

Environment, Social

and Governance

Report 2021





# Contents



# Welcome to our 2021 ESG report

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I am pleased to present Global Switch's Environmental, Social and Governance Report for 2021. This report consolidates our vision to maintain our agenda as a sustainable data centre operator.

In 2021, two years into the global pandemic, the data centre industry was recognised as an essential service in supporting and enabling the critical IT infrastructure needed to maintain day-to-day operations of countless businesses. Data centres have been a silent contributor to the pandemic battleground, providing some measure of normalcy to communities in their everyday lives, either by enabling remote work, facilitating digital transactions, or enabling people to keep in touch with family and friends in isolation through video calls and other digital communication methods.

Our data centres continued to operate throughout the pandemic, maintaining consistent service levels even as social distancing measures strained and complicated business operations. Data centres have been a critical factor for business resilience over the last two years, and our teams have worked tirelessly to ensure that our data centre solutions could be relied upon during this challenging period.

Our development of new energy-efficient data centres also continued alongside our redevelopments of existing facilities.

Global Switch is keenly aware of its environmental footprint. Data centres, as consumers of power and with the emerging energy crisis, have an important part to play in the transition to a sustainable global economy powered by clean energy. We are committed to reducing the impact of our data centres on the environment through energy efficiency, carbon emissions reductions and green energy solutions for our customers. In this regard, we have committed to using 100% renewable electricity by 2030 as part of our goal to be climate-neutral in line with the 2015 Paris Agreement, aiming to limit global warming to 1.5°C, compared to pre-industrial levels. This will be achieved through a mix of green data centre design as well as adjustments to our energy source mix. Energy-efficient data centres with optimised water usage is another impactful way our business can serve its purpose sustainably.

I was proud to witness Global Switch's debut green bond, a €700 million issuance that finances our green data centres and helps us to achieve our ESG targets.

With this bond, Global Switch is on track to fully integrate sustainability as a core driver of growth. Progress will be incremental as we work with experts to baseline and monitor progress towards our ESG commitments, starting with ambitious targets for carbon emissions and sustainable design detailed in this report. Our approach is to get it right from the beginning by taking the full and necessary actions and I am optimistic about the positive ESG developments underway at Global Switch.



John Corcoran
Chief Executive Officer



#### London

**London East** 

65,542 sq m of gross space 100MVA

**London North** 

23,439 sq m of gross space 26MVA

#### Madrid

Madrid

21,922 sq m of gross space 18MVA

#### **Paris**

**Paris East** 

34,915 sq m of gross space 25MVA

**Paris West** 

16,703 sq m of gross space 25MVA

#### **Amsterdam**

**Amsterdam West** 

41,061 sq m of gross space 32MVA

**Amsterdam East** 

(under construction) 32,000 sq m of gross space 40MVA entities that house a myriad of organisations seeking high specification technical space for their mission critical equipment. They choose Global Switch for our resilient power and cooling, robust security, sophisticated monitoring systems as well as connectivity, cloud and managed services.

world-class facilities owned by consolidated

Global Switch's portfolio comprises 13

Frankfurt North

**Frankfurt** 

11,862 sq m of gross space 14MVA

Frankfurt South

17,686 sq m of gross space 14MVA

#### Hong Kong

70,545 sq m of gross space 100MVA

#### Singapore

Singapore Tai Seng 26,743 sq m of gross space 30MVA

Singapore Woodlands 25,157 sq m of gross space 30MVA

### Sydney

Sydney East

31,226 sq m of gross space 45MVA

**Sydney West** 

41,575 sq m of gross space 35MVA

(Consolidated Group entity)



# Growing a responsible global business

Global Switch is one of the world's leading largescale, carrier and cloud-neutral, multi-customer data centre owner, operator and developer.

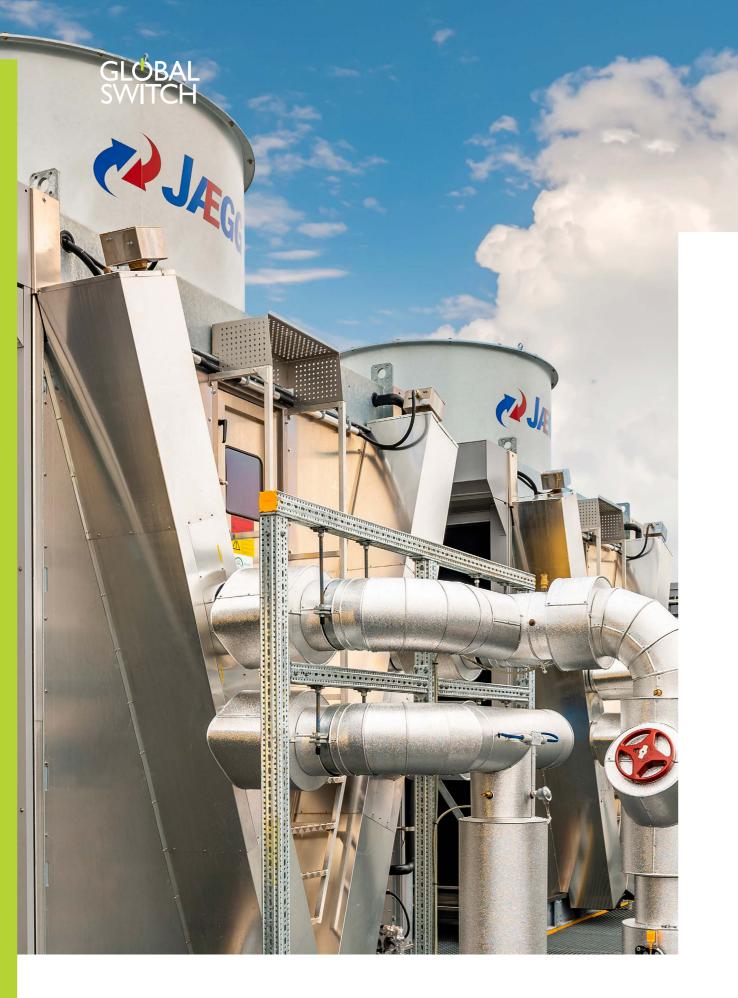
Our data centres, with a total of around **428,000 square metres** of gross floor area, are located exclusively in super prime positions in the Tier 1 markets of Europe and Asia Pacific and provide reliability, security and flexibility in highly secure and resilient environments operating to industry leading Tier III plus standards. Our aim is to continue growing our position as one of the leading providers of strategically located data centres and to do so in a sustainable way. As a company, we are committed to increasing energy efficiency, reducing carbon emissions and providing green energy solutions on a continual basis. We are also committed to implementing best practices in our corporate and social responsibilities and to positively impact the local communities and broader society through our work.



13 world-class data centres

428,000 m<sup>2</sup> of gross floor area

295 employees globally



# Our approach to ESG

At Global Switch, we understand that our business responsibilities go beyond our status as a successful data centre operator. Our customers, our design and construction partners, and our supply chain also look to us to set an example for long-term environmental, social and economic development.

This is why our focus on sustainable development and operation is embedded in our business philosophy and defined in our Sustainability Policy (which can be found on our website). We are committed to taking a customised approach to ESG that fits our data centre business and reflects the fact that sustainability is a continuous journey of improvement that demands long-term investment.

Recognising the importance of operationalising ESG commitments and best practices, we developed a Group ESG strategy that is now guiding us on making the right decisions for the future of our business.



#### Analysing the key issues and engaging with stakeholders

To ensure that our reporting is aligned with the top concerns of our stakeholders, we began the process to formally assess ESG risks and achievements for the Company by carrying out a materiality assessment. We used its findings to inform the content of this report.

To identify and select the parties we wanted to engage with as part of this materiality assessment, we conducted a mapping exercise that highlighted Global Switch's key internal and external stakeholders.. We distributed a quantitative survey to these groups to understand their level of concern regarding a wide range of environmental, social and governance issues. This quantitative analysis, combined with insight from our ongoing, business-as-usual engagement with stakeholders throughout the year, informed our selection of a number of material sustainability topics and disclosures – all of which this report is structured around.

For our reporting, we are using the Global Reporting Initiative (GRI) standard for company sustainability disclosures. The material topics identified and selected for reporting are shown in the matrix below. They are ranked in terms of their perceived importance to the business and our industry as well as our understanding of their perceived importance to stakeholders. We will continue to conduct annual surveys with key stakeholders to ensure these topics remain relevant – and will update them where necessary – based on their materiality to the business and to stakeholders.



Importance to business

#### Legend

#### **Environmental**

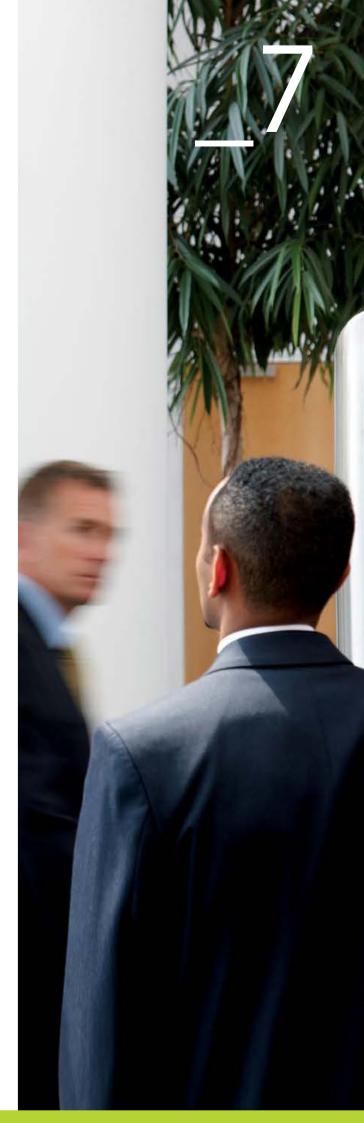
- 1. Energy efficiency
- 3. Renewable energy
- 5. Water
- 9. Scope 1 and 2 emissions

#### Social

- 2. Employee health and safety
- 6. Internal training and investment
- 7. Diversity and equal opportunity
- 8. Customer privacy
- 10. Employee benefits
- 11. Non-discrimination

#### Governance

- 4. Anti-corruption
- 12. Tax





# The five pillars of our ESG strategy

We have developed a sustainability framework made up of five pillars of action where our material impacts are greatest across ESG. We are in the process of defining plans, targets, and metrics for each pillar of the framework and our progress to date is described in the rest of this report.



# Taking climate action

Climate change presents a material risk to our resourceintensive operations, so it is imperative that we take action to protect our business and our customers' interests that in turn contribute to economic growth and benefit the populations in our countries of operation.

We rely on 24x7x365 energy to power our data centres and water to cool our customers' hardware and environments. Our infrastructure, similar to other data centres, is at a potential risk from climatic events such as extreme temperature, flood damage and utility power shortages that are a threat to business continuity. As such we our committed in conducting environmental risk assessments to ensure that we continue to provide our 'Always On' service to our customers.

#### Commitment

In response, our aim is to continue growing our position as one of the leading providers of strategically located data centres and to do so in a sustainable way. We are committed to increasing energy efficiency, reducing carbon emissions and providing green energy solutions on a continual basis. We have set a target for Scope 2 carbon neutrality across our portfolio through the purchase of 100% renewable electricity by 2030.

We are also committed to implementing best practice in our corporate and social responsibilities and to positively impact local communities and broader society through our work.

#### **Digital Services**

The demand for digital services has increased exponentially as a result of these services being embedded into our everyday lives and while not still well understood by the general public, these services are delivered through data centres.

Data centres are buildings in which IT equipment (hardware) that run digital services (software) that are delivered over the Internet are operated. This IT equipment is typically located in secure technical suites within data centres. There is a distinction between data centres that are owned and operated by the owners of the IT equipment/digital services and those like Global Switch that operate the buildings to host this equipment on behalf of these same digital service operators.

Data centres are on the frontline of efforts to tackle climate risks while being relied upon for social and economic benefits



In 2020, internet traffic globally rose by more than 40% as a result of increased video streaming, video conferencing, online gaming and social networking . This is in addition to a global trend of growth in internet users, a number that has doubled since 2010 while internet traffic has risen 15-fold (~30% per year) as illustrated in Figure 1.

What is particularly interesting to note in Figure 1 is that while this insatiable appetite for data consumption by business and consumers alike has increased, significant improvements in energy efficiency by the data centre industry has kept energy demand flat as a result of both improvement in the amount of work each server can do, technology improvements, and energy efficiency delivered by the data centre buildings.

#### **Aims**

Global Switch provides 24x7x365 building operations. While having control over the power and cooling systems required to maintain the operation of customers' IT equipment, we have no influence or control over this equipment itself or the digital services it provides. Neither do we have control over the amount of power consumed by this equipment. However, as we have 'operational control' of the incoming utility power supply for the data centre and aim to purchase 100% renewable energy for the benefit of our customers, we are publishing the carbon emissions of the data centres for the purposes of this report.

Somewhat counter intuitive is that a successful data centre operator will attract customers which in turn leads to an increase in energy demand. The more successful we are at delivering efficient use of power and water the more successful we become with our customers.

We encourage our customers to deliver their digital services in an energy efficient manner within our data centres and work with them to operate good air flow management to cool their IT equipment. We also support the drive by governmental policy makers to ensure that IT equipment is operated to maintain maximum power efficiency and that IT equipment that is consuming power but providing no digital services is switched off.

Hosting IT equipment in specialist data centres is more efficient as the plant and operations are tailored for such loads, compared to trying to squeeze IT equipment into an office type environment. As a result of this, Global Switch has established rigorous environmental standards that ensure when our infrastructure is constructed or modified, every opportunity is taken to improve the efficiency of the infrastructure supporting customers' IT equipment, e.g. cooling. Operationally our infrastructure is managed to minimise the environmental impact of maintaining customer services.

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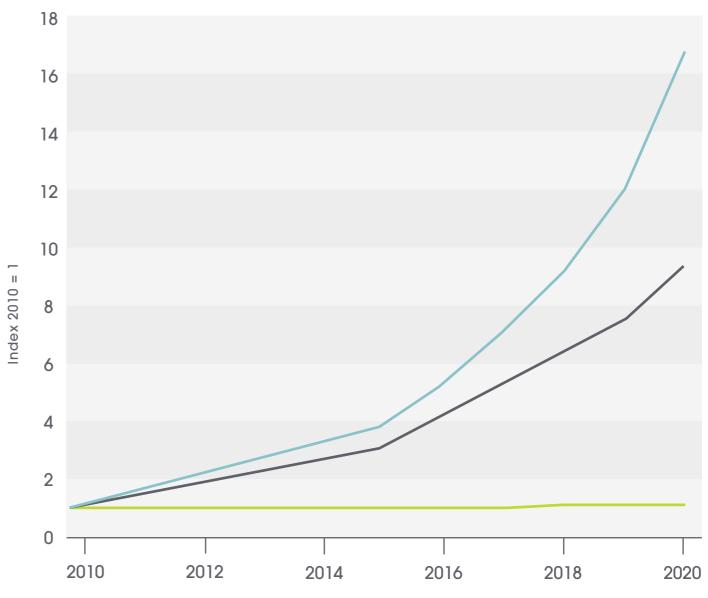


Figure 1, Global trends in internet traffic, data centres workloads and data centre energy use, 2010-2020, IEA, Paris<sup>1</sup>

#### Legend

- Data centre energy use
- Data centre workloads
- Internet traffic





# Putting sustainability at the heart of what we do

As we execute our build programme and our power densification strategy, our mission is to lead the way in data centre energy efficiency. While the global economy finds ways to grow at the same time as reducing its carbon footprint, data centres must safeguard the IT infrastructure with minimal environmental impact. At Global Switch, we are proud of the progress we have made in striking that balance, and our priority is now to ensure future developments meet the highest industry environmental standards.

At the very heart of our business model is the cutting-edge design and efficiency of both our new and redeveloped data centres. This has been made possible by our Operations teams working collaboratively with our customers on the long-term management of each of our data centres throughout their life cycle.

#### **Our commitments**

In line with our ESG strategy, we have already made some clear commitments that are steering our development and operations across the Global Switch platform, including:

Purchase 100% renewable energy across all our data centres by 2030.

Select refrigerant gases with a low Global Warming Potential for new developments.

Avoid the use of SF6 gas in switchgear because of its global warming potential.

Obtain LEED 'Gold' or BREEAM 'Very Good' ratings for new developments.

Achieve annualised PUE of <1.2 in Europe and <1.4 APAC for new developments

Export heat to local communities.



#### **Electricity and carbon**

#### Purchase 100% Renewable Electricity across all our Data Centres by 2030

Six of our 13 data centres currently purchase renewable electricity and two purchase nuclear electricity with zero carbon emissions

#### Commit to a Science Based Target / Net Zero Pledge within 2 years

Baselining exercise underway through specialist consultants

We are seeking to establish an ambitious position on net zero, with a near term target for 2030 and a long term for 2040 that is backed by science to align with the goals of the Paris Agreement, and to complement our customers on their journey to a net zero future.

#### **Corporate Travel**

Introduce carbon off-setting on all corporate travel

#### Building sustainability assessments

### Conduct LEED / BREEAM assessment for all new developments

Six assessments have been conducted for new developments

### Conduct LEED / BREEAM assessment for redevelopments

Two underway for London East and Paris East

#### Construct new developments With a maximum annualised PUE

<1.2 New Developments Europe <1.4 New Developments Asia Pacific

#### Retrofit LED lighting all Global Switch offices

Implement programme of works completed

#### Climate impact

#### Climate risk and resilience

Conduct a TCFD review within 2 years.

Introduce a climate resilience policy

#### Eliminate the purchase of equipment with SF6 Gas

All new developments to be specified with switchgear that using alternative low GWP gases or is air insulated

#### Purchase refrigerant gas with low Global Warming Potential

Cooling equipment on all new developments to be selected with low GWP where available

#### **Environment**

#### **Biodiversity**

Introduce a biodiversity strategy for existing and new developments

#### Water Use

Introduce a water use policy and WUE limits. Incorporate into new developments rainwater harvesting and other sources of water.

#### **Biofuel**

Purchase Biofuel as a replacement for Diesel for all new sites

#### **Heat Export**

Implement on all new developments the means to export heat from the process of cooling to local communities

#### Recycling

Introduce circular economy strategy



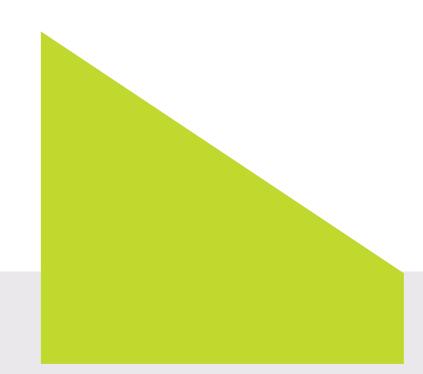


## Energy

Global Switch continues to maximise energy efficiency and minimise the negative impacts of energy use. To achieve these objectives, our senior management and site Managing Directors are responsible for overseeing all energy-related commitments and objectives in the following areas:



- Design and build our data centres and any new infrastructure within existing data centres to recognised industry best practice standards, utilising large centralised systems where possible to maximise efficiencies
- Design and build all European developments to BREEAM 'Very Good' standard and all Asia Pacific developments to a LEED 'Gold' standard as a minimum
- Operate our data centres to recognised industry best practice standards to reduce energy consumption consistent with our business and without adversely affecting reliability or resilience
- Consider the impact of energy in the procurement of goods and services and support the purchase of those products with the lowest impact on the environment
- Ensure understanding and awareness by all Global Switch staff and contractors and provide relevant induction, skills and awareness training as required



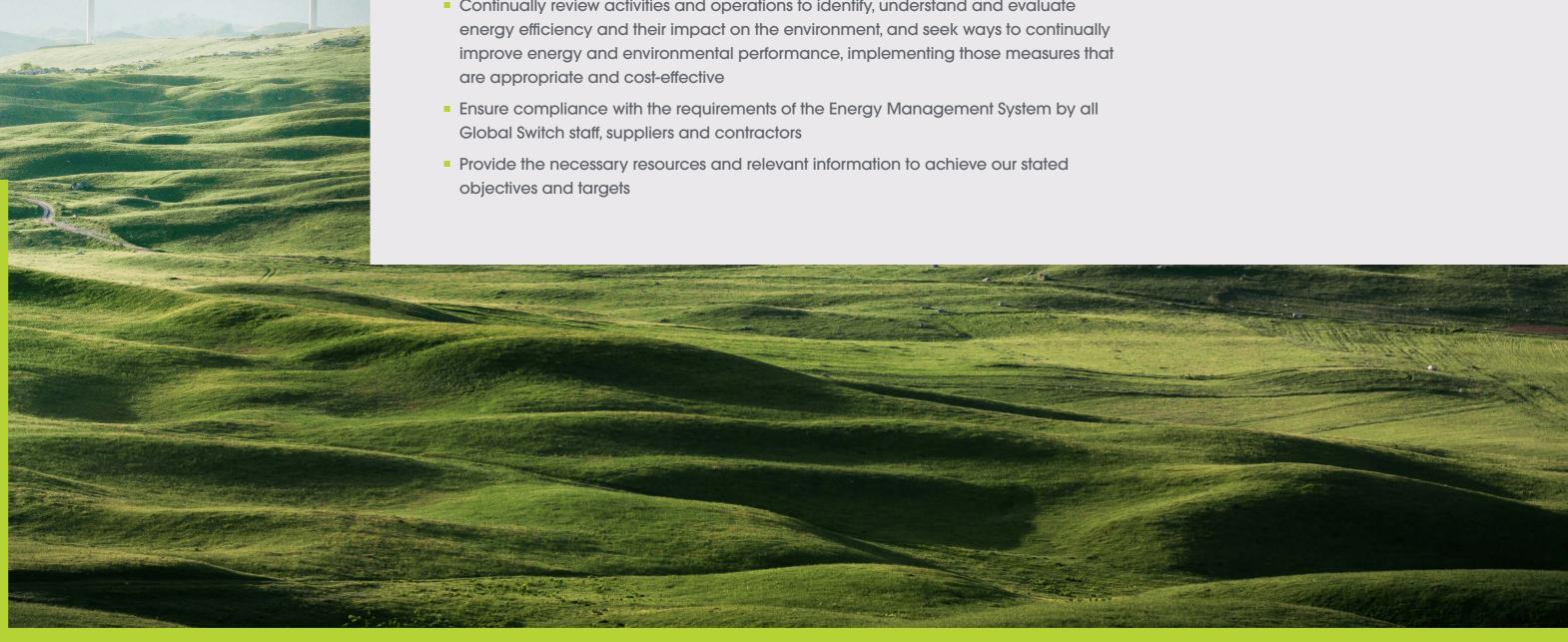
#### **Customers**

**GLUBAL SWITCH** 

 Work with customers to encourage improved energy efficiency of their equipment, optimise and highlight any inefficient practices within their suites thereby optimising energy consumption

#### **Environmental Management System**

- Provide an ISO 50001:2018 accredited Energy Management System at each of our data centres that conforms to local applicable legislation, regulation and statutory requirements
- Develop performance baselines, including energy performance, to measure and monitor improvements
- Continually review activities and operations to identify, understand and evaluate energy efficiency and their impact on the environment, and seek ways to continually improve energy and environmental performance, implementing those measures that are appropriate and cost-effective



#### **Energy Performance**

In 2021, our total energy consumption increased because of increased demand for our data centre services. We continue to purchase renewable energy with a pledge to use 100% of electricity from renewable sources by 2030. Nuclear energy is considered a carbon-free energy source and is therefore included in our zero carbon mix.

#### **Energy-Efficiency at our core**

Energy efficiency is at the heart of our design from all new data centres to developing initiatives to improve energy efficiency in our existing data centres. We take the recognised sustainability approach to 'be lean' (energy efficient), 'be clean' (deploy highly efficient infrastructure with the aspiration of low embodied energy) and 'be green' (cover the reduced energy demand with use of renewable energy).

We actively review our portfolio for opportunities to selectively redevelop existing spaces in order to meet changing customer requirements and increase our return on capital.

We have redevelopment projects underway across our portfolio that will substantially improve energy efficiency in those data centres.

#### **Our Redevelopment Programme includes:**

- Upgrading existing technical space and associated base infrastructure
- Improving energy efficiency
- Increasing power densities in large private suites from original design capacities
- Improving access for our carrier and cloud service providers by building new
   Meet Me Rooms
- Converting non-technical space into high yielding technical space
- Our redevelopment programme eliminates use of new land and resources to create another data centre structure therefore recycling our existing data centre

Energy Data	2021
Total energy consumption (MWh)	900,499
Total electricity consumption from zero-carbon sources (MWh)	447,705
Percentage of zero carbon energy* (%)	49.7%
Percentage of renewable energy (%)	39.4%
Scope 1 - Combustion of fuel and operation of facilities (MWh)	4,353
Scope 2 - Total electricity consumption (MWh)	896,146
Total Energy Intensity** (MWh/Adjusted Occupied Space)	5.76
Scope 1 Intensity (MWh/Adjusted Occupied Space)	0.03
Scope 2 Intensity (MWh/Adjusted Occupied Space)	5.74

<sup>\*</sup>Includes nuclear energy

<sup>\*\*</sup>Energy Intensity value is based on total energy consumption of Scope 1 & 2 and the denominator is an Adjusted Occupied Net Lettable Space metric



While there may be views within the industry to demolish and completely replace older data centres, our preference is to redevelop these facilities using the existing building structure and fabric where feasible, thereby reducing the embodied energy when compared to new construction. We have successfully demonstrated through our redevelopment programme that it is possible to improve energy efficiency while increasing power density in a live data centre environment.

As part of our Taking Climate Action strategy pillar, we have initiated a life cycle replacement programme and energy efficiency improvement initiative across several of our data centres.

#### **Power Utilisation Effectiveness (PUE)**

To measure the energy efficiency achieved in our data centres, we use the widely used metric of Power Usage Effectiveness (PUE). This is a ratio of the energy used by the data centre to the energy used by the computing equipment (as opposed to cooling and other infrastructure that supports the computing equipment).

#### Redevelopments

Although we strive to reduce the PUE as part of the redevelopment of our existing data centres, actual IT utilisation heavily dictates its value. Our London North redevelopment, for example, has seen the end-of-life replacement of the existing computer room air handling (CRAH) units and roof top chillers with more efficient models that capitalise on free-cooling. The project has allowed the chillers to operate free-cooling hours for approximately half the year, and therefore reduce the PUE for the data centres.

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Our new data centres are designed to meet a target annualised PUE of less than 1.2 at full load in Northern Europe and less than 1.4 in Asia Pacific. This is a significant improvement on the pledge for climate neutrality by 2030 under the European Climate Neutral Data Centre Pact, an EU data centre industry initiative. However, this comes with an increased use of water which is a trade-off that needs to be considered, please see the Water section below.

The design of our new data centres is devoted to reducing energy consumption of the supporting infrastructure for the IT equipment. Noting that a part of our energy consumption is the customer's contract IT load, our business promotes good airflow management when deploying customer IT equipment with hot and cold aisles and blanking plates, and supports switching off idle servers.

#### **Exporting heat**

Data centres generate vast quantities of heat – a good trade-off is to export this heat to local communities. This benefits the environment as the heat is reused and potentially avoids the use of heat rejection plant that in turn consumes water as part of the process, while also allowing local communities to reduce their carbon footprint.

Our reference designs incorporate the means to export heat to the local communities and we aim to ensure that all new developments achieve this.



## Carbon

Global Switch has purchased carbon-free or renewable energy across Europe and the UK for many years. In 2021, 49.7% of our total electrical consumption was from carbon-free sources.

#### Our carbon footprint

The carbon footprint is different in those countries where we do not use renewable electricity due to the local electricity production mix available from national grid systems. For example, Australia has a particularly high carbon emission factor for the public grid and accounts for 28% of our total Scope 2 carbon emissions.

Our carbon emissions increased between 2020 to 2021, primarily due to the load growth of Singapore Woodlands, a new data centre we launched in 2019.

In seeking to reduce our carbon emissions, four of our six European data centres and our London data centre campus have converted to 100% renewable energy (through the purchase of renewables-backed electricity tariffs with certificates of origin such as REGOs and RECs). We do not currently purchase green tariffs for our two data centres in Paris, as France's nuclear energy generation delivers low carbon emissions.

However, we are committed to moving our Paris campus to renewables as part of our commitment of achieving 100% renewable electricity across our portfolio by 2030.

In Asia Pacific, the challenge lies in sourcing renewable energy in our locations. Purchase of renewable energy from the public utility network in Hong Kong, Singapore and Sydney is limited due to the low percentage of renewable energy production in those countries.

Carbon Intelligence as an independent assessor has verified the Scope 1 and 2 GHG emissions given in this report in accordance with ISO 14064-3





In our new developments, we are introducing refrigerant gases with a low Greenhouse Warming Potential (GWP) as well as air insulated switchgear. In addition, even though standby diesel generators accounted for only 0.04% of our total location-based carbon emissions in 2021, this is still an area that we are looking into for cleaner and greener alternatives.

Electricity consumption from customer IT equipment is accounted for within Global Switch's Scope 2 emissions but represents downstream Scope 3 emissions for our customers.

This carbon accounting approach is adopted because Global Switch directly procures the energy from the utility suppliers and therefore has control over it. Electricity consumption from IT equipment is directly measured by energy meters throughout most customers' spaces, so the relevant energy use data can be disclosed when requested by the customer.

During 2020, we focused our efforts on formalising our approach to GHG measurement and reporting, including verifying our Scope 1 and 2 data against the ISO 14064-3: Greenhouse Gases standard. We are undertaking an extensive Scope 3 baseline assessment with a specialist external consultant to map our Scope 3 emissions. Over the course of 2021, we reviewed our Scope 3 reporting boundary, with the intention to broaden this over time to disclose emissions from across our wider value chain, including our suppliers. We believe that by increasing the quality and breadth of data from across our business, we will be in a stronger position to assess the feasibility of setting Scope 1-3 reduction targets in line with global standards for example the Science Based Targets initiative (SBTi). Ultimately, we are seeking to establish an ambitious position on net zero, with a near term target for 2030 and a long term for 2040 that is backed by science to align with the goals of the Paris Agreement, and to complement our customers on their journey to a net zero future.





## Water

Data centres are consumers of water, dependent on climate and technologies used. At Global Switch, we take water use seriously and focus on reducing our reliance on water where we can.

Climate change means that, in some areas, droughts magnify the severity of water shortages, threatening the availability of a precious commodity, while in others unusually heavy rainfall can cause flooding. These issues not only pose a threat to local communities; they are also a risk to our business.

Recognising the importance of water use and water management, we are investing in and implementing mitigation measures, as well as taking steps in our new designs to reduce water consumption in our existing data centres, as part of our Taking Climate Action strategy pillar.

#### **Water Use Efficiency**

To measure the water efficiency achieved in our data centres we use the widely accepted metric of Water Use Efficiency (WUE). This is a ratio of the water used by the data centre (Litre) to the IT equipment energy usage (KWh). At Global Switch, our approach is not to completely eliminate water use from our data centre design but to consider the matter holistically and use water sparingly. Our WUE target for new developments is set at less than 0.75<sup>1</sup> which takes into account the balance of achieving ultra-low PUEs.

With our new developments we are also seeking available alternatives other than the sole use of potable water, such as industrial water and rainwater.

#### **Technologies**

There are technologies available that make it possible to eliminate the use of water for IT cooling, for example as we have recently introduced in our London North data centre. However, water is still required for humidity control within the technical space, and we encourage customers within our data centres to adopt a wide humidity range (as stipulated by the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE)).

Using less water for the generation of cooling results in more power being used for cooling equipment, thus a higher PUE. In some regions of the world where renewable electricity is not available in sufficient commercial quantities, minimising the use of water can result in higher carbon emissions associated with the production of the electricity at source For these reasons, Global Switch does not apply a blanket prerequisite to eliminate water in the cooling process; instead, each region operates on its own merit given the circumstances.

1 - There is no industry published scale for WUE, typically cooling towers have a WUE of between 2.0 and 3.0, depending on climate conditions, assuming full load





#### GLOBAL SWITCH

#### **Water Stress**

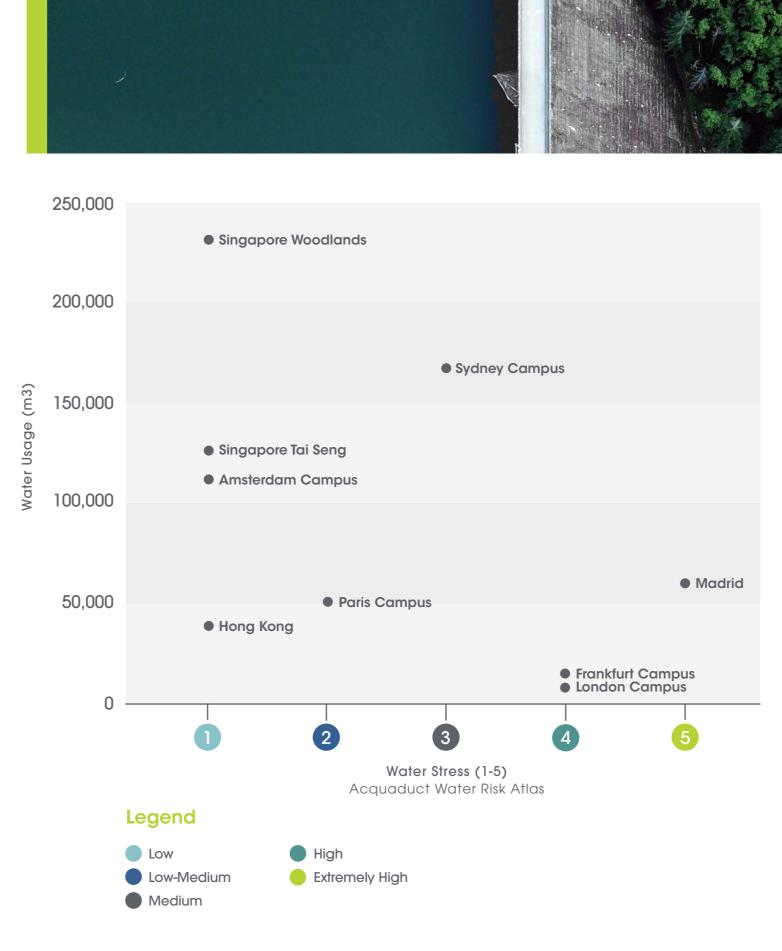
The opposite illustration is based on the data given in the Aqueduct Water Risk Atlas<sup>1</sup> and shows that three of our data centres are considered to be located in high water stress areas.

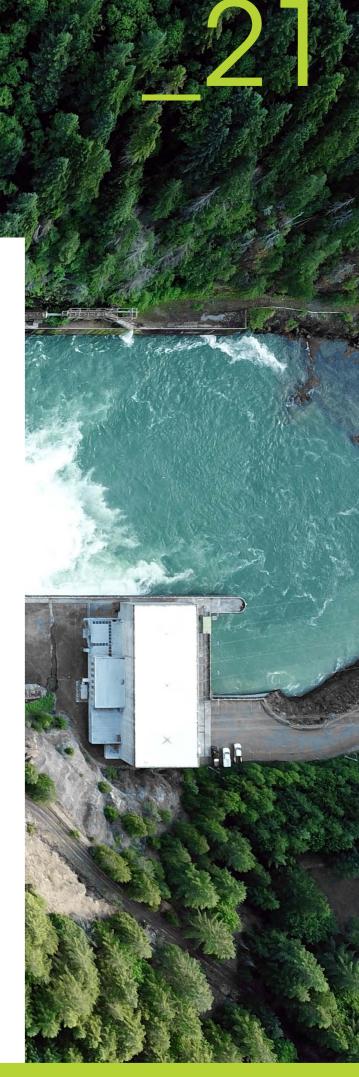
While Singapore and Sydney face low to moderate water stress at present, these locations are projected to experience a higher water stress by 2030, and efforts are being made to reduce this as part of our Taking Climate Action strategy pillar.

In Madrid our data centre is located within an extreme water stress area and has historically used cooling towers.

However, taking into account the overall water demand across our portfolio, the water consumption for Madrid is proportionally low compared to other Global Switch data centres. Nonetheless water recycling is being introduced to the data centre along with replacement of more water efficient cooling towers.

Both our London and our Frankfurt data centre campuses are in high water stress areas but have low demand for water. London uses dry heat rejection devices to cool the data centre campus.







## Sustainable Building Design and Certification

As part of our commitment to sustainability, Global Switch undertakes holistic building sustainability assessments such as BREEAM and LEED. These assessments ensure a comprehensive view on the sustainability agenda for new build data centres and are regularly updated by BRE and the US Green Building Council respectively to reflect current 'good' and 'exceptional' practice.



Each of our new developments have been assessed using at least one of these two industry-recognised sustainability assessment tools and in some cases use local assessment tools, such as BEAM in Hong Kong. As part of our Green Bond (see section below), we set targets to achieve a minimum of BREEAM 'Very Good' or LEED 'Gold' for all new developments and endeavoured to conduct sustainability assessments for major redevelopments at existing data centres.

These assessments not only appraise the technical aspects of a new development; they also look at aspects of occupant wellbeing.

At Global Switch, we are keen to create better working environments and are focusing on ensuring human-occupied spaces have good daylight penetration and effective ventilation – factors known to have an impact on human health.

Other build requirements include alternative modes of transport to the data centre and provisions for bicycle storage, shower rooms and electric car charging points – all initiatives that encourage employees to make sustainable lifestyle choices.

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#### **Embodied carbon of materials**

While operational energy consumption is a significant focus, we recognise that embodied energy in the building and technical services should also be given due consideration. Our new data centres will be appraised in terms of their embodied energy and the materials used both in the form of the passive architectural and structural elements and the technical plant. As a leading data centre operator, we would like to see more vendors offering Environmental Product Declarations (EPDs) from the Original Equipment Manufacturers (OEMs) producing the technical plant and will be pursuing this information from the supply chain when selecting new infrastructure.

#### Waste

We also seek to recycle non-hazardous waste generated in the normal day-to-day operation of our data centres. Our waste reduction goals are to:

- Minimise the production of waste and dispose of waste in a way which reduces adverse effects on the environment.
- Optimise the proportion of waste recycled and the amount of recycled materials used within the data centres.

# Sustainable and local materials in Global Switch Hong Kong:

In Global Switch Hong Kong 46.2% of the total volume of all materials used in site exterior surfacing work, structures and features contain recycled content.

Use of materials manufactured locally, i.e. within 800 km from the data centre, contributed to at least 20% of all building materials used in the development.





# Using the Design for Manufacturing Assembly approach

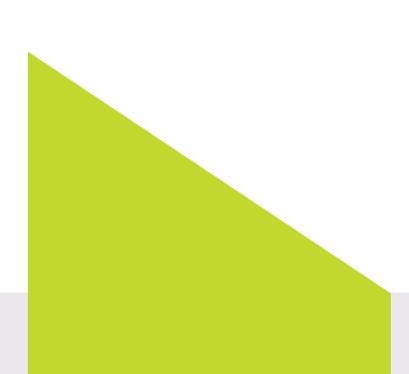
Our goal is to achieve over 50% offsite prefabrication for building structure and over 75% for mechanical, electrical and plumbing parts.

We will continue to use the Design for Manufacturing Assembly approach (DfMA) to maximise offsite prefabrication in a controlled environment, reducing health and safety risks as well as construction waste.

Singapore Woodlands, which achieved LEED 'Gold' and Green Mark 'Platinum' ratings, employed the approach of Design for Manufacturing Assembly (DfMA), resulting in an innovative design for offsite modular construction. More than 60% of the mechanical, electrical and plumbing (MEP) systems were assembled offsite.

The benefits of this approach included:

- Improved building quality and waste reduction
- Labour savings of 70% at the trade level
- Reduced project period by at least 10%
- Improved health and safety onsite





# Financing progress through our Green Bond

In October 2020, we launched an inaugural Green Bond to finance new energy-efficient data centres, the redevelopment of existing facilities and upgrades to our campuses to further improve environmental standards.

The 10-year, €700 million bond was issued at a coupon of 1.375%, the lowest across any maturity in Global Switch's history. The issue was twice oversubscribed, with strong demand from leading international institutional investors. The bond, which has been included in both the Bloomberg Barclays MSCI Green Bond Index and the Climate Bonds Initiative Green Bonds Database, further lowered our cost of capital and strengthened our balance sheet, while also forming an important part of our sustainability strategy to become climate neutral across our portfolio by 2030.

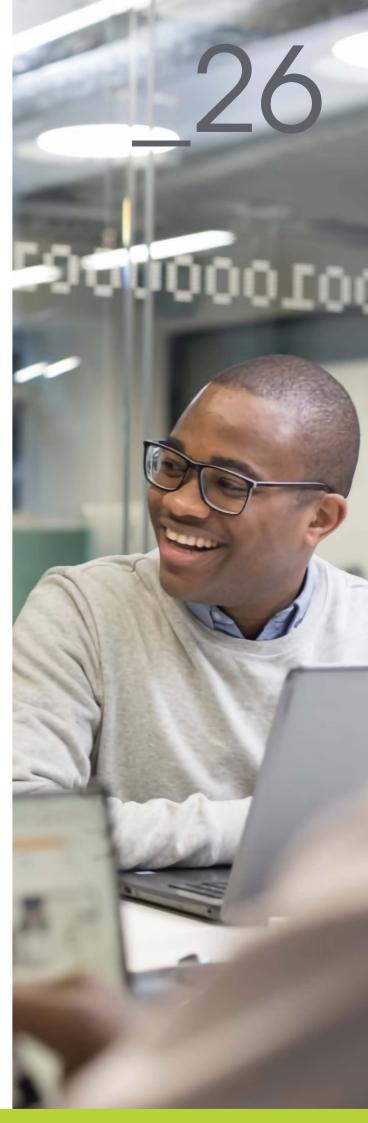
Being power-intensive businesses, data centres have a significant part to play in the UN's Sustainable Development Goal 7.3 of doubling the global rate of improvement in energy efficiency by 2030. The proceeds from the bonds have enabled us to contribute to meeting that target as we fund our expansion plans by developing new green data centres and improving energy efficiency across new and existing data centres.

#### GLOBAL SWITCH

We developed a Green Bond Framework to support its launch. This complies with the ICMA Green Bond Principles 2018 which outlines clear requirements for each green bond issue, covering Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting. The framework, which was independently reviewed by Sustainalytics, the leading independent global provider of ESG and corporate governance research and ratings to investors, helps to embed sustainability initiatives into every aspect of our operations.

Our Green Bond Committee chaired by Global Switch's Chief Financial Officer determines the projects to which funds were allocated ie Hong Kong, Singapore Woodlands, Frankfurt North, Amsterdam East and London North.

ICMA Green Bond Project Category	UN SDGs Alignment	Use of Proceeds
Green Buildings	Affordable and clean energy  11 SUSTIMMER CITES Sustainable cities and communities	Investments in the construction and operation of buildings that have received or will be:  LEED: gold or above.  BREEAM: Very good or above
		<ul> <li>Other local 'green' certifications</li> <li>Construction, refurbishment, or operation of eco-efficient data centres with an annualised PUE of less than 1.2 in Europe and due to climate conditions, 1.4 in APAC.</li> </ul>
Energy Efficiency	Affordable and clean energy	Investments in the re-development of existing data centres to improve energy efficiencies such as:  Installing 'free cooling' systems  Replacing the internal cooling delivery units and the cooling plant with more efficient equipment combined with improved control and monitoring systems  Replacing UPS equipment with the latest generation models with more energy efficient operation, and allow the power densification of existing space



# Performance Highlights



#### **Energy**

**>** 900,498

Total energy consumption (MWh)

49.7%

Percentage of zero-carbon energy

896,146

Total electricity consumption (MWh)

5.76

Energy intensity based on MWh/Adjusted Occupied Space

366,825

Total Scope 2 GHG location

based emissions (tCO<sub>2</sub>e)

**447,705** 

Total electricity consumption from zero carbon sources (MWh)

**50%** 

Percentage of total energy consumption associated with our European Facility Operations

#### **Carbon Emissions**

Scope 1 and 2 GHG intensity

on market based tCO<sub>2</sub>e /

Adjusted Occupied Space

2,086

1.49

Total Scope 1 GHG emissions (†CO<sub>2</sub>e)

157

Diesel fuel carbon emissions (†CO<sub>2</sub>e) - Scope 1\* 231,371

Total Scope 2 GHG market based emissions (tCO<sub>2</sub>e)

1.157

Refrigerant gas carbon emissions (tCO<sub>2</sub>e) - Scope 1\*

As at 31 December 2021

\*Excludes Sydney



GLOBAL SWITCH

**817,148** 

Total water consumption (m³) across the group

57,801

Water consumption (m³) in current extreme water stress locations

7.1%
Extreme waters

Extreme water stress as a percentage of total water consumption

1.83

Average group annualised WUE

<0.75

Target WUE for future new developments

11

Out of 13 data centres that use water to facilitate heat rejection

#### **Sustainable Design**

1

Data centre developed under a sustainability assessment 70,545

GFA (sqm) certified under a sustainability assessment

6

Out of 13 data centres developed under sustainability assessments

<1.2 Europe <1.4 Asia

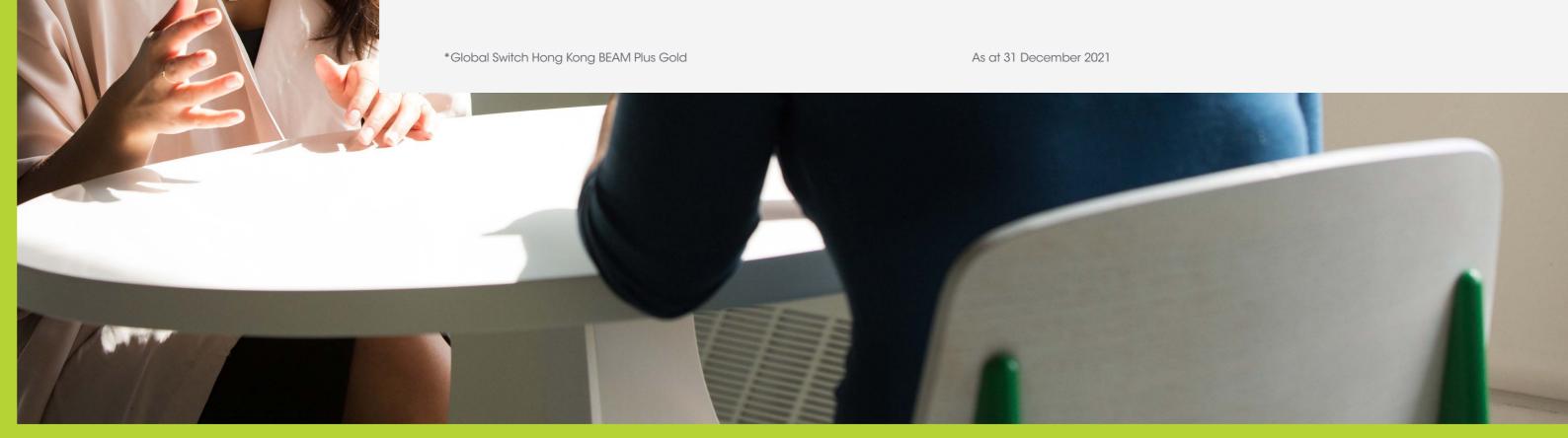
Target PUE for future new developments

Very Good

BREEAM minimum target

Gold

LEED minimum target



# Energising our human capital

Human capital is the most valuable resource in the data centre industry. We rely on the skills and talent of our people to grow our portfolio of data centres in ways that are economically and environmentally viable, and we are committed to investing widely to foster mutually beneficial relationships with our people.

#### **Employment**

As of 31 December 2021, Global Switch had 305 permanent employees and contractors. Of those, 295 were directly employed by Global Switch, demonstrating our commitment to stability and investment in long-term relationships with our employees. Our colleagues are located in eight cities across Europe and Asia-Pacific.







#### **Geographic Location**

An array of cultures, nationalities and backgrounds are represented across our international footprint. We are proud of this diversity and recognise that the different assets and experiences our people bring to the Company all serve to enhance our success.

During the pandemic, our employment of casual contractors increased slightly as a short-term response, but levels have since returned to business-as-usual with only ten contractors in 2021. No employees were suspended or furloughed due to the pandemic as the data centre industry provides a mission critical service.

While the pandemic increased the complexity of our operating and working environments, we had clear procedures and processes to ensure a safe working environment aligned to the guidelines of national governments and World Health Organisation advice. All employees who performed non-critical operational roles were encouraged to work remotely. For these employees in locations where government subsidies were allowed, Global Switch offered a work-fromhome allowance to contribute to some of the utility costs incurred. Additionally, employees were supported by their local office manager and Group IT team to ensure they had the correct desk set-up, IT equipment and ergonomic chairs in their home working environment.

Location	No. of employees
Corporate Office (London Victoria)	67
London	28
Amsterdam	25
Paris	27
Sydney <sup>1</sup>	32
Singapore	37
Madrid	15
Frankfurt	28
Hong Kong	36
TOTAL	295



GLOBAL SWITCH

# 31

#### **Gender Composition**

As at 31 December 2021, the percentage of female representation in the Company was approximately 31%; an improvement from the previous year. 29% in 2020. 87 female employees in 2020 and 94 in 2021. Global Switch ensures that during the recruitment process, female candidates are represented in the shortlist as far as possible, with all recruitment companies being briefed on this. Our female-to-male employment ratio is monitored on an ongoing basis and we are pleased that our female employment rate is higher than some of our closest peers in the market. Indeed, in our London, Singapore and Sydney data centres, we had a near 50/50 split between male and female employees at the end of 2021.

Gender	No. of employees	% of workforce
Male	205	68.8
Female	90	31.2

#### Age and Professional Distribution

Our workforce is a mix of upcoming talent and seasoned professionals, with the majority of our team considered as very knowledgeable in their fields of expertise. We support all employees in developing skills and qualifications in line with their career development and professional aspirations. The majority of our employees are in non-managerial roles.

Age range	No. of employees
Under 30	31
31 - 50	187
51+	77
Professional category	No. of employees
Directors	37
Line Managers	71
Others	187
Professional and Technical Engineering	57

#### **Board Age and Gender Diversity**

Half of Global Switch's Board of Directors is aged 31 to 50 years with the remaining aged above 50.

Board age range	Composition
31 - 50	50%
50+	50%
Board gender	Composition
Board gender  Male	Composition 100%



#### **Employee Engagement**

We understand that having an engaged workforce is vital to achieving our strategic objectives as it directly leads to better productivity and a driven, committed culture. Our attrition rates are comparable to the industry average and stood at 27% in 2021.

We introduced several initiatives in 2021 to increase employee engagement and reduce turnover, including:

- Increased rigour in the recruitment process, which
- has improved the quality of candidates applying and improved skills and cultural fit
- A modified approach to performance and
- development through the annual appraisal process which focuses on ongoing, continuous feedback and employee-led development
- Identifying and tailoring development for our key
- talent as well as creating clear succession plans for critical leadership roles

All Global Switch employees receive performance, remuneration and career development reviews annually, and we continue to invest in employee diversity and inclusion, with a particular focus on employee engagement.

Our monthly Team Bulletin introduces all the new hires for the month, anecdotal news about individual employees (such as new babies, weddings and partnerships) and announces any role or title changes and promotions. Current vacancies are also shared, backed by our employee referral scheme which offers a generous bonus.





#### **Employment Benefits and Fairness**

Eligible employees are provided with a competitive benefits package usually consisting of discretionary bonus, pension, life insurance, medical insurance and leave entitlements. We carry out a role-based benchmarking analysis annually to ensure that all employees are remunerated fairly against the local market and, where applicable, against their peer group.

Our family-friendly policies adhere to local legislation, varying by country and jurisdiction, and often go further than the local legal requirements. In support of gender equality, Global Switch employees are entitled to two weeks' paternity leave at full basic pay. Weddings and civil partnerships are celebrated with two-days' leave and a gift or voucher worth £500 or equivalent.

We also support an IVF and Antenatal Policy for employees seeking time off for fertility or family-planning appointments, whether for themselves or to accompany partners. We recognise that family is important and having a strong support network at home is vital to employee wellbeing.

Global Switch does not use unlawful or unfair means to restrict the employment relationship between the employees and the Company. Employees are free to terminate their employment with Global Switch upon giving their contractual notice. Global Switch ensures any formal grievances raised are addressed in accordance with legislative obligations, including meeting any procedural fairness requirements. Our Grievance Policy outlines both formal and informal channels through which grievances may be raised.

The Chief Executive Officer has delegated the day-to-day responsibility of policy implementation to the Chief Legal Officer and Group HR Director. Line Managers are responsible for receiving formal written grievances, and further procedures for addressing grievances are detailed in the Policy.

### External Benchmarking Analysis for Competitive Remuneration

For the 2022 salary review process, we engaged the global consulting company Willis Towers Watson to evaluate all of our roles (139 roles in total) across the business and to benchmark against the relevant local pay markets (spanning over 10,000 unique roles). Our goal was to achieve a market position as an upper quartile employer, with all roles paid at the 75th percentile. Where appropriate, additional benchmarking evidence was provided. Based on the results of the benchmarking exercise, salaries of key competitive roles have been adjusted to reflect local market conditions more closely.

Given the specific skill sets required by some of our more technical roles, which are difficult to recruit and retain, evaluating our market position and understanding the local markets and payment practices that occur in each of our jurisdictions ensures we remain competitive within the data centre industry. By looking at active market data in conjunction with the benchmarking evidence, we were able to propose evidence-based salary adjustments across the board and understand which specific roles required above-CPI increases to retain our existing talent. We are also in the process of introducing a system of recording full details of all recruitment exercises, successful or not, to identify the areas for improvement in attracting and retaining staff.





An array of cultures, nationalities and backgrounds are represented across our international footprint.

#### **Employee On-boarding**

A thorough build-out of the employee on-boarding experience and the induction process ensures that the talent entering the organisation at all levels and in all locations can smoothly and quickly integrate into their roles, improving productivity and enhancing team morale. Our global induction programme enables all new hires to meet virtually and sets the tone for collaborative working practices at the start of their Global Switch journey. Group HR keeps in touch with new hires at the six-week, six-month and one year mark to monitor their engagement and satisfaction levels with the Company and their roles.

#### **Diversity and Inclusion**

Global Switch is committed to a culture that empowers its people through a work environment where inclusion, diversity and respect are both expected and valued. Living by Global Switch's guiding principles and striving for a sustainable work environment involves understanding, accepting and embracing diversity and ensuring the inclusion of our employees of all gender identities, ages, races, ethnicities, national origins, cultures, religious or political beliefs, languages, education levels, socioeconomic backgrounds, family or relationship statuses, sexual orientations, genetics and disabilities. We expect each of us no matter our level or function - to play an active role in creating environments where people of diverse backgrounds are excited to bring all of who they are to do their best work. We want;

every team member to feel comfortable sharing their unique perspective and encourage them to also seek the perspectives of others.

Our belief in equality is supported by our Equal Opportunities Policy containing an anti-discrimination statement with penalties appropriate to the applicable local laws. Our Anti-Harassment Policy details the conditions that are considered as harassment and unacceptable, covering LGBTQ+, race, sex, age and disability. Any violation of either of these policies need to be reported to HR or the Chief Executive Officer. We are pleased to report that there were no registered cases of discrimination within the Group in 2021.

Diversity and inclusion are more than policies, programmes or headcounts. Equitable employers outpace their competitors by respecting the unique needs, perspectives and potential of all their team members. As a result, diverse and inclusive workplaces earn deeper trust and more commitment from their employees. A diverse and inclusive workplace is one that makes everyone, regardless of who they are or what they do for the business, feel equally involved in and supported in all areas of the workplace.

Having an inclusive workplace culture helps us to attract a diverse set of talent and ensures we can retain the diverse talent we have attracted in the first place. An inclusive workplace does not just have a diversity of people present; it has a diversity of people involved, developed, empowered and trusted by the business. The difference between diversity, inclusion and belonging is that diversity is the representation of different people in an organisation, inclusion is ensuring that everyone has an equal opportunity to contribute to and influence every part and level of a workplace, and belonging is ensuring that everyone feels safe and can bring their full, unique selves to work.



## Health and Safety

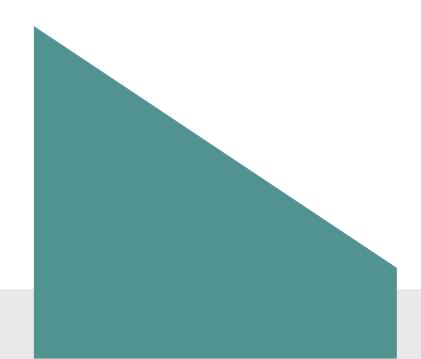
Global Switch considers health and safety (H&S) and incident prevention to be vital to our success. In accordance with our certification to ISO45001 for our Health & Safety Management System, we are committed to providing and maintaining a safe and healthy environment for all employees, contractors, customers and visitors. We are continually striving to eliminate anything which may pose a risk to those who work in or visit Global Switch premises or use our services. Our goal is to continue to have zero injuries where we operate.

We are committed to providing the resources necessary to achieve this goal and for the continued implementation of a robust H&S plan. Our Board of Directors is provided with regular reports on H&S issues, and H&S policies and procedures are regularly reviewed and updated. All data centre employees and contractors are required to undergo mandatory H&S training, and task-specific safety training is provided for staff based on their exposure to hazards.

Global Switch recorded zero reportable injuries involving our staff in 2021, resulting in a Total Recordable Injury Frequency Rate (TRIFR) of zero.

When incidents do occur, they are recorded and investigated in line with our H&S incident procedures, and remedial actions are identified and implemented to minimise the likelihood of recurrence. The Lost Time Injury Frequency Rate (LTIFR) in 2021 was zero.

Besides physical threats to wellbeing, we are also concerned about work-related stress which could hamper employee performance. We promote positive mental health by maintaining a culture of openness, communication and engagement, and by providing support through counselling, special leave, flexible working arrangements and back-to-work assistance.





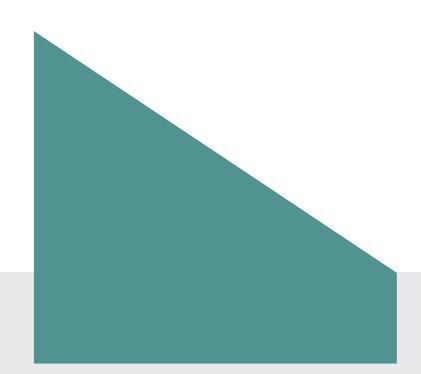
# Learning and Development

We invest in people development through a range of learning and development activities, with external training programmes and qualifications complemented by internal training programmes, workshops, information sharing and on-the-job training. We actively encourage our employees to attend industry events so they stay well-connected within the data centre industry.

For a company serving the digital economy, the competency and skills of our employees is a prime differentiator and key to maintaining our strategic competitiveness. This is why we invest in the continuous training and upskilling of our people, encouraging them to pursue further learning experiences such as professional seminars and training courses. The Company offers financial support for additional academic qualifications as our employees develop their capabilities, and we generally reimburse employees for their ongoing professional membership subscriptions.

We take pride in investing in our leadership and management and recognise the role they play in Global Switch's success. On an annual basis, current leadership identifies and discusses tailored development proposals for our key talent, as well as identifying clear succession plans for critical leadership roles.

Across the Company, every employee has the opportunity to create a personalised development plan based on their skills and experience and to continue to grow their career at Global Switch. The information is used at the annual performance review to identify top talent for the Group's succession plan.





## Performance Highlights

#### **Human Capital**

295

Total number of employees

7%

Increase from 2020 in female employees

90

Total number of female employees

▶ 10.5%

Percentage of employees under 30 **30.5%** 

Percentage of female employees

Zero

Diversity, discrimination & harassment reports

Zero

Permanent staff work-related injuries

# Engaging in high impact community action

As a global business, we look at ways to support and have a positive impact on the communities where we operate.

Within our ESG strategy, we have made a clear commitment to do this by engaging in 'High-Impact Community Action'. With a footprint that spans 13 data centres worldwide, Global Switch is well-positioned to leverage our influence and benefit the people and places where we do business. This includes our customer, supply chain partners, and local communities.

#### **Product Responsibility**

Our ISO 9001 Quality Management System across all our data centres demonstrates our commitment to quality and customer satisfaction. A key part of that is engagement and communication, which is facilitated by the close relationships we build with customers, staying in constant touch through meetings, telephone calls, email and conference calls.



3

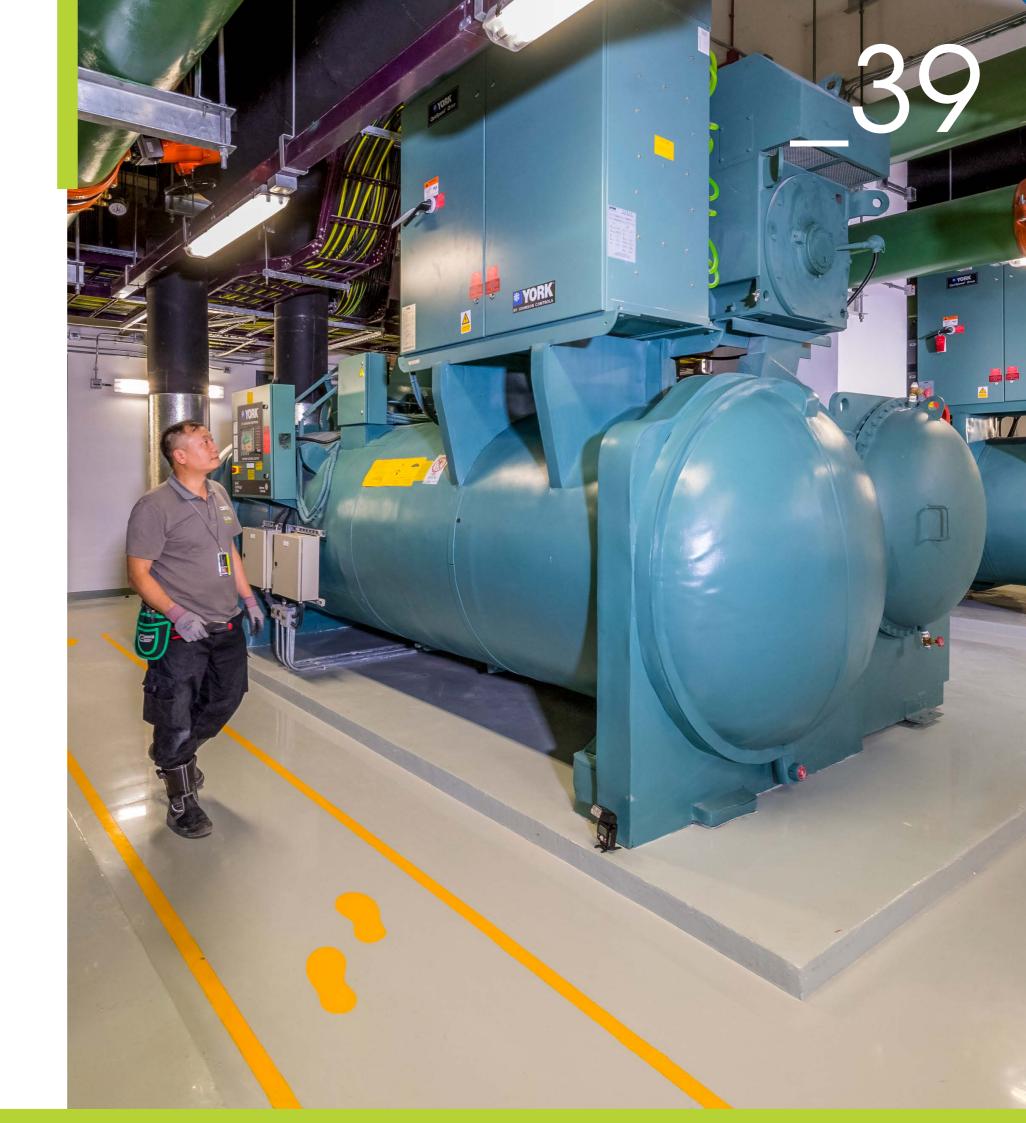


#### **Supply Chain Management**

Global Switch does not have a large supply chain for day-to-day operations, but we do source a wide range of specialist equipment and services for the build, operation and maintenance of our data centres. While we encourage our supply chain to follow our procedures and processes, we are aiming to disseminate this formally through a Suppliers Code of Business Conduct. This will establish the minimum principles for suppliers to adhere to in areas including:

- Corporate governance and ethical practices
- Health and safety
- Social, environmental and economic risk management
- Employment practices
- Information security

Through a rigorous selection process, our suppliers selected to supply specialist equipment and are awarded ongoing or long-term maintenance agreements. For all maintenance work done at our data centres, we carry out risk assessments (including safety, environmental and information security requirements) to ensure threats are sufficiently mitigated by the contractor prior to approval.





#### **Community Investment**

We endeavour to use our scale and experience to make a positive difference – from working with local schools and learning institutions to our employees donating their time to support causes they care about.

We're building on the following principles:

- Partnering with local education organisations of all levels

   we work to encourage the development of talent in the local community because we value a diverse workforce.
   We are also proud to be involved in the nurturing of the data centre leaders of tomorrow.
- Positive environmental leadership we understand the positive influence we can have on climate change and are fully committed to reaching net zero and achieving 100% renewable energy across our global footprint. We partner with local education organisations and groups who share our vision of a greener planet and improve the livelihoods of local communities.
- Employees play a vital role in identifying and driving community initiatives in the places where they live, work and raise families. This engagement is crucial when identifying the path of community engagement in a particular geography – we recognise that all communities are different and our local approach to engagement is as diverse as they are.

Transparency and trust - Global Switch wants to be a valued member of our local community and we feel strongly about being transparent and open about how our business operates and how we can positively impact our local community. Furthermore, we will always listen to the views of our local communities and apply information in ways that create real options for future engagement.

We encourage our employees to volunteer for causes they care about, whether as individuals or teams. Volunteer programmes are organised internally and externally with the emphasis on supporting a charity and, in the case of team events, boosting morale for the benefit of the working environment.

Examples of individual and team charity support in 2021:

- We sponsored Project Turnover's 475km Amsterdam to London cycle ride. The charity uses rugby and teamwork to help vulnerable young people get back on track.
- We supported children's charity Variety by taking part in the Royal Parks Half Marathon. The charity helps to improve the lives of sick, disabled and disadvantaged children and young people in the UK.
- We supported Chickenshed, a charity which brings together people of all ages and from all backgrounds to produce outstanding theatre that entertains, inspires, challenges and informs both audiences and participants alike.
- We organised a bake sale at our corporate office in London in support of the Macmillan Cancer Support charity that supports people living with cancer and their loved ones.





# Joining forces with the industry

As members of the data centre industry, we have a shared responsibility to address the ESG challenges we all face.

At Global Switch we are actively working with peers across the sector to pool knowledge and resources as we believe this is the best way to make meaningful progress and increase the impact we can have both individually and collectively.









## Memberships

We collaborate continuously by being full and active participants in a number of industry and non-profit associations globally, including:

- Dutch Datacenter Association
- Eco-Verband der deutschen Internetwirtschaft
- EU Data Centre Association (EUDCA)
- Federation of Hong Kong Industries
- Nederland ICT
- Pacific Telecommunications Council
- Spain Data Centre Association
- Sustainable Markets Initiative
- TechUK
- Telecommunications Executive Circle
- The Open Compute Project
- Uptime Institute

#### **CASE STUDY:**

TechUK School Initiative | 1-26 November 2021: I'm an Engineer, Invisible Internet Zone

As Headline Sponsor, Global Switch supported TechUK to engage up to 2,000 students in engineering by showing them the people who make the internet work., Our Life Cycle and Infrastructure Manager, was invited by five schools to talk to their students online. The sessions have been an innovative way for Global Switch to engage with children in schools across England and shone a light on how little knowledge there is among young people of data centres and their importance. The positive feedback has shown how highly the schools and pupils valued these sessions.

In addition, to increase Global Switch's brand awareness among the next generation as well as part of our CSR, we created and launched a Global Switch Internet Quiz. This initiative was designed to help educate and nurture our future engineers and develop their knowledge of the internet.

go.globalswitch.com/quiz

## Investing in transparency

We are committed to investing in and demonstrating transparency in everything we do – from governance and business conduct to employee attitudes.

This is key to our reputation for integrity, trust and accountability. Throughout the business, we strive for transparent processes by enforcing industry best practices in areas such as customer privacy, anti-bribery, corruption and human rights.

#### Governance

Over the years, Global Switch has implemented strong corporate governance practices and improvements. These include Board terms of reference, delegation of authority, policies and processes, internal audit oversight and separate Board subcommittees covering audit, remuneration and investments.

In addition, our corporate governance is enhanced by a Shareholders' Agreement whereby our shareholders undertake, amongst other things, to allow Global Switch to carry on with its business plan and strategy independent of themselves. Ensure proper communication protocols are in place, and reinforce strong corporate governance practices. Our Security Control Agreement further enhances this commitment.

Global Switch will continue to strengthen our corporate governance by adopting further relevant measures and best practices. Our aim is to maintain a structured ESG framework, including governance measures, that ensure ESG elements are incorporated in every business decision.



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## Customer Privacy

Customers' data privacy is of paramount importance in our data centre business and Global Switch enters into non-disclosure agreements with customers for the purpose of protecting their privacy. As part of our commitment to data security throughout our operations, the Group complies with information security management ISO 27001 in each location.

Global Switch also complies fully with regulations relating to protection of customer data under the General Data Protection Regulation (GDPR). Supporting policies include GDPR Data Breach Management and Procedure, GDPR Data Protection, GDPR Data Retention, GDPR Handling Data Subject Requests, GDPR Privacy Policy – each addressing a different aspect of GDPR-related privacy.

#### **Anti-Bribery and Corruption**

The Group has implemented policies to replace informal practices and procedures that have been in place for several years; these policies underpin and strengthen the Group's governance structures going forward.

They include policies dealing with whistleblowing, anti-bribery and corruption, gifts and hospitality, and financial crime (including money laundering, sanctions, anti-terrorism and tax evasion). Training on these policies will be rolled out to all Group employees and will be refreshed regularly in future.

The Group's Whistleblowing Policy covers various forms of misconduct, investigative procedures and protection of the whistleblower's safety. Whistleblowers can raise concerns anonymously to whistleblowing@globalswitch.com. This and other policies are supported by the Disciplinary Policy, which sets out a framework for taking action against misconduct.

In 2021, no cases relating to misconduct were reported.





#### **Human Rights**

Our business complies with the Modern Slavery Act 2015 throughout our Group and global supply chain. We have published a Prevention of Slavery and Human Trafficking Statement which is available at <a href="https://www.globalswitch.com/modern-slavery-statement/">https://www.globalswitch.com/modern-slavery-statement/</a>

We are also working towards further developing our policies and processes for our global supply chain, as part of which we will be updating our supplier agreements, procurement policies and training procedures where necessary.

#### Board Composition and ESG Oversight

The Global Switch Board of Directors is comprised of seven individuals: our Chairman, two Executive Directors (the CEO and CFO of the Company), three Non-Executive Directors and one Independent Non-Executive Director.

The CEO of Global Switch has oversight of ESG at the Company. At an Executive level, Global Switch has established an ESG Steering Committee comprised of individuals from various teams across the business that meets regularly to discuss ESG initiatives and prepares the annual ESG Report.

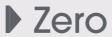
Global Switch maintains a set of comprehensive internal control and risk management procedures to address various operating risks, including financial project management, data centre operations and health and safety risks found in our business. Such risk management policies use the precautionary principle and contain procedures for the level of relevant risk reporting identified in our operations. The C-suite is responsible for the oversight of risk management and internal control systems, including ESG risks.





## Performance Highlights





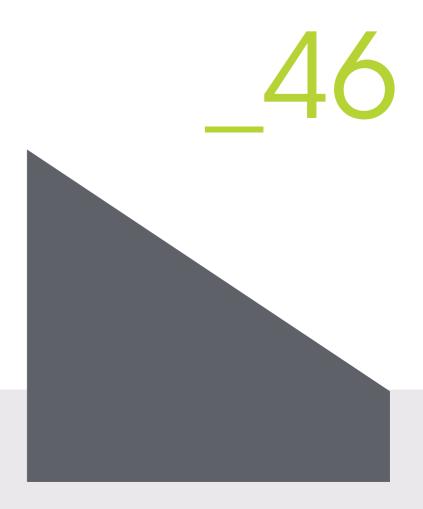
Reported cases of whistle blowing incidents



Information security breaches



As at 31 December 2021





## About this report

This report, produced by and for Global Switch, is presented as a true and accurate reflection of our Environmental, Social and Governance (ESG) practices over this reporting period.

This report covers the 2021 financial year from 1 January 2021 to 31 December 2021, utilising the Global Reporting Initiative (GRI) Standards to structure our disclosure of information. This report has been written in accordance with the GRI Standards: Core option. We have referenced our GRI-aligned disclosures via a content index at the back of this report.

The boundary of our ESG disclosure is the same as the 'operational control' approach to consolidating greenhouse gas (GHG) emissions. Our chosen GHG methodology (GHG Reporting Protocol) defines this as operations where we have full authority to introduce and implement our operating policies. We consider that this approach incorporates all of our entities with sustainability impacts that are actually or potentially material, including social and governance impacts.

However, disclosures beyond this boundary specifically pertaining to the development of a Scope 3 baseline are included where applicable.

The words 'Group' or 'Company' refer to Global Switch unless stated otherwise.

This report has been reviewed and approved by the Chief Executive Officer and is confirmed to be an accurate and true account of the Company's ESG performance.

Any questions or comments regarding this ESG report and the information contained within can be directed to:

esg@globalswitch.com





## Verification opinion from Carbon Intelligence

We planned and performed our work to obtain the information, explanations, and evidence that we considered necessary to provide a limited level of assurance based on the process and procedures conducted.

We conducted our verification of Global Switch GHG assertion, which included assessment of the company GHG information system, monitoring and reporting methodology. This assessment included the collection of evidence supporting the reported data and multiple checks relative to the provisions of the legislation, reporting standard and calculation methodologies referenced in the verification criteria.

This statement shall be interpreted with the GHG assertion of Global Switch as a whole.

Carbon Intelligence's approach is riskbased, drawing on an understanding of the risks associated with calculating GHG emission information and the controls in place to mitigate these risks. Our examination included assessment, on a limited sample basis, of evidence relevant to the reporting of emission information. Based on the data and information provided by Global Switch and the processes and procedures conducted, Carbon Intelligence concludes with limited assurance there is no evidence that the GHG assertion:

- is not materially correct,
- is not a fair representation of the GHG emissions data and information, and
- is not prepared in accordance with the criteria listed above.

Continued on next page...





It is our opinion that Global Switch has established sufficient systems for the collection, aggregation and analysis of quantitative data for determination of these GHG emissions for the stated period and Boundaries.

The GHG information for the period 01/01/2021 – 31/12/2021 is verified by Carbon Intelligence to a limited level of assurance, consistent with the agreed verification scope, objectives and criteria. 100% of emissions by scope are verified as:

#### Reporting Period: 01/01/2021 - 31/12/2021

Scope 1

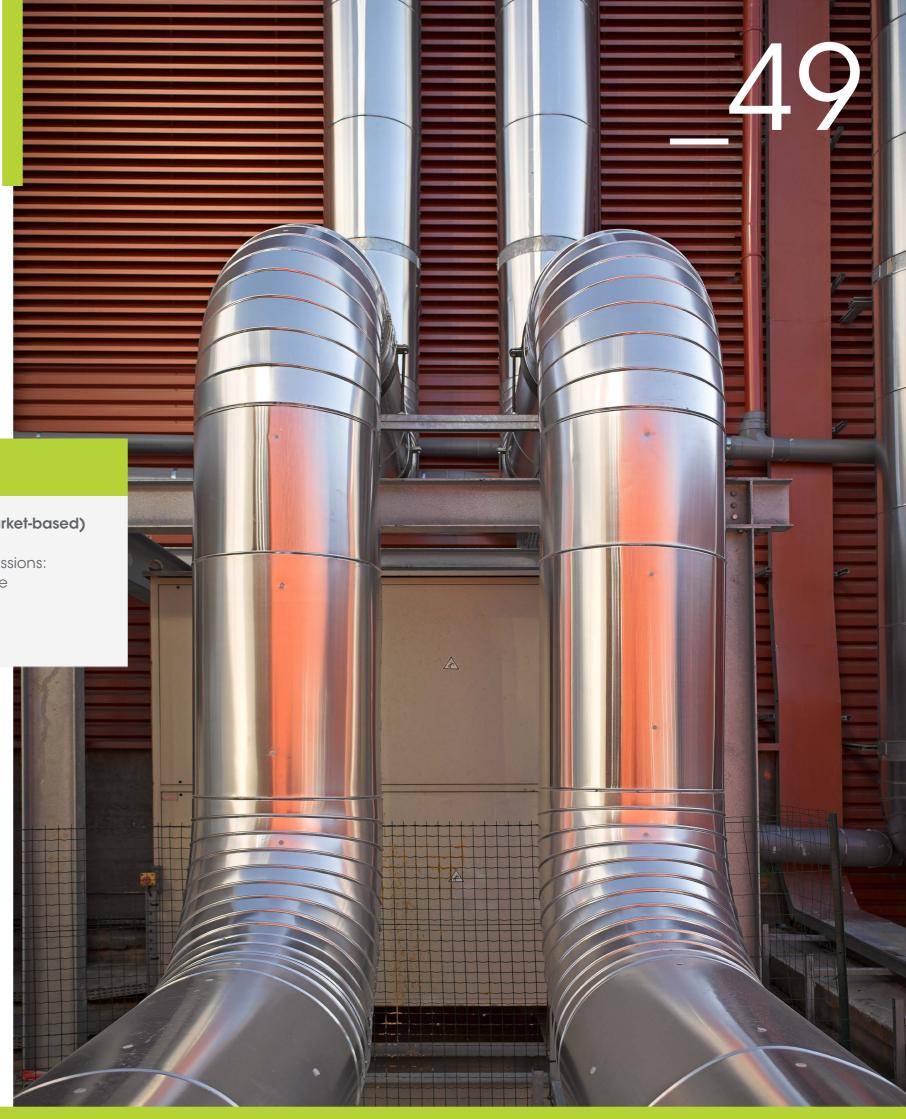
Reported Emissions: 2,086 tCO<sub>2</sub>e

Scope 2 (location-based)

Reported Emissions: 366,825 tCO<sub>2</sub>e

Scope 2 (market-based)

Reported Emissions: 231,371 tCO<sub>2</sub>e



## Data Appendix

#### **Energy Consumption**

Energy Source	2019	2020	2021
Scope 1 - Combustion of fuel and operation of facilities (kWh)	6,951,969	6,923,175	4,353,166
Scope 2 - Electricity consumption (kWh)	786,233,809	797,105,978	896,145,499°
Scope 2 - Electricity consumption from Zero Carbon Sources (kWh)	491,924,432	472,114,086	447,704,496
Scope 1 Intensity	0.05	0.04	0.03
Scope 2 Intensity	5.02	5.13	5.74

#### **Emissions**

GHG Source	2019	2020	2021
Scope 1 - Combustion of fuel and operation of facilities (tCO <sub>2</sub> e)	3,623	3,821	2,086
Scope 2 - Carbon emissions (Location Based) - Electricity (tCO <sub>2</sub> e)	294,221	296,603	366,825
Scope 2 - Carbon emissions (Market-Based) - Electricity (tCO2e)	171,892	179,572	231,371"
Scope 3 - Carbon indirect value chain emmisions (tCO2e)	Data not available	150,787	Data not available yet

#### Water Consumption

Water	2019	2020	2021
Potable Water (m3)	772,063	579,118	817,148
Non-potable water (ML)	0	0	0



Headcount Breakdown	Indefinite or permanent contract		Fixed term or temporary contract			Total number of employees			
пеаасоин ыеакаоwн	2019	2020	2021	2019	2020	2021	2019	2020	2021
Gender									
Female	75	84	90	1	3	4	76	87	94
Male	173	198	205	12	13	6	185	211	212
Total	248	282	295	13	16	10	261	298	306
Age Group									
Under 30 years old	21	31	31	0	2	0	21	33	31
31-50 years old	157	175	187	1	1	6	158	176	194
Over 50 years old	70	76	77	0	0	4	70	76	81
Total	248	282	295	1	3	10	249	285	306
Professional Category									
Directors	10	10	37	0	0	0	10	10	37
Line Managers	55	54	71	0	0	0	55	54	71
Other Employees	183	218	187	13	16	10	196	234	198
Total	248	282	295	13	16	10	261	298	306



### GRI Content Index

The GRI Content Index shows our material GRI Topics and Disclosures selected for reporting in alignment with the GRI 'Core' option.

#### General Disclosurers

eneral Disclosu	rers		
Disclosure No.	Description	Response	Page No.
102-1	Name of the organisation	Global Switch	-
102-2	Activities, brands, products, and services	Owner, operator and developer of large scale multi-tenanted data centres	-
102-3	Location of headquarters	Global Switch Holdings Limited is domiciled in the British Virgin Islands with company registered number 1468649. The corporate office is located at: 2nd Floor, Nova North, 11 Bressenden Place, London, SW1E 5BY, United Kingdom	-
102-4	Location of operations	London Victoria (corporate office), Amsterdam, Frankfurt South, Frankfurt North, Hong Kong, London East, London North, Madrid, Paris East, Paris West, Singapore Tai Seng, Singapore Woodlands, Sydney East and Sydney West	-
102-5	Ownership and legal form	Global Switch is privately owned. The Company's shareholders are Elegant Jubilee Limited (51%), Strategic IDC Limited (24.99%) and Tough Expert Limited (24.01%); the controlling shareholder is Jiangsu Shagang Group Co., Ltd, which indirectly owns 51.7% of the Company	N/A
102-6 Markets served		Highly connected data centres offering large scale space, either as private suites or share colocation, across Europe and Asia-Pacific	4
102-7	Scale of the organisation	13 facilities across 8 countries, offering a total of 428,000 sq m of technical space	N/A
102-8	Information on employees and other workers	Fully reported	30-31, 51
102-9	Supply chain	Our supply chain consists primarily of domestic and international vendors in industry sectors such as equipment manufacture and construction engineering. We also engage with consultancy service providers which support the business' day-to-day functions relating to facilities management, IT, Operations, Sales, Marketing, Communications, Legal, Finance and Human Resources	N/A
102-10	Significant changes to the organisation and its supply chain	During 2021, there were no significant changes to the supply chain	N/A
102-11	Precautionary Principle or approach	Fully reported	5



#### General Disclosurers

Disclosure No.	Description	Response	Page No.		
102-12	External initiatives	Fully reported	40		
102-13	Membership of associations	Fully reported	42		
102-14	Statement from senior decision-maker	Fully reported	3		
102-16	Values, principles, standards, and norms of behaviour	Fully reported	6-8		
102-18	Governance structure	Fully reported	45		
102-41	Collective bargaining agreements	Paris - 9.28% of total employees	N/A		
102-42	Identifying and selecting stakeholders	Partially reported	6, 7, 32, 35, 38, 41-42		
102-43	Approach to stakeholder engagement	Fully reported	6, 7, 32, 35, 38, 41-42		
102-44	Key topics and concerns raised	Fully reported	7		
102-45	Entities included in the consolidated financial statements	Global Switch Amsterdam Property B.V., Global Switch FM GmbH, Global Switch Limited, Global Switch Estates 1 Limited, Global Switch Estates 2 Limited, Global Switch Property Madrid S.L., Global Switch Paris Sarl, Global Switch Hong Kong Limited, Global Switch (Property), Singapore Pte Limited, Global Switch Property (Australia) Pty Limited	N/A		
102-46	Defining report content and topic boundaries	Fully reported	7		
102-47	List of material topics	Fully reported	7		
102-48	Restatements of information	Not applicable – this is Global Switch's first ESG report	N/A		
102-49	Changes in reporting	Not applicable – this is Global Switch's first ESG report	N/A		

#### General Disclosurers

Disclosure No.	Description	Response	Page No.	
102-50	Reporting period	1 January 2021 - 31 December 2021	4	
102-51	Date of most recent report	This is Global Switch's first ESG report	N/A	
102-52	Reporting cycle	Annually from January to December	N/A	
102-53	Contact point for questions regarding the report	esg@globalswitch.com	4	
102-54	Claims of reporting in accordance with the GRI Standards	Fully reported	47	
102-55	GRI content index	Fully reported	52	
102-56	External assurance	The information disclosed has not been externally assured	N/A	
103-1	Explanation of the material topic and its boundary	Fully reported in the respective chapters	N/A	
103-2	The management approach and its components	Fully reported in the respective chapters	N/A	
103-3	Evaluation of the management approach	Fully reported in the respective chapters	N/A	

#### **Economic Disclosurers**

Topic	Disclosure No.	Description	Response	Page No.
Anti-	205-2	Communication and training on anti-corruption policies and procedures	Partially reported	44
Corruption	205-3	Confirmed incidents of corruption and actions taken	Fully reported	46
	207-1	Approach to tax	We comply with all applicable tax laws in our territories of operation. We align our tax profile to the business operations and our tax planning is underpinned by operational activity	N/A
Tax	207-2	Tax governance, control and risk management	David Doyle, Chief Financial Officer, has ultimate oversight and responsibility for compliance with the tax strategy. The business reports to the Board on tax issues and any related plans	N/A
	207-3	Stakeholder engagement and management of concerns related to tax	We respond to any requests from tax authorities for information or tax audits. To date, we have not had stakeholders raise any concerns with regard to our tax practices	N/A



#### **Evironmental Disclosurers**

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	Topic	Disclosure No.	Description	Response	Page No.
Energy		302-1	Energy consumption within the organisation	Fully reported	16
	Energy	302-3	Energy intensity	Fully reported	16
		302-4	Reduction of energy consumption	Partially reported	16-17
		305-1	Direct (Scope 1) GHG emissions	Fully reported	16
Energy		305-2	Energy indirect (Scope 2) GHG emissions	Fully reported	16
	Energy	305-3	Other indirect (Scope 3) GHG emissions	We are planning to undertake Scope 3 modelling and reporting in 2022.	50
		305-4	GHG emissions intensity	Fully reported	50
		305-5	Reduction of GHG emissions	Partially reported	18-19
	Water	305-5	Water consumption	Fully reported	50

#### Social Disclosurers

Topic Disclosure No.		Description	Response	Page No.
·				
	403-1	Occupational health and safety management system	Fully reported	35
Occupational Health and Safety	403-2	Hazard identification, risk assessment, and incident investigation	Partially reported	35
	403-5	Worker training on health and safety	Fully reported	35
Training & Education	404-1	Average hours of training per year per employee by gender, and by employee category	Global Switch plans to include this information in the 2022 ESG report	N/A
Customer Privacy	418-1	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	No complaints concerning breaches of customer privacy were received from outside parties and/or regulatory bodies during the reporting year	46
Diversity & Equal Opportunity	405-1	Diversity of governance bodies and employees	Fully reported	31
Non- Discrimination	406	Incidents of discrimination and corrective actions taken	No incidents of discrimination were recorded during the reporting year	N/A



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