishkumar  
Head, Sustainability Services [SEA]  
DNV Business Assurance Singapore Pte. Ltd.  
Singapore, 12 June 2022



# GRI AND SASB REFERENCE INDEX

## Statement of use

GDC has reported in accordance with the GRI Standards for the period 1 January 2022 to 31 December 2022.

## GRI 1 used

GRI 1: Foundation 2021

## Applicable GRI Sector Standard(s)

GRI G4 Construction and Real Estate Sector (CRES). We will be validating our list of material topics with the latest GRI Sector Standard for the Construction and Real Estate industry when it is published by GRI (WIP if completely applicable). For now, included in terms of building certification CRE8 (see table)

## Applicable SASB Sector Standards

Real Estate Standards



GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>General disclosures</b>					
GRI 2: General Disclosures 2021	2-1 Organisational details	Letter from our CEO, <a href="#">Page 13</a> About STT GDC, <a href="#">Page 4</a>			
	2-2 Entities included in the organisation's sustainability reporting	About this report, <a href="#">Page 11</a>			
	2-3 Reporting period, frequency and contact point	About this report, <a href="#">Page 11</a>			
	2-4 External assurance	About this report, <a href="#">Page 11</a> and <b>Independent assurance report 70</b>			
	2-5 Activities, value chain and other business relationships	Powering advancement, <a href="#">Page 6-10</a>			
	2-6 Employees	Total employees headcount: 759 Singapore: 237 employees - 31% United Kingdom: 211 employees - 28% India: 297 employees - 39% South Korea: 14 employees - 2% Globally: 749 permanent employees, 10 on temporary contract			
	2-7 Workers who are not employees	The majority of STT GDC's work is carried out by employees.			
	2-8 Governance structure and composition	Our ESG governance, <a href="#">Page 25</a>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 2: General Disclosures 2021	2-9 Nomination and selection of the highest governance body	STT GDC's highest governance body members are selected based on their competency, relevant experience and diversity.			
	2-10 Chair of the highest governance body	The President is also a senior executive in STT GDC.			
	2-11 Role of the highest governance body in overseeing the management of impacts	Our ESG governance, <a href="#">Page 25</a>			
	2-12 Delegation of responsibility for managing impacts	Our ESG governance, <a href="#">Page 25</a>			
	2-13 Role of the highest governance body in sustainability reporting	The Board has reviewed and approved of this report in SR2022.			
	2-14 Conflicts of interest	<p>Conflicts of interest are handled in accordance with STT GDC governance procedures.</p> <p>At Board level, each director is required to disclose the nature and extent of any personal interest to other directors. If appropriate, they may be excluded from being able to vote and/or be present at the relevant meeting.</p> <p>STT GDC company secretarial team also maintains a conflicts of interest register. The latter is updated regularly.</p>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 2: General Disclosures 2021	2-15 Communication of critical concerns	Critical incidents are communicated to the BOD.  No critical concerns were raised during the reporting period.			
	2-16 Collective knowledge of the highest governance body	Board is regularly updated on latest trends and regulatory frameworks update.			
	2-17 Evaluation of the performance of the highest governance body			Confidentiality constraints	
	2-18 Remuneration policies				
	2-19 Process to determine remuneration				
	2-20 Annual total compensation ratio				
	2-21 Statement on sustainable development strategy	Letter from our CEO, <a href="#">Page 13</a>			
	2-22 Policy commitments	Innovation and resilience, <a href="#">Page 3</a>			
	2-23 Embedding policy commitments	Disclosed throughout the report and summarised on, <a href="#">Page 14</a>			
	2-24 Processes to remediate negative impacts	RESPONSIBLE BUSINESS, Governance & integrity, <a href="#">Page 57</a>  Disclosed throughout the report across the three pillars: Environment, Social and Governance.			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 2: General Disclosures 2021	2-25 Mechanisms for seeking advice and raising concerns	RESPONSIBLE BUSINESS > Governance & integrity, <a href="#">Page 52</a>			
	2-26 Compliance with laws and regulations	RESPONSIBLE BUSINESS > Governance & integrity, <a href="#">Page 52</a>			
	2-27 Approach to stakeholder engagement	Stakeholder engagement, <a href="#">Page 23</a>			
	2-28 Collective bargaining agreements	No employees are covered by collective bargaining agreements.			
<b>Material topics</b>					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Materiality assessment/review, <a href="#">Page 18</a> ,			
GRI 3: Economic Vitality 2021	3-2 List of material topics	Materiality assessment/review, <a href="#">Page 18</a>			
<b>Economic vitality</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	RESPONSIBLE BUSINESS, Economic vitality, <a href="#">Page 54</a>			
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	RESPONSIBLE BUSINESS, Economic vitality, <a href="#">Page 54</a>			
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	RESPONSIBLE BUSINESS, Economic vitality, <a href="#">Page 54</a>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>Climate risk resilience</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	RESPONSIBLE BUSINESS, Climate risk resilience, <a href="#">Page 56</a>			
GRI 201-2: Financial implications and other risks and opportunities due to climate change	201-2 Financial implications and other risks and opportunities due to climate change	RESPONSIBLE BUSINESS, Climate risk resilience, <a href="#">Page 56</a>			
<b>Energy efficiency &amp; energy management</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31</a>			
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	ENVIRONMENTAL IMPACT, Climate Change & Energy, <a href="#">Page 31</a>			
	302-2 Reduction of energy consumption	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31</a>			
GRI 305: Energy 2016	305-1 Direct (Scope 1) GHG emissions	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31-36</a>			
		ANNEXURES, 2022 Environmental and social data snapshot, <a href="#">Page 68</a>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 305: Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31-36</a>  ANNEXURES, 2022 Environmental and social data snapshot, <a href="#">Page 68</a>			
	305-3 Energy indirect (Scope 3) GHG emissions	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31-36</a>  ANNEXURES, 2022 Environmental and social data snapshot, <a href="#">Page 68</a>			
	305-4 GHG emissions intensity	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31-36</a>			
	305-5 Reduction of GHG emissions	ENVIRONMENTAL IMPACT, Energy efficiency and management, <a href="#">Page 31-36</a>			
<b>Water</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	ENVIRONMENTAL IMPACT, Water stewardship, <a href="#">Page 37-39</a>			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	ENVIRONMENTAL IMPACT, Water stewardship, <a href="#">Page 37-39</a>			
	303-3 Water withdrawal	ANNEXURES, 2022 Environmental and social data snapshot, <a href="#">Page 68</a>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>Waste</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	ENVIRONMENTAL IMPACT, Waste, <b>Page 40-41</b>			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	ENVIRONMENTAL IMPACT, Waste, <b>Page 40-41</b>			
	306-2 Management of significant waste-related impacts	ENVIRONMENTAL IMPACT, Waste, <b>Page 40-41</b>			
	306-3 Waste generated	ANNEXURES, 2022 Environmental and social data snapshot, <b>Page 62-65</b>			
	306-4 Waste diverted from disposal	ANNEXURES, 2022 Environmental and social data snapshot, <b>Page 62-65</b>			
<b>Diversity &amp; inclusion</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	SOCIAL IMPACT, Diversity and inclusion, <b>Page 47-48</b>  SOCIAL IMPACT, Human capital management, <b>Page 49-50</b>			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	ANNEXURES, 2022 Environmental and social data snapshot, <b>Page 68</b>			



GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Singapore: 16.5h/employee/year UK: 31.4h/employee/year India: 28.8h/employee/year South Korea: 5h/employee/year			
	404-2 Programmes for upgrading employee skills and transition assistance programmes	SOCIAL IMPACT, Human capital management, <b>Page 49-50</b> Appendices, UK, <b>Page 62</b> Appendices, India, <b>Page 63</b>			
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	STT GDC did not receive any reports of incidents of discrimination in FY2022.			
<b>Health, safety &amp; well-being</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page 44-46</b>			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page 44-46</b>			
	403-2 Hazard identification, risk assessment, and incident investigation	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page 44-46</b>			
	403-3 Occupational health services	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page 44-46</b>			
	403-4 Worker participation, consultation, and communication on occupational health and safety	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page 44-46</b>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page <a href="#">44-46</a></b>			
	403-6 Promotion of worker health	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page <a href="#">44-46</a></b>			
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page <a href="#">44-46</a></b>			
	403-8 Workers covered by an occupational health and safety management system	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page <a href="#">44-46</a></b>			
	403-9 Work-related injuries	SOCIAL IMPACT, Health, safety & wellbeing, <b>Page <a href="#">44-46</a></b>  RESPONSIBLE BUSINESS, Responsible procurement, <b>Page <a href="#">57</a></b>			
<b>Governance &amp; integrity</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	RESPONSIBLE BUSINESS, Governance & integrity, <b>Page <a href="#">52</a></b>			

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	RESPONSIBLE BUSINESS, Governance & integrity, <a href="#">Page 52</a>  In FY22, 100% employees received Anti Bribery and Corruption policy training.			
	205-3 Confirmed incidents of corruption and actions taken	RESPONSIBLE BUSINESS, Governance & integrity, <a href="#">Page 52</a>  Zero confirmed incidents of corruption for FY 22.			
<b>Responsible procurement</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	RESPONSIBLE BUSINESS, Responsible procurement, <a href="#">Page 57</a>			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria			Information unavailable/incomplete.	In FY 22 we strengthened our supplier onboarding and qualification process. We will report the progress annually.

GRI Standard/ Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	RESPONSIBLE BUSINESS, Responsible procurement, <a href="#">Page 57</a>		Information unavailable/incomplete.	In FY 22 we strengthened our supplier onboarding and qualification process. We will report the progress annually.
<b>Cybersecurity</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	RESPONSIBLE BUSINESS, Cybersecurity, <a href="#">Page 58</a>			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	RESPONSIBLE BUSINESS, Cybersecurity, <a href="#">Page 58</a>  There were no complaints relating to breaches during the reporting period.			
<b>Non-GRI disclosure</b>					
GRI Sector Disclosures: Construction and Real Estate	CRE8 Type and number of sustainability certification, rating and labelling	RESPONSIBLE BUSINESS, Green building certification, <a href="#">Page 52</a>			

## SASB - Real Estate Standards

SASB Sustainability Disclosure Topic	SASB Code	Accounting Metric	Property Subsector	2022
Energy management	IF-RE-130a.1	Energy consumption data coverage as a percentage of total floor area, by property subsector (%).	Data Centres	100%
			Offices	100%
	IF-RE-130a.2	Total energy consumed by portfolio area with data coverage, by property subsector (GJ).	Data Centres	6,146,060
			Offices	526
			Data Centres	48%
			Offices	0.01%
	IF-RE-130a.2	Total energy consumed by percentage renewable, by property subsector (%).	Data Centres	52%
			Offices	0.00%
	IF-RE-130a.3	Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector.	Data Centres	24%
			Offices	N/A as South Korea office was only constructed in 2022.
	IF-RE-130a.4	Percentage of eligible portfolio that has an energy rating, by property subsector (%).	Data Centres	Not applicable
			Offices	Not applicable
Percentage of eligible portfolio that is certified to ENERGY STAR®, by property subsector (%).		Data Centres	Not applicable to Singapore, South Korea, India & UK.	
		Offices	Not applicable to Singapore, South Korea, India & UK.	

SASB Sustainability Disclosure Topic	SASB Code	Accounting Metric	Property Subsector	2022
Energy management	IF-RE-130a.5	Description of how building energy management considerations are integrated into property investment analysis and operational strategy.		STT GDC ensure that its data centres are designed, managed, and maintained to meet energy, water, raw materials, waste, and atmospheric emissions standards.
Water management	IF-RE-140a.1	Water withdrawal data coverage as a percentage of total floor area, by property subsector (%).	Data Centres	100%
			Offices	100%
		Water withdrawal data coverage as a percentage of total floor area, by property subsector (%) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector (%).	Data Centre	100%
			Offices	100%
	IF-RE-140a.2	Total water withdrawn by portfolio area with data coverage, by property subsector (m <sup>3</sup> ).	Data Centre	100%
			Offices	100%
		Total water withdrawn by percentage in regions with High or Extremely High Baseline Water Stress, by property subsector (%).	Data Centre	100%
			Offices	0%
IF-RE-140a.3	Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector.	Data Centres	17%	
		Offices	N/A as South Korea office was only constructed in 2022.	

SASB Sustainability Disclosure Topic	SASB Code	Accounting Metric	Property Subsector	2022
Water management	IF-RE-140a.4	Description of water management risks and discussion of strategies and practices to mitigate those risks.		Most of STT GDC's data centres are situated in water-stressed regions such as the UK, India and Singapore which, according to the World Resource Institute Water Risk Atlas tool, fall under high water-stress percentage of 40-80%. Thus, STT GDC takes a holistic approach towards mitigating these water management risks to provide long-term value to our assets. We ensure that our strategies in place cover the entire lifecycle of our assets starting from site selection to operation. More detailed information can be found <a href="#">page 37</a> to <a href="#">39</a> .
Management of tenant sustainability impacts	IF-RE-410a.1	Percentage of new leases that contain a cost recovery clause for resource efficiency-related capital improvements, by property subsector (%).	Data Centres	0%
			Offices	0%
		Associated leased floor area, of new leases that contain a cost recovery clause for resource efficiency-related capital improvements, by property subsector (sq. ft).	Data Centre	0%
			Offices	0%

SASB Sustainability Disclosure Topic	SASB Code	Accounting Metric	Property Subsector	2022
Management of tenant sustainability impacts	IF-RE-410a.2	Percentage of tenants that are separately metered or submetered for grid electricity consumption, by property subsector (%).	Data Centres	100%
			Offices	NA
		Percentage of tenants that are separately metered or submetered for water withdrawals, by property subsector (%).	Data Centres	0%
			Offices	0%
	IF-RE-410a.3	Discussion of approach to measuring, incentivising, and improving sustainability impacts of tenants.		No formal programmes in place at present.
Climate change adaptation	IF-RE-450a.1	Area of properties located in 100-year flood zones, by property subsector (net leasable area, in sq. ft).	Data Centres	Information not available
			Offices	Information not available



SASB Sustainability Disclosure Topic	SASB Code	Accounting Metric	Property Subsector	2022
Climate change adaptation	IF-RE-450a.2	Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks.	Data Centres	<p>While we have been closely identifying and managing our climate risks, in 2022, we conducted our first high-level scenario analysis where climate risks and opportunities were identified in line with the reporting recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). We have conducted the scenario analysis under the 2°C and 4°C warmer scenarios, looking at short (1 year), medium (between 1 and 2 years) and long-term (more than 2 years) time horizons for our UK, Singapore and India assets. Both physical and transition risks were identified and assessed.</p> <p>Following the analysis, we are taking action to strengthen the resilience of our strategy to promote sustainable growth, enhance our efforts to be more energy-efficient and create a safe and secure environment for our people. We will be integrating the findings into our Enterprise Risk Management (ERM) framework and operations to better manage these climate risks. More detailed information can be found in the Climate Resilience section, <b>page 56</b>.</p>

SASB Code	Activity Metric	Managed Building Type	2022
IF-RE-000.A	Number of assets, by property subsector	Data Centres	37
		Offices	4
IF-RE-000.B	Leasable floor area, by property subsector (sq. ft)	Data Centres	Confidential information
		Offices	Confidential information
IF-RE-000.C	Percentage of indirectly managed assets, by property subsector (%)	Data Centres	NA
		Offices	NA
IF-RE-000.D	Average occupancy rate, by property subsector	Data Centres	Confidential information
		Offices	NA

# FOOTNOTES

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1. In 2022, we expanded our report scope to include information from our operations in South Korea. As the data centres are still under construction, the scope covers only our South Korea office for now.
2. The AA1000 AccountAbility Principles are founded around the principles of Inclusivity, Materiality, Responsiveness and Impact
3. Global Reporting Initiative (GRI) 2021 Standards: GRI 3: Material Topics 2021
4. <https://www.iea.org/reports/data-centres-and-data-transmission-networks>
5. The International Sustainability Standards Board (ISSB) has published the Exposure Draft IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information, which sets out the overall requirements for STT GDC to disclose sustainability-related financial information about all its significant sustainability-related risks and opportunities.
6. Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions for entities for which the Group has operational control (excluding GDS and Thailand).
7. Greenhouse gas (GHG) Protocol establishes comprehensive global standardized frameworks to measure and manage GHG emissions.
8. Power usage effectiveness (PUE) is a globally accepted metric that is described by The Green Grid in several whitepapers. PUE illustrates the total energy used by a data centre divided by the energy used by information and communications technology (ICT) equipment in that data centre. For this purpose PUE will be determined as the group wide weighted average PUE over a 12 month period. The equation to calculate PUE is as follows:  $PUE = (\text{Total Facility Energy}) / (\text{IT Equipment Energy})$
9. [Climate change agreements - GOV.UK](https://www.gov.uk) (www.gov.uk)
10. <https://www.datacenterdynamics.com/en/broadcasts/world-water-day/2023/episode-1/>
11. [Climate change umbrella agreement for the data centre sector - GOV.UK](https://www.gov.uk) (www.gov.uk) An umbrella agreement exists between the Environment Agency (EA) and the data centre industry association. Each data centre in the UK has an underlying agreement with the EA where they are required to achieve a 15% reduction in PUE over the life of the scheme.
12. [Masao Ashtine & David Mytton, 'Commentary: Data centres are massive water guzzlers' - Channel NewsAsia](https://www.channelnewsasia.com)
13. [BCA-IMDA Green Mark for New Data Centres - BCA.GOV.SG \(www.bca.gov.sg\)](https://www.bca.gov.sg) This scheme places a significantly higher emphasis on energy efficiency and covers other performance efficiencies in water, sustainable construction and management and indoor environmental quality.
14. [The World Economic Forum - WEFORUM.ORG \(www.weforum.org\)](https://www.weforum.org) The World Economic Forum's Global Risks Report 2023 uses the term 'polycrisis' to explain how present and future risks are interacting with each other to form a cluster of related global risks with compounding effects.

## CONTACT

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