

# Zero-ing in on emissions

Sustainability and climate change advocates break down what a credible plan to reduce and eliminate carbon emissions should entail, the approaches companies should take and the pitfalls to avoid

BY *Sreerema Banoo*

**I**N response to climate change, an increasing number of countries and corporations have made “net zero” carbon emissions commitments and set deadlines ranging from 2030 to 2050. Datin Seri Sunita Rajakumar, founder of the Malaysian chapter of the World Economic Forum’s Climate Governance (CGM), says decarbonising the economy has gathered significant momentum in the last 12 to 18 months, particularly in the run-up to the 2021 UN Climate Change Conference, also known as COP26, which was held in Glasgow from Oct 31 to Nov 12.

Under the 2015 Paris Agreement, almost every country on the planet agreed to limit the rise in global average temperature to well below 2°C, ideally to a ceiling of 1.5°C, to avoid the worst impacts of climate change.

But as the Intergovernmental Panel on Climate Change (IPCC) climate report released in August shows, human activity has already heated up the world by about 1.1°C. What’s more, the authors of the report believe that based on current emissions trends, 1.5°C of warming will be reached by 2040 or earlier if emissions are not reduced in the next few years. At 1.5°C of global warming, there will be an increase in heatwaves, longer warm seasons and shorter cold seasons. At 2°C of global warming, heat extremes would more often reach critical tolerance thresholds for agriculture and health, the report shows.

“There is increased awareness of the financial risks arising from climate risks, a realisation that the cumulative impact of all NDCs (Nationally Determined Contributions) would still lead to warming well above that agreed on in Paris, that adaptation measures are gravely insufficient in many regions, and that anticipated technologies to decarbonise are still not available at scale,” says Sunita.

NDCs are national climate plans highlighting climate actions, including climate-related targets, policies and measures governments aim to implement in response to climate change and as a contribution to global climate action. Malaysia’s NDC is to reduce the greenhouse gas emissions intensity per unit of GDP by 45% in 2030, from 2005 levels, and, as recently announced by Prime Minister Datuk Seri Ismail Sabri Yaakob during the tabling of the 12th Malaysia Plan, to achieve carbon neutrality as early as 2050.

According to KPMG International’s Net Zero Readiness Index (NZRI), Malaysia ranked No 21 out of the top 25 countries in the race to net zero based on progress to date and established initiatives. (The NZRI is a tool that compares the progress of 32 countries in reducing the greenhouse gas emissions that cause climate change, and assesses their preparedness and ability to achieve net zero emissions of these gases by 2050.)

## Pressure from regulators and stakeholders

According to the KPMG 2021 CEO Outlook survey, 70% of CEOs in Asia-Pacific said they faced increased demand from stakeholders for more reporting and transparency on ESG issues, with pressures predominantly coming from institutional investors (57%) and regulators (31%).

KPMG Malaysia head of sustainability Kasturi Nathan says Bank Negara Malaysia is strengthening regulatory and supervisory expectations for managing climate risks. “Initiatives have been introduced, such as expectations for financial institutions to improve disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The Climate Change and Principle-based Taxonomy (CCPT) Guidance Document was issued on April 15, 2021, to provide a framework on the climate impact of economic activities and support the transition of economic activities to contribute to climate change objectives.

“Such requirements will impact not just operations within financial institutions but will directly impact all companies regardless of industry that have dealings with them,” says Kasturi.

Komathi Mariyappan, head of advisory and consultancy (climate action group) at the Malaysian Green Technology and Climate Change Corporation (MGTC), says a few



companies in Malaysia have announced net zero targets, including Petroliam Nasional Bhd (Petronas) and Tenaga Nasional Bhd. “DHL Malaysia has pledged its commitment to reduce logistics-related emissions from its fleet, following the announcement of DHL Group on a net zero emissions target,” she says. As the implementation agency under the purview of the Ministry of Environment and Water, MGTC offers support to businesses to formulate corporate strategies and plans to work towards carbon neutrality or net zero.

The conversation on net zero emissions isn’t just confined to large organisations; small and medium enterprises (SMEs), which make up about 90% of global businesses, also need to address their emissions.

Phang Oy Cheng, executive director (sustainability advisory) at KPMG Malaysia, says a key driver of net zero initiatives for SMEs is cost-cutting to improve profit margins. “Cost reduction can be achieved by implementing measures such as using smart meters and energy-efficient lighting systems, adopting energy management practices and waste management. SMEs can also introduce new product designs with a smaller carbon footprint, revise product packaging and engage local suppliers. Switching to low-carbon practices also fulfils customers’ expectations of ‘going green’.

“Increasingly, large companies are expecting to reduce emissions across the value chain, hence SMEs would be expected to start measuring and monitoring emissions in order to remain competitive, and consider sustainable supplier assessment processes introduced by public-listed companies (PLCs) and multinational corporations (MNCs).”

Komathi says to ensure that SMEs have the financing and technologies they need to be part of the climate action initiative, a greater level of cooperation among PLCs and MNCs is required. Education and raising of awareness are also critical. Sunita discloses that CGM is collaborating with the Companies Commission of Malaysia and HSBC to run a series of webinars specifically designed for SMEs to understand climate risks, the urgency of the transition and ensuring sufficient adaptation plans.

What’s driving more and more companies towards net zero commitments is also linked to the rising trend of ESG (environmental, social and governance) practices and sustainable investing. Phang says the KPMG 2021 CEO Outlook survey found that 81% of CEOs in Asia-Pacific stated that their organisation’s digital and ESG strategic investments are inextricably linked.

“Research also suggests that companies that exhibit higher levels of carbon transparency outperform their peers on shareholder return. It is unclear whether transparency simply reflects good management or whether investors are placing a premium on companies they see as well positioned to compete in a net zero world, or both,” she adds.

### ‘The devil is in the details’

In coming up with a credible net zero plan, Kasturi says, “The devil is in the details.” Management, for instance, needs to understand the company’s exposure to both types of climate-related risks. “Consider physical risks resulting from changing climate — for example, more frequent and severe storms, wildfires and rising sea levels — and transitional risks arising from the global shift to a net zero economy, for example, new regulations and changing market dynamics.

“Then develop scenario analysis to map potential risk in your value chain using a combination of various recognised and respected scenarios developed by credible sources such as the IPCC, the International Energy Agency or the International Renewable Energy Association (Irena),” she says.

Companies, she adds, need to develop a robust climate resilience strategy for the short to long term for operations and product portfolios, taking into consideration the different scenarios that could pan out in the future. The road map should also be communicated company-wide.

She points to the importance of reviewing and adapting investment strategies that reduce exposure to climate-related risks. “Use an internal carbon price or ‘shadow price’.

Investors may view the use of an internal carbon price as a sign that a company is well prepared to navigate net zero transition and this is especially important in high-carbon sectors such as oil and gas, metals, minerals and mining, and electric utilities, which are particularly exposed to carbon reduction policies and external carbon pricing,” she says.

Equally crucial is the monitoring and periodic reporting of net zero plans. “Credibility is key to maintaining or increasing investor confidence. Reporting should clearly communicate whether the company is on track to meet its decarbonisation targets or is open about any dilemmas and challenges that have hindered progress. A lack of transparency can have the opposite effect by diminishing investor confidence,” says Kasturi.

Although only 10% of large companies currently issue a standalone report on climate risk, KPMG expects this trend to grow in tandem with increasing investor expectation and mandatory reporting regulation around the world.

### Address indirect emissions

Any credible climate plan needs to address the company's indirect emissions, those that fall under scope 3. (The Greenhouse Gas Protocol Corporate Standard classifies a company's greenhouse gas emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions — not included in scope 2 — that occur in the value chain of the reporting company, including both upstream and downstream emissions.)

Komathi reckons that addressing scope 3 emissions is where the greatest impact can be achieved. "For many businesses, scope 3 emissions account for more than 70% of their carbon footprint. For example, for a manufacturer, significant carbon emissions may be associated with the extraction, transport and processing of raw materials. The challenges lie in the fact that businesses tend to have less control over scope 3 emissions, and the data is often not readily available or easy to measure," she points out.

But that does not mean businesses do not have a responsibility to influence their supply chain. EY, in a report published in August, points out that supply chains are a key area of ESG focus because they are a large source of emissions for companies and account for a large percentage of operating costs, and are also susceptible to the risks inherent in climate change, such



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as natural disasters and rising temperatures. The report, "Why supply chains are the next big opportunity for business", recommends that businesses rethink how they engage with their suppliers.

"Collaboration across the value chain is vital for meeting goals and commitments. Companies should feel empowered to demand data-based targets from their suppliers, rather than merely asking them to reduce emissions. Consider adding different criteria to your scorecards for suppliers and third-party logistics providers with those goals in mind," say the authors of the report.

Businesses can also make a large impact on reducing emissions by scrutinising the full life cycle of their products, from product design to packaging design, and even in the way the end-consumer uses the product. "Through a full life-cycle view, you can drive positive change through adapting what raw materials you use, which suppliers you rely on, and when and where manufacturing can take place, with the effects of climate change in mind from the beginning," says the report.

It adds that by adopting the circular economy business model, products can be designed to have a second

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life or else be repurposed. Quoting the Circularity Gap Report 2021, EY says circular economy strategies have the potential to cut emissions by 39%.

### **Zero hour and pitfalls to avoid**

CGM’s Sunita says although the common interpretation of the Paris Agreement is net zero by 2050, “there is also significant consensus that we need to halve our emissions by 2030, which is only eight years away. So, while some targets might be on the basis of emissions intensity, for example, as a proportion of GDP or investments, we still need to be laser-focused on reducing absolute emissions”.

Friends of the Earth International (FOEI), the world’s largest grassroots environmental network with 73 member groups and over two million members and supporters around the world, says in a February 2021 report that getting to zero emissions is not all that matters. “When the focus is only on the flows of carbon — carbon emitted and carbon removed — the cumulative nature of carbon dioxide

is hidden. CO2 remains in the atmosphere for hundreds to thousands of years, so any imbalance of additions over removals adds to atmospheric concentrations, which will persist,” says the report.

So, the time frame over which net zero strategies are pursued is extremely consequential because if the balance between emissions and removals is only achieved by 2050, for example, then a huge amount of additional greenhouse gases will have been added every year until that time and that same amount would then need to be removed to keep the temperature rise below 1.5°C.

The journey to net zero emissions is riddled with potential pitfalls. S&P Global, in a thought leadership piece earlier this year, said challenges include agreeing on a formal definition of the term, ramping up global financing and infrastructure investments, and ensuring green technology advancements occur and their costs are reduced or subsidised to enable a rapid shift away from carbon-emitting fossil fuels.

KPMG’s Phang says the exclusion of scope 3 emissions through selective measurement or reporting is another pitfall companies should avoid. “[If they do so,] companies will not be able to understand the actual footprint of their own operations and risk ignoring the emissions component that is contributing to the highest footprint.”

MGTC’s Komathi points out that while more and more companies are making climate pledges and publishing their net zero commitments, interim plans cannot be overlooked. “Setting long-term carbon targets without interim goals or a plan to realise them may turn out to be little more than greenwashing. Cutting emissions is hard work and some may be tempted to take the easy way out by spending money on carbon offsets.”

Sunita agrees, adding that management needs to first consider how it can decarbonise its own footprint before turning its focus to offsetting the deeply entrenched emissions that are hard to reduce or eliminate, and for which there are no technology solutions currently available or where there is a finite remaining life.

“So, the board and management need to be extremely careful in considering the terminal life of its assets, as the inevitable pricing of carbon could result in stranded assets almost immediately and it will be difficult for stewards of the organisation to claim they were not aware of this impending policy pivot [of carbon pricing],” she says.

Petronas, as the first national oil corporation in the region to declare a net zero target, is allocating significant efforts and resources to establish its baseline and set robust decarbonising strategies to future-proof its business, she notes.



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### **The role of the board and investing public**

In determining if a company’s net zero or climate strategy is robust, Komathi says the investing public needs to familiarise itself with the TCFD and Sustainability Accounting Standards Board (SASB) standards, which are increasingly framing the conversation around climate-related disclosures.

“Both sets of standards benefit corporate entities by focusing on climate-related disclosures that are material to investors, and both are relatively simple and straightforward to use and understand. The TCFD standard helps to provide investors with a company’s climate policy and insights into how it identifies and addresses climate-related risks. The SASB, on the other hand, focuses exclusively on the materiality of ESG information, including climate-related data,” she explains.

Company directors and the board need to step up too. Kasturi says the requirements of the TCFD oblige members of the board to demonstrate their oversight of climate-related risks and opportunities, and management to demonstrate their role in assessing and managing climate-related risks and opportunities.

“A company should ensure that all its board members have a basic understanding of climate change, the particular risks and opportunities involved for the business for net zero transition. A company should assess the climate-related knowledge and expertise of its board members in order to identify and fill any gaps. Companies that appoint a board director with specific responsibility for climate change signal to stakeholders that they are well prepared and proactive in terms of their climate change response,” she adds.

Sunita points out that it is reasonable to expect that, since climate change is an existential crisis, boards and management teams and businesses that demonstrate innovative solutions stand to create significant value.

“Best-of-breed boards are stepping up and challenging their management, playing their crucial role as a critical friend, balancing their contributions as a partner to the business and a guardian of the organisation,” she says.

Sunita believes the triple crises of climate, biodiversity and pollution need an “all-of-government and whole-of-society approach”. “The private sector can do much but industry and investors need to have a high degree of confidence in the stated national ambition. When government policy is explicit and relatively predictable, then we can rely on the private sector to act accordingly to enable a smooth transition for businesses and the public alike,” she adds.

Malaysia, she says, which was a carbon-neutral country just 18 years ago, has an opportunity to “punch above our weight class by demonstrating thought leadership in how all of society can come together to make recommendations for simple solutions to manage this existential crisis — that we can drastically reduce our emissions within the next few years if we focus on this goal and put in place adequate checks and balances to monitor progress and incentivise (or penalise) emitters, including individuals”. **E**



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