THIS WEEK'S TOPIC

How may businesses in Singapore reduce their carbon footprint and help mitigate climate change?

Going green, saving Gaia

John Bittleston

Founder and Chair

Terrific Mentors International Pte Ltd There are three key things that businesses can do.

1) Business in Singapore still uses an inordinate amount of paper. Double-sided printing, and using technologies that enable e-signatures, e-invoices and e-payment will help reduce this. The way I discipline myself is to say that each sheet of paper I use threatens one breath in my

2) Meetings are often called when a webinar conference call could be just as effective. There is also some anecdotal evidence that people in call meetings speak more frankly presumably because the chairperson isn't there to growl at them.

3) The problem with climate change is that everyone thinks everyone else should/will solve it. So the best way to mitigate climate change is for everyone, starting at the top, to make an effort to do their part.

Alan Ng

Co-Chair, Brands for Good In partnership with Carbon Care Asia Limited

Businesses in Singapore are not required to disclose their greenhouse gas emissions. Identification of climate-related risks faced is also not mandatory. Businesses cannot manage their risks when they do not identify and measure them. Other parts of the world has more stringent requirements regarding climate-related risks, For example, the Hong Kong Exchanges and Clearing Limited is proposing to tighten disclosure requirements on climate-related risks. The same is not happening here. To reduce their carbon footprint, Singapore businesses should first measure their emissions by way of carbon assessment. They will then be better positioned to identify climate-related risks and to mitigate their impact on business.

Yeoh Oon Jin Executive Chairman PwC Singapore

Climate change is an existential issue for humanity. Singapore alone will not be able to reverse the risk, but both businesses and individuals in Singapore can certainly do their part. One practical way is for businesses to start taking responsibility for their carbon footprint using frameworks such as the Greenhouse Gas (GHG) Protocol. Measuring an organisation's carbon footprint is a common first step to managing and reducing global carbon emissions. At PwC Singapore, we have been tracking our carbon footprint for a number of years now and have steadily reduced our carbon emissions per staff.

Simon Baptist Global Chief Economist and MD, Asia The Economist Intelligence Unit

Climate change is one of the defining global challenges of the 21st century. Businesses have an important role to play, but we cannot expect businesses to act on the scale required without the government setting the right condi tions for them to do so.

This means that policies like a carbon tax are necessary, and then firms will adjust their behaviour in response. It is very welcome that Singapore has introduced such a tax, although the rate of S\$5 per tonne is in the order of 10 times smaller than what is needed. As a rich country, Singapore should be taking significantly more than its fair share of emissions reductions, and also playing a role in encouraging coordinated policy throughout Asean. Business can also plan to take advantage of the opportunities that will present themselves through mitigation and adaptation activity. Given that the carbon price is likely to rise, it would make sense for longer-term decisions to be made assuming a price more like S\$50 a tonne to ensure that investments are robust to the kinds of policy changes that are likely to become necessary in fu-

Victor Mills Chief Executive

Singapore International Chamber of Commerce Climate change is a great equaliser. If businesses don't

change they'll go under – literally as sea levels rise and financially as resources dry up. More businesses now realise true sustainability is only achieved when they use less of the earth's resources and reuse or recycle more of the resources they use. In other words, the commercial self-interest to survive is driving businesses to change wasteful linear production models by transforming them into beneficial circular models. This action will do more to mitigate climate change than any other with the exception of the widespread availability and greater use of renewable en-

Ooi Boon Hoe

Chief Executive Officer Jurong Port Pte Ltd

Climate change remains one of the most significant challenges of the modern age. In a bid to do our part in mitigat ing this issue, Jurong Port is developing port-centric ecosystems that will contribute towards reducing the carbon footprint for the industries it serves.

Jurong Port houses the world's largest port-based Solar Generation Facility, where solar panels on two-thirds of its warehouse roof generate a capacity of 9.6 megawatt-peak, reducing 11,000 tonnes of CO2 emissions annually. We have also incorporated environmental features into infrastructure redevelopments, using green construction material and methods to upgrade two berths, reducing the carbon footprint of civil works, making it the world's first Green Berths. As part of Jurong Port's vision to become a Next Generation Multipurpose Port over the next few years, we are committed to reducing the carbon footprint of the various industries that we serve.

Tan Man Ee Chief Operations Officer NatSteel Holdings Pte Ltd

Climate change is one of the biggest challenges of our time and NatSteel is committed to doing our utmost to reduce the company's carbon footprint. As climate change has now been brought to the forefront by Prime Minister Lee Hsien Loong, hopefully there will be more energy from companies and individuals alike to tackle this problem. Through collaboration and improving efficiency in the entire value chain, businesses can significantly reduce their carbon footprint by shortening the supply chain. For example, by recycling steel scrap in Singapore, we are reducing our carbon footprint by more than half as opposed to exporting the scrap, producing steel overseas and bringing the finished steel back to Singapore. We are also participating in events such as International Built Environment Week, through which we hope to be able to raise further awareness about the construction sector's carbon footprint.



PHOTO: FREEIMAGES

Sean Toohey EVP and President, Asia-Pacific

Ecolab

Whether it's saving water and energy or reducing waste and greenhouse gas emissions, there's a growing realisation that these priorities go hand in hand with business growth and profitability. To begin with, businesses must have sustainability at their core. They must work together to collectively raise the corporate responsibility on sustainability standards. At Ecolab, we are privileged to help drive these positive developments forward by helping our customers work more efficiently and reduce costs, while lowering their impact on the environment. Business leadchange by ourselves, together we can drive the progress the world needs.

Amra Naidoo

Co-Founder and Partnerships & Operations Director Accelerating Asia

Preparing an urban metropolis such as Singapore for the onset of climate change requires impetus from businesses to support the government's latest agenda in mitigating the effects of climate change for the island. Aside from being conscious about resources such as going paperless and recycling, businesses should look to the latest in emerging technologies such as green building, artificial intelligence, blockchain and the Internet of Things (IoT) to reduce carbon footprints.

As these solutions become commonplace, access to data and machine learning insights can help businesses make cost-effective decisions while eliminating waste inefficiencies. While inherently costlier to implement, I would advise business owners to factor in long-term benefits and savings and not merely focus on short-term expenditure. Reducing your carbon footprint will undoubtedly impress your stakeholders and build greater credibility for your business. It is possible to work together to combat climate change and create a win-win situation all around for evervone!

Ho Nyok Yong President

Singapore Green Building Council

Going green not only benefits the environment, it also benefits the businesses and organisations themselves. Some organisations in the built environment sector have already invested in sustainability measures for their business operations that can help to mitigate climate change.

But change does not happen overnight, especially for smaller organisations. They can, however, begin by taking small steps to reduce their carbon footprint. Companies can start with some easily attainable measures such as getting employees to turn off lights when not in use, unplugging equipment/devices from power sockets at the end of the day and also by making use of reusable water bottles in the office. Organisations can also identify the barriers and motivators for staff, and create activities to change be-

This will make the desired carbon-reduction behaviours easy and attractive to adopt, especially when it becomes a social activity that colleagues can do together.

Organisations can also use certified green building materials for their office fitting-out or renovation, creating low-carbon workplaces with long-term benefits to employee health and wellbeing. Companies can also encourage employees to lower their commuting emissions by taking public transport, biking or carpooling to the workplace, and offering them incentives to do so.

Damien Dhellemmes Singapore Country President

Schneider Electric

We are running out of time to tackle and mitigate global warming effects: all companies need to do their part. Digitisation brings new avenues and means to help business reduce their carbon footprint. By leveraging IoT, businesses can manage energy usage and drive more efficient operations. As an example, our regional HQ at Kallang has been transformed by IoT technology and is on track to achieve carbon neutrality by mid-2020.

Apart from technology solutions, it is important for businesses to empower and support one another, to achieve the common goal of mitigating climate change; no one should be left behind. With ongoing efforts to support local SMEs in their sustainable journeys, Schneider Electric hopes to contribute further in the country's transition towards a low carbon economy.

Ivy Lai **Country Manager Philips Singapore**

Circular economy principles - reusing, recycling and remanufacturing materials – can be key competitive differentiators, as consumers are increasingly aware and conscious of the product choices they make. To this end, businesses must adopt innovative business models and maximise the lifetime value of products and solutions. We extend our sustainability efforts by applying EcoDesign principles to increase the energy efficiency of our products, so everyone can make a difference. We are also committed to carbon neutrality by 2020 and are the world's first health technology company to have its carbon dioxide emission targets approved by the Science-Based Targets initiative.

Anders Liss Country Manager Scania Singapore

Businesses should not neglect the area of transportation which is central to building sustainable supply chains. If transportation is provided by third parties, businesses can prioritise greener providers that are committed to lowering their environmental impact.

These could be transport providers that have systematic ways of reducing fuel consumption or upskilling their drivers to be more fuel-efficient. Or they could be providers that adopt renewable fuels such as biogas, biodiesel and hydro-treated vegetable oil, which reduce emissions by up to 90 per cent.

As the transport industry has yet to be fully decarbonised, businesses can make smart choices now to mitigate climate change. These include encouraging staff to use public transportation, providing company buses or choosing teleconferencing over air travel.

Gavin Milton-White VP Enterprise, Asia Pacific

CommScope

An often-overlooked issue in developed economies (eg Singapore) is understanding the energy efficiency and environmental footprint of buildings. Energy use in buildings and construction is responsible for 36 per cent of global energy consumption, according to an industry re-

CommScope strives to reduce the industry's environmental footprint together with partners and trade organisations through various global initiatives. We've seen to date that making the right network connectivity and infrastructure choices that meet high energy efficiency and industry-compliant standards can help end customers save some 28.6 million metric tonnes of CO2 emissions and US\$1.6 billion in energy costs annually.

Patrick Lee CEO Singapore

Standard Chartered Bank (Singapore) Limited The issue of climate change has massive business, soci-

etal and environmental impact. Companies can make a difference by 1) Supporting climate change mitigation policies; 2) Formulating their own climate change strategy; 3) Setting carbon emissions reduction targets; and 4) Measuring their progress.

As a bank, our biggest impact is made through the businesses we finance and support. Standard Chartered is an early leader in sustainable finance and we have been evaluating environmental, social and governance (ESG) risks since 1997. We are committed to supporting our clients in adopting ESG best practices and mobilising the capital needed to mitigate climate change.

Derek Wang General Manager

Alibaba Cloud Singapore

Digital transformation is underpinned by electrical power, and as businesses in Singapore continue to digitalise, it is crucial for technology to serve as a powerful engine to unlock sustainable solutions and environmental outcomes. For Alibaba Cloud, this means improving energy efficiency around data centre operations – an area known for its heavy usage of electrical power, accounting for nine per cent of Singapore's total electricity demand in 2015. Many of our data centres in China adopt alternative cooling systems, supported by renewable energy. We have brought our expertise in green data centres to Singapore through partnerships with local universities and researchers to develop locally adaptable use cases which will help reduce the carbon footprints of data centres

Wee Siew Kim Group CEO

NIPSEA Group

In light of growing consciousness on the harmful effects of climate change, businesses must recognise that business needs can be balanced with that of the environment to ensure resource efficiency, economic viability and social impact. Nippon Paint is committed to the quality of its products, and with that lies an inherent need of a balanced and collaborative approach to going green. We introduced new technologies to develop "green" coatings and are in the process of upgrading existing production plants to keep on par with existing environmental standards, and also improve the environmental sustainability of our offerings. Consistent action to mitigate climate change would protect businesses against unravelling past progress and achieve future growth.

Seah Kian Peng

CEO **NTUC FairPrice**

Companies must proactively reduce their carbon footprint by embracing innovative solutions or making changes in operations and processes. Regardless of the approach, every action will have a positive impact. At NTUC FairPrice, sustainability is a key pillar of our CSR framework and consideration in our operations. Beyond adopting eco-friendly initiatives, FairPrice also advocates community involvement and collaboration with strategic partners such as Building and Construction Authority. In fact, many of our stores are Green Mark certified.

Our Plastic Bag Reduction Programme and Food Waste Framework have also significantly raised public awareness and reduced wastage. We also carry biodegradable products and encourage packaging using recycled materials or from sustainable sources. The sustainability journey is an ongoing one and we will continue to improve our processes and together with our community, make a positive impact to our environment. Let us all play our part.

Frankie Chia Managing Partner

BDO LLP

In Budget 2017, the government took firm steps towards addressing climate change by introducing a carbon tax for businesses. While the tax is intended to deter and reduce carbon emissions, we need to avoid the situation of businesses simply passing on the carbon tax to their customers as an added cost of business while blaming the government for the increased cost. To address the real problem of climate change, businesses need to seriously reflect on their business processes and resource use to identify elements that contribute to negative climate change. Small measures such as reducing the use of single-use plastics; paperless workflow; using energy-efficient equipment at the workplace, are simple practices which should be implemented as a start.

Thomas Holenia

Henkel Singapore

With energy and climate as one of six focal areas of Henkel's sustainability strategy, our long-term vision is to become a climate-positive company. With the support of our employees who act as Sustainability Ambassadors and in collaboration with various organisations, Henkel Singapore has implemented more than 13 climate actions since 2016. These are categorised under three areas: sharing sustainability knowledge with children through our school project; acting sustainably at our sites; and engaging in corporate volunteering.

Additionally, with sustainability as an integral part of Henkel's sourcing activities, our Global Supply Chain Hub in Singapore, in collaboration with our Global Supply Chain Headquarters in Amsterdam, has qualified all our strategic global and regional suppliers in Asia-Pacific under the Together for Sustainability initiative. With sustainability as a universal challenge, we believe it is essential for companies to play active roles in promoting collaboration and dialogue with all stakeholders along the entire value-chain.

Jason Hammond Chief Executive Officer

OBE Asia

Businesses are taking significant steps to reduce their climate impact. QBE is carbon-neutral and has set targets to reduce carbon emissions across our global operations. We have joined some of the world's most influential companies in the RE100 initiative, committing to source 100 per cent renewable electricity for our operations by 2025 and to support the transition to a low-carbon economy.

We have committed to phase out all direct insurance services for thermal coal customers by 2030, at the latest. We have zero direct investments in the thermal coal industry, while maintaining a margin of up to 0.5 per cent of total funds under management through indirect invest-

Through our Premiums4Good programme, we also offer customers the option to invest part of their premiums in securities that deliver positive social and environmental outcomes and have a goal to grow this investment to US\$1billion by 2021.

Craig Ellis **Chief Executive Officer**

MSIG Insurance (Singapore)

With the threat of climate change growing every day, businesses will need to take a proactive stance to integrate sustainability into their business operations and long-term growth plans. For insurers, this includes embracing digitalisation and innovation to streamline processes and reduce their carbon footprint and incorporate "green elements" into their product offerings.

There are many environmental issues that we need to tackle, and businesses can choose to contribute towards a cause that ties in closely with their corporate mission. At MSIG, we believe biodiversity conservation is an important link to tackling climate change. To raise public consciousness on the importance of biodiversity, we have recently launched the MSIG Biodiversity Trail. Set within Singapore Botanic Gardens, this interactive and educational trail aims to inspire more people to take actions to care for the environment.

Sunny Verghese Chief Executive Officer Olam International and

Chair, World Business Council for Sustainable Development

At Olam, we have a direct interest in tackling anything that could impact the future of agriculture. But such complex challenges, like climate change, are impossible for any organisation to solve alone. As Chair of the World Business Council For Sustainable Development (WBCSD), I see the benefit of joining with other companies from many other sectors to understand how best to deliver impactful change across multiple inter-dependent areas. So I urge Singaporean business leaders, large and small, to understand how and where your product and services benefit or contribute to climate change, reach out to like-minded organisations for support, and help us reimagine our future.

Dennis Yeo Chief Executive

Cushman & Wakefield, Singapore and Southeast Asia

Air-conditioning plants typically make up 60 per cent of maintenance costs so there is a lot of pressure to optimise air-conditioning performance to reduce energy consumption. Businesses increasingly have the ability to make decisions around energy efficiencies at an earlier stage of a building's lifecycle by analysing the amount of energy that cools facilities 24/7. By accessing data in real time, building owners and operators are able to take corrective actions immediately, to switch energy service providers quickly, and in so doing, have better control over energy usage costs and improve energy efficiencies.

Christopher Wehner Managing Director BMW Asia Pte Ltd

BMW Asia has been actively doing its part to help mitigate climate change by bringing electrified vehicles onto Singapore roads since 2014. We strongly believe electrification is the future, and by 2023, we will have launched 25 electric models globally. We are optimistic that the charging infrastructure in Singapore will continue to develop, thanks to investments by both private and public organisations. In the meantime, we believe plug-in hybrids (PHEVs) to be the best solution to encourage electrified driving with zero local emissions in Singapore. We will continue to expand our portfolio of electrified models in Singapore as battery technology develops and customer demand increases.

Eddie Ang General Manager Lenovo Singapore

While reducing a company's carbon footprint takes time, my experience has shown that implementing a sustainability strategy ultimately helps drive business development.

At Lenovo, energy and resource efficiency is embedded in our operations from manufacturing processes to products - using recycled electronic waste for components of our devices, using more bio-based materials in our packaging, and introducing a more sustainable Low Temperature Solder process to the manufacturing world. These have enabled us to reduce our global greenhouse gas emissions by 32 per cent since 2010 and grow our

Going green is not only cost-efficient, but also inspires our energy-saving innovations, which in turn help our customers make greener choices. I believe that Singapore businesses are in an excellent position to find environmental and business opportunities by making sustainability a priority.

John Chen

Vice President, Asia

To stand out in the current business landscape, companies need to look at ways to create efficient, cost-effective yet sustainable supply chains to meet customer demands while minimising environmental impacts.

CH Robinson tackles this challenge with an asset-light business model – complemented by technology – to help our partners and customers optimise their loads and miles with a more effective use of transportation resources. The sharing of fleets, for instance, helps cut cost and carbon emissions at the same time.

We believe similar strategies to streamline the supply chain, with a focus on conserving valuable resources, are necessary steps towards a more sustainable future of busi-

Terence Yuen Country President BP Singapore

Energy companies like BP are at the forefront and driving the energy transition, but all businesses can find new op portunities. Castrol Lubricants (owned by BP) enhanced its partnership with Borneo Motors in Singapore to become Asia's first carbon-neutral dealership. Working through BP's Target Neutral programme, Borneo Motors understood their carbon footprint, found ways to reduce it and then offset their remaining footprint through BP. BP has also been including a carbon price in internal project evaluations for over 20 years, ensuring commercial and environmental sustainability.

Ian Terry Managing Director, Singapore

It is important for every business to address both waste and greenhouse gas (GhG) emissions to reduce their carbon footprint. Conferences, trade shows and events are a very carbon-efficient way to conduct business face-to-face in a collective forum, compared with travelling to individual meetings, and many event organisers purchase carbon offsets to mitigate the GhG emissions from attendee travel and shipping. The events industry is working hard to reduce waste, by creating less material, using more sustainable materials, and shipping efficiently.

At Freeman, we have a global zero waste goal, with focuses on air, resources, energy, and people. Our Power Down campaign has reduced energy consumption within our company globally by 8 per cent this year. We are dedicated to working with our supply chain to find more sustainable materials, and creating an aftermarket to repurpose PVC, fabric, and vinyl.

Gopi Mirchandani

CEO **NN Investment Partners Singapore**

At NN Investment Partners, our commitment to address ing climate-related risks is reflected in supporting international initiatives. We have signed up to the UN Principles for Responsible Investment and are in the Institutional Investors Group on Climate Change. We are also members of the Climate Action 100+ group.

Engagement and awareness are key to stimulating corporate change. Asset managers like us can play a crucial role in influencing our investee companies. We work collaboratively with other investors to achieve the maximum influence and to pool resourcing and expertise. We also support self-regulatory initiatives like the Task Force on Climate-Related Financial Disclosures and encourage companies to incorporate this into their business plans. We

have developed a set of targets that focus on energy transition and these encourage companies with whom we engage to formulate strategies for a low-carbon future. We expect companies which we invest with to have accountability mechanisms and key indicators relating to climate per-

We also need to walk the talk. We identify and implement green alternatives in our business operations. As a global firm, we have been carbon neutral since 2007 but we still aim to reduce our carbon emissions from direct operations by 3 per cent per year.

Kavita Gandhi **Executive Director**

Sustainable Energy Association of Singapore

Highlighted on the national agenda, climate change has implications for the very survival of Singapore. While the government has introduced many measures including a new carbon tax, businesses themselves need to implement innovative new solutions to manage their energy consumption and incorporate sustainable energy strategies supporting the adoption of clean energy . Now more than ever, driving greater awareness of best practices and progressive technologies that foster sustainability in the energy ecosystem will be the way forward. Having industry platforms and open discussions will increase the decentralisation, decarbonisation, and digitalisation of the energy ecosystem.

Gunian Srivastava Executive VP, Head of Asia Pacific BSH Home Appliances

Businesses have been aligning themselves to efforts that address climate change. However, it is paramount to ensure that these efforts are sustainable beyond surface level. At BSH Home Appliances, the company goes beyond developing energy-efficient home appliances. By adopting the principles of a circular economy, our sustainability strategy now no longer just involves manufacturing and service life but encompasses all areas from production and appliance usage through to recycling. This enables

BSH Home Appliances to offer consumers high-quality

products that are as sustainable and environment-

ally-friendly as possible, so that we can improve consumers' lives worldwide and safeguard our planet. **Munenori Ando**

Epson Singapore At Epson, with sustainability being core to our practices and as part of our commitment to the UN's Sustainable Development Goals, we provide efficient, compact and precision technologies to help our customers and businesses worldwide to reduce the environmental impact of products and services across their life cycles. Businesses should regularly review business practices to reduce energy consumption at the workplace, including in production; reduce waste production in daily operations; and incorporate recycling into business habits, to drive transformation towards a decarbonised future.

John Ng **Chief Executive Officer** YTL PowerSeraya

Businesses, especially those from energy-related sectors, can play their part to mitigate climate change by intensifying efforts in expanding the energy efficiency and environmental benefits of their operations. As an energy provider, we have over the years invested in emissions control equipment and cogeneration technologies to switch to greater use of natural gas. In moving to a low-carbon economy, the industry's focus has also been geared towards employing renewable energy sources such as solar, as well as a push for greater electrification of vehicles.

Companies can also seek to bring about positive change in the community by taking ownership in educating the public to adopt a more sustainable lifestyle. Besides offering green electricity plans to consumers, our electricity retail brand Geneco also aims to educate them on smart electricity usage and working towards zero waste – be it in the way we produce and consume food, or combating the prevalent buy-and-throw-away culture in our society.

Mario Singh

Fullerton Markets

The government of Singapore has reiterated its pledge under the 2015 Paris agreement to cut emissions intensity by 36 per cent (from 2005 levels) by 2030, with the aim of peaking around then.

With carbon emissions making up about 97 per cent of our total greenhouse gas emissions, there are three things businesses in Singapore can do to play a part in reducing our collective carbon footprint. Firstly, greater adoption of solar energy. The current carbon tax on 30 to 40 of the biggest local carbon emitters would also act as a push factor for resource companies to consider adopting solar energy.

Secondly, transport. Businesses and companies can help to reduce or avoid long flights for their business needs and find workaround solutions that can still meet their collective business objectives. Finally, food and beverage companies can create greater awareness for the public on cutting down meat in their diet; and consider vegetarian meals more often.

Jayaprakash Jagateesan **Chief Executive Officer RHT Holdings Pte Ltd**

Just as the government has done, businesses in Singapore need to get creative in their efforts to reduce their carbon footprint and help mitigate climate change. Bold and innovative ideas will have significant potential to deliver the right impact.

As a fintech and financial services focused company, we see opportunities in emerging platforms to transform the way companies manage their carbon footprint. We are working with AirCarbon, a blockchain-based trading platform, to set up a carbon exchange for companies to trade and manage their carbon liabilities under market-based mechanisms. The practice has been gaining momentum overseas, especially in the transportation industry, and we believe it can have wider application for green growth.

Magesvaran Suranjan

President, Asia Pacific, Middle East and Africa **Procter & Gamble**

Climate change is a global issue that is already impacting our communities and environment across the globe significantly. At P&G, we feel a strong sense of responsibility to enable a positive impact on the environment while creating value for our consumers. We are looking at our entire value chain to identify new ways to reduce our carbon footprint and help mitigate climate change. As part of our sustainable goals Ambition 2030, our focus is on using 100 per cent renewable electricity and cut our greenhouse gas emissions by half as well as achieve a 35 per cent increase in water efficiency.

We are leveraging our innovation capabilities to reduce over one million plastic bottles and eliminate 12 million pounds of CO2. P&G is committed to being a force for good and growth. I also believe that strategic partnerships and collaborations are necessary to make meaningful pro-

J Heinrich Jessen

Chairman

Jebsen & Jessen Pte Ltd

We have been carbon-neutral since 2011. We achieved this by investing into footprint-reducing processes and then purchasing credits to offset the remaining emissions. But when it comes to sustainability, it is not rewarding to be "the first" or "the only". To make carbon neutrality a mainstream business objective, governments can help by offering incentives and removing disincentives; companies can help by



BT FILE PHOTO

measuring their carbon footprint and setting targets to neutralise it; buyers can help by making low carbon intensity a key purchasing criterion. Only then can we hope to get the critical mass necessary to make a real difference.

Axel Berkling

Executive Vice-President KONE Asia Pacific

For organisations to make sustainability a priority, it needs to be part of the business agenda. Every business decision made needs to factor in its impact on the environment, including the processes and raw materials used by external partners and vendors because driving sustainable change is a collective process.

At KONE, our Environmental Excellence programme supports the transformation of the built environment into smart eco-cities, low-carbon communities, and net zero energy buildings. Our constant focus on sustainable innovation ensures our solutions enhance performance while reducing energy usage for our customers. Improving resource efficiency is one of our top priorities, as we aim to reduce our carbon footprint relative to sales by at least 3 per cent annually.

Rufino Tiam-Lee Chief Executive Officer Monde Nissin Singapore Pte Ltd

Worldwide, livestock accounts for 14.5 per cent of human-induced greenhouse gas emissions. If no action is taken to reduce this, the sector could be responsible for about 80 per cent of the allowable greenhouse gas budget by 2050. Businesses can do their part by offering more meat-free options at corporate events and in staff canteens, whilst food establishments can creatively incorporate meat-free ingredients in their dishes. With just one meat-free meal replacement, an individual can save carbon emission equivalent of boiling 388 kettles, and personal usage of water for eight days. Monde Nissin is committed to collaborating with businesses to provide meat-free meal solutions that alleviate these climate

Prakash Govindan

Gradiant Corporation

An effective approach for businesses and countries to reduce their carbon footprint is to adopt the circular economy. Applied holistically, this strategy – encompassing all vital natural resources (such as water, energy, land etc) - is needed to effectively mitigate the alarming rate at which climate change is occurring. Whilst some might view environmental policies as a threat to competitiveness, implementing circular economy standards can be a cost-saving opportunity. For instance, businesses can both reduce their environmental impact and their costs by implementing water treatment technologies capable of recycling wastewater into usable resources, reducing reliance on natural resources.

Tony Lombardo Chief Executive Officer of Asia

Lendlease

As businesses, we should be striving to reduce our carbon footprint. At our flagship development at Barangaroo in Sydney, we achieved a carbon-neutral outcome for the whole development. All the buildings at Paya Lebar Quarter have achieved BCA Green Mark, and the office buildings and mall are the first in Singapore to achieve the BCA Green Mark for Non-Residential Buildings 2015.

A key principle at Lendlease is to leave a positive legacy for future generations. Our focus is on creating resilient places and communities to minimise the impact on the environment by integrating sustainability into every part of our business. We have aligned to recommendations from the Task Force on Climate-related Financial Disclosures and are a signatory to the United Nations Global Compact; analysis has commenced on the impact of different climate scenarios on our business strategy going forward. 100 per cent of our development pipeline has achieved or targeting a green certification.

Peter Zaman Managing Partner

Reed Smith

For most businesses, the most overwhelming source of carbon emissions is energy consumption and any efforts to reduce this will help. This includes good lighting practices (use of energy-efficient bulbs and turning off lights when not needed), ensuring office equipment is not kept running unnecessarily (shutting down computers at night rather than leaving them on standby), and reducing energy wastage for cooling (turning down the air conditioning and ensuring it doesn't run unnecessarily). Other steps can include reduction of waste (going paperless or printing double sided), increased recycling and considerate practices (reduced plastic bag and take-away cup usage), avoidance of unnecessary work travel by car or plane and, for businesses with large supply chains, adopting sustainable procurement policies.

Paul Henaghan Senior VP, Data Centre Solutions, APJ **Dell Technologies**

Climate change is an issue that affects everyone in Singapore, and it is essential for all to take steps to embed sustainability and ethical practices whenever possible to help reduce the world's carbon footprint. For instance, organisations in Singapore can explore ways to reduce energy use directly or indirectly. At Dell Technologies, we have reduced the energy intensity of our product portfolio by 64 per cent since our FY2012, constantly innovating to improve our products to be more efficient and consume less power. Another way to mitigate climate change is to reuse materials in a bid to reduce production. Dell has reused

over a hundred million pounds of recycled content and sustainable materials in our products. Our social impact vision aims to address challenges facing the world and businesses by 2030, with a dedicated focus and commitment to advance sustainability. Organisations need to think creatively and reinvent ways of working and living to ensure that that our activities have zero or minimal impact on the environment for years to come

Lee Fook Chiew Chief Executive Officer

Institute of Singapore Chartered Accountants (ISCA)

The introduction of carbon tax with effect from Jan 1, 2019 is an important step in combating climate change. With this, businesses will be more mindful of their carbon footprint. To have an even more meaningful impact, businesses could go beyond meeting regulatory requirements and consider the carbon emissions of their supply chains in their procurement decisions. This would incentivise their vendors to reduce their carbon footprint. With greater societal expectations on companies to adopt sustainable practices, businesses that adopt sustainable, environmentally-friendly practices and communicate their sustainability efforts to stakeholders may gain a competitive advantage.

Ben Lim Co-CEO

The SHADO Group

The answer to a low-carbon future will not necessarily come from top-down government initiatives, but from local businesses and SMEs. In the electric vehicle space. rather than have the government build and install electric charging stations, we should allow fleet owners (ie logistics companies, delivery firms, etc) to own and install their own charging points. This will allow them to charge their own fleets and other companies' vehicles, allowing them to generate revenue. This will encourage the expansion of an electric charging infrastructure.

This, combined with low voltage ultracapacitor battery technology which charges in minutes - the type SHADO Group have recently launched in India - will drive electric vehicle adoption among businesses. Once the consumer starts seeing more and more electric vehicles and charging points on the streets of Singapore, then mass adoption will soon follow. The key is in empowering businesses and allowing them to generate revenue and profit from going green, rather than forcing them to adopt costly, loss-making initiatives.

Jimmy Yam VP of Sales, East Asia

Eaton

Digitalisation has brought about many benefits for businesses, but at a potential cost to our environment. Data centres, for example, are projected to consume up to 12 per cent of Singapore's total energy demand by 2030. As more businesses go digital, the focus should not solely be on deploying the most sophisticated and high-performing technologies, but also assessing the environmental impact of these next-generation systems. Greener options are already available in the market in the form of advanced energy storage systems and other technologies that allow us to use renewables more efficiently. By implementing sustainable power infrastructures for IT, businesses can be part of the solution, not the cause of global climate shifts.

Dileep Nair Independent Director

Thakral Corporation Limited

As a low-lying island nation, climate change is an existential threat to us. All segments of society must address it. For businesses, tackling climate change actually makes business sense. Boards should steer their companies' efforts to reduce their carbon footprint. For a start, a company's carbon footprint should be measured. Here, a consultancy grant or tax write-off from Government would be an incentive. An action plan to reduce the footprint should then be worked out. This should involve, amongst other things, using less energy in-house; having more bio-degradable material in the production system; designing more energy-efficient logistics systems; and even encour aging suppliers to be more mindful of their carbon footprint. This effort should mesh with the sustainability reporting that has been mandated by SGX. By setting out targets for carbon emission reduction in the sustainability report, companies will be motivated to act responsibly and thus do their part in mitigating climate change.

Leck Chet Lam Managing Director Experia Events

Businesses can take simple and practical steps such as relying on natural light from windows, or switching off lights when they are not in use. However, while top-down policies do play a part in mitigating climate change, its impact is limited. If businesses intentionally cultivate a green consciousness and culture within its organisation, to the extent that employees instinctively seek out green options because caring for our environment has become second nature, this is where we can make the biggest contribution to help mitigate climate change. It does take all of us to play our part in reducing the carbon footprint.

> The full list of views from CEOs is available at http://businesstimes.com.sg