

# 2021 ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) REPORT

Unlocking social value







# CONTENTS

---

04	<b>Introduction</b>	<ul style="list-style-type: none"><li>About STT GDC</li><li>Our role and purpose in society</li><li>About this report</li><li>Letter from our CEO</li><li>2021 highlights</li></ul>
18	<b>Our ESG governance</b>	
22	<b>Our ESG strategy</b>	<ul style="list-style-type: none"><li>Materiality process</li><li>Stakeholder engagement</li><li>ESG strategy</li></ul>
32	<b>Environmental impact</b>	<ul style="list-style-type: none"><li>Climate change &amp; energy<ul style="list-style-type: none"><li>&gt; Climate assessment in line with TCFD</li><li>&gt; Driving innovative cooling and energy-efficient solutions</li></ul></li><li>Managing resources efficiently<ul style="list-style-type: none"><li>&gt; Water stewardship</li><li>&gt; Cooling initiatives to increase the water usage effectiveness</li><li>&gt; Waste and material use</li></ul></li></ul>
42	<b>Social impact</b>	<ul style="list-style-type: none"><li>Health, safety &amp; wellbeing</li><li>Social impact of construction</li><li>Inclusion and diversity</li><li>Labour and human rights</li><li>Development and training</li></ul>
50	<b>Responsible business</b>	<ul style="list-style-type: none"><li>Governance and integrity</li><li>Economic vitality of communities and supply chain</li><li>Green buildings certification</li><li>Responsible procurement</li></ul>
58	<b>Appendix</b>	<ul style="list-style-type: none"><li>Annex</li><li>References</li></ul>



STT Tai Seng 1, strategically positioned  
as a regional connectivity hub in Singapore  
to serve the region's needs



# ABOUT STT GDC

---

ST Telemedia Global Data Centres (STT GDC) is one of the fastest-growing data centre providers in the world. STT GDC, a Singapore-headquartered company formed in 2014, has grown its portfolio to include over 170 data centres across nine countries, including Singapore, the United Kingdom (UK), India, China, Thailand, South Korea, Indonesia, Japan and the Philippines.

STT GDC offers a full suite of best-in-class and flexible data centre solutions, providing critical infrastructure services that best meets customers' current and future colocation needs.

Led by an experienced team, STT GDC specialises in delivering and providing scalable end-to-end data centre solutions, support services, and cloud infrastructure solutions across major economic markets. The company has achieved recognition as a leader in complex, high-growth markets delivering reliable, resilient, and responsible digital infrastructure.

Such recognition builds and inspires continued trust in STT GDC and commits us to continuously live our values. STT GDC is wholly owned by ST Telemedia, a direct and wholly owned subsidiary of Temasek Holdings Limited.



## **STRIVE FOR EXCELLENCE**

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



## **BE SOCIALLY RESPONSIBLE**

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



## **DELIVER CONSISTENCY**

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



## **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.



## **ACT WITH INTEGRITY**

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

Our global platform spans eight geographies comprising more than 170 data centres and 2.2 gigawatts of IT load. The map below shows how they are distributed around the globe.



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



STT GDC has a proven ability to replicate and scale in the markets where we have established a presence. We are helping our customers navigate and expand into Asia's fastest-growing, yet most complex environments, with a harmonised set of services for a consistent experience that includes:

## COLOCATION

Customers can operate at any scale and level of privacy that their business requires with high flexibility, ranging from rack to multi-megawatt bespoke solutions that can include cage, suite, and dedicated buildings.

## SUPPORT SERVICES

Customers can enjoy peace of mind with our suite of complementary services performed to the highest service delivery standards by qualified and accredited 24x7 data centre professionals as their extended team members.

## CONNECTIVITY

Customers are enabled to interconnect within the data centre or city to network service providers, business partners, the public cloud and a whole host of business opportunities through our connectivity options.



STT Loyang, fitted with a 2,000m<sup>2</sup> rooftop solar photovoltaic system feeding approximately 400MWh per annum of renewable zero-carbon energy directly into the facility power network, avoiding approximately 158 tonnes of CO<sub>2</sub> emissions, the equivalent of CO<sub>2</sub> capture by 2,600 trees over 10 years or 194 acres of forest in one year.





By providing flexible solutions and operational excellence of consistently high quality, we are able to exceed customer expectations across our global portfolio.



### STRONG GLOBAL-LOCAL LEADERSHIP

- Enabling market entry for our customers across our global platform
- Global strength matched by our local expertise, with accredited and qualified teams on the ground who know their home markets best



### RELIABILITY

- Robust systems and procedures in place to manage change control and incidents
- High power availability for customers' mission-critical data, providing peace of mind and reliability



### BUILT AND OPERATED TO GLOBAL STANDARDS OF EXCELLENCE

- Centre of Operational Excellence to adopt best practices and communication across the STT GDC platform



... and more



### WIDE RANGE OF CONNECTIVITY OPTIONS

- Carrier-neutral
- Interconnection and peering fabrics
- Ready connectivity via both local and global network service providers
- Direct connectivity to Cloud Service Providers



### PHYSICAL SECURITY

- Multi-layer security at all sites
- On-site security personnel
- Enhanced security measures e.g., intrusion detection, physical access controls, 24x7 CCTV monitoring



### STATE-OF-THE-ART, NEW DATA CENTRES

- Purpose-built data centre designed to the highest technical specifications
- Modular approach providing customer expansion options in future

# STT GDC AT A GLANCE

2014

STT GDC commenced operations

Acquired 42% stake in GDS Services in China

2015

Commenced construction of STT GDC's first data centre in Singapore (STT Defu 1)

Acquired an initial 26% stake in VIRTUS in the UK

Invested in a 70% stake in Singapore, with Starhub

Remained the single largest shareholder in GDS

2016

Entered into a strategic partnership with Tata Communications (majority stake) to expand data centre business in India (completed in 2016) and Singapore (STT Tai Seng, completed in 2017)

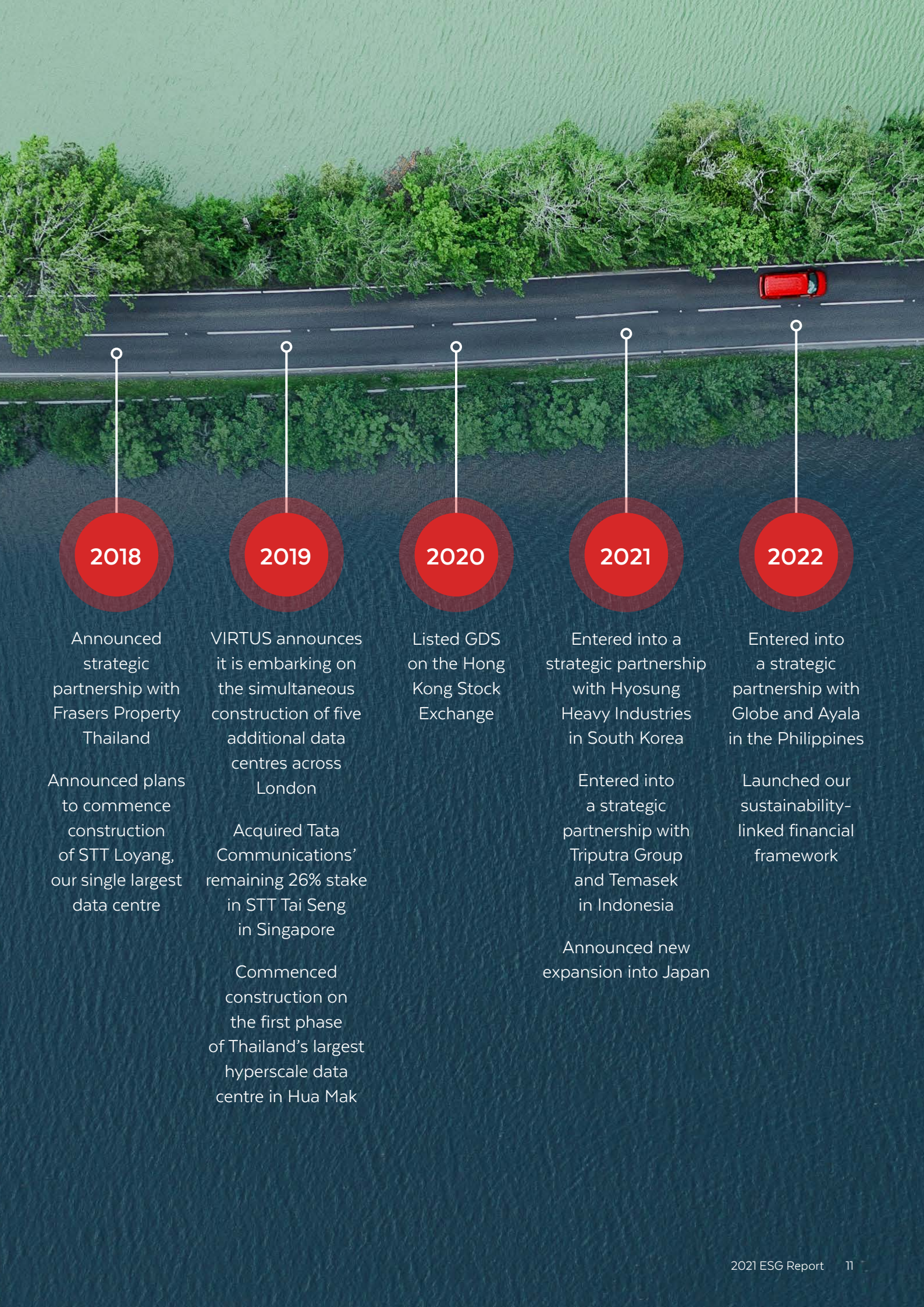
2017

Added STT Tai Seng following the completed acquisition of Tata Communications' facilities in Singapore

Announced new expansion in Singapore (STT Defu 2)

VIRTUS became a wholly-owned subsidiary of STT GDC





2018

Announced strategic partnership with Frasers Property Thailand

Announced plans to commence construction of STT Loyang, our single largest data centre

2019

VIRTUS announces it is embarking on the simultaneous construction of five additional data centres across London

Acquired Tata Communications' remaining 26% stake in STT Tai Seng in Singapore

Commenced construction on the first phase of Thailand's largest hyperscale data centre in Hua Mak

2020

Listed GDS on the Hong Kong Stock Exchange

2021

Entered into a strategic partnership with Hyosung Heavy Industries in South Korea

Entered into a strategic partnership with Triputra Group and Temasek in Indonesia

Announced new expansion into Japan

2022

Entered into a strategic partnership with Globe and Ayala in the Philippines

Launched our sustainability-linked financial framework



# OUR ROLE AND PURPOSE IN SOCIETY

Data centres, like the ones we build and operate, play a central and critical role in powering today's digital economy.

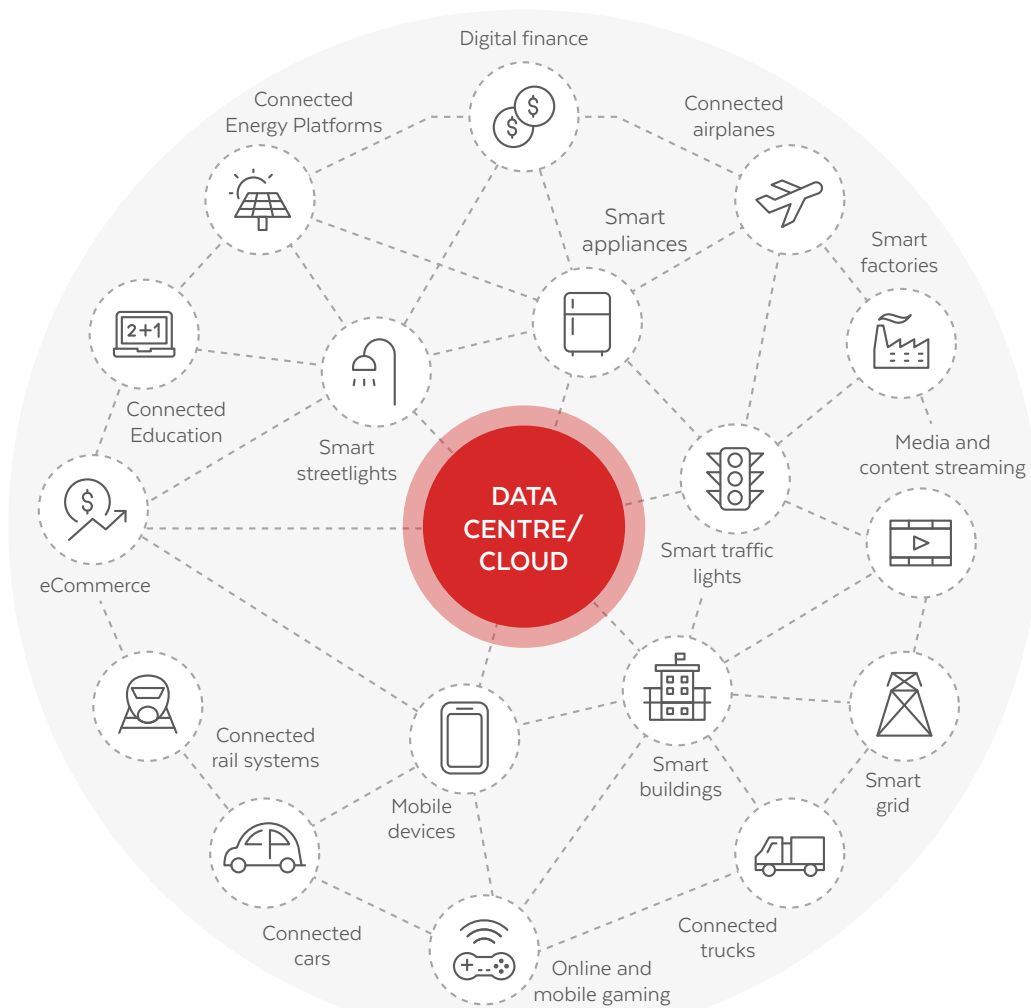
The demand for our infrastructure and services is being propelled by shifts to the cloud, mobile technologies, internet connectivity, 5G and IoT. On an uninterrupted basis every second, minute, hour and day in a year, our data centres provide ultra-secure, highly-powered and super-reliable facilities to enable computing, connectivity, automation, innovation and business transformation.

As the world continues to innovate and digitise, our purpose is also to support climate adaptation and decarbonisation roadmaps for ourselves and our customers. We do this by addressing the complexities

involved in power generation, whilst reducing carbon emissions, the emerging risks of climate change, balancing these against geopolitical tensions and cybersecurity threats.

We have a moral obligation to positively impact communities and people by promoting innovation, inclusion and economic growth, while safeguarding nature's resources, developing skillsets for present and future workforces and the wellbeing of people and communities.

We understand our role in society to be increasingly about unlocking social value.





# ABOUT THIS REPORT

---

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

Our progress is shared in this report, which references selected Global Reporting Initiative (GRI) standards and covers our contributions towards the United Nations Sustainable Development Goals (UN SDGs).

We adopt a progressive approach towards reporting. Over time, we will increase disclosures on performance and targets, also in line with the Task Force on Climate-related Financial Disclosures (TCFD) where an initial assessment has been included in this year's report.

## REPORTING PERIOD AND SCOPE

We have provided a detailed account of our ESG performance based on the Group's financial year from 1 January to 31 December 2021. It covers all operations (data centres and offices) under STT GDC's operational control during the year (i.e., Singapore, India, South Korea and the UK).

This report does not include the performance of GDS nor STT GDC Thailand, in which we hold a minority share. As a listed company, GDS manages its own ESG strategy to reflect its regional operations. As such, its data, policies, and practices will be reported separately.

## INDEPENDENT CONSULTANCY

An independent sustainability advisory firm was appointed to provide internal assistance with developing the contents of this report. Information in this report has been reviewed in accordance with internal review and control measures.

We have received a pre-assurance statement from an independent party, and attached the report at the end of our ESG Report.

## GIVE US YOUR FEEDBACK

We welcome your feedback to help us do better. Please do provide feedback on this report. You can reach us at [ESG@sttelemediagdc.com](mailto:ESG@sttelemediagdc.com).

# LETTER FROM OUR CEO

---

Dear Stakeholders,

As the world becomes increasingly automated and digitalised, the role of data centres has grown more critical. Data centres have also gained prominence, in large part because of climate change. However, digital infrastructure can support the transition to a low carbon economy through the responsible reduction of emissions, waste, and water consumption. As a long-term participant of this industry, our role is to act responsibly, and safeguard the wellbeing of our employees, local communities and societies.

As the markets in which we operate continue to face systemic shocks and disruptions caused by the recent pandemic, geopolitical tensions, cyber threats and climate change, STT GDC strives to be a recognised infrastructure leader with a clear ESG strategy. We commit to meet the growing demand for automation and digital requirements to connect, store and share data and information, while continuing to care for people, and the planet on which we live.

**STT GDC lives up to those responsibilities.  
We are proud to be one of the few pioneering  
global data centre companies who have  
publicly pledged decarbonisation by 2030.**

We understand that our capacity needs to grow to support the further digitalisation of economies and our society.

We acknowledge that this growth of capacity must happen in a responsible way and we act accordingly by implementing relevant ESG metrics and targets and ensuring green design and materials for our data centres.

We believe that this growth should not happen at the expense of people and the planet. Our growth requires resources and we are committed to working together with our employees, business partners, clients and stakeholders to maximise our energy intensity efficiency and minimise our environmental impact.

Our role is to unlock social value for the benefit of greener, more equitable and inclusive societies. To us, social value is about enabling a culture of care that influences the development of present and future skills, contributes to sustainable growth, promotes inclusive and resilient communities, safeguards the environment and drives innovation.

With this report, we continue to track and monitor our progress and our impact across the sustainability spectrum, as we build and operate future-proof data centres across major economies.



**Bruno Lopez**  
President and Group CEO  
ST Telemedia Global Data Centres







# 2021 ESG HIGHLIGHTS

During 2021, we have made strong progress with respect to our sustainability programmes and ESG performance targets.

## GROUP HIGHLIGHTS

Year on year

12% carbon intensity improvement

4% PUE improvement

18% WUE improvement

44% renewable energy usage across the group

Performed an initial assessment of **climate related risks** & opportunities in line with Task Force on Climate-related Financial Disclosures (TCFD)

 **Zero** serious injuries and fatalities

 Achieved world-leading performance for **health and safety**





## REGIONAL HIGHLIGHTS

### India

Additional **renewable energy PPAs** signed, reaching 33% renewable energy penetration across the business

**10%** PUE improvement

**19%** WUE improvement

### United Kingdom

**100%** renewable energy secured for our data centres

**Water efficiency** programme initiated in 2020

**VIRTUS 2030** decarbonisation program launched

**40%** WUE improvement

### Singapore

**STT Loyang** completed our largest single data centre build, with a range of world leading sustainability initiatives and certifications

**2,000m<sup>2</sup>** rooftop solar photovoltaic system deployed

**25,000t** of carbon credits purchased at the inaugural auction at Climate Impact eXchange (CIX) in Singapore successfully retired

**\$100K** donated to each of the following beneficiaries:

- **Samaritans of Singapore (SOS)**  
Supporting persons with mental health conditions
- **Lions Befrienders Service Association**  
Dignifying the lives of the elderly
- **IMDA's Digital for Life Fund**  
Helping Singaporeans access digital and keep pace with technological transformation



STT GDC recognises the importance of good governance as a strong foundation and is committed to sustainability beyond environmental matters. Our Board has oversight of relevant ESG and Health and Safety issues at STT GDC.

# OUR ESG GOVERN



A woman with long dark hair, wearing a light blue V-neck shirt, is looking down at a tablet device she is holding. She is holding a yellow marker in her right hand. In the background, a man in a dark vest over a light shirt is standing near a desk with a laptop. The setting appears to be a modern office or co-working space with warm lighting and blurred background elements.

# ANCE

A dedicated Group Head of ESG role was formalised in 2021 in recognition of the importance of sustainability. The role reports to our C-Suite and coordinates sustainability leadership, reporting, initiatives and their implementation across our platform, together with our local in-country teams.

In addition, a formal Health and Safety Department was created during the year in recognition of the importance of protecting the health and welfare of our extended workforce and communities. The remit of this independent department spans all our operating DCs as well as our construction programme addressing critical topics, such as occupational safety, occupational health exposure, public health exposure, mental health and fatigue, degradation or pollution of the local environment.

STT GDC applies standards, processes and controls to meet the requirements of international standards for Environmental Management (ISO14001), and Occupational Health & Safety (ISO45001).

During the year, several of our regions including Singapore and India achieved certification to ISO45001.

Furthermore in 2021, we developed and implemented our Global Minimum Standard (GMS) for health and safety as a definitive reference guide applicable to all our businesses across the construction and operational lifecycle. The GMS helps us align our business with global Health and Safety standards and practices and will ultimately be accredited to the international standard ISO 45001:2018 – Occupational Health and Safety Management Systems – Requirements with Guidance for Use.

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









STT GDC's ESG ambition is to be a recognised leader in complex, high-growth markets delivering reliable, resilient and responsible digital infrastructure.

# OUR ESG



## SECTION CONTENTS

01

Materiality process

02

Stakeholder engagement

03

ESG strategy

# STRATEGY



We recognise the critical role we play in today's digital economy and our purpose is captured in our ESG strategy focusing on:

- Increasing data centre capacity to meet growing customer requirements without overextending the planet's capacity and resources
- Providing resilient and secure services based on responsible management and sound governance
- Proactive management of ESG risks and opportunities including climate change
- Inspiring our employees, their development and the wellbeing of people and communities

We have set a course to deliver on ESG performance targets for our identified material topics.



# MATERIALITY PROCESS

---

In 2020 we performed an extensive materiality assessment. This is summarised below in Tier 1 and Tier 2 topics to reflect the heightened level of relevance and significance to certain topics, compared to others. Tier 2 topics are covered in less detail than Tier 1 topics in this report.

---

## ENVIRONMENTAL IMPACT

### BIG GOAL

Decarbonising data centre operations and responsible resource management



### TIER 1 MATERIAL TOPICS

- Climate change
- Energy
- Water

### TIER 2 MATERIAL TOPICS

- Sustainable energy storage
- Waste and materials use

---

## SOCIAL IMPACT

### BIG GOAL

Empowering people to thrive, managing positive outcomes in a safe workplace



### TIER 1 MATERIAL TOPICS

- Health, safety & well-being
- Inclusion & diversity
- Social impacts of construction

### TIER 2 MATERIAL TOPICS

- Labour & human rights
- Development & training
- Human capital retention

---

## RESPONSIBLE BUSINESS

### BIG GOAL

Ethical conduct, sector leadership



### TIER 1 MATERIAL TOPICS

- Governance and integrity
- Economic vitality of communities and supply chain
- Green building certifications

### TIER 2 MATERIAL TOPICS

- Responsible procurement
- Resilience to disruption

In 2021, we reviewed the relevance of our Tier 1 and Tier 2 topics. The review has involved management and selected stakeholders and considered a time horizon of one to five years, peer benchmarking, industry practices, expectations, key trends, and regulatory requirements.

The outcome is that for 2021, the material topics are unchanged compared to previous reporting period. Due to the changing nature of our industry, STT GDC will reassess its material topics in 2023 by including external stakeholder engagements.

# STAKEHOLDER ENGAGEMENT

---

STT GDC engages with key stakeholder groups regularly by using different forms of engagement.

Our key stakeholder groups are identified based on their influence, interest in STT GDC, and the potential impact our operations might have on their businesses and wellbeing.

In 2021 we consulted key stakeholders on their priorities and identified key topics and areas of concern critical to our role to unlock social value for the benefit of greener, more equitable and inclusive societies.

STAKEHOLDER GROUP	FORMS OF ENGAGEMENT	KEY TOPICS AND CONCERNS
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>• Maintain open channels of communication</li><li>• Sales and strategic account managers</li><li>• Collaboration on efficiency and clean energy project</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>
Board and investors	<ul style="list-style-type: none"><li>• Quarterly reporting</li></ul>	<ul style="list-style-type: none"><li>• Communication and transparency of performance, outlook and strategy</li></ul>
Business Partners & Suppliers	<ul style="list-style-type: none"><li>• Regular meetings, calls and performance reviews</li><li>• Contract development and ongoing interaction</li><li>• Supplier code of conduct</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>



STAKEHOLDER GROUP	FORMS OF ENGAGEMENT	KEY TOPICS AND CONCERNS
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	<ul style="list-style-type: none"> <li>• Regular dialogue related to project permitting and other business matters</li> </ul>	<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	<ul style="list-style-type: none"> <li>• Engagement on matters relevant to JV investments and management of the JV</li> </ul>	<ul style="list-style-type: none"> <li>• Transparency and communication of company financial, business and sustainability performance</li> </ul>



# ESG STRATEGY

---




When we first introduced our ESG strategy in 2020, we were clear about our intention to understand and be accountable for our positive and negative impacts on people, the planet and profit.

We are now bringing further transparency and consistency by developing our ability to assess the contributions that our ESG topics, programmes and initiatives have on social value<sup>1</sup>, and how they align with the UN Sustainable Development Goals (SDG).



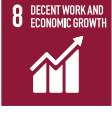




## Decarbonising data centre operations and responsible resource management




TIER	ESG TOPICS	OUR GOALS	OUR CONTRIBUTION TO SOCIAL VALUE	PROGRAMMES AND INITIATIVES <sup>2</sup>	UN SDGS
1	<b>Climate Change &amp; Energy</b>	Design and operate “Built-to-last” data centres  Assess climate change risks and opportunities in the design, construction and operation of data centres	<ul style="list-style-type: none"> <li>Decarbonising data centre operations and introducing responsible resource management processes</li> <li>Driving water savings activities</li> <li>Increasing the recycling rate of building and non-building materials</li> </ul>	<ul style="list-style-type: none"> <li>Increase the share of carbon-free electricity sources</li> <li>Purchase and retire high quality carbon credits</li> <li>Perform assessment of climate risks and opportunities in line with TCFD</li> </ul>	  
	<b>Water stewardship</b>	Source water responsibly		<ul style="list-style-type: none"> <li>Drive innovative cooling- and energy-efficient solutions</li> <li>Promote water efficiency in data centre front-end design</li> </ul>	
	<b>Waste and material use</b>	Drive a “Zero-waste” culture		<ul style="list-style-type: none"> <li>Reduce waste arising at source, improve the percentage of materials procured that are recycled</li> <li>Establish formal waste management policies and procedures for hazardous and non-hazardous wastes</li> </ul>	

## Empowering people to thrive, managing positive outcomes in a safe workplace

TIER	ESG TOPICS	OUR GOALS	OUR CONTRIBUTION TO SOCIAL VALUE	PROGRAMMES AND INITIATIVES	UN SDGS
1	<b>Health, Safety &amp; Wellbeing</b>	Safeguard the safety, health and wellbeing of employees, contractors and communities	<ul style="list-style-type: none"> <li>Promoting practices and procedures having positive impact for employees, contractors and local communities</li> </ul>	<ul style="list-style-type: none"> <li>Promote physical and mental health for the wellbeing of employees and workers</li> <li>Train all employees on health and safety practices</li> </ul>	  
	<b>Inclusion &amp; Diversity</b>	Promote a respectful and inclusive environment	<ul style="list-style-type: none"> <li>Impacting talent attraction and retention, organisational productivity and innovation processes</li> </ul>	<ul style="list-style-type: none"> <li>Promote women to executive leadership and management positions</li> <li>Promote gender diversity in the workforce and in the talent recruitment pipeline</li> </ul>	
	<b>Social Impacts of construction</b>	Extend our responsibility to influence third-party construction management—often in challenging jurisdictions—to ensure zero harm, fair employment terms and good working conditions for contractors and migrant workers	<ul style="list-style-type: none"> <li>Implementing practices to ensure proper management of fatigue and monitoring of working conditions</li> <li>Protecting the health and wellbeing of our extended workforce</li> </ul>	<ul style="list-style-type: none"> <li>Roll-out Group Minimum Standards (GMS)</li> <li>Establish site health and safety training in front-end design</li> <li>Align worker conditions (including migrant workers) with recognised minimum global build and welfare facilities (e.g. no chemical toilets, provision of rest areas)</li> </ul>	
2	<b>Labour &amp; Human Rights</b>	Provide fair working conditions to employees, contractors and workers to thrive physically, emotionally and mentally—in and outside work	<ul style="list-style-type: none"> <li>Promoting practices to impact the social resiliency of people and communities</li> </ul>	<ul style="list-style-type: none"> <li>Implement GMS</li> <li>Supplier Code of Conduct to be acknowledged during 2022</li> <li>Whistle-blower policy has been implemented</li> </ul>	
	<b>Development &amp; Training</b>	Encourage the development of employees' careers and professional skills to stay relevant	<ul style="list-style-type: none"> <li>Investing in programmes to develop relevant and future skills for the sector as a whole</li> </ul>	<ul style="list-style-type: none"> <li>Partner with local governments (e.g., India) and relevant technical academic organizations to develop nationally recognised qualifications (e.g., data centre management)</li> </ul>	
	<b>Human Capital Retention</b>	Retain talented and qualified employees to increase productivity and stability in growing markets where the risk of turnover of key talent is high and/or the workforce is scarce			



## Ethical conduct, sector leadership

TIER	ESG TOPICS	OUR GOALS	OUR CONTRIBUTION TO SOCIAL VALUE	PROGRAMMES AND INITIATIVES	UN SDGS
1	<b>Governance &amp; Integrity</b>	Deliver our services in an honest and ethical manner	<ul style="list-style-type: none"> <li>Implementing Group standards to provide a framework of reference</li> </ul>	<ul style="list-style-type: none"> <li>Continue our unwavering commitment to ethical and moral business conduct</li> <li>Rigorous enforcement of anti-bribery and corruption policies</li> </ul>	 
	<b>Economic Vitality of communities and supply chain</b>	Support the basic needs <sup>3</sup> of communities, including access to healthcare during the pandemic, to allow people to gain access to economic opportunity	<ul style="list-style-type: none"> <li>Influencing local governments to improve infrastructure, entrepreneurship and social cohesion</li> </ul>	<ul style="list-style-type: none"> <li>Promote innovation and fair practices</li> </ul>	
	<b>Green Building certification</b>	Design and manage direct and indirect impacts of buildings on the environment, including construction, occupancy, renovation and demolition	<ul style="list-style-type: none"> <li>Ensuring consistency across countries to support the decarbonisation of our data centre</li> </ul>	<ul style="list-style-type: none"> <li>Achieve and maintain LEED Gold certification at a minimum (or local equivalent) for all new DCs</li> <li>Adapt technologies and solutions in line with green building requirements</li> </ul>	
2	<b>Responsible procurement</b>	Reduce/remove negative environmental and social impacts caused by the purchased goods and services	<ul style="list-style-type: none"> <li>Engaging suppliers to anticipate, avoid and respond to negative events in our supply chains</li> </ul>	<ul style="list-style-type: none"> <li>Assess existing and new suppliers using ESG criteria in line with international standards and certifications</li> </ul>	
	<b>Resilience to disruption</b>	Embed resiliency in our strategy and processes (e.g., climate change)	<ul style="list-style-type: none"> <li>Resiliency creates opportunities for innovation, for environmental and societal benefits</li> </ul>	<ul style="list-style-type: none"> <li>Expand existing risk assessment process to deepen the analysis of wider sustainability risks and opportunities including adoption of TCFD</li> </ul>	



Enabling a culture of care by decarbonising  
our data centre operations and promoting  
responsible resource management.

# ENVIRONME IMPACT



## SECTION CONTENTS

01

Climate change & energy

02

Managing resources efficiently

NTAL



# ENVIRONMENTAL HIGHLIGHTS 2021



**44%**

renewables



**25,000**

tonnes of carbon offsets retired



**4%**

PUE reduction



**12%**

carbon intensity reduction



Additional PPAs  
signed in India



**WUE 18%**

improvement YoY



# CLIMATE CHANGE & ENERGY

STT GDC has committed to decarbonise its operations and become net carbon neutral by 2030<sup>4</sup> by:

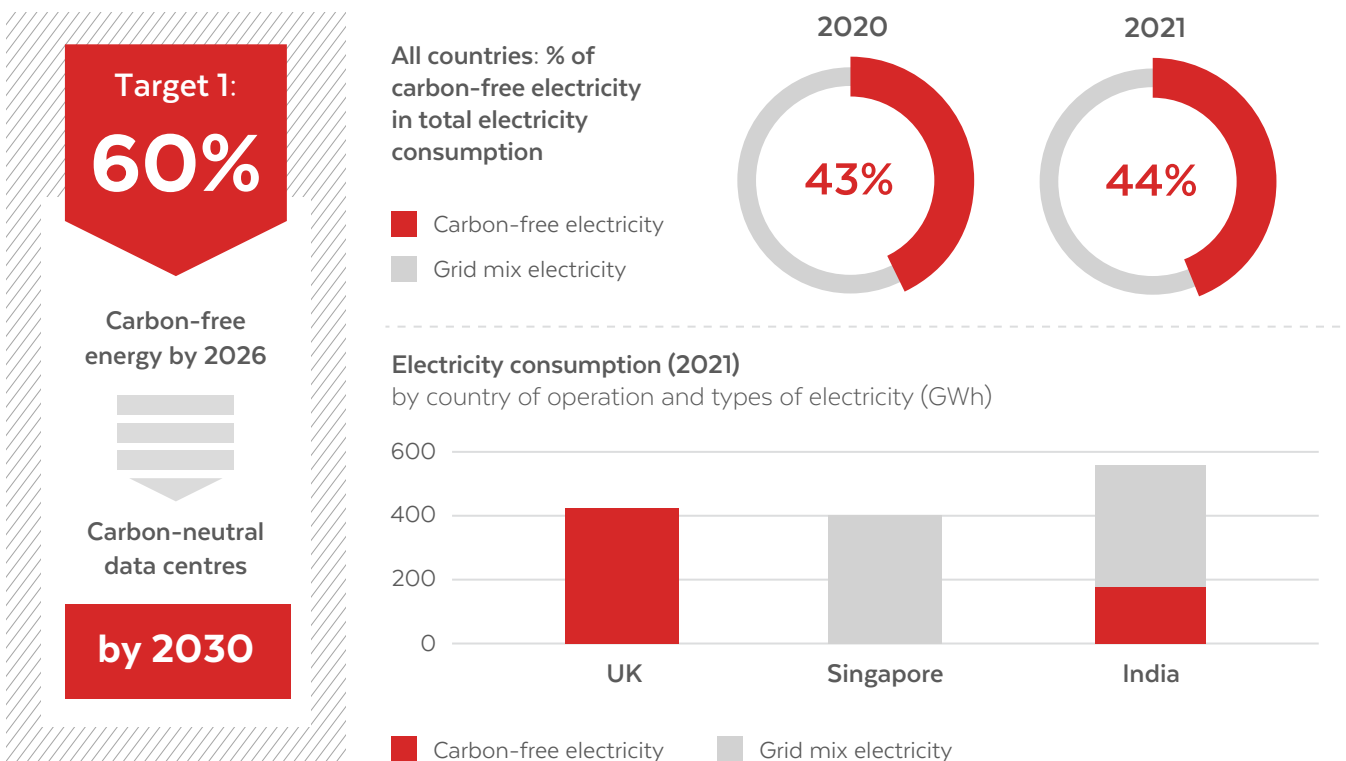
- driving innovative cooling- and energy-efficient solutions
- increasing the share of carbon-free electricity sources by appropriate and verified renewable power purchase agreements (PPAs)
- purchasing and retiring carbon credits
- managing resources efficiently

In 2021, we improved our data collection systems to accurately measure STT GDC’s monthly carbon footprint using the standards set by the GHG Protocol.<sup>5</sup>

Accurately tracking and analysing our carbon footprint is a critical capability in our journey to net-zero carbon.

Over the year, STT GDC has achieved 44% renewable energy usage across the Group with additional renewable energy PPAs being signed in India.

Finally, we actively track and benchmark power usage effectiveness (PUE)<sup>6</sup> for all facilities to measure and manage our energy use.



PROGRESS

Percentage of carbon-free electricity consumption has shown slight growth, led by increased carbon-free electricity use in the UK.

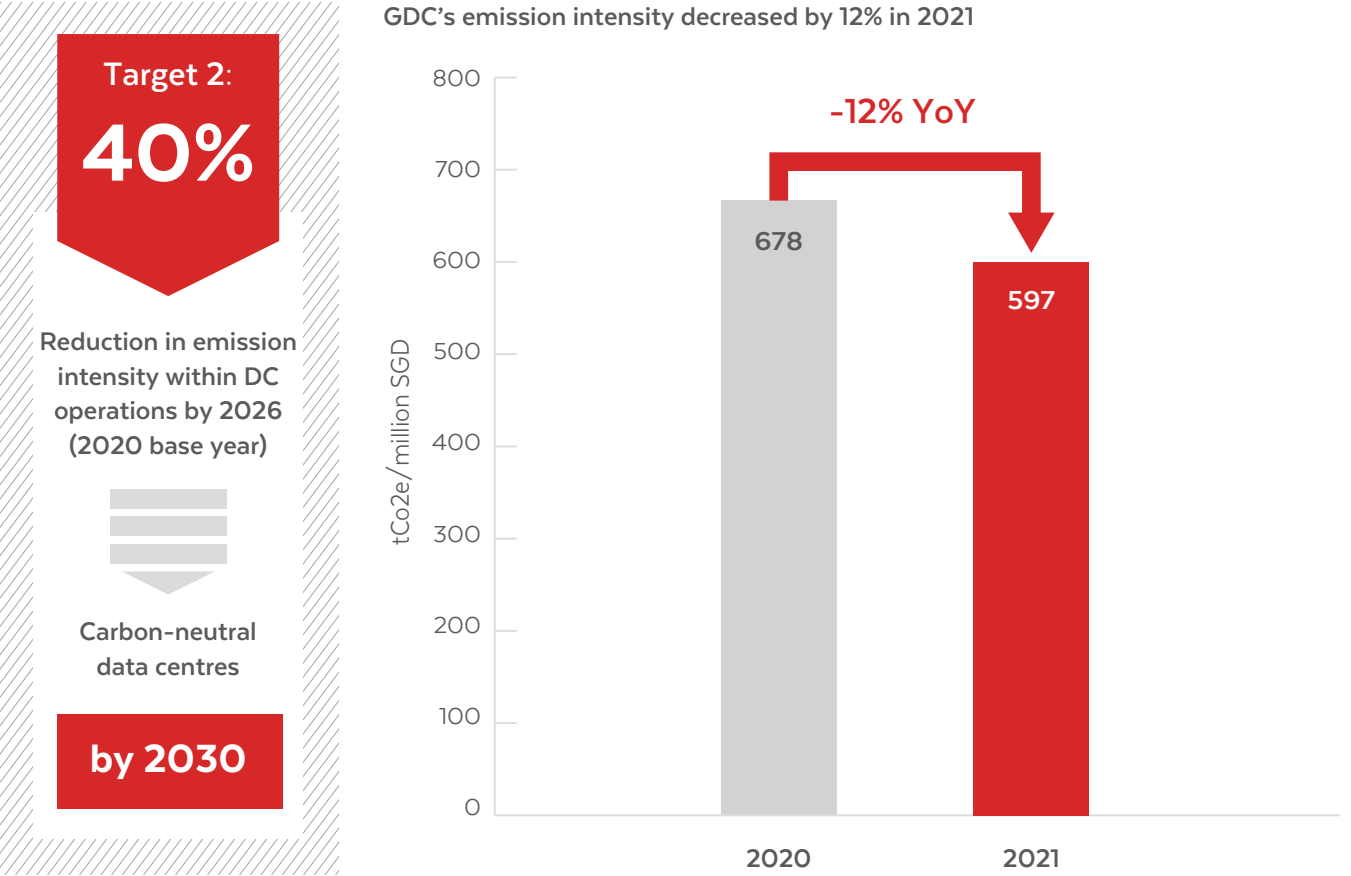
COUNTRY 2021 HIGHLIGHTS & INITIATIVES

**India**  
Signed additional PPAs to increase renewable energy penetration from 32% to 51% in the coming few years

**Singapore**  
In 2022, Loyang data centre has deployed a 2,000m<sup>2</sup> solar photovoltaic rooftop system

**UK**  
Our UK business consumes entirely carbon-free energy

Carbon intensity<sup>7</sup> has also been introduced to our ESG KPIs as a meaningful metric to measure the impact of our decarbonisation efforts.



PROGRESS

- Reduction of 12% of emission intensity
- We made progress in reducing fuel consumption by 21% from 2020 to 2021
- We have increased our renewable energy use to 44% in 2021
- We have purchased and retired carbon credits

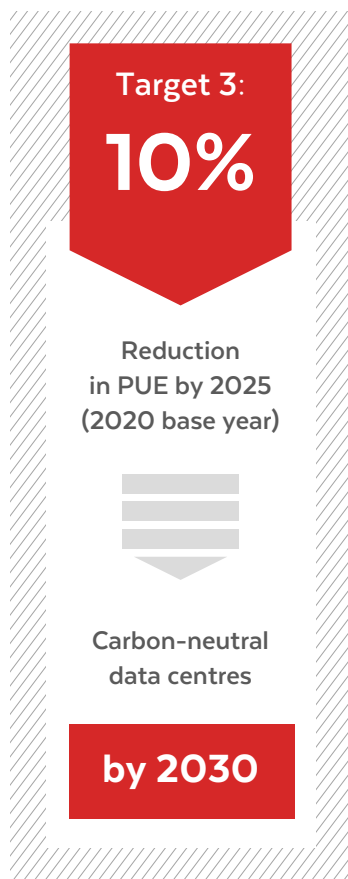
COUNTRY 2021 HIGHLIGHTS & INITIATIVES

**India**  
Reduced its Scope 1 emissions

**Singapore**  
Singapore has successfully retired 25,000 tonnes of carbon credits purchased at the inaugural auction at Climate Impact Exchange (CIX)

**UK**  
100% Renewable energy and reduced its Scope 1 emission







## PROGRESS

We are on track to achieve the 2025 target, achieving strong reductions in India operations so far.

## COUNTRY 2021 HIGHLIGHTS & INITIATIVES

	<b>India</b> 11% reduction from 2020 to 2021		<b>Singapore</b> Average PUE stable		<b>UK</b> Average PUE stable
---	---	---	---	---	------------------------------------

For Scope 3, we track business travel (excluding accommodation) and employee commuting for India, Singapore and UK operations. For 2021, Business Travel resulted in 125 tCO<sub>2</sub> and Employee commute in 340 tCO<sub>2</sub>.

In 2021, we initiated the assessment of climate risks and opportunities for STT GDC in line with the Task Force for Climate-related Financial Disclosures (TCFD). Our reference to TCFD aligns with our strategic initiatives to strengthen our efforts to include climate change in our decision processes.

## CLIMATE ASSESSMENT IN LINE WITH TCFD

Scenario analysis presents hypothetical climate outcomes of the future, that will help us to better understand how climate change may impact our business. As STT GDC's data centres are located in several geographies prone to climate change risks, the scenario analysis becomes an imperative tool for risk management, strategy planning and in helping to build resilience against climate emergencies.

In our analysis, we established both worst-case (4°C warming) and best-case (<2°C warming) scenarios to ensure that STT GDC builds adequate climate resilience around its operations no matter the outcome. 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), whereby we evaluated the impacts on STT GDC for both physical and transition risk factors.

Physical climate risks under the 4°C warming scenario include rising temperatures and sea levels, water scarcity and extreme weather conditions. These present implications such as physical damage to our infrastructure and people, supply chain disruptions, increased energy and water costs, as well as lower productivity. We recognise the importance of climate risk analysis and mitigation in our operations, supply chain and construction.

We value our staff and extended workforce, so it is also crucial for STT GDC to implement proper standards and management around protection of our workers and assets from these physical risks. To assess transition risks, we have simulated scenarios with relevant variables such as implementation of carbon tax, mandates and regulations on existing products and services as well as net zero operations.



# MANAGING RESOURCES EFFICIENTLY

As an organisation with a global footprint, we are committed to minimising local environmental impacts.

In the UK for example, VIRTUS adheres to the Climate Change Agreement (CCA)<sup>8</sup> existing between the Environment Agency (EA) and the data centre industry association. CCAs are voluntary agreements made to reduce energy use and CO<sub>2</sub> emissions. In return, VIRTUS receives a discount on the Climate Change Levy (CCL), a tax added to electricity and fuel bills. The CCL represents a direct saving for VIRTUS customers and is measured in terms of PUE performance against base year.<sup>9</sup>

In addition, VIRTUS is also a signatory of the EU [climate neutral data centre pact](#).

“

As a trusted leader in the European data centre industry, VIRTUS operates with full awareness of our collective responsibility to minimise our environmental impact. That's why we only ever use 100% renewable energy to power all of our data centres, as part of our commitment to protecting our planet. The Carbon Neutral Data Centre Pact provides further accountability for our industry as we work collectively to provide reliable, resilient and responsible critical infrastructure that supports the growing digital economy in the most sustainable way possible.”

**Neil Cresswell, CEO**

VIRTUS Data Centres

## WATER STEWARDSHIP

### OUR AMBITION

Responsible use of water across all operations<sup>10</sup>

### OUR TARGETS

- Measure and track Water Usage Effectiveness (WUE) for all data centres by 2022
- Implement water usage efficiency programs
- Conduct a Global Water Stewardship Assessment for all properties operated by STT GDC, refreshed every two years and in line with international protocol

### PERFORMANCE 2021 VS 2020

# 18%

decrease in WUE at Group Level

### PROGRESS

Whilst overall water consumption increased in the year, this was in-line with business growth and in keeping with our commitment to responsible use of resources we made significant improvement in water efficiency (WUE) by 18%

### COUNTRY 2021 HIGHLIGHTS & INITIATIVES



**India**  
WUE has been consistently below 1.5



**Singapore**  
WUE has been consistently between 1.5 and 2



**UK**  
WUE consistently below 0.2 due to predominant use of air cooled chillers

## COOLING INITIATIVES TO INCREASE THE WATER USAGE EFFECTIVENESS

At all our sites, we execute a rigorous plant selection process during the detailed design phase. When designing our LONDON2 facility for example, VIRTUS was the first operator in the UK to deploy Indirect Evaporative Cooling at scale.

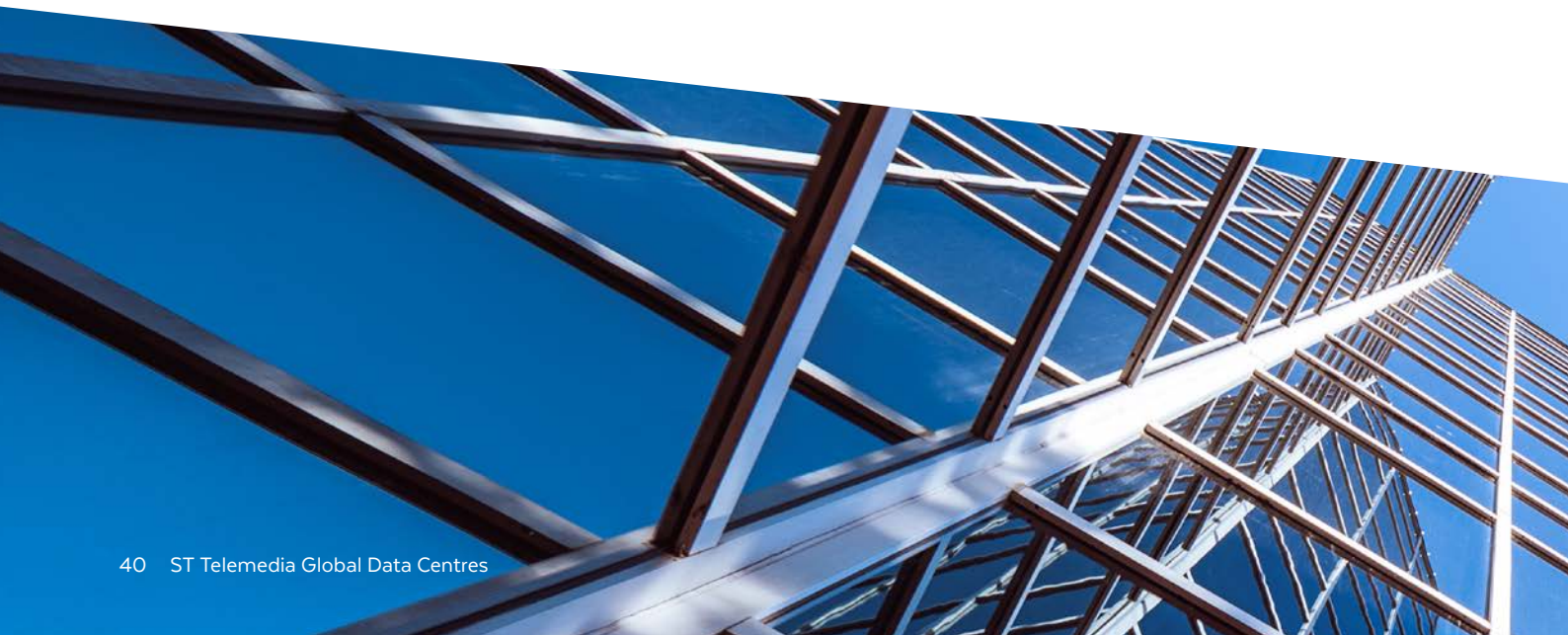
VIRTUS drilled a borehole 200m below ground to access a natural underground aquifer, to reduce water demand on the mains water supply. Even using this natural source, the water hardness in the UK meant the cooling units were consuming a large quantity of filters, and the warmer summers of the last few years were seeing increased water consumption during the summer months.

Back in 2020, VIRTUS undertook an optimisation project with Excool to investigate alternative operating configurations for reducing the overall water consumption, while still delivering efficient cooling. A revised strategy was explored, where the DX circuit was brought on earlier and adiabatic cooling was introduced later in the process. Tests took place at the Excool factory to prove the theory in a controlled environment, followed by a controlled implementation of the new strategy on site.

## DRIVING INNOVATIVE COOLING AND ENERGY-EFFICIENT SOLUTIONS

We are partnering with Schneider Electric and Iceotope in Singapore to conduct real-world trials of a liquid immersion cooling system to manage the higher chip densities expected into the near future. A liquid-cooled medium is 3,000 times more effective than an air cooling one and it allows for better energy efficiency and a reduction of carbon emissions. This will reduce a data centre's carbon footprint as a chiller—a major cooling component—will no longer be required.

We teamed up with ABB on artificial intelligence to optimise our energy use and reduce our carbon footprint. AI can dynamically manage ambient environment temperatures in line with changing IT loads, resulting in optimised energy usage. Applying predictive analytics helps data centres model energy trends and usage patterns, allowing for better management of power and cooling needs and increased energy efficiency.





## WASTE AND MATERIAL USE

Our ambition to promote a ‘Zero Waste’ culture strongly complements our carbon-neutral ambition in striving for decarbonisation through non-energy means. In 2021, we have engaged a third-party

recycler, also allowing us to improve on our data gathering and tracking processes. The better visibility also explains the increase in our waste compared to the previous year.

### OUR AMBITION

Promote a “zero-waste” culture

### OUR TARGETS

- Reduce waste arising at source, improving the percentage of materials procured that are recycled.
- At our operating sites (pre-commissioning, operation, decommissioning, closure) we’ll establish formal waste management policies and procedures for hazardous and non-hazardous wastes.

### PROGRESS

Waste generation increased significantly in 2021, but additional waste produced was offset through a higher recycling rate. In 2021 we engaged a third-party recycler to provide greater visibility around waste data for Singapore operations.

### COUNTRY 2021 HIGHLIGHTS & INITIATIVES



#### India

Better waste data management system was implemented



#### Singapore

Majority of additional waste produced was recycled



#### UK

Waste data collection to be implemented in 2022



Enabling a culture of care to empower people to thrive, while managing positive outcomes in a safe workplace.

**SOCIAL**



## SECTION CONTENTS

01

Health, safety & wellbeing

02

Social impacts of construction

03

Inclusion & diversity

04

Labour & human rights

05

Development & training

# IMPACT

# SOCIAL HIGHLIGHTS 2021

---



**15.5M**

construction hours  
recorded



**0**

work related  
serious injuries



**0.13**

Total Recordable  
Incident Rate (TRIR)



**S\$300,000**

donated to various  
charities in Singapore



# HEALTH, SAFETY & WELLBEING

All STT GDC employees are bound by the requirements of the GMS and associated documents regardless of work location.

All our Joint Ventures (JV)—including offices, project sites, operational data centres—shall adopt and demonstrate compliance to the GMS. All of our external stakeholders (e.g., contractors) are expected to conform to our GMS.

STT GDC has Health, and Safety 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 which we call Group Minimum Standards (GMS).

GMS requirements shall be considered as early as the project proposal stage and during all preliminary stages to firstly ensure the allocation of sufficient resources and to also ensure that appropriate safety performance objectives are met for all new projects and activities.

OUR AMBITION	OUR TARGETS & METRIC	PERFORMANCE 2021
The safety, health and wellbeing of our employees, contractors and communities is safeguarded in all the work we deliver and the projects we contract out	<b>Employee Safety</b> Injury rate globally per 200,000 hours worked in operating data centres <b>Target:</b> <0.5 recordable incident rate annually	<b>0</b> work related serious injuries
	<b>Management System</b> ISO 45001 certification of data centre operations, in % share of sites <b>Target:</b> 100% by the end of 2022 and maintained in future years	<b>Completed</b>

IMPROVEMENT MADE	HIGHLIGHTS & INITIATIVES
Our Group Minimum Standards (GMS) has been implemented to ensure and align requirements across sites	<ul style="list-style-type: none"> <li>Third-party administered employee satisfaction surveys (80% score)</li> <li>Participation in Human Capital Awards</li> <li>Environmental, Health and Safety (EHS) and wellbeing targets established</li> <li>Safety week in collaboration with the government</li> <li>Compulsory safety training</li> <li>The Mental Health Support Program aimed at promoting a culture of positive mindset and care for the mental and emotional wellbeing of employees shall be made available</li> </ul>

# SOCIAL IMPACT OF CONSTRUCTION

Protecting the health and safety of the people and the communities that build our business is the right thing to do, morally and ethically.

Our responsibility extends to influencing third-party construction management—often in challenging jurisdictions—to ensure contractors can operate in good working conditions while suffering from zero harm.

All activities performed by contractors and subcontractors on STT GDC controlled sites shall therefore conform to GMS requirements and applicable local legislation and regulations.

OUR AMBITION	OUR TARGETS & METRIC	PERFORMANCE 2021
The safety, health and wellbeing of our employees, contractors and communities is safeguarded in all the work we deliver and the projects we contract out	<b>Construction Safety</b> Contract workers on construction sites, injury rate globally per 200,000 hours worked <b>Target:</b> <1.2 recordable incident rate (TRIR) for each construction project by the end of 2021, and maintained in future years	<b>0.13</b>
	<b>General Contractors Certified</b> ISO 45001 <b>Target:</b> 100% by the end of 2022 and maintained in future years	<b>On track</b>

COMMENT TO TARGETS	HIGHLIGHTS & INITIATIVES
Our Group Minimum Standards (GMS) has been implemented to ensure and align requirements across sites	<ul style="list-style-type: none"><li>• Due diligence for onboarding new suppliers</li><li>• Establishing of dedicated safety department with staff in all regions</li><li>• Biometrics technology introduced at construction site</li></ul>



# INCLUSION AND DIVERSITY

Our ability to excel depends on the knowledge, teamwork and diversity of our employees.

For STT GDC, a diverse working environment is one that ensures fair treatment and non-discrimination, embracing the diversity of all backgrounds. Inclusion

refers to behaviours that welcome every employee to bring the full range of their experiences to work.

OUR AMBITION	OUR TARGETS & METRIC	PERFORMANCE 2021
We promote a respectful, inclusive environment where all feel comfortable to be themselves, where all voices are heard and where everyone is entitled to equitable treatment and equal opportunity, irrespective of attributes such as age, gender, sexual orientation, ethnicity, country of origin or disability	<b>Gender diversity in the workforce</b> Increase the number of women in management roles in the workforce by the end of 2025 <b>Target:</b> % of women across group employees (a formal target is in discussion)	<b>28%</b>
	<b>Training for managers</b> Specific training around 'unconscious bias' during hiring and performance reviews <b>Target:</b> 8 hours per hiring manager per year	<b>Completed</b>

## HIGHLIGHTS & INITIATIVES

Setting goals for diversity in hiring / employees (focus on gender & also ethnicity, geographical spread)

STT GDC GROUP						
Gender	MALE (79%)			FEMALE (21%)		
Job level	SM	MM	NM	SM	MM	NM
	5%	38%	57%	6%	39%	55%
Age range	Below 30	30-50	Above 50	Below 30	30-50	Above 50
	7%	80%	12%	16%	73%	11%
Permanent/ Temporary	Permanent	Temporary		Permanent	Temporary	
	99.6%	0.4%		99%	1%	
Full time/ part time	Full time	Part time		Full time	Part time	
	100%	0%		99%	1%	

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

# LABOUR AND HUMAN RIGHTS

STT GDC is upholding labour and human rights (i.e., fair working conditions) by introducing practices with a positive impact in terms of social resiliency for employees, workers and local communities.

OUR AMBITION	OUR TARGETS	PERFORMANCE 2021
Employees and workers who are afforded fair working conditions are more likely to thrive physically, emotionally and mentally—in and outside work	STT Group whistle-blower policy fully implemented	Implemented
	Publish a Code of Conduct Supplier policy by 2022	2nd half 2022



# DEVELOPMENT AND TRAINING

---

Training and career development cover vocational training, paid educational leave and funded external courses; all vital to maintaining a productive and happy workforce.

## OUR AMBITION

Employees who can develop their careers and professional skills stay happy and loyal and are vital to cost-effective human capital management

## OUR TARGETS

- We are running Awareness Programmes in STT GDC India
- We are looking to establish partnerships with academia to attract students into Science, Technology, Engineering and Mathematics (STEM) disciplines through targeted primary and high school programmes
- Internal training sessions are regularly scheduled for all employees





Enabling a culture of care by promoting ethical conduct and demonstrating sector leadership.

# RESPONSI BUSINESS



## SECTION CONTENTS

01

Governance & integrity

02

Economic vitality of communities  
and supply chain

03

Green building certification

04

Responsible procurement

BLE





Corporate integrity and responsible business practices are paramount to STT GDC and continue to govern our values and culture. As an active shareholder, we also promote sound corporate governance in the JVs.

We are raising the bar through:

- zero-tolerance policy on bribery, kickbacks, and corruption
- all persons acting on behalf of STT GDC must conduct all business activities in compliance with our policies and applicable anti-corruption laws

We advocate for ethics and compliance through:

- ongoing training and communication programmes for all employee levels on anti-corruption and ethics annually
- emphasising our code of conduct with business partners and suppliers

**To uphold the highest standards of conduct, all employees are empowered and encouraged to report improper conduct or unethical behaviour without any fear of reprisal.**

# GOVERNANCE AND INTEGRITY

---

Training and career development cover vocational training, paid educational leave, and funded external courses; all vital to maintaining a productive and happy workforce.

OUR AMBITION	OUR TARGETS	PERFORMANCE 2021
<p>Corporate integrity and anti-corruption measures are in place to prevent ethical breaches; services are delivered in an honest, ethical manner and advocacy and regulatory engagements are appropriate to responsible business practices</p>	<ul style="list-style-type: none"><li>• Training and communication programs for all employees (% of employees receiving training and communications on anti-corruption and ethics, at recruitment and annually)</li><li>• Business partner/supplier engagement (% of first-tier suppliers formally acknowledging STT GDC's code of conduct in 2022)</li><li>• 100% of employees to receive training and communications on data privacy and cybersecurity upon recruitment and annually</li></ul>	<p>100% compliance already in place and will be maintained</p>
PROGRESS	HIGHLIGHTS & INITIATIVES	
<p>Our Minimum Group Standards provides a framework of reference in respect of EHS Assurance, Reporting and Performance Management</p>	<p>Supplier Code of Conduct to be published by second half of 2022</p>	



# ECONOMIC VITALITY OF COMMUNITIES AND SUPPLY CHAIN

Our economic contribution supports the basic needs of our communities—and those of our suppliers—including access to healthcare during the pandemic. This extends to appropriately influencing governments to improve infrastructure, entrepreneurship, and social cohesion.

OUR AMBITIONS	OUR TARGETS & METRIC	PERFORMANCE 2021
<ul style="list-style-type: none"><li>• To promote local hiring and procurement to keep value created by STT GDC within the local economy</li><li>• To partner with government and relevant academic institutions to develop a nationally recognised qualification in data centre management</li><li>• To encourage local adaptation to national education policies and programmes</li></ul>	Effective, locally relevant contribution to economic and social development	By the end of 2022, review and establish local community investments targets (including partnerships, infrastructure investment, in-kind donations, etc.), prioritise lower-income host countries, and ensure effective, locally relevant contributions
	Local procurement of goods and services where practicable	All sites to assess the share of general operations procurement which can be procured from the local community (excludes specialty skills, heavy equipment and construction)
	Partnerships and engagement on education/skills	Partner with governments and relevant technical/academic organisations to develop the future talent pool in data centre design and management
	Promotion of sector-specific entrepreneurship	Investigate the possibility of establishing an innovation incubator 'Centre of Excellence in Data Centre Sustainable Energy' to help industry and entrepreneurs commercialise innovations, such as energy efficient cooling and renewable energy

# GREEN BUILDING CERTIFICATION

We ensure that our data centres are designed, managed, and maintained to meet energy, water, raw materials, waste, and atmospheric emissions standards.

OUR AMBITION	OUR TARGETS & METRIC	PERFORMANCE 2021
To design and manage direct and indirect impacts of buildings on the environment, including construction, occupancy, renovation, and demolition	Increase the proportion of data centres LEED Gold certified (or local equivalent) to 55% by 2026	<div>39%</div> <div>in 2021</div> <hr/> <div>Completed</div>
	100% of newly constructed buildings under the control of STT GDC to achieve and maintain LEED Gold certification (or local equivalent) as minimum	
	We aim for all acquired buildings under the control of STT GDC to be LEED Gold certified (or equivalent local standard) as a minimum	

# RESPONSIBLE PROCUREMENT

---

STT GDC recognises our responsibility to create a sustainable and fair supply chain. Our procurement teams implement our code of conduct with business partners and suppliers, recognising that continuous engagement with suppliers is key to removing or reducing negative supply chain impacts.

<b>OUR AMBITION</b>  The engagement with suppliers anticipates, avoids and responds to negative events in our supply chains	<b>OUR TARGETS &amp; METRIC</b>  We will consider assessing all existing and new Tier 1 suppliers using ESG criteria in line with international standards and certifications	<b>PERFORMANCE 2021</b>  <ul style="list-style-type: none"><li>Continually update our procurement processes to identify areas where the right to freedom of association and collective bargaining may be at risk</li><li>Enhance supplier screening for risks of negative environmental and social impacts</li></ul>
<b>PROGRESS</b>  Our Minimum Group Standards provides a framework of reference	<b>HIGHLIGHTS &amp; INITIATIVES</b>  Please refer to <a href="#">Governance &amp; integrity</a>	







# APPENDIX



Stockley Park Campus, the UK's largest data centre campus built for scalability





# ANNEX

## 2021 Environmental Data Snapshot

GHG emissions		Operational waste	
Scope 1 emissions	16,296 tCO <sub>2</sub> e	Waste generated	338 tonnes
Market-based Scope 2 emissions	520,549 tCO <sub>2</sub> e	Waste recycled	90 tonnes
Scope 3 emissions	465 tCO <sub>2</sub> e	Diversion rate	27%
Scope 3 emissions by source	Business Travel: 125 tCO <sub>2</sub> e Employee commute: 340 tCO <sub>2</sub> e		
Carbon intensity (Scope 1 + 2 market-based)	597 tCO <sub>2</sub> e/SGG Million revenue		

## Health and Safety

Occupational health and safety metrics		
Global employee metrics	Work- related fatalities (per 200,000 hours)	0
	Work related injuries	0
	Total recordable incident rate	0
Global contractor metrics	Work- related fatalities	0
	Work related injuries	4
	Total recordable incident rate (per 200,000 hours worked)	0.13

## Green Building Certifications

Certifications	
India	<ul style="list-style-type: none"> <li>3 DC LEED Gold: STT Ahmedabad DC1, STT Chennai DC2, STT Delhi DC2</li> <li>Bengaluru DC3 Gold IGBC Green Data Centre</li> </ul>
Singapore	<ul style="list-style-type: none"> <li>All DC SS 564 - Energy &amp; Environment Management Systems</li> <li>All DCs are LEED Gold (except from MediaHub)</li> <li>DF1, MediaHub and Loyang BCA Platinum Green Mark</li> </ul>
United Kingdom	<ul style="list-style-type: none"> <li>BREEAM UK Excellent for London 2, London 5 and Very Good for London 4</li> <li>All DC certified ISO 14001- Environmental Management System</li> <li>All DC certified ISO 50001- Energy management</li> </ul>



## 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 undertake an independent assurance in connection with select subject matter to be included in Company's ESG Report 2021, in its printed format ('the Report') for the calendar year ending 31<sup>st</sup> December 2021. The Management of STT GDC have developed their ESG Report 2021 referencing Global Reporting Initiative (GRI) standards. The intended users of this Assurance Statement are the Management of the Company.

### Scope and Boundary of Assurance

The scope of assurance included a review of sustainability related disclosures and performance data from the Company's operations in Singapore, India & the United Kingdom (UK).

The sustainability disclosures in this Report have been prepared based on the identified material topics and related performance disclosures based on the GRI Standards for the activities undertaken by the Company for the calendar year 1<sup>st</sup> January 2021 – 31<sup>st</sup> December 2021.

We have performed a limited level of engagement using DNV's assurance methodology VeriSustain™ which is based on our professional experience, ISAE 3000 and GRI's Reporting Principles. Our assurance engagement was limited to select subject matter and carried out during May – June 2022.

Our verification methodology applies a  $\pm 5\%$  uncertainty threshold towards errors and omissions for the performance data brought out in the Report.

### Responsibilities of the Management of STT GDC and of the Assurance Provider

The Company's management has sole responsibility for the integrity of the Report and this responsibility includes designing, implementing, and maintaining internal controls over collection, analysis, aggregation and preparation of data, fair presentation of the information, ensuring that data is free from material misstatement and maintaining the integrity of their website under digital domain. The Board has complete oversight and is responsible for the Company's ESG reporting. STT GDC has stated that this Report has adopted general disclosures and selected topic-specific disclosures related to identified material topics referencing the GRI Standards.

In performing our assurance work, DNV's responsibility is solely towards the Management of STT GDC in accordance with terms of reference agreed, however this assurance statement represents our independent opinion and is intended to inform the outcome of the assurance to the Company's stakeholders. DNV's responsibility is to form an independent conclusion. In doing so, we carried out the sampling procedures required for the evidence for a limited level of assurance based on VeriSustain i.e., DNV is responsible for planning and performing the engagement to obtain assurance about whether the selected information is free from material misstatement and meets the disclosure requirements.

### Basis of our Opinion

We had planned and performed our work to obtain the evidence considered necessary to provide a basis for our assurance opinion as part of the assurance engagement. We adopted a risk-based approach, i.e., we concentrated our verification efforts on the issues of high material relevance to STT GDC and its key stakeholders. A team of sustainability assurance specialists reviewed non-financial disclosures 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 and conducted the audit in line with DNV's assessment methodology. We perform the following activities:

- Review of the non-financial sustainability-related disclosures (GRI 302, GRI 305 & CRE8) in this Report;
- 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 and remote assessment in India and UK locations, to review the processes and systems for preparing site level sustainability data and implementation of sustainability strategy;
- Review of supporting evidence for key claims and data disclosed in the Report. Our verification processes were prioritized based on risk-based approach, i.e., relevance of identified material topics and sustainability context of the business;
- Review of the processes for gathering and consolidating the performance data and, for a sample, checking the data consolidation at site and corporate levels.

### Subject matter assured

Our limited assurance engagement covers the following Subject matter:

<b>GRI 302: Energy</b>	<b>302-1 Energy consumption within the organization</b> a. Total fuel consumption within the organization from non-renewable sources, in liters, and including fuel types used. c. In kilowatt-hours, the total: i. electricity consumption f. Standards, methodologies, assumptions, and/or calculation tools used.
<b>GRI 305: Emissions</b>	<b>305-1 Direct (Scope 1) GHG emissions</b> a. Gross direct (Scope 1) GHG emissions in metric tons of CO <sub>2</sub> equivalent. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.
	<b>305-2 Energy indirect (Scope 2) GHG emissions</b> a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO <sub>2</sub> equivalent. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.
<b>CRE8: Type and number of sustainability certification, rating and labeling schemes for new construction, management, occupation and redevelopment.</b>	<b>2.1. Report the type and number of mandatory and voluntary sustainability certification, rating or labeling schemes in the following way:</b> a. Total number of assets that have achieved a certification, rating or labeling within a portfolio (buildings and construction projects), and level of certification attained;

### Opinion and Observations

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the information related to the select subject matter for the ESG Report of STT GDC for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with the Reporting Criteria detailed above. Without affecting our assurance opinion, we provide the following observations against the principles of VeriSustain and GRI Reporting Principles:



## Materiality

*The process of determining the issues that is most relevant to an organization and its stakeholders.*

The Report explains the process through which STT GDC has carried out its materiality determination exercise based on consultations with key stakeholders, and its key outcomes. Further, the Report prioritises key topics and concerns as tier 1 and tier 2 material topics for reporting, as brought out in the section 'Materiality Process' of the Report.

Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Materiality.

## Stakeholder Inclusiveness

*The participation of stakeholders in developing and achieving an accountable and strategic response to Sustainability.*

The report explained the process of identifying stakeholders in the section "Stakeholder Engagement" of the Report. STT GDC has engaged and consulted with stakeholders such as Employees, Customers, Investors, Business Partners & Suppliers, Industry Associations, Government & Regulators and Joint Venture (JV) Partners. The Report explains various formal and informal modes of engagement through which STT GDC understands the key concerns of above listed stakeholders.

Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Stakeholder Inclusiveness.

## Responsiveness

*The extent to which an organization responds to stakeholder issues.*

The Report brings out STT's responses and strategies related to identified material topics and key stakeholder concerns through disclosures on management approach, governance, policies across various sections of the Report. Further the Report also brings out its non-financial performance related to these material topics through selected GRI Topic specific standards.

Nothing has come to our attention to believe that the Report has not met the Principle of Responsiveness for the selected performance standards.

## Reliability

*The accuracy and comparability of information presented in the report, as well as the quality of underlying data management systems.*

STT GDC has developed a spreadsheet-based sustainability disclosure system to capture key sustainability disclosures across its reporting boundaries. The majority of data and information verified by us were found to be fairly accurate and reliable. Some of the data inaccuracies identified during the verification process of the sample data sets verified were found to be attributable to transcription, interpretation and aggregation errors. The data inaccuracies have been communicated for correction and the related disclosures were reviewed for correctness.

Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Reliability.

## Completeness

*How much of all the information that has been identified as material to the organisation and its stakeholders is reported.*

The Report brings out the Company's sustainability or nonfinancial disclosures based during the reporting year related to these two material issues using appropriate GRI topic-specific Standards, for its identified boundary of operations.

Nothing has come to our attention to suggest that the Report does not meet the Principle of Completeness with respect to the identified scope.

## Neutrality

*The extent to which a report provides a balanced account of an organization's performance, delivered in a neutral tone.*

The Report brings out disclosures related to STT GDC sustainability performance including key concerns and challenges faced during the reporting period in a neutral tone in terms of content and presentation.

Nothing has come to our attention to suggest that the Report does not meet the requirements related to the Principle of Neutrality.



### Limitations

DNV's assurance engagements are based on the assumption that the data and information provided by STT GDC to us as part of our review have been provided in good faith, are true, and is free from material misstatements. Because of the selected nature (sampling) and other inherent limitation of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. The engagement excludes the sustainability management, performance, and reporting practices of STT GDC suppliers, contractors, and any third parties mentioned in the Report. The Company's position statements, the statements for the management approach, and case studies and examples are excluded from the scope of our work. We did not interview external stakeholders as part of this assurance engagement.

We understand that the reported financial data and related information are based on statutory disclosures and Audited Financial Statements<sup>1</sup>, which are subject to a separate independent statutory audit process. We did not review financial disclosures and data as they are not within the scope of our assurance engagement.

### Statement of Competence and Independence


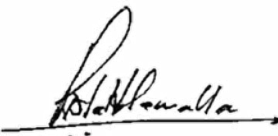

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct<sup>2</sup> during the assurance engagement and maintain independence where required by relevant ethical requirements.

This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assurance process.

### Purpose and Restriction on Distribution and Use

This report, 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 report.

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

 N Sathishkumar Lead Verifier Head, Sustainability Services DNV Business Assurance Singapore Pte. Ltd.	 Percy Lakdawalla Regional Manager – APAC Supply Chain and Product Assurance DNV Business Assurance Singapore Pte. Ltd.	 Thamizharasi Kaliaperumal Assurance Reviewer Sustainability Services DNV Business Assurance India Private Limited.
--	---	---

Singapore, 06 July 2022

---

DNV Business Assurance Singapore Pte. Ltd. is part of DNV, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. [www.dnv.com](http://www.dnv.com)

---

<sup>1</sup> Audited Financial Statement dated 31/12/2021

<sup>2</sup> The DNV Code of Conduct is available on request from [www.dnv.com](http://www.dnv.com)

# GRI REFERENCE INDEX

CHAPTER	SECTION	RELEVANT GRI DISCLOSURES	PAGE NUMBER
Introduction	About ST Telemedia Global Data Centres	102-1 – 7, 102-9, 102-16	5
	About this Report	102-32, 102-45, 102-46, 102-50 – 54, 102-56	13
	Letter from CEO	102-14 – 15	14
	2021 Highlights		16
Our ESG Strategy	Our Strategy and Material Issues (including SDG Mapping)	102-46, 102-47, 103-1b, 102-18	22
	Our Materiality Process	102-40, 102-42 – 44	24
	Stakeholder Engagement	102-43	26
Sustainable Governance	Stakeholder Engagement	102-18	26
Environment	Tackling Climate Change <ul style="list-style-type: none"> <li>• 2021 Energy and GHG Emissions</li> <li>• How we manage this issue: Decarbonising data centre operations</li> <li>• Green building certifications, status, progress and plans</li> </ul>	302, 305	34
	Managing Resources Efficiently <ul style="list-style-type: none"> <li>• How we manage this issue: Our Water Stewardship</li> <li>• 2021 Waste Data</li> <li>• How we manage this issue: Supporting the Circular Economy</li> </ul>	303-1 – 3, 306-2 (2016)	39
Social	Protecting Worker Rights and Safety <ul style="list-style-type: none"> <li>• 2021 EHS Performance</li> <li>• How we manage this issue: <ul style="list-style-type: none"> <li>• Our approach to labour rights and safe working conditions</li> <li>• Ensuring safe workplaces for our employees</li> <li>• Group-wide EHS Improvements in 2021</li> </ul> </li> </ul>	403	45



CHAPTER	SECTION	RELEVANT GRI DISCLOSURES	PAGE NUMBER
Social	Embracing Diversity <ul style="list-style-type: none"> <li>• 2021 employee diversity data</li> <li>• How we manage this issue: Diversity in a male dominated industry</li> <li>• Feature of women in leadership</li> </ul>	405, 406	47
	Building Industry Talent and Expertise <ul style="list-style-type: none"> <li>• How we manage this issue: Supporting upskilling and development of our employees</li> </ul>	404	49
Governance	Advocating Ethics and Compliance <ul style="list-style-type: none"> <li>• 2021 Ethics and Compliance Performance</li> <li>• How we manage this issue: <ul style="list-style-type: none"> <li>• Zero-tolerance Policy on bribery, kickbacks and corruption</li> <li>• Training</li> </ul> </li> </ul>	205, 307, 419	53
	Supporting the Vitality of Communities and Local Economies <ul style="list-style-type: none"> <li>• How we manage this issue: Community programmes</li> <li>• 2021 Performance: Lakhpati Initiative and Geriatric Caring Initiative</li> </ul>	203	54
	Sourcing Responsibly <ul style="list-style-type: none"> <li>• How we manage this issue: <ul style="list-style-type: none"> <li>• Emphasising our code of conduct with business partners and suppliers</li> </ul> </li> </ul>	308, 414	56
Annex	Any relevant policies, full employee data, full datasets as applicable.		60
GRI Reference Index			65

# REFERENCES

---

- 1. VIRTUS in UK is supporting and introducing the National TOMs framework ([www.socialvalueportal.com/solutions/national-toms](http://www.socialvalueportal.com/solutions/national-toms)) to assess and quantify social value.
- 2. More details around the implementation of programmes and initiatives are provided in the respective sections covering our material topics
- 3. ‘Basic needs’, as defined under United Nations Sustainable Development Goals (SDG): “Sufficient nutritious food, Education, Healthcare, Decent housing, Energy and cooking facilities, Clean water and sanitation, Networks of communication, Networks of social support, Sufficient income to meet the above needs”
- 4. Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions for entities for which the Group has operational control (excluding GDS and Thailand).
- 5. Greenhouse gas (GHG) Protocol establishes comprehensive global standardized frameworks to measure and manage GHG emissions.
- 6. 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:

$$\text{PUE} = \frac{\text{Total Facility Energy}}{\text{IT Equipment Energy}}$$

- 7. 

$$\text{Carbon Intensity} = \frac{\text{Annual Scope 1 + Scope 2 market-based GHG emissions}}{\text{Annual consolidated revenue}} \quad [\text{Tonnes CO}_2/\text{GDS million}]$$
- 8. [Climate change agreements - GOV.UK \(www.gov.uk\)](http://www.gov.uk)
- 9. [Climate change umbrella agreement for the data centre sector - GOV.UK \(www.gov.uk\)](http://www.gov.uk)  
An umbrella agreement exists between the Environment Agency (EA) and the data centre industry association.
- 10. Construction site water consumption is not included, as water consumption records are kept by third parties

## Contact

e ESG@sttelemediagdc.com  
w sttelemediagdc.com

All information contained in this brochure ("Information") is for information purposes only and is not intended to constitute an offer or contract of any kind. STT GDC does not warrant the accuracy, adequacy or completeness of the Information and expressly disclaims all liabilities relating to the Information. STT GDC shall in no event be liable for any damages, loss or expense however caused arising from, or in connection with, the use of, or reliance on, the Information. No Information or parts of it may be reproduced, distributed, modified or displayed without the prior written permission of STT GDC.

© 2022 STT GDC Pte Ltd (CRN: 201228542D)