PCEO & Board Statement

**Our Sustainability** Framework

Feed & Connect Communities

**Develop Smart** Infrastructure

Reduce Food & Packaging Waste **Nurture Skills** for the Future

GRI

Disclosures

GG

We are deeply committed to minimising the impact our current and future activities may have on the environment, through smart infrastructure that reduces our carbon footprint and contributes to a low-carbon economy.

**Spencer Low** 

Chief Sustainability Officer, SATS Ltd.



**In Conversation** with Spencer Low

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UNSDG

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## In Conversation with Spencer Low





With the disruption to air travel caused by the pandemic, SATS has experienced very low carbon emissions in the past year. How do you intend to achieve your carbon emission goals as operations ramp up?



Indeed, during the pandemic we witnessed lower levels of carbon emissions globally as a result of the dramatic decrease in aviation traffic – a stark reminder of the impact of human activities on the environment. COVID-19 significantly reduced our carbon footprint, but this was involuntary and primarily driven by volume. This has prompted us to further review and refine our sustainability goals and targets by improving our data capture and governance, and by monitoring carbon intensity<sup>3</sup> as an operational metric, to better reflect the impact of our activities on emissions. This helps us work towards achieving our overall carbon reduction target of 50% by 2030.

We are focused on accelerating our plans to electrify ground support equipment and install solar panels on our facilities to help us transition to a low-carbon economy, given that we anticipate operations to slowly return to normalcy.

Electrifying our GSEs fully is expected to abate





### How have you progressed with your initiative to electrify ground support equipment?



In consultation and collaboration with Changi Airport Group (CAG) and the Civil Aviation Authority of Singapore (CAAS), SATS aims to accelerate our electrification master plan towards the goal of a 100% electric fleet, which is expected to reduce about 12% of our Singapore-based carbon emissions, abating 11,000 tCO<sub>2</sub>e. The collaborative effort includes addressing key challenges such as the availability of infrastructure at Changi Airport's airside bays that could support the charging of larger electric vehicles, and the availability of electric vehicles with efficient battery technologies in the market. In addition, we are currently trialling an electric skyloader with Changi Airport and will commence operational trial of the electric joint container pallet loader (JCPL) by end of this year.

In Hong Kong, Asia Airfreight Terminal Company Limited (AAT) is also upgrading its existing diesel/petrol GSE vehicles such as cargo loaders and belt loaders through a Ground Services Equipment Pooling Scheme. In 2020, under this scheme and as part of providing partner businesses with



financial support during the COVID-19 pandemic, Hong Kong International Airport (HKIA) purchased existing diesel/petrol GSE vehicles from its ground services providers. These are being replaced with electric alternatives and subsequently leased to the airport's ground services providers.



<sup>3</sup> Carbon intensity refers to carbon emissions generated per unit of activity, such as gross meals produced, flights handled or tonne of cargo handled.

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## In Conversation with Spencer Low



What percentage of your ground support equipment are electrified?



(Q)

To date, we have electrified 31% of our ground support equipment in Singapore and 32% of our motorised fleet at Beijing Aviation Ground Services (BGS), one of our joint venture companies in China. 676 diesel/petrol vehicles that are still in use at BGS have emissions control modifications installed which comply with the local emissions standards. 95% of our GSE at Beijing CAH SATS Aviation Services Co., Ltd. (BCS) has also been electrified.

In India, Air India SATS (AISATS), a joint venture between Air India Limited and SATS, has started the conversion of diesel to electric GSE with the purchase of 20 electric GSE vehicles in FY2020-21. By 2025, we plan to achieve 100% conversion of light motorised GSE vehicles. In

Japan, our subsidiary SATS TFK had also deployed six electric vans across its operations this year.

shock sensors.



As part of our ongoing efforts to expand our electric fleet beyond tractors and forklifts, we are working with our partners to source for the electric variants of GSEs that suit our needs. Part of the process includes on-site trials to assess the performance of these vehicles and equipment and their compatibility with the unique requirements of airport operations as well as the gathering of staff feedback. The skyloader trial I mentioned earlier is an example. We have 71 forklifts across our cargo operations in Singapore which are scheduled for replacement this year. These will be converted to electric versions, eliminating approximately 1,087 tonnes of carbon emissions. GTR, a SATS subsidiary in Malaysia, uses fully electric machinery, such as forklifts, tow tractors and pallet trucks for its cargo operations in Kuala Lumpur. The six electric forklifts deployed are equipped with enhanced safety features such as reversing cameras, a driver assistance system, and



**Electrification of 71** forklifts expected to eliminate **1,087** tCO<sub>2</sub>e

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## In Conversation with Spencer Low



You mentioned SATS is also focused on harnessing solar energy to achieve the plan to transition to a low-carbon economy. What progress have you made in this area?



Solar energy is one of the greenest forms of renewable energy. Used to generate electricity, solar panels neither require fuel nor release harmful emissions and are an integral part of our sustainable business strategy.

In Singapore, as part of our commitment to convert all available roof space for solarisation wherever feasible, we have expanded our solar installations across Changi AFTs 1 to 4, Cargo Transshipment Centre, and SICCs 1 and 2. Collectively, these solar panels are expected to yield an additional 6,000 megawatthours' worth of renewable energy a year. The solar panels installed across AFTs 1 to 4 generate enough power to supply about 57% of electricity across these buildings. Our total amount of renewable energy generation amounts to approximately 10,750 megawatt-hours per year, which is equivalent to powering 2,340 four-room HDB<sup>4</sup> flats.

Solar thermal hybrid panels have also been installed on the rooftop of SICC 1. The first prototype of its kind in Singapore, these hybrid panels can convert solar energy to electricity and, at the same time, pre-heat water. The hot water produced can be channelled to our production kitchen within the catering centre. In this way, energy through the use of electricity and gas that is normally required to heat water can be reduced.

In China, Beijing Airport Inflight Kitchen (BAIK), a SATS joint venture company, has installed roof solar heat pipes on the rooftops of its buildings to generate heat for its hot water supply. Water recycling tanks have also been installed to recycle wastewater that is produced from the washing of vegetables and cooling of hot soup. The recycled water is then used for cleaning floors and flushing lavatories.

In India, SATS India's Bengaluru uses energy from solar panels, which produce enough energy to fulfil 55% of its energy needs and has resulted in an estimated reduction of 2.8 metric tCO2e in FY2020-21. Additionally, from 2019 to 2021, AISATS consolidated its facility spaces, which led to a reduction in electricity usage and an estimated reduction of 2.2 metric  $tCO_2e$  in carbon emissions during this period.

Similarly, our catering facilities in Delhi, Chennai and Bengaluru have also been enhanced with solar installations which harness renewable energy to power their operations. In Bengaluru and



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Chennai, in particular, we have replaced diesel with liquefied petroleum gas (LPG) as a fuel source for equipment like steam boilers and ovens. The use of LPG produces significantly less carbon dioxide and other pollutants compared to diesel. In total, both initiatives contributed to a reduction of approximately 3.7 metric  $tCO_2 e$  in carbon emissions in 2020.

About **10,000 megawatt-hours** of renewable energy generated annually.



<sup>4</sup> Housing Development Board, Singapore's public housing authority.

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# In Conversation with Spencer Low



In your opinion, why is it important to integrate sustainability and strategy?



Climate change and the global megatrends associated with it can fundamentally change the way we operate over the coming decades. Today, more than ever, integrating sustainability into our strategy helps us future-proof our business, and ensures we take a long-term view on the effort required. We have therefore adopted TCFD as a useful approach in helping the organisation identify and address the potential impact of climate-related risks and opportunities on our business strategy and operations. It is increasingly important for SATS to put in place environmental, social and governance (ESG) targets and best practices, and to pay close attention to the concerns of stakeholders such as investors and consumers. By doing so, we strive to harness potential opportunities and innovative solutions to become more sustainable even as we grow our business.



For more information on SATS' TCFD framework, please turn to page 46.

Annexes

