Star
ESG
ENVIRONMENTAL SOCIAL GOVERNANCE

Getting Ahead Of The Curve

Global trends and macroeconomic factors that influence corporate sustainable strategies >10-12

Is ESG another Washington Consensus?

By DR MOHD AFZANIZAM ABDUL RASHID

THE transition towards greener economy has always been associated with environmental, social and governance (ESG). The trend has gained further momentum as the investing community have shown their commitment to invest based on the ESG principle.

In particular, the institutional investors have increasingly pledged their allegiance to this new way of doing business. As of Sept 30, 2023, there are 5,337 signatories of Principle for Responsible Investment (PRI) of which 734 are asset owners with total assets worth US$121.3 trillion. Most are located in the United States, the United Kingdom and Ireland, France, Germany and Austria with total signatories of 1,064, 846, 408 and 337.

Meanwhile, the number of signatories in China, Japan and the rest of Asia stands at 139, 125 and 266 respectively.

In that sense, the ESG principles have been well embedded among the western countries.

Global race

Interestingly, the amount of greenhouse gas (GHG) emission in the US had peaked in 2001 at 7188.2 million tonne and has progressively been on a declining trend to 5,615.6 million tonne in 2020 before it picked up again to 6,017.4 million tonne in 2022.

Similarly, the GHG emission in the UK had dropped from 872 million tonne in 1970 to 426.6 million tonne in 2022. In the same vein, Germany and France have demonstrated a steady decline in GHG emission from 1,322.1 million tonne and 637.7 million tonne in 1970 to 784.0 million tonne and 430.4 million tonne respectively in 2022.

Meanwhile, the situation in Asia was completely the opposite.

The GHG emission for China and India has accelerated from 2,142.6 million tonne and 817.9 million tonne in 1970 to 15,684.6 million tonne and 3,943.3 million tonne in 2022.

Similar trajectory was also observed in Indonesia, Vietnam, Cambodia, Thailand, Malaysia, Philippines and Singapore.

Obviously, the developed countries have the head start in the global race for lower GHG emissions.

While the intention towards a greener world is noble, there is always pockets of concern that is worth mentioning. To some degree, it felt like a déjà vu when the prevailing ESG euphoria seems to resonate well with the Washington Consensus in 1989.

It was a term that was associated with level of agreement with the International Monetary Fund (IMF), World Bank and US Department of Treasury for reforming the global economy as a result of the collapse of communism back then.

There are 10 economic reforms agenda which includes fiscal discipline, subsidies rationalisation, tax reform, competitive exchange rate, privatisation of state enterprises, trade liberalisation and deregulation among others.

Renowned economist Joseph Stiglitz who is the former World Bank chief economist has shared his critics in his book *Globalization and its Discontent* on how globalisation move was carried out in the 1990's. It has led to the macroeconomic imbalances among the developing economies as there were not enough time for the capacity building to occur and the implementation of the reforms were deemed reckless.

The Asia Financial Crisis in 1997-98 was one of the main highlights as many Asian countries were experiencing an overheating economy as a result of the rapid expansion in investment.

Balancing act

In a grand scheme of things, a move towards embracing the ESG has to be wholesome.

At the current juncture, there has been excessive focus on 'E' while 'S' and 'G' seems not to be getting an equal treatment. Not to mention that lower GHG trajectory among the developed countries would give them the upper hand in a bid to move towards sustainable environment. It will put the developing economies at a disadvantage position as their production activities continue to emit higher GHG.

It appears global capital owners may not keen to invest in this economy if they are not in compliance with the ESG requirement. This might accentuate the degree of economic inequality between the developed and developing countries.

Also, some might see this as a form of protectionist policy as developing countries are being constrained by the set of rules which they are not ready to comply.

As such, it begs the question on how much weight one should assigned for each letter of the ESG. This can be quite theoretical question which will require an empirical study to determine the right weight for each letter. Also, having an independent organisation to rate and score the ESG is a must have ingredient in order to improve the ESG credibility.

Towards a civilised world

At the end of the day, it's about achieving a living standard that covers all areas.

An environment that is clean where everyone could breath a fresh air that can last for many generations.

A harmonious society that can earned a decent income which can support their family and along the way, can help others via philanthropy activities.

Good governance would ensure everyone are on its toes when it comes to assuming any responsibilities.

If it plays out well, then ESG will be a key catalyst to a civilised world.

Dr Mohd Afzanizam Abdul Rashid is currently the chief economist of Bank Muamalat Malaysia Berhad with almost two decades of experience in investment research, economics and capital market. He has served various investment institutions such as Khazanah Nasional Berhad, Employees Provident Fund (EPF) and Malaysian Rating Corporation Berhad as an economist.

ESG in the news

NOV 5

• **Bursa Malaysia** has unveiled its ESG Reporting Platform, which will act as a repository for disclosures conforming to the prescribed format mandated under its enhanced sustainability reporting requirements introduced on Sept 26, 2022.

Bursa Malaysia chief regulatory officer Julian Hashim said the stock exchange is implementing the enhanced sustainability reporting requirements for listed issuers in a phased approach, accompanied by supporting user guides and illustrative toolkits.

• **Bursa Carbon Exchange (BCX)**, a wholly-owned subsidiary of Bursa Malaysia, has signed a memorandum of collaboration (MoC) with Sarawak Energy Bhd, Hydropower Sustainability Alliance (HSA) and the I-REC Standard Foundation. The signing took place during the 28th United Nations Climate Change Conference of Parties (COP28) held in Dubai, United Arab Emirates.

In a statement, Bursa Malaysia said the four-way MoC brings together a collaboration between Malaysian and international organisations in paving the way for the offering of renewable energy certificates on the Bursa Carbon Exchange, Malaysia's voluntary carbon market exchange.

NOV 6

• **Sarawak Premier Tan Sri Abang Johari Tun Openg** says the development of two dedicated undersea cables to Peninsular Malaysia and Singapore to channel its hydropower energy is under discussion in a move to amplify the use of renewable energy.

"We are now discussing with the federal government, but first is the question of whether we have the excess energy.

"At the moment we have excess energy, then we can share with our neighbours. Now we are dealing with Singapore, which has been agreed by both prime ministers (recently)," he told the media after visiting the Malaysia Pavilion at the 28th Conference of Parties (COP28) in Dubai.

NOV 8

• **Mercedes-Benz Malaysia (MBM)** continues to see sustained demand for electric vehicles (EVs) and expects sales to remain robust going forward.

In recent weeks, major automobile manufacturers such as General Motors, Ford Motor, and Tesla have announced that they will pull back their spending on EVs, as demand slows.

Nevertheless, Mercedes-Benz Cars Malaysia chief executive officer and president Amanda Zhang said the group is witnessing a surge in demand for its EVs, with sales reaching 174,500 units worldwide – a 82% increase year-to-date through September.

NOV 18

• **Cypark Resources Bhd** is looking at Sarawak to expand its RE operations via engineering, procurement, construction and commissioning works or asset ownership.

The company currently owns, operates and manages 19 domestic solar PV farms with a total 72MW installed capacity. Cypark expects to expand its solar PV generation to 232MW by end-23.

NOV 20

• **Tenaga Nasional Bhd (TNB)** is poised to forge partnerships with governments, investors and key stakeholders to accelerate responsible energy transition (ET) while addressing the energy trilemma, reflecting its continued unwavering commitment to driving sustainable development initiatives in Asean.

TNB president and chief executive officer Datuk Seri Baharin Din said there is a need for a responsible ET to address the rapidly increasing demand for electricity, and emphasised that TNB is prepared to meet this demand while reducing emissions.

NOV 21

• Sustainable packaging has been gaining traction globally as more companies are adopting eco-friendly solutions.

Kenanga Research believes that Europe is set to be the most attractive marketplace for innovative packaging solutions because of its proactive approach to regulations and standards.

"This growing emphasis on sustainability and increased consumer demand is spurring companies to adopt innovative, eco-friendly packaging solutions in the European market.

"In this context, we believe companies like Thong Guan Industries Bhd can expand its revenue within Europe by leveraging its nano stretch film technology, which aligns with the demand for sustainable packaging."

NOV 22

• **Mega First Corp Bhd** has proposed to acquire 3.38 million ordinary shares, representing a 20% equity interest, in Don Sahong Power Co Ltd (DSPC) for US$85mil or RM396mil.

In a Bursa Malaysia filing, Mega First Corp said it had entered into a share transfer agreement via its subsidiary Mega Ventures Ltd, with vendor and stakeholder EDL-Generation Public Co (EDL-Gen).

"The proposed acquisition will enable Mega First to increase its shareholding in a proven and profitable renewable energy asset," the filing said.

• **Tenaga Nasional Bhd (TNB)** is on track to rebrand and transform the Malaysia Green Attribute Trading System (mGATS) into the country's leading digital marketplace for Renewable Energy Certificates (mREC), with the rebranded mGATS set to launch in the first quarter of 2024.

In a statement, TNB said the Natural Resources, Environment, and Climate Change Ministry and TNB's unit, TNBX Sdn Bhd, had collaborated to upgrade mGATS in response to the surging demand for green electricity, particularly from multinational corporations.

• **Malakoff Corp Bhd** is in the final stages of discussion regarding its waste-to-energy (WtE) plant in Melaka.

TA Research said the WtE plant will be built next to the Sungai Udang sanitary landfill and will have a waste management capacity of 960 tonnes per day as well as installed power capacity of 22.1MW.

NOV 23

• **Maxis Bhd** has collaborated with smart scooter provider Blueshark and the operator of the JomCharge charging network, EV Connection Sdn Bhd (EVC), to provide 4G and 5G network connectivity solutions.

This initiative aims to address the e-mobility needs of both the latter companies, covering their electric vehicle (EV) assets and infrastructure. Maxis inked memoranda of understanding with both Blueshark and EVC at the E-Mobility Asia (EMA) 2023 exhibition, with the aim of accelerating the adoption of e-mobility solutions.

NOV 24

• **RHB Banking Group**, which aims to mobilise RM20bil for sustainable financial services by 2026, is planning a higher allocation for the segment.

Group managing director and group chief executive officer Mohd Rashid Mohamad said allocation for the segment has already reached 99%, and the group is now assessing its next target for 2024 and beyond.

Mohd Rashid said the target had been deliberated internally and the bank would be sharing its future goals with the public by next year.

• **CIMB Group Holdings Bhd** is formalising its 2030 climate target for its palm oil sector portfolio, focusing on sustainable palm oil production.

Concurrently, the group is also raising its commitment towards decarbonisation, establishing a target for its power portfolio, and emphasising a transition towards cleaner, renewable energy sources.

In a statement, CIMB group chief executive officer Datuk Abdul Rahman Ahmad said the bank is pleased to present a strategy on the sectors, the first in Malaysia, and thus solidify its commitment towards nett-zero by 2050.

NOV 27

• **Bank Muamalat Malaysia Bhd chief economist Mohd Afzanizam Abdul Rashid** said carbon tax is one of the mechanisms to encourage businesses and consumers to shift towards an environmentally friendly solution.

He said the tax would be a means to punish the carbon emitter, which then would redirect more resources to build a greener economy.

NOV 28

• **Sime Darby Property Bhd (SDP)** has pledged to achieve nett-zero carbon emissions by 2050, reiterating its dedication to reduce the group's carbon footprint while mitigating the effects of climate change.

SDP aims to reduce scope one and two emissions by 40% by 2030 and has outlined several initiatives to achieve the target, including retrofitting its assets with energy-efficient technology and encouraging employees to adopt energy-conscious behaviours, in addition to transitioning to renewable energy sources to power operations

The group's sustainability general manager Yasmin Rasyid said there are two sets of strategies identified that will get the group ahead of the curve and on its way to meeting its pledge.

NOV 30

• **Tenaga Nasional Bhd's (TNB)** earnings growth over the immediate term looks promising, driven by the establishment of new electricity-intensive data centres in Malaysia.

In addition, the national utility expects the negative fuel margins that impacted its performance in 2023 to completely ease as it enters 2024.

Citing TNB's management comments from a recent briefing, Kenanga Research said TNB has projected total potential demand of 7,000 megawatt (MW) of electricity from data centres by 2035.

DEC 1

• On its environmental, social and governance agenda, CIMB Group Holdings Bhd group chief executive officer Datuk Abdul Rahman Ahmad pointed out that the group aspires to be an Asean sustainability leader.

He noted that in September, CIMB announced that it had more than tripled its sustainable finance target to RM100bil by 2024 under its green, social, sustainable impact products and services framework, from its initial RM30bil target previously announced in 2021.

DEC 4

• A comprehensive policy which provides full su pport to local players is essential to move the national renewable energy (RE) agenda a step further, according to **Citaglobal Bhd.**

Executive chairman and president Tan Sri Mohamad Norza Zakaria said the group is ready to execute new RE-related projects, in line with the framework to be implemented by the government.

• Malaysia's advancements in Islamic finance have provided an important springboard to grow and expand transition and green finance, says **Datuk Abdul Rasheed Ghaffour.**

With a mature Islamic finance ecosystem, dynamic and resilient players, diverse products, and comprehensive enabling infrastructure, Malaysia is well-poised to play an important role in addressing the financing needs of climate challenge, according to the Bank Negara governor.

• In a landmark move towards establishing itself as a key player in the global transition to renewable energy (RE), **Cypark Resources Bhd** has signed a strategic memorandum of understanding (MoU) with Abu Dhabi Future Energy Company PJSC-Masdar, one of the world's largest RE companies.

Letters & opinions

WORLD Soil Day (Dec 5) is an international observance dedicated to raising awareness of the importance of soil as a vital component of the natural environment.

We are starting to realise that everything from micro-organisms living in the soil to larger organisms like grass, are beneficial to not just the environment but also every living person.

Soils around the world are divided into 12 types. Depending on the nature of the soil, different plants, trees and vines grow in it. Important factors contributing to this include the use of chemical fertilisers and polythene products.

Chemical fertilisers destroy the natural fertility of the soil, depleting the nutrients in the soil, killing the beneficial micro-organisms and ultimately making the soil sterile.

Similarly, polythene materials that get buried in the soil don't compost and also prevent rain water from seeping into the soil, further jeopardising its fertility.

Nutrients such as nitrogen, magnesium, sulphur, phosphorus, potassium, iron, manganese, copper, chlorine, molybdenum, zinc and boron are directly available to plants from healthy soil. These are destroyed by chemical fertilisers.

So, we should aim to avoid using chemical fertilisers and polythene materials.

Let's keep the microbes in our Earth's soil alive.

N.V. Subbarow
Consumers Association of Penang Education and Environment Officer

A brighter future for oil palm

Since 2015, Malaysia has taken a global leadership role in continuously implementing sustainable oil palm cultivation and palm oil process innovations.

Malaysia's oil palm industry has grown into one that has a strong competitive edge, based on its progressing efforts to support sustainable palm oil production.

IN 1905, a young Frenchman named Henri Fauconnier arrived in Malaya in search of opportunities for fortune.

Two years later, in 1907, Fauconnier planted some oil palm seeds for its oil at the Tennamaram estate in Batang Berjuntai, Selangor — making it the first commercial oil palm plantation which laid the foundation for Malaysia's palm oil industry development.

Little did Fauconnier know, Malaysia's oil palm industry would go through a boom leading to plantations occupying 5.67 million hectares.

Malaysia exported around 25 million tonnes of palm oil and palm-based products in 2022.

Malaysia's palm oil industry was valued at around RM137bil, contributing 35 billion ringgit to the nation's total gross domestic product (GDP).

Malaysia is currently the second largest producer of palm oil in the world. The country currently accounts for 23% of world palm oil production and 31% of world exports.

Oil palm is a perennial crop, with trees producing economically viable volumes of fresh fruit bunches (FFB) throughout its entire 25-year economic life cycle.

"The oil palm is the most efficient oil-bearing crop in the world, requiring only 0.28 hectares of land to produce one tonne of oil while soybean, sunflower and rapeseed require 2.24, 1.49 and 1.37 hectares, respectively, to produce the same," said MPOC.

These high-yield characteristics of oil palm can be considered a promise for profitable returns, while its superior economic competitiveness sets it apart from other oil bearing crops.

Moving towards nett-zero

Switching to alternative vegetable oils would not reduce the impacts given that other oil bearing crops have much lower yields per hectare than oil palm.

Research shows that oil palm is a zero-waste crop, making the industry in line with the 12th Malaysia Plan (12MP) which outlines plans of a carbon neutral nation by as early as 2050.

Oil palm biomass can be exemplified in palm trunks, empty fruit bunches (EFB), fibre, or shells.

Meanwhile, its wastewater can be classified into palm oil mill effluent (POME) that is generated from the processing of FFB into crude palm oil (CPO).

Palm trunks can be utilised for organic fertiliser, mulching, particleboard, fibreboard, plywood, paper production, and others, while oil palm fruits will produce oil palm fibres, palm kernel shells, and EFB after being harvested and crushed to extract the oils.

Its fibre waste can be used in many things like mulching, furniture, mattress, ropes, and sticks, while shell waste can be used as solid fuels for steam boilers in palm oil mills, and the steam generated is used to run turbines for electricity production.

EFB waste can be made into a renewable biological resource called biofuel, cultivation of straw mushrooms, and animal feed, especially livestock.

Malaysian Oil Palm estate's standard practices uses EFB as organic fertiliser and mulching for their field due to the high moisture volume and rich nutrient content.

The palm kernel cake by-product that is produced after the kernel oil extraction from the mesocarp can be processed into organic fertiliser and animal feed, while the last by-product produced after the processing step in the palm oil mill is called POME.

Biogas — generated from POME via methane capture facilities — can contribute to a substantial amount of energy, especially in areas with no electricity.

Some of the mills are using biogas as their biological energy to run the mill operation. This is a great way to ensure zero waste in palm oil production.

Furthermore, the oil palm leaf extract (OPLE) is rich in antioxidant activity, a finding which a Universiti Putra Malaysia's research had also reported.

Sustainable production practices

The East Asia Forum had once mentioned that Malaysia has a competitive edge over Indonesia based on its progressing efforts to support sustainable palm oil production.

This is because Malaysia took a global leadership role in continuously implementing oil palm cultivation and palm oil process innovations aimed at making palm oil production more sustainable and environmentally friendly.

Malaysia is committed to the United Nations Sustainable Development Goals (UN SDGs) agenda 2030 to drive and attain higher sustainability commitment within the oil palm industry, as reflected in Malaysia's national development blueprint, the 12MP.

In line with the UN SDGs, Malaysia introduced the Malaysian Sustainable Palm Oil (MSPO) certification scheme in 2015, requiring plantations, independent and organised smallholdings, as well as palm oil processing facilities to be certified sustainable.

MSPO, which was made mandatory beginning Jan 1, 2020, addresses critical issues on deforestation; biodiversity loss and conservation of high biodiversity value areas; issues relating to climate change; planting on peatland; fire; haze; greenhouse gases (GHG); employment and work conditions; child and forced labour; communal Native customary rights land and ownership rights as well as employee health.

In 2022, the MSPO standards were revised and streamlined to five principles — management commitment and responsibility; transparency; compliance with legal and other requirements; responsibility to social, health, safety and employment conditions; and environment, natural resources, biodiversity and ecosystem services.

According to MPOC, the MSPO 2022 contains integration of the high conservation value (HCV) approach and states that a comprehensive HCV, environmental, and social impact assessment will be conducted before new plantings or establishments occur. The cut-off date had been set as Dec 31, 2019 — meaning no conversion of natural forest, protected areas, and HCV can take place after the aforementioned date.

These principles form the general requirements of a management system framework, based on the three pillars of sustainability — economic, environmental and social.

Protocol 29 of the International Labour Organisation, an indicator for labours, was also included as part of the MSPO 2022 revision, in addition to the GHG from land-used change and GHG measuring methods.

Other critical requirements added in the MSPO 2022 are the traceability and legality of FFB as well as ethical conduct.

Meanwhile, MSPO 2022 also contains an additional standard requirement to assess conformity for FFB dealers and palm oil traders against the MSPO to ensure all types of dealers under MPOB licensing, including exporters and importers that purchase and sell oil palm products will not change the chemical properties of the materials.

During the International Sustainable Palm Oil Forum 2023, Deputy Prime Minister Datuk Seri Fadillah Yusof, in his keynote address "Sustainable Trade and Responsible Business Practice in a New Global Area", said Malaysia made government-mandated sustainability certification a requirement for its oil palm industry.

At time of writing, the MSPO Trace app shows that the total certified area, which includes certified planted area, infrastructure, buildings, roads and conservation, has reached 6,282,429.88 hectares. From this figure, a total of 5,339,115.13 hectares of planted area of independent smallholders, organised smallholders and plantations has been reached.

A total of 581 entities including mills, refineries and processing facilities, have achieved the MSPO Supply chain certification Standard (MSPO SCCS), as shown in the MSPO Trace app.

The MSPO SCCS covers management requirements and traceability of the production throughout the supply chain from the raw materials to processing and manufacturing of palm oil and palm oil-based products.

Malaysian palm oil biofuel exporters also meet the strict standards of sustainability required by European consumers including being certified by the German International Sustainability and Carbon Certification (ISCC).

Air Selangor

Air Selangor is committed to bring consumers Joy in Every Drop. Discover how we serve the communities, beyond safe and clean treated water.

Boboiboy Join Forces with Air Selangor in Water Conservation Efforts

A meaningful collaboration between BoBoiBoy and Air Selangor since 2021 to promote the importance of protecting our most valuable earth resource - water.

Visit **www.airselangor.com/airselangorxboboiboy/** to catch BoBoiBoy in action, and download the exclusive BoBoiBoy Activity Book and WhatsApp stickers too.

With the support of the public, more than 4,600 families from the B40 communities received basic food necessities through the Box of Hope Programme

The Box of Hope programme is part of Air Selangor's Corporate Social Responsibility (CSR), Sesama Mara initiative that aims to help the B40 community in Selangor, Kuala Lumpur and Putrajaya by providing basic food necessities such as rice, oil, sugar, dry goods and flour.

You can participate through online donation via **www.airselangor.com/boxofhope/**

Discover fun and informative water-related contents on Hydro Hub

Explore our one-stop content platform for all! Discover a variety of articles, videos, and stories that cater to every interest. Whether you're seeking knowledge or edutainment, we've got something for everyone. Dive in and make Hydro Hub your go-to destination for a mix of exciting and enriching content related to water!

Visit *hydrohub.airselangor.com* now

Enjoy Touch 'n Go RM5 Reload PIN

when you **report pipe leaks, pipe bursts, meter leaks or illegal tappings** through the Air Selangor app

Get more information about the Air Selangor Report Leaks Campaign at ***www.airselangor.com/reportleakscampaign***

Step 1
Download Air Selangor app

Step 2
Report pipe leaks, pipe bursts, meter leaks or illegal tappings via Air Selangor app.

Step 3
The first 2,000 valid and completed reports verified by Air Selangor every month throughout the campaign period stand a chance to win Touch 'n Go RM5 Reload PIN.

Step 4
Reload PIN will be sent via SMS after the campaign period.

Joy in Every Drop
www.airselangor.com

*Limited for the first 2,000 valid and completed reports every month throughout the campaign period

Fighting against the current of water loss

Air Selangor's strides in reducing non-revenue water (NRW) gains momentum, saving an average of 12 million cubic metres of water a year

By JESSIE LIM
jessie.lim@thestar.com.my

WATER scarcity is a global concern, and addressing the issue of non-revenue water (NRW) is crucial for an efficient and sustainable water management.

NRW refers to clean and safe-treated water that is lost during the distribution of water supply from the water treatment plant to consumers.

As the largest water services provider in Malaysia, Air Selangor has been taking significant strides in reducing NRW and optimising water distribution to homes – ensuring a reliable water supply to over nine million consumers across Selangor, Kuala Lumpur and Putrajaya.

NRW can be a result of several factors including pipe leaks or bursts, reservoir overflow, faulty or aged meters and water theft, leading to financial losses and resource wastage.

NRW could cause the water supply reserve margin to decrease – compromising the resilience of the water supply system.

Planning and implementation

Since the Selangor state government placed the management of treated water supply under its purview in 2016, Air Selangor made the strategic decision to conduct NRW reduction activities in-house, with full implementation in 2017.

This decision was driven by various factors including holistic policy, cost effectiveness, integration of work across departments, and talent retention within the organisation.

The 2017 in-house programme to reduce NRW encompassed:

> Actively detecting leaks in the main pipe as well as its network of smaller reticulation pipes within the distribution chain.

> Recruitment and development of leak specialists and leak inspectors to implement active leakage control.

> Establishment of new district metering zones (DMZ) by breaking down a large network into smaller, isolated areas. This is followed by the implementation of water pressure management to reduce pipe leaks and pipe bursts.

> Technology intervention:

- pressure transient monitoring system that detects anomalies like rapid pressure surges as well as pipe leaks or pipe bursts;
- permanent leak noise correlating loggers to analyse acoustic signals and automatically pinpoint leak locations within the distribution network;
- intelligent command centre to integrate data from various sensors, allowing real-time decision-making and swift response to leaks or pressure changes.

> Degraded and faulty meter replacement for accurate consumption billing.

> Replacement of ageing and deteriorating pipes.

> Addressing unauthorised or illegal tappings to water supply networks, which can lead to water losses, as well as impact to the integrity of the distribution system and water quality.

Yearly reduction goals

With these strategies, Air Selangor has reduced NRW levels from 33.3% in 2017 to 27.8% in 2022 – at an average reduction of about 1% per year.

While this may seem like a drop in the ocean, 1% actually equates to about 33 million litres per day (MLD) – water that would actually reach about 125,000 people a day.

Furthermore, Air Selangor met the target set by the government under the National NRW Reduction Programme through Approach 2 from 2019 to 2021. The grant was provided to encourage effective and consistent reduction of NRW based on targets set by Suruhanjaya Perkhidmatan Air Negara (SPAN).

A noteworthy milestone for Air Selangor is the number of current pipe burst cases which stood at a mere 4.3 cases per 100km per year, significantly below the international benchmark for pipe burst index (PBI) of 13 cases per 100km per year. Air Selangor's PBI has reduced by more than 70% since 2017.

To curb NRW, Air Selangor has invested as much as RM1.06bil in capex and opex from 2017 to 2022, with RM763mil allocated for the replacement of ageing water pipes.

Air Selangor has also actively consulted with utility experts globally to adopt best practices and conduct benchmarking initiatives, ensuring a comparable standard.

Community engagement

Realising the need to involve the wider community in order to achieve further reduction of NRW, the Leak Reporting Campaign was launched among its consumers and staff to encourage them to report any leaks – from pipe leaks, pipe bursts, meter leaks and suspected illegal tappings – through the new "Report Leaks" feature in the Air Selangor app.

With this feature and campaign, Air Selangor is able to swiftly identify and rectify leaks, thereby reducing water loss and conserving resources.

Since its inception in August 2023, the campaign has generated encouraging consumer leak reports, with over 16,000 cases repaired as of November 2023, signifying not only the effectiveness of the campaign, but also the start of NRW reduction through a collective effort.

In the pipeline

Air Selangor is already refining its strategies to strengthen and elevate ongoing programmes, resonating with its commitment to operational efficiency and service excellence.

There are also plans to double the length of the pipes that will be needed for replacements from 150km to 300km while the Leak Reporting campaign via the mobile app will be extended for continued awareness and participation.

Through all of these and more, Air Selangor has sights set on achieving a reduction in NRW levels to 27.5% by 2025, and a subsequent decrease to 25% by 2030.

Pipe bursts can lead to significant water losses. By promptly addressing and repairing ageing pipes, water utilities can conserve water resources, ensuring that the available water supply is used efficiently.

Ageing and deteriorating pipes are a common source of water leaks. By replacing old and faulty pipes with newer, more durable materials, leaks will be minimised and overall system efficiency will be improved, reducing non-revenue water.

Advanced technologies such as the pressure transient monitoring system detect rapid pressure changes signaling issues like pipe bursts.

Driving for a greener world through sustainable mobility

Toyota is steadfast in reducing our environmental footprint and making a positive societal impact

WE are at a pivotal moment in history where our actions today will reverberate for generations to come.

To avert catastrophic climate change, we need to urgently curtail global greenhouse gas (GHG) emissions, which currently stands at approximately 50 billion tonnes of carbon dioxide equivalent (CO_2eq) per year.

Notably, road transportation contributes a significant 11.9% share of these emissions.

Green mobility seems to be the answer, particularly electric vehicles (EV). They have been dominating conversations and discourse within, and across nations.

EVs first debuted in the 1830s, preceding fossil-fuel counterparts by 50 years. However, the awareness on the consequences of carbon and GHG emissions only came to the fore in the 1980s.

Redefining mobility

It is imperative to combat climate change; however, nations have unique strengths and constraints.

To overcome the differences in more than the 170 countries that it operates in, Toyota recognises the need for a tailored approach, thereby empowering individuals to progress at their own pace.

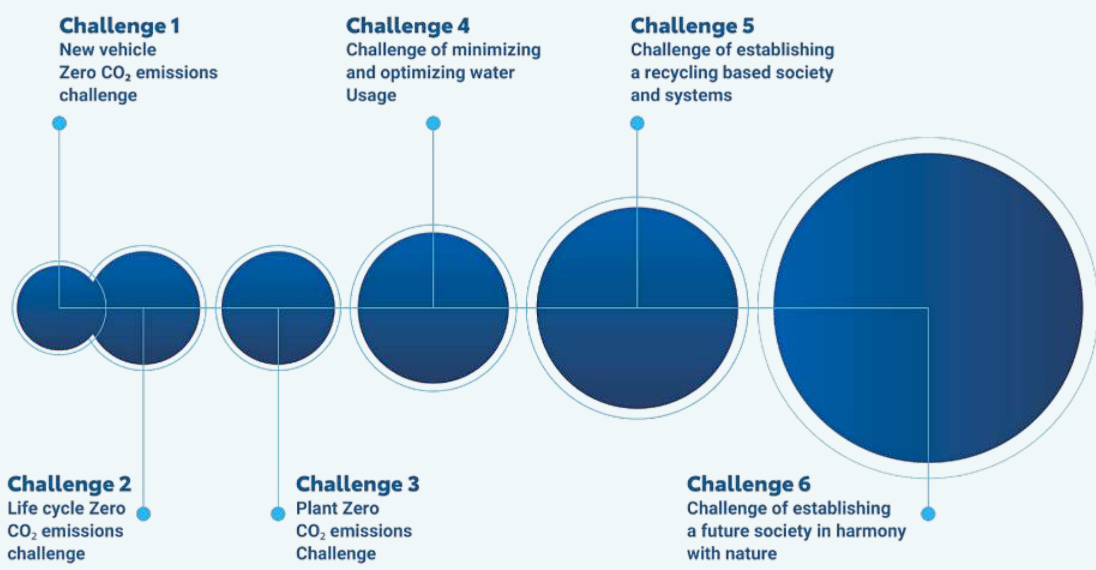
"Toyota is poised for a paradigm shift, evolving into a comprehensive mobility company, which makes us one of the world's most diverse mobility companies.

"Our ambition extends beyond transportation, as we envision an integrated future where connectivity and communities transcend traditional road networks," UMW Toyota Motor Sdn Bhd president Datuk Ravindran K. shares.

Closer to home, UMW Toyota Motor Sdn Bhd redefines mobility as an integral facet of daily life through their Move Your World initiative, completely reimagining how we move and connect with each other.

The initiative is deeply rooted in the company's philosophy; they endeavour to offer not just reduced emissions, but a holistic and sustainable mobility experience in their effort to address critical environmental challenges.

Their goal is not only carbon neutrality but also the realisation of a happier, more connected society where individuals can make choices aligned with their values and lifestyles.



A multi-pathway approach to zero-carbon

The energy that powers our mobility presents one of the greatest challenges in shaping our future.

The journey towards nett-zero carbon has no universal finish line as renewable energy production varies from country to country.

For nations powered entirely by renewables, fully electric mobility is the logical choice, offering a true zero-emissions ecosystem.

In countries still reliant on fossil fuels, hybrid vehicles offer a pragmatic solution. They reduce "dirty" energy consumption while utilising existing fuelling infrastructure, eliminating concerns about range.

Malaysia's National Automotive Policy (NAP) places a strong emphasis on Energy Efficient Vehicles (EEVs). This policy serves as a crucial framework for sustainable mobility, providing a roadmap for the automotive industry, aligning policies with environmental goals.

Toyota is dedicated to supporting and advancing the objectives outlined in the NAP through innovative technologies and sustainable practices.

Toyota also forays into alternative fuels to furnish consumers with a diverse and sustainable array of options, from hydrogen exploration to harnessing synthetic fuels derived from biomass.

The future of mobility lies in offering diverse options and programmes tailored to unique global ecosystems, moving Toyota closer to its Beyond Zero vision. This gives everyone a finish line they can aim for, even if at their own pace.

The Toyota Assembly Services Sdn Bhd (ASSB) Bukit Raja Plant plays a pivotal role in realising this vision.

With an integrated manufacturing complex, it signifies Toyota's commitment to producing sustainable vehicles at scale, aligning with the goals of the NAP.

Toyota Environmental Challenge 2050

In resonance with Malaysia's vision for carbon neutrality by 2050, UMW Toyota Motor Sdn Bhd commits wholeheartedly to multifaceted pathways toward this goal.

Toyota's focus extends beyond the result as they value the journey and the diverse routes leading to a sustainable future.

Their dedication to promoting electrified vehicles align seamlessly with the Toyota Environmental Challenge 2050, going beyond business to show Toyota's promise to people and the planet.

This challenge shows their belief in working together to change how we move and create a better future for everyone.

Datuk Ravindran K.
President,
UMW Toyota Motor Sdn Bhd

The visionary challenges outlined in the Toyota Environmental Challenge 2050 are deeply aligned with the United Nations' Sustainable Development Goals (SDGs), highlighting Toyota's dedication to worldwide progress that knows no boundaries.

Hybrid Electric Vehicles (HEVs)

Having acknowledged the comprehensive life cycle emissions analysis, Hybrid Electric Vehicles has emerged as a pragmatic and cost-effective choice for Malaysians today.

"The success of 40,906 Toyota HEVs sold as of October 2023 attests to the viability of this approach.

"This embodies real-world impact, equivalent to the environmental benefit of preserving 2.4 million trees.

"Moreover, this translates into the commendable decarbonisation of approximately 0.5 million tonnes of CO_2 annually, further emphasising the positive impact of Toyota's endeavours towards a sustainable future," Ravindran points out.

It is no longer about reducing emissions on a grand scale but the tangible and meaningful contributions each HEV owner makes toward a cleaner, greener world.

Moving forward together

While the goal of near-zero carbon emissions is near, Toyota already envisions a future beyond.

Toyota's Beyond Zero programme explores how achieving nett-zero carbon emissions can evolve into carbon-positive outcomes, thereby preserving the planet.

Toyota's global impact is already significant: In 2022, Toyota sold 2.73 million electrified vehicles globally, with 78% of Toyota models offering an electrified option.

Furthermore, Toyota purchased 380,688 megawatthours (MWh) of total renewable electricity in 2023, and in 2021, 93% of waste was recycled, reused, or repurposed.

As the world charges forward into this transformative era, Toyota invites consumers to be integral to this extraordinary journey as they acknowledge each individual's role in shaping the future of mobility.

Moving forward towards a better, more sustainable yet thriving future isn't just a hope but a promise - Toyota, alongside its consumers, is actively taking steps towards this with the belief that not only a mobile and connected, but also greener, safer, and happier world can be achieved together.

Getting ahead of the curve

Future-proofing businesses through corporate sustainable strategies

By StarESG Editorial Team
ESGeditorial@thestar.com.my

AS THE YEAR edges closer to 2024, the countdown towards 2030, and invariable 2050, is on the minds of those concerned with fulfilling the country's nett-zero nationally determined contribution (NDC) set out in the Paris Agreement.

But in a world where the realities of economics and politics had been fractured by the pandemic, a global inflation and two wars that have caused massive repercussions to commodity and energy prices worldwide, attention on ESG-related topics would normally have taken a backseat.

However, the conclusion of the United Nations Framework Convention on Climate Change's 28th meeting of the Conference of Parties (COP) may still renew the focus on ways to move sustainability action forward.

To gauge where our country stands within the ESG landscape, and how current and upcoming issues can affect the way sustainability is practised by businesses, the StarESG editorial team reached out to Deloitte Malaysia chief executive officer Yee Wing Peng, Ernst & Young Consulting Sdn Bhd (EY) Malaysia Climate Change and Sustainability Services (CCaSS) and APAC Decarbonisation Solution leader and partner Arina Kok, KPMG in Malaysia sustainability advisory head Phang Oy Cheng, and PwC Malaysia Asia Pacific Sustainability, Biodiversity director Perpetua George on what to expect in 2024.

Emerging trends against the backdrop of global patterns

Transitioning to green energy: The status report of the recently concluded COP28 saw around 130 countries committing to the Global Renewables and Energy Efficiency Pledge.

Together, they have declared their intent to work collaboratively and expeditiously in the pursuit to triple the world's installed renewable energy (RE) generation capacity to at least 11,000 gigawatt (GW) by 2030, while considering various starting points and circumstances of nations.

They have also committed to collectively double the global average annual rate of energy efficiency improvements from around 2% to more than 4% yearly until 2030, as well as putting the principle of energy efficiency as the "first fuel" at the core of policymaking, planning and major investment decisions.

In that respect, the efforts to green energy are picking up speed, seeing as we only have about seven more years to reach those goals.

Closer to home, the creation of the new Energy Transition and Public Utilities Ministry as part of the recent cabinet reshuffling further underscored the government's focus and efforts on RE.

Experts have opined that green hydrogen is the country's ideal option for clean energy production; in the long run, the country will enjoy the benefits of economies of scale that will exert downward pressure on the overall cost of energy production for businesses, says Yee.

The ability of green hydrogen in decarbonising the country's energy, materials and infrastructure sectors that have been traditionally reliant on fossil fuels is further underscored by the Malaysian Investment Development Authority (Mida).

Yee states that there are also collaborations, especially with private sector players, taking place with promising progress like the partnership between Petronas and Sarawak Energy in the commercial generation and exploration of green hydrogen.

"Public policy shifts such as the lifting of the RE export ban would be a positive move as they would provide competitively priced clean energy for consumers, address energy security concerns, create jobs, diversify export opportunities and accelerate the national energy transition.

"Malaysia is projected to enjoy between RM49bil and RM61bil in additional Gross Domestic Product (GDP) contribution and RM12.1bil in revenue gains from the hydrogen market by 2030.

"The government's proposed Hydrogen Economy Technology Roadmap (HETR) is set to provide 45,000 new job opportunities by 2030 and reduce Malaysia's greenhouse gas (GHG) emissions by 0.4% to 1.3% by 2030," Yee points out.

According to Kok, the six energy transition levers — RE, energy efficiency, bioenergy, hydrogen, carbon capture, utilisation and storage (CCUS) and green mobility including electric vehicles (EV), outlined in the National Energy Transition Roadmap (NETR), are anticipated to experience significant growth in the Malaysian business landscape in 2024.

Further to that are the EV-related provisions made in Budget 2024, announced by Prime Minister Datuk Seri Anwar Ibrahim, to encourage greater adoption of EVs by Malaysians.

"Globally, there is an anticipated growth in the sales of EVs in 2024. For example, with a favourable policy environment, the sales of electric cars and vans in the US are projected to gain momentum throughout the remainder of this decade, ultimately achieving the government's target of 50% by 2030," says Kok.

ESG disclosure and reporting: With rising concerns from investors, banks and customers on businesses' ESG practices, the demand for transparency on ESG performance, target, strategies and value created for customers, employees and broader society will push leaders to embrace critical mindset shifts and deliver beyond profits. Recognising the need for ESG capability development, Budget 2024 also allows tax deduction of up to RM50,000 per year of assessment for ESG-related expenditure conducted under the purview of the Inland Revenue Board of Malaysia.

"We are also seeing an increasing alignment of ESG reporting standards globally and the trend will intensify, reducing the ambiguity and inconsistency that once characterised this field, as harmonised reporting frameworks enable companies to navigate the complex web of expectations by regulations, customers and banks seamlessly while fostering a more equitable global marketplace," Kok points out.

She adds that the Securities Commission Malaysia, with endorsement from the Finance Ministry, has set up a national level Advisory Committee on Sustainability Reporting (ACSR) to support the implementation of the IFRS Sustainability Disclosure Standards (ISSB Standards) in Malaysia.

The ACSR will look into the enablers that would support the implementation of the ISSB Standards in Malaysia including the approach and timeline for implementation, taking into careful consideration market readiness to meet the reporting requirements.

To address reliability of the information and mitigate concerns of greenwashing, the ACSR will also discuss matters related to assurance of sustainability statements.

"Miti will provide a framework to mainstream ESG elements in the development of the manufacturing sector, which will include four main components: ESG standards, financial support and incentives, capacity building and market mechanisms including carbon trading and carbon pricing.

"In October 2023, Miti launched the i-ESG Framework to prepare Malaysia's manufacturing sector for embracing ESG principles and introduced tools like the ESG Readiness Assessment (i-ESGReady) and the i-ESG Starter Kit (i-ESGStart) in Phase 1.0.

"These resources help companies understand and evaluate their current ESG adoption level and provide a step-by-step guide for sustainability reporting," adds Kok.

Echoing similar sentiments is Phang, who points out that the gradual mainstreaming of ESG principles into the daily business management of Malaysian companies has become increasingly evident over the past few years.

This is underscored by the nation's adoption of guidelines such as the Global Reporting Initiative, Task Force on Climate-Related Financial Disclosures, and the International Sustainability Standards Board (ISSB) standards.

Phang highlights that a major trend poised to impact local companies will revolve around the demand for data accuracy, granularity and reliability.

"Investors are now seeking clarity on the nett-zero and decarbonisation initiatives. They're assessing how these strategies impact business sustainability and the required investments in carbon adaptation technologies from an investment standpoint. Hence the need for reliable supporting data is crucial."

Next year will also see a heightened emphasis on corporations in Malaysia to move towards double materiality reporting, wherein both sustainability and financial implications are considered in the ESG risk evaluation, Phang stresses.

"I anticipate a shift towards more comprehensive risk management strategies undertaken by corporations, marked by the increasing integration of ESG risk factors into their business enterprise risk assessments.

"The issuance of the Corporate Sustainability Reporting Directive, Carbon Border Adjustment Mechanism and Corporate Sustainability Due Diligence Directive, will influence how local companies manage crucial aspects such as product carbon footprint, human rights and labour management, sustainability financial management and reporting, as well as assurance processes.

"This will be particularly profound for companies with products imported into the European Union (EU) or those with subsidiaries within the EU," says Phang.

Biodiversity risks: Biodiversity and nature are gaining attention from companies and governments, but many businesses are still figuring out the risks involved, says George.

"Malaysia has a unique biodiversity ecosystem and its dependence on nature and its associated ecosystem services make it among the most vulnerable economies to climate change.

"On a macro scale, the region will be significantly impacted by nature loss, with 54% of Asia Pacific GDP highly or moderately dependent on nature.

"2022 data shows that Bursa Malaysia has US$239bil in market capitalisation for high and moderate nature dependent sectors, which represents 65.3% of Bursa's entire market value.

"Even without direct exposure, businesses may face significant risks in their investments or supply chains. As cited in a Bank Negara Malaysia Report, Malaysia faces a potential 6% loss of GDP by 2030 from the collapse of Malaysia's forestry and fisheries ecosystem services."

George emphasises that it is important to understand the link with nature for managing business risks effectively as it is difficult to do so without first understanding the nature-climate nexus.

"Businesses that understand their relationship with nature can begin developing dual responses and risk mitigation processes such as embedding nature-based solutions into their climate transition plans."

Emerging frameworks such as the Taskforce on Nature-related Financial Disclosures— a market-led and science-based initiative supported by national governments, businesses and financial institutions worldwide— can help businesses navigate this complex issue.

Nature-based solutions and carbon markets are expected to grow in Malaysia given the launch of the Bursa Carbon Exchange (BCX) and appetite for credible and value-added offsets globally among corporates.

The push for businesses to decarbonise as a response to climate change will continue to grow stronger in 2024, George highlights, citing PwC's Net Zero Economy Index 2023 (Asia Pacific edition) that Malaysia's current decarbonisation rate is at 2.5%, far behind what is required to meet NDC's target at 7.2%.

This push is also driven by evolving policy frameworks such as the NETR as well as greater transparency with the introduction of new reporting standards such as the International Sustainability Standards Board's IFRS S1 and IFRS S2.

"If made mandatory, these standards will compel businesses to enhance transparency in sustainability disclosures."

She highlights the growing recognition of the imperative for an inclusive and just transition, taking into consideration workforce needs, supply chain sustainability especially the support needed for micro, small, and medium-sized enterprises to transition, as well as the society and community as a whole.

Efforts to prevent further temperature increases by reducing GHG emissions must continue, coupled with an equal focus on adapting to the climate realities of today, including opportunities for nature-based solutions to help meet climate commitments.

"Preparing for physical climate risks can be a catalyst for companies' innovation and growth. However, Malaysian companies must first form a clear picture of their vulnerabilities and make a plan to manage them," George stresses.

Tailoring Malaysian businesses for sustainability

In light of the rapidly evolving sustainability scene, it is essential for Malaysian businesses to tailor their practices while taking into account macroeconomic factors and the unique context of the country.

Managing the transition: Emphasising that Malaysian companies need to set a solid foundation for high quality carbon emission data, Yee says the foundation of good data is an important prerequisite to ensure players pay their fair share which aids in preventing inequity in taxation.

"Most companies here have just embarked on their climate accounting journey with only a few players tracking their Scope 3 emissions (indirect carbon emissions emitted through upstream and downstream supply chains).

"They should also establish their own market awareness programmes that ensure the business case for transitioning to renewable energy as the key to promote behavioural change and crucial industry buy-in," Yee says.

Digitising the business: Kok calls on businesses to grab the opportunity to enhance their technological infrastructure as well as increase sustainability and competitiveness, given that Budget 2024 will see corporate initial allowance for information and communication technology equipment and software be raised from 20% to 40% starting from YA2024.

"Digitising assets and implementing cloud adoption for efficient storage, easy access, paper waste reduction is one of the sustainable practices that enhances security measures for sensitive materials," says Kok.

She shares that RHB Banking Group (RHB) and Tenaga Nasional Berhad (TNB) have forged a collaboration to expedite the adoption of renewable energy and energy efficiency solutions among small and medium enterprises (SMEs) and individuals.

"With collaboration and sustainability roadshows conducted in major cities, TNB will provide technical advice on energy efficiency and renewable energy solutions, including supplying and installing solar PV systems to SMEs— prioritising RHB's SME customers and TNB's clients and business partners.

"RHB will offer green financing solutions, which comprises financing programmes in SME Green Renewable Energy, SME Green Construction, SME Green Commercial Property, SME Green Working Capital and SME Green Capital Expenditure," says Kok.

Sustainable integration: Phang recommends businesses to pivot towards an integrated sustainability management framework which helps ensure ESG factors are considered from an all-of-business approach (integration into daily business practices, risk and financial management).

"Businesses can begin by thoroughly scrutinising data veracity and verify that all reported data undergo checks and monitoring from the point of generation to its collation and reporting.

> TURN TO PAGE 12

Arina Kok
Malaysia Climate Change and Sustainability Services (CCaSS) and APAC Decarbonisation Solution leader and partner
Ernst & Young

Phang Oy Cheng
Sustainability Advisory head
KPMG in Malaysia

Yee Wing Peng
Chief executive officer
Deloitte Malaysia

Perpetua George
Asia Pacific Sustainability, Biodiversity director
PwC Malaysia

> FROM PAGE 11

"Start looking at the financial reporting of ESG matters and how this can be streamlined to ensure necessary data is available for financial impact analysis and reporting.

"Integrate ESG material matters as well as their financial implications into your business strategies," says Phang.

Long-term planning: George highlights that many companies are at risk of losing out significant long-term financial benefits as they continue to view sustainability and decarbonisation through the short-term lens of regulatory compliance.

She says integrating sustainability into a company's strategy, operating model and processes can lead to huge potential to create value, while protecting value from increasing ESG related risks, such as flooding.

"The workforce is an integral part of this, with key considerations including identifying skills gaps, providing accessible upskilling and reskilling opportunities.

"Doing so builds on the efficiencies of a holistic approach to sustainability rather than addressing each topic in siloes."

She adds that a just transition is critical to include vulnerable communities in the journey towards a lower carbon future, in addition to ensuring benefits and costs of climate action are distributed fairly.

"The Department of Statistics Malaysia had reported that micro-small-to-medium-sized entities (MSMEs) contributed to 48.2% of national employment and made up 97.4% of overall establishments in Malaysia in 2022, making them a crucial part of the country's net zero transition.

"These MSMEs require substantial support to effectively make this transition, an area where larger businesses can step in to help them make necessary adjustments and reduce Scope 3 emissions through their value chain."

George also suggests companies to start investing in nature-based solutions, whereby the power of nature is incorporated into operations. By doing so, it can help in lowering emissions, increase resilience and reduce disaster risk, while providing environmental and social benefits that pay off financially.

"The UN estimates that nature-based solutions have the potential to remove up to 12 gigatons of CO2 equivalent per year, boosting climate resilience and providing an additional US$2.3tril in productive growth to the global economy," says George.

Strategies to successfully navigate evolving ESG trends

As global economics and invariably, politics, impact the livelihoods of businesses, big and small, decision-makers in any enterprise or institution would undoubtedly need to circumvent rising eventualities should they arise.

Being at the forefront of this change, Bursa Malaysia has already rolled out a mandatory ESG reporting platform for listed companies on Dec 4 this year.

In that sense, ESG reporting is encouraged, even for small and medium sized enterprises as their transparency and accountability would make them more attractive for financial assistance.

But as ESG trends are closely affected by macroeconomic factors that can shift significantly according to socio-economic and political factors, as well as the environment, learning how to adapt is crucial.

Competent workforce: Yee points out that companies should develop strong human capital in order to prepare for changing trends in ESG.

"A general lack of human capital has contributed to the relatively higher cost for deployment and maintenance of RE in Malaysia," he elaborates.

He also suggests attracting more advanced players into Malaysia to allow the transfer of technology and knowledge to occur.

This should be further supported by a robust policy to appeal to such players.

He adds that ESG should also be recognised as a C-Suite key performance indicator, given that it is a framework for risk mitigation and a driver of financial success.

"The three dimensions of ESG — environment, social and governance — indicate a company's resilience and the degree to which it is future-proof in the context of growing stakeholder demands for sustainability," Yee explains.

Linking ESG-related key performance indicators to remuneration may include a balanced scorecard, a modifier that brings about multiplier impact or a minimum trigger for bonus or incentives to be paid, commonly known as underpin.

The new normal: Phang points out that Malaysian companies must shift their perspectives on ESG management, recognising it not only as a compliance matter but as an indispensable facet of business management that is a concern of their customers, collaboration partners, regulators and investors.

"Businesses must also ensure the efforts on managing ESG-related risks mirror the attention given to risks related to their organisation and products," she states.

"Emphasising efficiencies and minimising impact should be the core focus."

She reminds that as ESG management has now entered the mainstream, which demands businesses to be cognisant of its significance, the failure to meet its standards can result in substantial business and reputational repercussions.

"It is now very much part of a company's value creation journey, demanding a shift in how it's perceived and treated accordingly."

George reminds that sustainability is a long-term game that when done well, can yield near-term benefits and return on investments.

"Navigating the expansive sustainability landscape, which includes aspects like adaptation, nature risk and circular economy, includes strategically aligning sustainability actions to realise co-benefits.

"Integrating your company's climate adaptation and biodiversity efforts with nett-zero programmes can yield significant advantages."

She gives the example of agroforestry, which is the affordable land management system of planting trees on the same land as crops, resulting in ecological and economic advantages.

As it removes GHG, it also brings adaptive benefits, which include improving water retention and enhancing soil diversity.

Anticipating, adapting to change: In line with the paradigm shift towards ESG, Kok says organisations should prioritise staying informed and adapting to this evolving landscape by closely monitoring local and regional ESG regulations, market trends and stakeholder expectations relevant to their operational context.

"Staying regularly engaged with industry events and ESG networks will ensure organisations are up-to-date and able to adjust their strategies accordingly."

She suggests that a way for companies, especially SMEs, to start their ESG journey is to conduct materiality assessments.

This would identify the most important sustainability issues pertaining to their operations, stakeholders and industry.

"These assessments provide insights into the key ESG risks, benchmarks against competitors and uncover opportunities that impact business performance."

She cites the example that companies exporting carbon-intensive products to the EU started reporting emissions in October 2023 for six sectors: cement, iron and steel, aluminium, fertilisers, electricity, and hydrogen.

"To ensure that Malaysian businesses remain internationally competitive, local exporters must start preparing their operations to manage relevant carbon price regimes, while making certain that goods are produced with greater carbon efficiency," she says.

Kok adds that as the global economy embarks on decarbonisation strategies, Malaysian businesses need to start managing the EU Carbon Border Adjustment Mechanism or any upcoming carbon tax regulation imposed by other trade-partner jurisdictions to remain relevant and competitive.

Actionable accountability: George notes that although many companies have set their nett-zero targets, they are behind on operationalising them.

"They need to take double materiality considerations into account and mobilise every business function towards achieving nett-zero transformation," she says.

"We are at risk of being perceived as greenwashing by the market, if we don't act promptly to realise commitments made."

From production, procurement and finance, to marketing, technology and HR, everyone needs to transform how they operate, process and manage people and resources.

The longer the commitment-action gap persists, the greater the risk of companies being perceived to be engaging in greenwashing practices.

Yee concurs, saying that companies must also be held accountable for their actions and commitments towards sustainability.

He says this included efforts by various private and public organisations to promote transparency, encourage independent verification, and establish clear standards and regulations to prevent misleading or false claims of environmental sustainability.

"Consumers can play a role by educating themselves and scrutinising the sustainability claims made by companies."

George also advises prioritising progress over perfection: "Sustainability is a long term game but done well, can yield near term benefits and return on investments."

"To thrive in an unpredictable environment characterised by constantly evolving standards, regulations, frameworks and expectations, businesses require a shift in mindset — away from expectations of certainty and towards one that embraces a consistent, incremental and fluid approach."

She says this will give organisations the agility and resilience to adapt along the way towards their overall nett-zero goals.

Businesses can traverse the ever-changing ESG landscape with sound strategies while contributing positively to their overall sustainability efforts

Which plastics are recyclable?

PLASTIC packaging plays a significant role in our daily lives, but not all plastics are created equal.

Among them, PET (polyethylene terephthalate) bottles stand out not just for their versatility but for the untapped economic potential they hold. Understanding the significance of recycling PET bottles unlocks opportunities for a sustainable and circular future.

But what type of plastics are we talking about?

Types of plastic packaging

COMMONLY RECYCLED | SOMETIMES RECYCLED

PET (polyethylene terephthalate) bottles
Recyclability: Highly recyclable

Each recycled PET bottle holds untapped economic value, waiting to be transformed into new products. Its versatility lends itself to numerous industries, from textiles to packaging.

HDPE (high-density polyethylene) containers
Recyclability: Widely recyclable

Often found in milk jugs and detergent bottles. Although valuable, their economic potential is not as diverse as PET bottles.

PVC (polyvinyl chloride) packaging
Recyclability: Limited recyclability

Commonly used in pipes and plastic film. Its limited recyclability restricts its economic scope.

LDPE (low-density polyethylene) packaging
Recyclability: Limited recyclability

Typically in plastic bags and plastic wraps. Its economic potential is often hindered due to recycling complexities.

PP (polypropylene) containers
Recyclability: Moderately recyclable

Found in yogurt cups and medicine bottles. While recyclable, their economic potential is less varied compared to PET.

The potential of PET bottles

Since PET bottles are highly recyclable, they offer a clear path towards sustainability. Each recycled PET bottle presents an opportunity for economic growth and resource conservation.

Recycling PET bottles in a closed-loop system contributes to our journey towards a circular economy, reducing waste and fostering a sustainable future.

Join the movement: 'Recycle Me!' campaign

In collaboration with Aeon Malaysia, Hiroyuki Industries, and Trash4Cash, Malaysians can also join Coca-Cola Malaysia's 'Recycle Me!' campaign to win rewards.

To earn your keep with Coca-Cola Malaysia's 'Recycle Me!' campaign, just follow these steps.

1. Gather 10 or more PET bottles and locate a participating Aeon mall.
2. Write your name and phone number on your recyclables to get cash rewards from Trash4Cash.
3. Scan the QR code and register your details on the smart recycle bins.
4. Snap and upload a photo of your recyclables before depositing it into the smart recycle bin.
5. Take a screenshot of your e-voucher and head to the participating Aeon mall's service counter.
6. Show your e-voucher to the staff and fill in the form to receive your rewards.

Here is a list of Aeon malls participating in the 'Recycle Me!' campaign you can visit:

Kuala Lumpur	Aeon Taman Maluri	Aeon Ampang Utara 2
	Aeon Alpha Angle	Aeon Metro Prima
Selangor	Aeon Bukit Tinggi	Aeon Bandar Baru Klang
	Aeon Taman Equine	Aeon Rawang
	Aeon Shah Alam	
Negeri Sembilan	Aeon Seremban 2	Aeon Nilai
Melaka	Aeon Bandaraya Melaka	
Johor	Aeon Permas Jaya	Aeon Tebrau City
	Aeon Bukit Indah	

Remember, recycling PET bottles not only benefits the environment but also fuels our economic growth through resource recovery and reuse.

Your participation in recycling PET bottles contributes to a greener, more sustainable Malaysia.

(From left) Trash4Cash chief executive officer Shafreez Redza Mohd Saiful Anuar, Coca-Cola Malaysia PACS West Franchise Operation director Triyono Prijosoesilo, Aeon Malaysia chief human resources and sustainability officer Dr Kasuma Satria Mat Jadi and Hiroyuki Industries executive director Lionel Choong at the launch of the 'Recycle Me!' campaign. — IZZRAFIQ ALIAS/The Star

Hiroyuki Industries processes PET bottles and turns them into rPET resin to be reintroduced into our supply chain.

Economic potential of recycling plastics

Coca-Cola Malaysia teams up with Aeon Malaysia, Hiroyuki Industries and Trash4Cash for 'Recycle Me!' campaign

Coca-Cola Malaysia PACS West Franchise Operation director Triyono Prijosoesilo said the company's World Without Waste initiative focuses on three key areas: design, collect and partner.

By CHOW ZHI EN
ESGeditorial@thestar.com.my

COCA-COLA Malaysia, in collaboration with Aeon Malaysia, Hiroyuki Industries, and Trash4Cash, has launched the 'Recycle Me!' campaign, an initiative aimed at promoting plastic recycling and the circular economy across various states in Malaysia.

Building on the success of last year's 'Recycling Fantastic' campaign, this new campaign seeks to encourage and reward Malaysians for their efforts in recycling plastic bottles.

Within the context of Malaysia's budding circular economy, the campaign aims to educate the public about the recyclability of different plastic materials and encourage their proper disposal.

Plastics in Malaysia

Commonly recycled plastics include polyethylene terephthalate (PET), which is usually used in beverage bottles; and high-density polyethylene (HDPE), found in containers for household products and packaging.

Additionally, low-density polyethylene (LDPE), used in plastic bags and films, and polypropylene (PP), found in food containers and packaging, are also recyclable to a certain degree.

These plastics can be processed and transformed into new products, reducing the demand for virgin materials and minimising waste generation.

By embracing the recycling of these plastic types, Malaysia is poised to unlock the economic potential of 1.7 million tonnes of discarded plastics, tapping into a potential economic value of US$1.3bil — a figure estimated by the Natural Resources, Environment and Climate Change (NRECC) ministry.

Decoupling economic value from our waste will be crucial in transitioning to a viable circular economy as our municipal solid waste (MSW) generation is estimated at 13 million tonnes annually, with plastic making up 20% of MSW.

To tackle this, the government had made it compulsory for several states to separate their waste at source under the Solid Waste and Public Cleansing Management Act 2007 (Act 672), through the Separation at Source (SAS) initiative back in Sept 2015.

In a report by the Organisation for Economic Co-operation and Development (OECD), "Malaysia has a relatively high rate of waste collection coverage, estimated at approximately 95% of waste."

However, the report also found that while waste separation at source is mandatory through the SAS, "there still appears to be limited traction amongst the public, with one estimate suggesting that less than 50% of plastic waste had been recycled."

The report highlighted that our "plastic waste recycling rate is estimated at 20%, with a higher rate of recycling for high-value plastics (such as HDPE, PET, PP) and no systematic recycling of low-value plastics."

A larger commitment

This 'Recycle Me!' campaign serves as a crucial component of Coca-Cola Malaysia's ongoing commitment to achieving packaging circularity and reducing plastic waste.

In alignment with The Coca-Cola Company World Without Waste strategy, the campaign represents one of its concerted efforts to contribute to the goal of collecting and recycling a bottle or can for each one it sells by 2023.

Scheduled to run from Dec 14 this year to Feb 29 next year, the campaign invites the public to collect PET bottles and receive cash rewards based on their contributions.

For every 10 PET bottles deposited, participants will be eligible for a RM0.10 Trash4Cash buy-back incentive, alongside exclusive Coca-Cola products.

Smart recycle bins

This year's campaign introduces an innovative addition in the form of smart recycle bins, made possible through Coca-Cola Malaysia's partnership with Trash4Cash.

These semi-automated smart recycle bins allow consumers to conveniently deposit PET bottles at any time during the campaign period, reducing the labour costs needed for staff to be present at collection points.

During the official launch on Dec 6, Coca-Cola Malaysia PACS West Franchise Operation director Triyono Prijosoesilo expressed enthusiasm about the campaign, stating: "We're on a mission to collect more empty bottles so we can make new ones.

"The 'Recycle Me!' campaign builds on last year's accomplishments, and we're thrilled to introduce our new partners and expand our reach to involve more communities. Our collaboration with Aeon Malaysia, Hiroyuki Industries, and our new partner Trash4Cash will create more opportunities to educate the public about sorting at the source, and provide them with direct access to return our bottles," he added.

He also said the campaign ties back to the company's role in reducing post-consumption plastic packaging, citing the need to set up the necessary value chain with like-minded partners to enable recycled PET to re-enter the material stream as rPET resin.

"We want to create a more robust ecosystem of collection. We have other partners we work with that provide funding for collection and recycling at the global and regional level," he said.

Triyono also noted that instilling new consumer behaviour is a long-term goal, and one that requires The Coca-Cola Company to be consistent.

"It's not easy to change habits. We've been accustomed to treating plastic typically as single-use so we need to consistently educate and create awareness for consumers."

Aeon Malaysia chief human resources and sustainability officer Dr Kasuma Satria Mat Jadi emphasised their commitment to both environmental and societal aspects.

"We at Aeon Malaysia recognise that our role extends beyond the traditional retail landscape, reaching into the heart of communities we serve. Together, we hope to drive awareness and action among the public about the importance of plastic segregation and recycling, demonstrating the strength that comes from collaboration and collective action," he said.

Meanwhile, Hiroyuki Industries executive director Lionel Choong highlighted the value of plastic recycling.

"Through the Recycle Me! campaign, we aim to educate the public that plastic is not waste; it holds great value if collected and processed appropriately," he said.

Expanding their efforts this year, Coca-Cola Malaysia and its partners are collaborating with 15 Aeon malls across five states, namely Kuala Lumpur, Selangor, Negri Sembilan, Melaka and Johor (refer to list of Aeon Malls participating in the 'Recycle Me!' campaign on page 14).

To simplify the deposit process, participants can now scan the QR code on the smart recycle bins to provide their details.

Organisers will then facilitate the rewarding process, ensuring a seamless and efficient experience for all recyclers.

Trash4Cash chief executive officer Shafreez Redza Mhd Saiful Anuar also emphasised the importance of reintegrating post-consumer packaging into the recycling value chain to reduce packaging waste.

"We believe that sourcing resources is the best solution to the waste problem. The public should understand that some post-consumer packaging has value, so it's important for us to reintegrate it into the recycling value chain," he said.

"Trash4Cash's vision is to help communities give back their post-consumer packaging as a step towards taking better care of our environment."

The 'Recycle Me!' campaign presents an excellent opportunity for Malaysians to actively contribute to sustainable practices and the circular economy while being rewarded for their efforts.

The new 100% recycled plastic PET bottles prominently feature the slogan *Dari Botol Jadi Botol* – signifying the transformative journey each bottle takes to re-enter the supply chain.

Coca-Cola introduces 100% recycled PET bottles for the first time in Malaysia

Coca-Cola Bottlers Malaysia (Malaysia-Singapore-Brunei) public affairs, communications and sustainability (PACS) director Khairul Anwar Ab Gahani (right) and Coca-Cola Malaysia PACS frontline manager Wan Ahmad Syazwan Mohamed announced the nationwide introduction of bottles crafted entirely from 100% recycled polyethylene terephthalate (rPET) plastic.

Coca-Cola Malaysia is making significant stride towards circularity in plastic packaging. On Dec 14, their nationwide launch featured Coca-Cola Original Taste and Coca-Cola Zero Sugar 500ml bottles made from 100% recycled plastic bottles, excluding the caps and labels.

Coca-Cola currently offers at least one brand made from 100% recycled plastic bottles in over 40 countries worldwide, including Indonesia, Myanmar, Vietnam, Thailand, Singapore and now Malaysia.

The launch follows the company's efforts to address the urgent issue of plastic waste and to promote sustainability in Malaysia. These efforts involve various strategic partnerships aimed at enhancing closed-loop circular packaging.

Earlier on Oct 11, Coca-Cola Malaysia, in collaboration with the American Malaysian Chamber Of Commerce (Amcham Malaysia), hosted the Our Future, Our Choice sustainability forum where key stakeholders, including the Natural Resources, Environment and Climate Change (NRECC) Minister Nik Nazmi Nik Ahmad as well as the Malaysian Recycling Alliance (MAREA) were in attendance.

The panel discussed the role of post-consumer packaging in advancing the circular economy, stressing the importance of creating the right ecosystem for collecting and recycling plastics, while ensuring consumers understand the recycling process.

The Coca-Cola Company (Asean and South Pacific) sustainability and partnerships director Kirsten van Zandwijk stated: "Recognising the urgency and complexity of the plastic waste challenge in Malaysia, we acknowledge the collaborative efforts needed to address this issue.

"In line with our commitment to building a circular economy in the country, we are introducing innovative packaging designs like our new 100% recycled plastic bottles. These bottles align with our brand philosophy of *Dari Botol Jadi Botol*, emphasising that every bottle has a second life. We are also expanding collection and recycling programmes and deepening stakeholder and industry partnerships.

"Leveraging the Coca-Cola brand's influence and reach, we actively engage Malaysians in recycling initiatives, encouraging them to embrace the concept that every bottle can transform and contribute to a sustainable future," she added.

This initiative aligns with The Coca-Cola Company's global sustainable packaging strategy, aiming to use at least 50% recycled content in its packaging by 2030 globally.

A transformative journey

During the launch of the 100% recycled plastic bottles on Dec 14 in Kuala Lumpur, Coca-Cola Bottlers Malaysia (Malaysia-Singapore-Brunei) public affairs, communications and sustainability (PACS) director Khairul Anwar Ab Gahani and Coca-Cola Malaysia PACS frontline manager Wan Ahmad Syazwan Mohamed tabled a panel discussion to address key questions of interest.

"Our World Without Waste vision, a strategy to which we've been committed since 2018, demonstrates our dedication to sustainable packaging.

"Recognising the important role of businesses in driving change, we stay focused on improving the collection of post-consumer packaging and are now progressing towards a circular economy," said Wan Ahmad.

He also notes that the recycled PET (rPET) bottles have been well-received in other countries so far.

"When we observe our consumers, particularly those who belong to Gen Z or younger, they are already aware of the environmental and sustainability issues we are addressing. Moreover, the recycled PET (rPET) bottles have been well-received in other countries so far," he said," he said.

Khairul Anwar added: "Our aim is to persistently use recycled materials, contributing significantly to Malaysia's environmental goals.

"Through active involvement in sustainable practices and promotion of the circular economy, we aim to make lasting contributions towards a more sustainable future."

Khairul Anwar also stated that the launch of the bottles is an important step towards reducing carbon emissions and reducing reliance on virgin resources.

"Essentially, we want to ensure that our products don't end up on a beach somewhere. Instead, we aim to have our products collected and recycled by our partners to be reused as packaging materials in the future," he said.

Coca-Cola Malaysia officially announce the nationwide introduction of bottles crafted entirely from rPET plastic following their Recycle Me! campaign.

(From right) Khairul Anwar Ab Gahani and Wan Ahmad Syazwan Mohamed (centre) held a panel discussion on the new Coca-Cola rPET bottles.

The 100% recycled PET plastic bottles (excluding the cap and labels) maintain the high-quality consumers expect, adhering to The Coca-Cola Company's stringent global standards for food-grade, 100% recycled plastic bottle packaging.

Together with its bottling arms, Coca-Cola Bottlers (Malaysia) Sdn Bhd, Coca-Cola is driving innovations in packaging and enhancing collection recycling capacity in Malaysia.

The 100% recycled plastic bottles undergo local processing and manufacturing in the Coca-Cola bottling plant at Bandar Enstek in Negri Sembilan, proudly symbolising their Malaysian origin.

This commitment echoes Coca-Cola's dedication to sustainability, reflecting that these bottles are "made in Malaysia, by Malaysians, for Malaysians."

The bottles prominently feature the slogan *Dari Botol Jadi Botol*, signifying the transformative journey each bottle takes.

Coca-Cola Malaysia 'Recycle Me!' campaign

Prior to the launch of the 100% rPET Bottles, Coca-Cola Malaysia once again initiated its Recycle Me! campaign for the second consecutive year, aiming to raise awareness and drive action regarding the importance of plastic segregation and recycling.

The sustainability initiative, in collaboration with Aeon Malaysia, Hiroyuki Industries and Trash4Cash, intends to promote public awareness around the value of recycling.

Consumers are encouraged to collect PET bottles in exchange for cash rewards based on their contributions. For every 10 bottles deposited, participants are eligible for a RM0.10 Trash4Cash buy-back incentive, complemented by Coca-Cola products.

Consumers can now scan the QR code on the smart recycle bin to provide their details, facilitating a seamless and efficient experience for all participants.

This year, Coca-Cola Malaysia and its partners are expanding their efforts to 15 Aeon malls across five states – Kuala Lumpur, Selangor, Negri Sembilan, Melaka and Johor.

Collected bottles are then transported to the leading recycler, Hiroyuki Industries, where they undergo a process to be transformed into another bottle at a later stage.

For more information about sustainability initiatives and future announcements from Coca-Cola Malaysia, please visit its Facebook and Instagram pages, or check out the Coca-Cola Malaysia website.

The slogan *Dari Botol Jadi Botol* is in reference to the process of creating the rPET bottles — from collection to shredding to remodeling into new bottles.

Consumers can now look forward to recycling their used bottles and even take part in the Recycle Me! campaign to earn rewards and more.

Overview and evolution of corporate governance challenges in Malaysia

Corporate governance: an ESG perspective

By SIMON YEOH

This is the conclusion of a three-part discourse on governance.

AS A result of a spate of climate-induced disasters last year, there was much emphasis on ESG (Environmental, Social and Governance).

For example, for the financial sector, the Securities Commission unveiled the principles-based Sustainable and Responsible Investment Taxonomy (SRI Taxonomy) for the Malaysian capital market in December last year.

It also issued the Climate Data Catalogue, which contains climate and environmental data. It is likely that in the years ahead, ESG will gain even more importance and will impact investment portfolios.

The Malaysian Code on Corporate Governance (MCCG) 2021 also introduced ESG measures that are in line with global regulatory trends for listed companies to adopt.

The revamped MCCG 2021 emphasises the need for corporate boards to integrate sustainability considerations in their decision-making in relation to formulating corporate strategy and governance.

The board is expected to address material ESG risks for long-term sustainability and work on a company's sustainability strategies, priorities and targets, to be communicated to its stakeholders.]

Commencing financial year ending 2023, Malaysian public -listed companies will need to comply with Bursa Malaysia's enhanced sustainability reporting requirements.

Apart from the above, Bursa Malaysia released the Illustrative Sustainability Report (ISR) on Sept 20 as an additional tool to its enhanced sustainability reporting framework.

The aim of ISR is to enhance the commitment of listed issuers to subscribe to sustainability practices and disclosures.

Given the increasing importance of sustainability reporting, companies are compelled to adopt a proactive and strategic position rather than just superficial compliance.

Tax perspective

It is worthwhile to note that, from a taxation perspective, a Tax Governance Guide jointly published by the Malaysian Institute of Accountants and the Malaysian Institute of Certified Public Accountants was issued in October 2021.

It provided details on disclosure on tax governance and management of tax matters affecting corporations.

On April 15 last year, the Malaysian Inland Revenue Board (LHDNM) launched the Tax Corporate Governance Framework (TCGF), which provides an overview of its expectations on the tax corporate governance processes and structures that should exist in an organisation.

It also provides guidance on tax risk management principles and management of tax risks.

On a general note, it would be beneficial for the various regulators to continue to have increased communication with each other and be on the same page when it comes to issuing directives to the industry.

This would help to eliminate possible contradictions, ambiguity and confusion on implementation.

Future principles and challenges

It is important that governance rules, policies, procedures and regulations should not be a knee-jerk reaction to financial crises, scandals, the environment and so forth.

It is also imperative that, before any new or updated MCCG policies, practices or guidelines are publicly announced, the relevant regulatory bodies or authorities continue to engage with the various institutes and professional bodies, for feedback or comments.

This is to ensure interconnectivity and consistency and where possible, an alignment and resonation with the core MCCG policies, practices and guidelines.

A former British Prime Minister once said, "the price of greatness is responsibility" and added, "we make a living by what we get, we make a life by what we give".

In this respect, directors help to decide on and navigate towards the corporate destination. Good practice in the boardroom leads to good corporate governance.

Moving forward, boards and organisations must redefine their roles and the measure of values, in the light of greater public demand for sustainability.

Hence, focusing on the old traditional strategies in relation to financial performance is not the main factor.

Organisations must take cognisance of their corporate purpose, with sustainability being a key part of the board agenda for effective good governance and long-term value creation.

In addition to value for customers, organisations need to focus on diversity and inclusiveness, health, and wellness and the total economic impact of their operations, including carbon footprint.

It goes without saying that ethics and sustainability must be the focal points of good corporate governance. ESG consideration should always be on the board agenda.

With all the above, and with the constantly-changing governance and sustainability environment, it is very important that directors and other relevant personnel attend regular training programmes so that they are constantly updated on matters pertaining to ESG and reporting standards.

Finally, it must be borne in mind that the adoption of good corporate governance does not impede business objectives nor is it against deriving economic returns.

However, it is important that cognisance be given to social development, maintaining human rights and environmental stability.

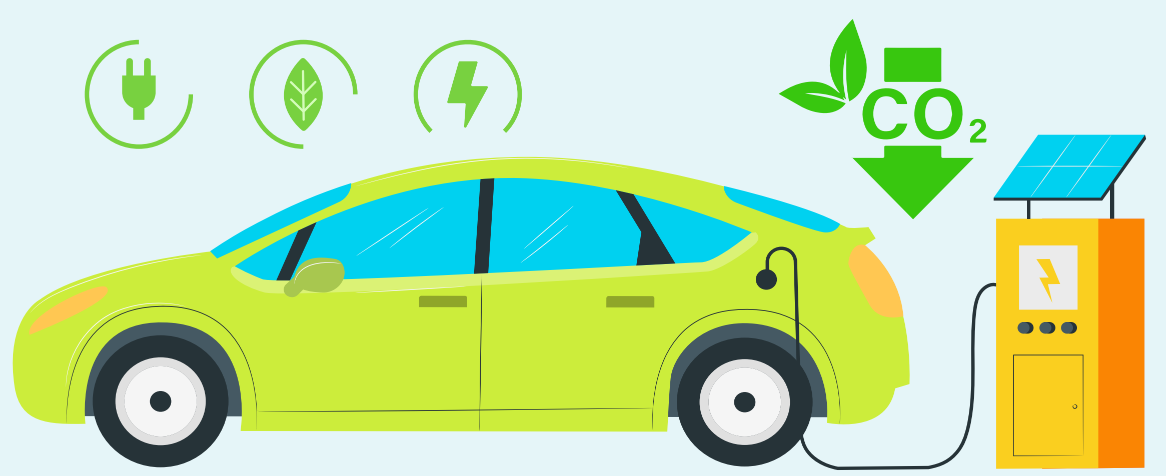
It is about doing business with a conscience. The board must take responsibility for good governance in any company, because ultimately, organisational integrity begins at the top.

Simon Yeoh is the president of the Malaysian Institute of Chartered Secretaries and Administrators (MAICSA). The views expressed here are the writer's own.

This concludes the three-part series on governance. Parts 1 and 2 were published in StarESG September and October issues.

Elevating the low carbon mobility agenda

Malaysia has the right foundations to operationalise a low-carbon transport ecosystem and is picking up the pace in green mobility.



INTROVERTS and extroverts experienced diverse impacts when Malaysia implemented the very first movement control order (MCO) on May 18, 2020 to curb Covid-19 infections and fatalities.

The former played into their strengths of adapting to social distancing and isolation – replenishing their energy during the ample "me time" the MCO had granted them.

The latter, whose brain's reward circuitry is activated when in a social environment and feel the spotlight of attention, found themselves craving face-to-face human interaction.

However, there is one similarity between these two contrasting personalities. Both enjoyed the near empty roads – something which is dearly missed once the MCO lifted and Malaysia transitioned into the new normal.

Traffic reverted to being horrendously congested. This is an unsurprising phenomenon given that Malaysia is a country which has the most cars in the region with the number of cars outnumbering people, producing a ghastly amount of greenhouse gas (GHG) emissions.

This, however, can be remedied. Malaysian Green Technology and Climate Change Corp (MGTC) group chief executive officer Shamsul Bahar Mohd Nor believes that Malaysia has the right foundations to operationalise a low-carbon transport ecosystem.

He says the green mobility shift in the nation has picked up its pace tremendously ever since the gazette of the Low Carbon Mobility Blueprint (LCMB) in 2021.

"With several milestone targets set, we are looking at immediate action plans, medium and long term initiatives that would not only spur the whole adoption of eMobility for the consumer market, but most notably establish platforms for the electric vehicle (EV) industry to invest, manufacture and produce electric vehicles and EV components in Malaysia.

"The migration from internal combustion engine (ICE) to EV is deemed significant in creating a new wealth of economy that would generate the demand for skilled workers, revolutionising Industry 5.0, mushrooming the supply chain ecosystem and most importantly impactfully reducing the GHG emission footprint," says Shamsul Bahar.

Stretching green mobility

There are several factors that would propel Malaysia's development of a comprehensive low-carbon transport ecosystem, one that reduces GHG emissions and promotes sustainable economic growth and energy independence.

Noting that 70% of the nation's energy mix will be from renewable sources by 2050, Shamsul Bahar says the three most significant sources of energy would be solar, hydro (mainly in Borneo) and biomass.

"Geographically, Malaysia has abundant sunlight that would generate energy to power up off grid charging stations.

"We have started solar photovoltaic (PV) charging stations at five sites back in 2018 and are currently looking at ways to increase those numbers and efficiency while reducing the cost," he says.

Meanwhile, the launch of LCMB has resulted in the government providing more incentives such as tax exemptions for importing EVs, tax rebates for installing wallboxes in private homes, financial guarantees under the Green Technology Financing Scheme (GTFS), and shortened approval periods for installing charging stations.

"At this point in time, there are slightly above 11,000 battery electric vehicles (BEV) in Malaysia. With almost 1,500 charging stations nationwide, our ratio is one to 7.3.

"The current European standard is one to 10, but our ultimate projection is to increase the infrastructure to 10,000 stations nationwide by 2025."

However, the slim availability of EV models in the affordable range segment poses an obstacle in the adoption of EVs among Malaysian consumers.

According to Shamsul Bahar, there are over 30 models and 50 variants available, but most are priced above RM250,000.

"Therefore, the government has granted tax exemption for importing EV parts and components to incentivise the private sector to produce more completely knocked down (CKD) vehicles which can spur production of cars with an on-the-road price (OTR) of below RM100,000," he shares.

In an effort to place emphasis on electric two-wheelers, he reiterates that the government has also announced incentives in the form of rebates for electric motorcycles purchased by selected target groups in the recent Budget 2024 announcement.

Additionally, many local municipalities are fast adopting mass transportation EV in their low-carbon plans.

He says the Investment, Trade and Industry Ministry (Miti) recorded that there are presently around 100 operational EV buses, while GoKL green buses have begun roaming throughout Kuala Lumpur.

"Prasarana is in the midst of procuring 100 EV buses in the early phase of the electrification programme, while Kuching, Sarawak initiated their hydrogen buses in 2022 and with their Metro inline to start in the fourth quarter of 2025. These all demonstrate a promising prospect for greening our public transport system."

Shamsul Bahar points out that Malaysia has strong technological expertise and research capabilities, which can be leveraged to develop innovative low-carbon transport solutions, including EV technology and smart transportation systems.

"Our strongest proponent in enabling the transition towards a low carbon ecosystem is that we have the government's backing and support to realise the intent.

"The government declared that by 2025, half of the new vehicles procured or leased for the usage of all ministries will be EVs. This commitment will also spatter over to government-linked companies (GLCs).

"The EV taskforce spearheaded by ministers of Miti, Natural Resources, Environment and Climate Change Ministry, Science, Technology and Innovation Ministry, Transport Ministry, Local Government Development Ministry and several others, including relevant government agencies, shows the seriousness of elevating the low carbon mobility agenda and the development of the EV ecosystem exponentially," he says.

Replicating Sarawak's success

It has been widely reported that Sarawak is intent on becoming a leader in the hydrogen economy of Malaysia, having stated plans to begin large-scale commercial production and export of hydrogen by 2027.

Last year, the state launched the H2biscus project – development of a new plant located in Tanjung Kidurong, Bintulu – which is predicted to produce 220,000 tonnes of green hydrogen, 630,000 tonnes of green ammonia and 600,000 tonnes of blue ammonia when it is up and running.

Earlier this year, Sarawak Economic Development Corporation (SEDC) chairman Tan Sri Datuk Amar Abdul Aziz Hussain announced that the state will widely promote the use of hydrogen-powered public transport vehicles which will include hydrogen-powered autonomous rapid transit (ART) vehicles as well as buses.

Following these announcements, Peninsular Malaysia has taken cues from Sarawak as well as Japan.

"To become a hydrogen society just like Japan, we must introduce hydrogen as part of the renewable mix to replace coal and natural gas in power plants and power up fuel cell vehicles.

"While other states in Malaysia do not have the low electricity tariff that Sarawak is offering, we have to look at other options for hydrogen that can be produced from various renewable energy sources available in Malaysia such as solar, biogas, methane from palm oil mill effluent or landfills and generated from electrolyser, pyrolysis process, steam methane reforming and anaerobic digestion," says Shamsul Bahar.

Pointing out that hydrogen is the most abundant element on earth and an energy carrier, he opines there is a need to first understand the supply and demand, which includes production, infrastructure and utilisation, before exploring the hydrogen ecosystem.

On that note, Peninsular Malaysia is embarking on an infrastructure programme to install its first Mobile Hydrogen Refuelling Station with a preferred location site in Putrajaya that also serves as a government administrative complex.

The infrastructure programme involves MGTC, UMW Corporation Berhad, Petronas and NanoMalaysia Berhad. It represents a giant leap forward in expanding the hydrogen infrastructure network and promoting the uptake of fuel cell electric vehicles (FCEVs).

"FCEVs are a valuable complement to battery-powered electric vehicles (EVs), particularly in heavy-duty machinery such as trucks, buses, and aeroplanes.

"FCEVs present distinct advantages in these applications, where the limitations of heavy batteries can be a significant concern throughout operations.

"Unlike battery electric vehicles that might face extended downtimes for recharging, FCEVs offer a different operational paradigm by relying on hydrogen top-ups, providing a more seamless and potentially continuous workflow," Shamsul Bahar explains.

He elaborates that extended range offered by FCEVs are particularly advantageous in scenarios where long-haul transportation is necessary.

"Hydrogen fuel cells emerge as a promising solution in heavy-duty industries where factors such as payload capacity and extended ranges are critical, given the short duration FCEVs use to swiftly refuel compared with the time-consuming recharging of batteries, contributing to reduced overall downtime for these vehicles."

However, as with any transformative technology, the widespread adoption of FCEVs faces challenges.

"The foremost hurdle is the necessity for significant infrastructure development. Establishing a robust and extensive network of hydrogen refuelling stations demands substantial investment and time.

"Furthermore, the current high cost of hydrogen production poses economic challenges for FCEVs. Strategies to address these cost concerns, such as advancements in hydrogen production technologies and economies of scale, must be explored," says Shamsul Bahar.

Additionally, he shared that government agencies and private entities are poised to initiate a catalyst programme in line with the Hydrogen Economy and Technology Roadmap (HETR), a document launched by the Science, Technology and Innovation Ministry which spells out the nation's commitment to developing the low carbon economy around hydrogen.

Shamsul Bahar says Malaysia is on track with immediate action plans, medium and long term initiatives that would spur adoption of eMobility and establish platforms for the EV industry to invest, manufacture and produce electric vehicles and EV components in Malaysia.

Why Asia-Pacific is central to the global climate challenge

Filepic of a flood in Yong Peng, Johor, on March 4 this year. A high-emission scenario modelled by the McKinsey Global Institute showed that Asia would account for roughly 75% of the global capital stock that could be damaged by river flooding in 2050. — THOMAS YONG/The Star

By HENRY FERNANDEZ

WHENEVER I travel to the Asia-Pacific (Apac) region, I am reminded of both its growing importance to the global economy and its pivotal role in helping the world achieve nett zero carbon emissions.

My recent trip to Hong Kong and Singapore was no exception.

Across both locations, chief executive officers (CEOs) and government leaders wanted to discuss climate-related investment solutions that can accelerate decarbonisation.

Hong Kong and Singapore have long been global financial centres, but now they are competing to become the top climate and sustainability hub for Apac investors.

The result has been a burst of new products, companies and platforms that are supporting the nett zero transition — from green bonds and fintech innovators to voluntary carbon markets and exchanges.

Beyond finance and investment, Apac leaders are focused on the full spectrum of climate-driven risks and opportunities, and with good reason: Whether we look at physical risk, greenhouse-gas (GHG) emissions or nett zero solutions, the Apac is central to the global climate challenge.

Beyond just bad weather

Consider this startling fact: People in the Apac are six times more likely to be affected by a natural disaster than people outside the region, according to the United Nations.

In 2023 alone, they have seen numerous record-breaking heatwaves, including the highest temperatures ever recorded in China, Vietnam, Thailand and Laos.

In South Korea, heat-related deaths from mid-May through July more than tripled compared with the same period in 2022.

The past two years have also witnessed record-breaking rainfall and flooding in South Korea, Pakistan and other Apac countries, along with record-breaking drought conditions in China.

To put the elevated risk in perspective, just look at the heatwave that swept through South Asia last April.

Scientists with the World Weather Attribution initiative calculate that the risk of such a heatwave in India and Bangladesh has increased by at least a factor of 30 compared with pre-industrial times.

All of this underscores the physical and human consequences of climate change for Apac.

The potential economic and financial consequences are staggering as well.

In one high-emission scenario modelled by the McKinsey Global Institute, Asia would account for roughly 75% of the global capital stock that could be damaged by river flooding in 2050, an amount equal to approximately US$1.2tril.

Likewise, the Swiss Re Institute projects that a temperature rise of 2.6° Celsius by 2050 could reduce Asia's total economic output by more than 20%, including a 29% loss in South-East Asia.

In this scenario, South-East Asia would suffer more economic damage than any other region on Earth.

Even with just a 2°C rise, more than one-fourth of China would face "medium-to-high or high risk from physical climate impacts," according to research from MSCI.

Of course, China also accounts for a disproportionate share of global GHG emissions.

For that matter, the Apac as a whole accounts for more than 55% of global emissions, and more than three-quarters of coal-fired power generation, according to the UN.

Simply put: We will never reach nett zero emissions without faster progress in this region.

Role in driving nett zero

At the same time, the Apac can play an outsized role in developing nett zero solutions.

Many of its largest economies have committed to achieve carbon neutrality by 2050 or 2060, including China (2060), Japan (2050) and South Korea (2050).

More than four years ago, Christian Zinglersen — who now leads the European Union Agency for the Cooperation of Energy Regulators, but was then serving as head of the Clean Energy Ministerial Secretariat — declared that China had become "the undisputable global leader of renewable energy expansion worldwide."

Indeed, China is on pace to meet its 2030 renewable-capacity target — 1,200 gigawatts of power — five years early, according to Reuters.

Meanwhile, Japan has earned recognition for its contributions to climate finance and clean-energy research. It produced far more renewable-energy patent applications than any other country between 2010 and 2019, according to the World Intellectual Property Organisation.

As for South Korea, it is now one of the world's five biggest producers of low-carbon nuclear power, behind only the U.S., China, France and Russia.

The current government in Seoul has pledged that nuclear [energy] will become South Korea's single largest power source by 2036.

More specifically, it hopes to increase nuclear [energy] to nearly 35% of power generation, up from 27% in 2021, while increasing the power share of renewables from less than 8% to almost 31%.

Overseas, South Korea is helping the United Arab Emirates (UAE) build its first-ever nuclear-power plant, as part of a US$20bil project.

Once completed, the UAE nuclear plant will supply close to a quarter of the country's electricity.

Pathways to decarbonisation

The task of decarbonising the Apac economies may seem daunting, but climate-related investment tools can help governments and industries navigate the transition.

For example, a new study from the MSCI Sustainability Institute shows how 15 Apac markets — Australia, Bangladesh, China, Hong Kong, India, Indonesia, Japan, Laos, Malaysia, Pakistan, the Philippines, Taiwan, Thailand, South Korea and Vietnam — could pursue an orderly, managed phase-out of coal-fired power plants through 2050.

The simulated pathways would reduce their coal-power emissions by anywhere from 39% to 95%, while reducing their total carbon emissions by 74%, compared with a business-as-usual scenario.

'People in Apac are six times more likely to be affected by a natural disaster than people outside the region, according to the United Nations,' says Fernandez.

To achieve such decarbonisation economy wide, the finance and investment industries will have to drive a historic repricing of assets and reallocation of capital.

That has massive implications not only for Hong Kong and Singapore, but also for Shanghai, Beijing, Shenzhen, Tokyo, Seoul, Sydney and other Apac financial centres.

All of these discussions will be front and centre during the COP28 climate summit in Dubai that I am currently attending, which began on Nov 30.

I hope it delivers meaningful results for countries and companies across the region.

Morgan Stanley Capital International (MSCI) is a leading provider of critical decision support tools and services for the global investment community. Henry Fernandez is MSCI chairman and chief executive officer. The views expressed here are the writer's own.

ESG disclosure to shaping sustainable supply chains

Capital Markets Malaysia's timely ESG guide empowers SMEs with clarity for seamless alignment with environmental, social and governance principles

By JESSIE LIM
ESGeditorial@thestar.com.my

THE launch of the Simplified ESG Disclosure Guide (SEDG) in October by Capital Markets Malaysia (CMM) — an affiliate of the Securities Commission Malaysia (SC) — offered small and medium-sized enterprises (SMEs) a definitive understanding of what is expected of them within the environmental, social and governance (ESG) landscape.

The aim of the SEDG is to ensure that businesses, irrespective of size, are ready to comply with global ESG standards and respond to disclosure requests from stakeholders including customers, investors, banks and regulators.

Acknowledging that SMEs face unique risks associated with supply chain vulnerabilities, the SEDG strives to assist and position SMEs as proactive leaders in an ever-changing global marketplace.

The guide aligns with recent national policy endeavours focused on propelling businesses in Malaysia towards commercial success and sustainability, including the New Industrial Master Plan 2030 (NIMP), i-ESG Framework (i-ESG) and the National Energy Transition Roadmap (NETR).

The benchmarking process for the SEDG involves examining existing global and local standards and frameworks, as well as assessing market requirements and through consultations with stakeholder groups.

This includes the Global Reporting Initiative (GRI), FTSE4Good, International Finance Reporting Standard by the International Sustainability Standards Board, Bursa Malaysia's Listing Requirements and Sustainability Reporting Guide, Principles-based Sustainable and Responsible Investment Taxonomy for the Malaysian Capital Market, and various multinational and local large company assessments of their supply chain, to name a few.

The guide offers a list of priority disclosures under 15 topics across the environmental, social and governance pillars from emissions, energy and waste to human rights and labour standards, risk management and reporting, and anti-corruption.

There are 35 key indicators with clear description, practical tips and resources for further guidance, and are divided into Basic, Intermediate and Advanced to cater for the different levels of sustainability maturity in each company, with no mandatory adoption timeline for the disclosures.

To promote inclusive and widespread adoption, CMM will be introducing the Bahasa Malaysia and simplified Mandarin versions at the end of the year.

Adopting the SEDG is fairly simple and straightforward. SMEs will first need to review the full map of disclosures before deciding which sustainability maturity level they are on.

With the Basic as a starting point, companies can look for Intermediate or Advanced disclosures if they have been on the sustainability journey for one to two years, or three to four years respectively.

They can then tick off on the disclosures that they can already report on now before identifying which to work on in the next year.

An additional guide on what to report is provided, as well as a template for companies to track and report their disclosures.

Clear and accessible path towards ESG alignment

SME Association of Malaysia national president Ding Hong Sing believes that SMEs are at a crossroads, being introduced with a number of ESG frameworks and guides that, while intended to provide clarity, has added a layer of complexity for many of them.

"The SEDG has definitely provided a clearer path on what is expected of SMEs, being part of the supply chain in the Malaysian economy.

"There are also SME members of the association that have taken steps and participated in the workshops by CMM to deepen their understanding of ESG disclosure under the SEDG.

"While it is still too early to learn any success story, I do observe the positive impact to the overall receptiveness of certain critical issues such as greenhouse gas emissions, which in the past, was a taboo to many."

Ding points out that the SEDG offers SMEs a clear and accessible path towards ESG alignment, thereby opening doors for them to actively engage with and contribute to the broader narrative of sustainable business practices.

"Prior to this, SMEs faced the challenge of Bursa's Sustainability Reporting Guide — a sophisticated framework designed for listed companies. The guide posed a hurdle for SMEs as they were not able to afford the resources required for compliance, nor were the SMEs able to adopt the complexity of the reporting guide."

The SME Association has been championing ESG awareness among its members, aligning with the ESG development in the country.

However, awareness on ESG as far as SMEs in Malaysia are concerned, is undoubtedly at its infancy stage, Ding notes.

"There are SMEs who form part of the global supply chain supporting multinational corporations; they are in a better position, having been gradually acclimatising to ESG principles over the years by their clients.

"These SMEs are familiar with ESG-related issues through their subscriptions to international supply chain assessment platforms, such as Sedex, EcoVadis and more. This places them at the forefront of the ESG landscape.

"Having said this, the SMEs that have implemented ESG to a certain extent, represent a small fraction of the SME community. A lot more work needs to be done to elevate overall awareness of ESG principles among SMEs," emphasises Ding.

ESG disclosure cannot be overlooked

While it is a matter of compliance, ESG disclosure has far-reaching benefits, including improved stakeholder relations, risk management, cost-efficiency and long-term competitiveness.

Multinationals are already ensuring that their suppliers on the supply chain practice sustainability; failing which, SMEs risk losing business opportunities.

For Nestlé (Malaysia) Berhad, understanding ESG performance across their supply chain is key to advancing their ESG agenda and goals for the sustainable development of the Group.

Its chief executive officer Juan Aranols shares that obtaining consistent ESG disclosures from their supply chain can provide quantitative data to benchmark progress over time and create clarity on impacts in key areas, such as Scope 3 carbon emissions.

"This is all the more important for us, as the main contributor of carbon emissions is not our factories or trucks, but the raw ingredients we use for the manufacturing of our products.

"ESG disclosure would allow us to identify gaps and areas for improvement where we can work with our suppliers, such as reducing carbon emissions or driving sustainable solutions that can enhance the sustainability of their operations."

An ongoing project of Nestlé's that they embarked on this year was engaging with over 100 long-term partners on the installation of solar panels as renewable energy source. This has resulted in the adoption of the solar panels by some, while others are in the process of evaluating it.

"Collaborating closely with our partners across the supply chain to drive improved ESG outcomes is part of our overall Creating Shared Value (CSV) approach to create value for our business, relevant stakeholders and society as a whole.

"Ultimately, strengthening supply chain disclosures can help to strengthen our own ESG reporting, contributing to our progress towards our sustainability goals," reminds Aranols.

In building a responsible supply chain, the ESG practices and performance of their suppliers, including SMEs, are taken into consideration during Nestle's procurement process.

To Nestlé, considering ESG practices in procurement can help to reinforce positive practices and provide an incentive for continuous improvement among suppliers.

"In tandem, it is important to recognise the challenges faced by SMEs and work together with relevant stakeholders to close these gaps.

"We engage closely with our suppliers to ensure they fully respect and adhere to our Responsible Sourcing Standard (RSS) requirements. Should there be any non-compliance, we work with our suppliers to address this and improve their practices," Aranols points out.

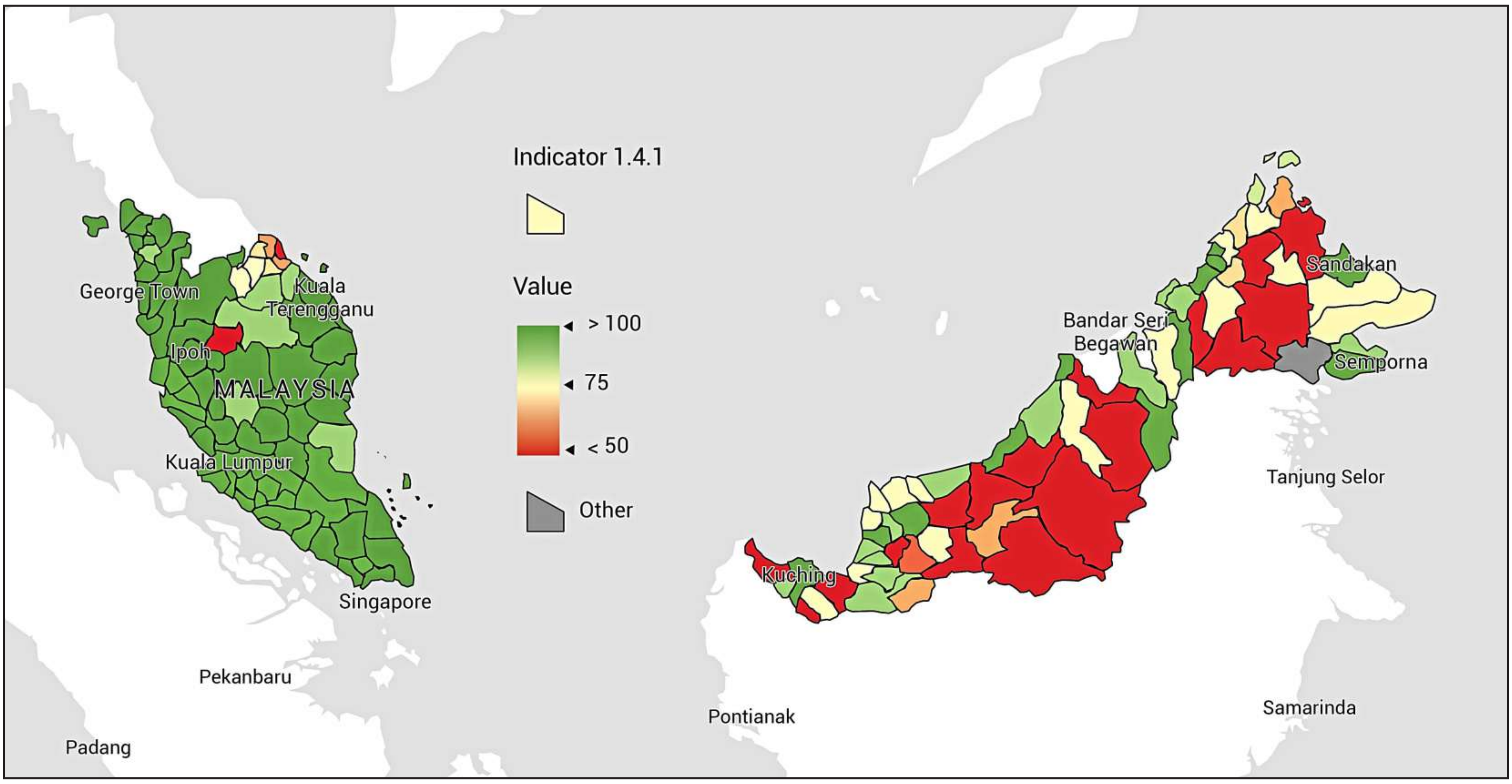
RSS outlines the requirements and ways of working that Nestle's suppliers must comply with; suppliers are regularly audited to ensure they meet the standards pertaining to labour practices, health and safety, the environment and business integrity.

Aranols notes that the establishment of the Simplified ESG Disclosure Guide further supports Nestle's suppliers and partner SME vendors in ESG adoption, helping to demystify ESG, facilitating better understanding of requirements and providing clear guidance in disclosure and reporting standards.

"We are committed to working collaboratively with our suppliers and partners across the value chain to continue enhancing their ESG practices and reporting, as this subsequently enables them to be in line with international benchmarks and supports our own responsible sourcing commitment and overall ESG agenda."

SME Association national president Ding Hong Sing notes that the SEDG has helped with the general receptiveness towards critical issues such as greenhouse gas emissions, which was previously a taboo.

Nestle (Malaysia) Berhad chief executive officer Juan Aranols says that establishment of the SEDG further supports Nestle's suppliers and partner SME vendors in ESG adoption, facilitating better understanding of requirements and providing clear guidance in disclosure and reporting standards.



This map shows the SDG Indicator 1.4.1 — proportion of population living in households with access to basic services for SDG 1-No Poverty. With a focus on access to piped water in house (hence clean water), this map shows the varied SDG performance of the access to piped water across Malaysian districts. The assessment has score values of zero to 100 where zero represents worst performance value and 100 is the best performance value for SDG indicator.

Malaysia's progress on SDGs

By DANESH PRAKASH CHACKO

ON Sept 25 of 2015, Malaysia — together with 192 United Nations (UN) member states — adopted 2030 Agenda for Sustainable Development.

As a global collective blueprint, the 17 Sustainable Development Goals (SDGs) is a call for all countries in the world to promote prosperity and protecting the planet. In Malaysia, our Economic Planning Unit (EPU) by the Economy Ministry is tasked as focal point for sustainable development and each country is responsible review and follow up on the progress of the SDGs.

According to Sustainable Development Report (SDR) 2023 — produced by UN Sustainable Development Solutions Networks (UN SDSN) — Malaysia ranks 78 out of 166 assessed countries of the report.

Re-strategising our efforts

Malaysian SDG 2023 performance warrants deep rethinking and strategy in achieving the 169 targets across 17 SDGs. Out of the 17 SDGs, Malaysia only achieved a desirable SDG level for one goal, that is 'Goal 1: No Poverty'.

However, SDR 2023 assessment of Goal 1 is centred on proportion of population living under and close to extreme poverty. According to SDG 2023 report, Malaysia does well in the following indicators:

> Elimination of extreme poverty
> Basic health indicators.
> Literacy.
> Access to electricity.
> Access to water in urban areas.
> Internet penetration.
> Managing fish stock.

As we pass through the midway point of our SDG journey, it is important to know which indicators the nation is doing well in, and where we're being held back in terms of SDG progress.

Indicators and performance

Jeffrey Sachs Center (JSC), Sunway University, is a think tank dedicated to the research and promotion of sustainable development.

JSC took on the challenge to conduct a state and district level assessments of SDGs in 2022 for the Malaysian public and other stakeholders to understand the challenges of various states and districts face. The study was completed just this year.

Largely using 2019 data, each state was assessed across 17 SDGs with the exception of Goals 12 and 13 due to lack of data. For the SDG state level assessment, the states and territories with the best SDG performance were the Federal Territories, whereas Kelantan sat at the bottom of the list, corresponding to its economic development.

That said, however, the ranking revealed that states with lower economic performance such as Negri Sembilan and Pahang are more sustainable compared to states like Selangor, Penang and Johor.

High gross domestic product (GDP) output and rankings does not mean a state is being developed sustainably.

Collective responsibility

All Malaysian states have achieved the 'Goal 7: Clean and Affordable Electricity' and have disconcerting performance levels on 'Goal 2: Zero Hunger'.

As the SDGs are collective responsibility of all tiers of government, private sectors and the public, the state level assessment highlights the effects of centralisation and decentralisation of services.

Since healthcare is a federal responsibility and sanitation is centralised for Peninsular Malaysia, Malaysian states have attained SDG targets for basic indicators such as access to safely managed sanitation, maternal mortality ratio and neonatal mortality rates.

On the other hand, indicators relating to water such as access to clean water and managing water ambience in river basins varies in performance across multiple states as water is largely domain of the state governments.

Danesh Prakash Chacko is a research analyst with the Jeffrey Sachs Center on Sustainable Development (JSC), Sunway University. His work focusses on applying mapping technologies to various Sustainable Development Goals (SDG) projects, and electoral systems research.

Indicators like Goal 1 and Goal 2 are under domains of federal and state responsibilities have disturbing levels of underperformance that include stunting, wasting and urban-rural poverty gap among other indicators.

The JSC website on SDG State level assessment is accessible via *https://sdg-for-malaysian-states-sdsn.hub.arcgis.com*.

Addressing the gaps

Building on the success of state level dashboard, SDGs Today — an arm of UN SDSN — partnered with JSC and UN SDSN's Asia office to develop a district level assessment. Since the SDG state level assessment pointed to variations in performance, the district level assessment is intended to examine which areas of the state are underperforming.

Due to data limitations, the assessment was strictly limited at the indicator level for a select number of SDGs, with the district level assessment reflecting 2019 and 2021 performance across Malaysia.

More importantly, not only does it highlight the effects of centralisation or decentralisation of services, the assessment also shows the urban-rural gaps on selected indicators.

In 'Goal 1', district level assessment points to 'rural absolute poverty' as major concern for parts of Kelantan, Perak, Sabah and Sarawak. While some states do well for basic indicators of 'Goal 3' — which include indicators such as maternal mortality, neonatal mortality rates and vaccination coverage — the district level assessment indicates rural areas are still lagging behind. This exposes need of deep improvements of this federal responsibility.

Similar urban-rural divide patterns appeared for indicators relating to access to Internet, smart phone and banks. Districts have shown excellent performance for indicators such as homicide (which is under police domain – federal responsibility) and unemployment (a matter under state and federal responsibility).

The district level assessment can be accessed via *https://sustainable-development-goals-sdsn.hub.arcgis.com*.

By making this information free and available to the public, JSC hopes these two subnational level assessments could be utilised by Malaysian public, academia, policymakers and students of SDGs to push for sustainable progress.

With the promise of 'Leave No One Behind' as central element of SDGs, these assessments can assist resources being directed at communities, districts and states to close remaining SDG gaps.

After all, SDGs, can only, and will only, be achieved when all communities reap the benefits of inclusive and sustainable development.

An MSME's guide to digital sustainability

By IAN CHEW

IF you had visited the website of the recent Conference of Parties (COP28) this year in Dubai, you would have seen an interesting button.

The low-carbon button allowed viewers of the website toggle between a regular mode and a "low-carbon" version. This is one example of digital sustainability – the recognition that technology itself has a carbon footprint and more needs to be done to reduce it.

What is digital sustainability?

Digital sustainability can mean many things to many people. As such, I am prefacing this piece by being intentionally specific as to what I would be referring to.

Digital sustainability can be broadly linked to two terms: first is tech-for-green and the second is green tech. Whilst similar sounding, they actually have very different meanings.

Tech-for-green refers to the usage of technology for green purposes. An example would be the use of artificial intelligence to aid in the design of eco-friendly buildings. Tech-for-green is outcome oriented – the outcome must be environmentally positive. Technology is merely the conduit for carrying out eco-friendly deeds.

Green tech on the other hand refers to technology which is inherently green. In this case, the focus is on the tool and how it should be environmentally positive.

By using an inherently green tool, the logic extension is that the outcome would also be good for the environment. An example would be low-carbon websites that Greenie Web – a Singapore climate tech startup – builds. A low-carbon website has a lower carbon footprint vis-à-vis its regular counterpart, thus its impact on the environment would be comparatively lower.

Much has been written about tech-for-green in recent years – from the use of Internet of Things (IoT) sensors to reduce energy consumption in office buildings to mobile applications which encourage recycling.

However, green tech – where the focus is on the environmental friendliness of the technology itself – has received far less attention and is the focus on this piece.

The necessity problem

Despite almost being non-existent in the mainstream conversation of sustainability, digital sustainability is a big problem.

One estimate for the carbon footprint of information technology (IT) showed that it was almost equal to aviation back in 2019. This estimate was made before the Covid-19 pandemic lockdowns that dramatically shrank aviation while accelerating the adoption of laptops and webcams for telemedicine, online classes and hybrid work.

As such, it would be conceivable that the carbon footprint of the IT sector had already surpassed that of the entire aviation sector during the pandemic.

However, what is more troubling than the enormous scale of the IT sector's carbon footprint is the rate at which it is growing.

Experts predict the IT sector carbon footprint is expected to triple by 2040. This is due to a confluence of factors such as increased used of IT devices and the massive number of people who will come online for the first time in the next two decades.

Small business, large impact

Whilst large corporations tend to have dedicated sustainability teams, many micro, small and medium enterprises (MSMEs) I have spoken to frequently point out that they would like to take action but are worried about costs and expertise. These are genuine and valid concerns.

As such, I have prepared two simple yet impactful ways to reduce your corporate carbon footprint:

1. Digital marketing materials

A number of MSMEs use digital technologies to amplify reach and boost interaction.

One frequently used method is the email update, where current or prospective clients are sent emails on the latest product offerings and discounts. Sending out an email is a low-cost method of connecting with a large audience. However, it also comes with a carbon cost.

Estimates have shown that an email – with words only – is responsible for 5g of carbon dioxide. That amount increases to 50g when a picture is included in the email.

To reduce your digital carbon footprint without sacrificing marketing efficiency, it would be good practice to check the click-through rates of your emails. A click-through rate is a measurement of how many people actually open the email.

Based on that, you could lower the frequency of emails sent to prospects who had not opened any of the digital marketing material in the past six months. This allows your organisation to reduce your impact on the environment without actually impacting customer interaction.

2. Email subscription centre

An action – which is slightly more advanced – is the creation of a subscription centre whereby customers can choose exactly the type of material they would like to receive.

Many MSMEs unintentionally have a "take-it or leave-it" email subscription mechanism where a customer either subscribes to all updates or unsubscribes completely.

By dividing email subscriptions into various categories and presenting this option to customers, the MSMEs can allow for more targeted emails – reducing email spam and aversion – while reducing unnecessary emails and hence carbon emissions.

Small acts to change the world

Given the ubiquity of technology, all businesses small and large have a role to play in digital sustainability.

In Malaysia, where MSMEs account for 97.2% of total business establishments and provide employment to 7.3 million individuals, there is great collective impact that can be harnessed.

As historian Howard Zinn famously said: "Small acts, when multiplied by millions of people, can transform the world."

Ian Chew (picture) is the founder of Greenie Web – a climate tech startup that decarbonises computer code. Since its inception in 2009, Greenie Web has evolved from a side project to a full-fledged digital decarbonisation start-up that focuses on sustainable digitisation in the B2G and B2B space.

1.5°C or bust: Will COP28 deliver the necessary climate action?

By WWF-MALAYSIA WWF

IN the bustling halls of Expo City Dubai, the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) took place from Nov 30 to Dec 12, 2023.

Over 70,000 delegates representing world leaders, young people, climate scientists, indigenous peoples, journalists, and various other experts and stakeholders gathered with a shared purpose: to agree on ways to address the climate crisis.

This year, more than any other, the COP was critical. In order to influence change, it had to be a climate-credible COP, and the agreements reached must be in line with the urgency of the climate issue and the scope of measures required to address it.

This meeting served as a crucial platform for negotiating and implementing global strategies, especially in assessing global efforts to keep the goal of limiting global warming to 1.5°C above pre-industrial levels within reach.

No more than 1.5°C

"Global warming" refers to the long-term rise in Earth's average temperature caused primarily by human activities, particularly the burning of fossil fuels like coal, petroleum, and natural gas, and deforestation.

"Pre-industrial" refers to the period before mankind began to rely heavily on fossil fuels or before the Industrial Revolution, roughly before 1750.

The goal of limiting global warming to 1.5°C above pre-industrial levels means keeping the average temperature of the Earth from exceeding 1.5°C higher than the average temperature before the Industrial Revolution began.

This goal is crucial to avoid far worse impacts of climate change, including extreme weather events, rising sea levels, and disruptions to food and water security. (See UN graph on this page which illustrates why it's so important to maintain 1.5°C, which can be considered as the least terrifying scenario for our survivability.)

First Global Stocktake

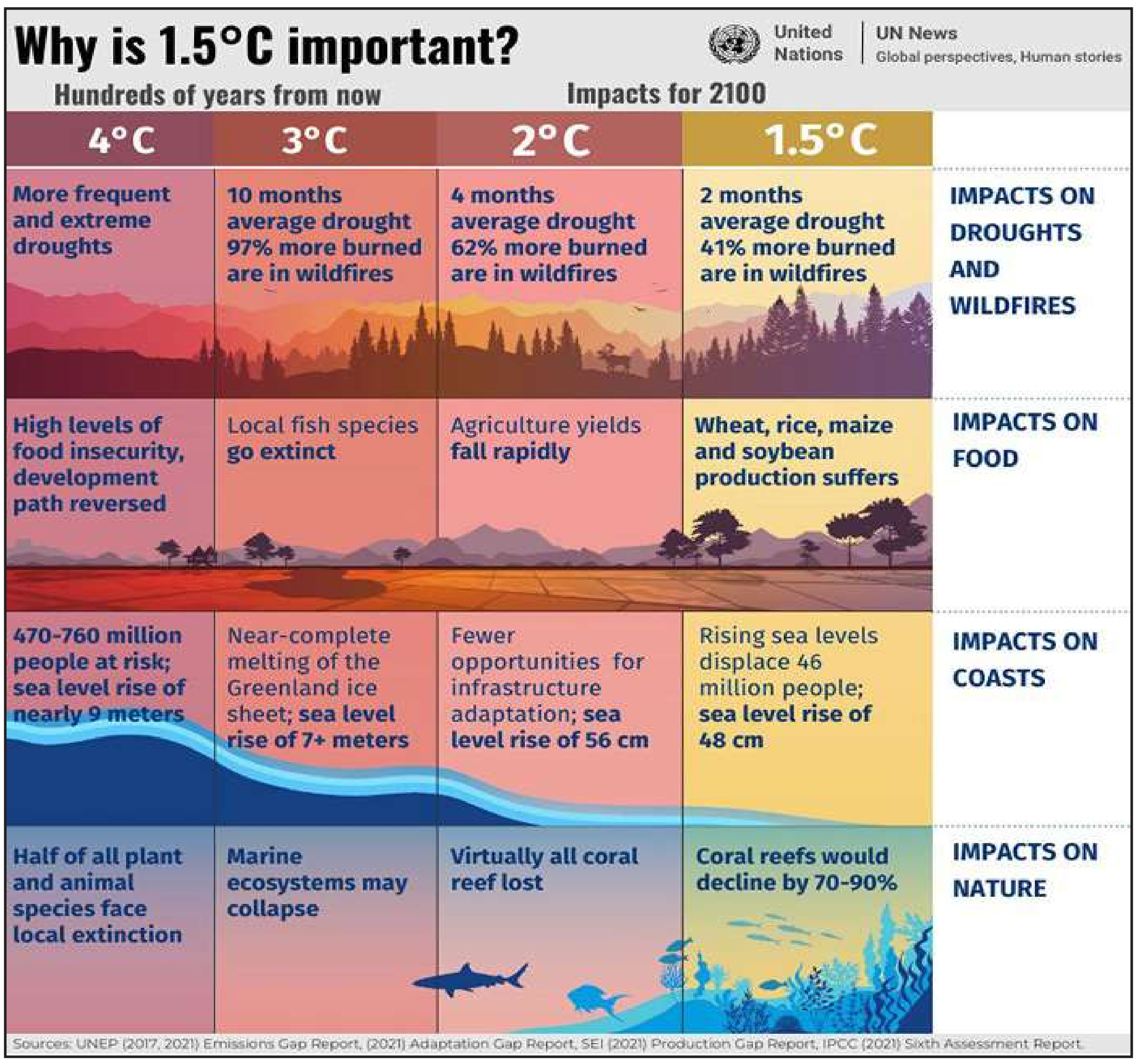
COP28 marked the first Global Stocktake, which means an assessment of global progress towards achieving the Paris Agreement goals.

As the world experiences record-breaking temperatures and extreme weather events, it is essential that we emphasise the need for immediate course correction.

During the start of the COP28 closing plenary, the improved Global Stocktake draft text was adopted with no objections to transition away from fossil fuels.

The Global Stocktake must pave the way for stronger Nationally Determined Contributions (NDCs) to achieve the 1.5°C target.

COP28 serves as a crucial platform to assess global efforts to keep the goal of limiting global warming to 1.5°C above pre-industrial levels within reach.- Photo by Lauren Duvel



Global Goal on Adaptation

The world is in crisis, with extreme weather events wreaking havoc on communities across the globe.

Adaptation stands as a crucial response, building climate resilience and reducing vulnerabilities.

The Global Goal on Adaptation (GGA) was established under the Paris Agreement to serve as a unifying framework to drive political action and finance for adaptation on the same scale as mitigation.

However, despite its potential, progress towards the GGA has been limited, likely due to the complexities and context-specific challenges faced by developing countries.

COP28 presented a crucial opportunity to establish an effective GGA framework to guide national adaptation efforts; however the negotiation outcome yielded no concrete progress as parties were unable to agree on quantitative targets and indicators, postponing the decision through a two-year process.

Loss and Damage Fund

The creation of the Loss and Damage (L&D) Fund at COP27 is deemed a positive step to help channel funds to developing countries impacted by negative effects of climate change that occur despite mitigation and adaptation efforts.

COP28 saw historic progress on this front, with pledges totaling around US$700mil to L&D Fund, and countries that have pledged include the United Kingdom, Germany, Italy, France, and United Arab Emirates.

As every fraction of a degree of warming pushes communities beyond their adaptation limits, causing irreversible damage, especially for vulnerable countries, its people and nature, the L&D Fund can be considered an important instrument for climate justice to assist communities, particularly those in the Global South.

Consensus at COP28

The issues negotiated at COP28 were complex, with countries holding diverse priorities and interests. Achieving consensus on crucial matters such as the fossil fuel phase-out, Global Stocktake assessment, GGA and L&D proved challenging.

The landmark COP28 meeting in Dubai has just concluded, marking an unprecedented moment in the implementation of the Paris Agreement.

The global stocktake adoption sets the stage for the next round of NDCs, and the decision to transition away from fossil fuels stands out as a significant milestone.

This outcome is a pivotal moment in global climate action, signalling the beginning of the end for the fossil fuel era after three decades of UN climate negotiations.

Beyond the negotiations, non party actors at COP28 highlighted various issues, concepts and initiatives.

Collaborative action

Contributing to the effort to address climate change impacts in South-East Asia, the Southeast Asia Climate Adaptation and Resilience (SEACAR) Alliance was launched at COP28 by WWF, Think City and the Boston Consulting Group (BCG).

South-East Asia is home to more than 673.3 million people and houses some of the world's most biodiverse and vulnerable ecosystems.

Unfortunately, there is still no clear narrative on the challenges faced by this critical region. Coordinated efforts are therefore crucial to accelerate adaptation and resilience.

The SEACAR Alliance does this by highlighting the combined potential of nature and artificial intelligence (AI) in addressing climate risks at cityscale, as well as by emphasising the importance of nature-based solutions (NbS).

Collaborative action like this across all segments of society is necessary to accelerate solutions in addressing climate change.

Our common future on our one home, Planet Earth, depends on it.

The Straits-inspired township of Eco Majestic houses a total of nine gated and guarded precincts that all incorporate a central garden.

Self-sustaining township in the suburbs

Eco Majestic places emphasis on people's needs now and tomorrow

ECOWORLD CREATING TOMORROW & BEYOND

By CHOW ZHI EN
ESGeditorial@thestar.com.my

PLANNING for the future requires incredible foresight, especially when it comes to building communities that will last for years to come.

A decade in the making, the sprawling 440.7ha township of Eco Majestic in Semenyih, Selangor, sought to distinguish itself from other successful urban townships within the Klang Valley.

Eco World Development Group Berhad (EcoWorld) planners wanted to create a township that was people-centred – envisioning a blend of residential and commercial zones, complemented by easy access to public amenities.

To achieve this vision, the developer needed land big enough to realise it. EcoWorld then took to Semenyih back in 2014.

The original site conditions of Eco Majestic and its then existing surroundings posed challenges, even for the most experienced planners. These include limited accessibility, an oil palm estate, and the need for major infrastructure and connectivity upgrades.

Ingeniously, the master plan for Eco Majestic transformed these obstacles into opportunities, with the development revolving around a number of key concepts: thematic architecture, community building, accessibility and circulation, environment, sustainability, security and public amenities.

Inclusivity at heart

"Sustainability for me means taking a people-centric approach while accounting for the interests of all stakeholders," says EcoWorld divisional general manager Evon Yap.

"Whatever we build – whether commercial or residential – has to have the needs of Malaysians in mind to be sustainable in the first place. For instance, when we plan and build our townships, we ensure that all the amenities are close by so residents don't have to travel far," she adds.

Creating value and maintaining inclusivity are high on EcoWorld's list of priorities as their township caters to different groups of people while keeping a consistent design language of the timeless Straits Era.

Since first launching their terrace homes, Eco Majestic now has a range of property types such as bungalow lots, cluster homes, semi-detached homes, garden homes, park homes, apartments and shop offices to serve diverse market demands.

This inclusivity also extends to the developer's landscaping and greening efforts, ensuring that maintenance costs remain affordable and sustainable for all Eco Majestic residents too.

"We start with the end in mind – beginning with the expected customer experience and budget, then work backwards from there," Yap says, adding that they continuously evolve alongside their customers, citing newer projects like the *duduk* serviced apartments that are designed to appeal to a new generation of homeowners.

Attention to detail

EcoWorld has always been known to incorporate elements of existing greenery for their carbon absorption capabilities, especially when it comes to carbon storing characteristics of the trees and soil.

To conserve those elements, the healthiest and most suitable trees found onsite were transplanted to Swan Lake Park at the beginning of the development.

Since then, Eco Majestic has planted around 20,000 trees and almost two million shrubs across the entire township – in open spaces, parks, back lane, side lane, boulevard and street-side planting.

According to Yap, the area enjoys cooler air, up to 1°C to 2°C cooler than neighbouring areas due to its lush greenery.

"Passive design" is also key here. These elements optimise the utilisation of natural sources of heat, cooling and ventilation to better regulate the internal environment of houses.

Eco Majestic is also a GBI-certified township. In line with this, EcoWorld also took into account better natural ventilation and lighting by designing homes that that feature tall ceilings and good windows sizes. Homes are also built to the full extent to minimise wastage of resources and to give purchasers peace-of-mind upon vacant possession.

"We studied old architecture that has lasted all this time – like the old British colonial buildings in Penang – and modernised it to fit our climate and weather. It's important to keep this concept of timeless elegance consistent throughout the entire township.

"If you're happy with the way your house looks, then you will save on renovation costs too as you don't feel like it needs any changing," explains Yap.

Placemaking for sustainable development

"Infrastructure and amenities are also a 'must have' for a township to be self-sustaining," says Yap.

For organic growth to occur, EcoWorld put in upfront investment close to RM186mil towards the infrastructure of Semenyih and improve its connectivity via the dedicated Lekas-Eco Majestic Interchange. These included the construction of the new interchange as well as the 132ft wide arterial roads to ease congestion along Jalan Semenyih.

As the township continues to mature 10 years later, the commercial centres are flourishing at Eco Majestic.

EcoWorld believes in transforming everyday spaces into vibrant, communal areas that encourage social interaction, cultural expression and economic growth.

Small enterprises like Chef Kecik Kitchen have also seen a boom in their business with foodies from out of town travelling to the one-and-only Chef Kecik Cafe for premium desserts located at Eco Majestic.

A well-designed public place is not only functional but also aesthetically-pleasing and reflective of the community's wants and needs. This is evident with the nearby retail malls, sporting facilities and extensive range of lifestyle amenities at Eco Majestic.

Yap also believes that collaboration is needed to make a place thrive.

EcoWorld not only expends its efforts within Eco Majestic, but the developer also works with the Kajang municipal council (MPKJ) to reinvigorate Kajang, specifically Jalan Besar Kajang – giving it substantial upgrades and creating vibrant murals in the street that celebrate Kajang's rich local culture and history.

The developer has also helped MPKJ in several projects, including designing bus stops, developing a smart motorcycle parking system as a proactive safeguard against vehicle theft, and organising flood relief and cleaning efforts in Hulu Langat to help the council during the end of 2021. These efforts are all part of EcoWorld's holistic ESG approach through which the group seeks to positively impact every community where its projects are located.

Eco Majestic's connectivity improvements to other major highways has also made it an attractive location for working adults and families in neighbouring states like Seremban, says EcoWorld divisional general manager Evon Yap.

The 60ha commercial hub located within Eco Majestic caters to all residents with anchor tenants such as Jaya Grocer, MR DIY and Starbucks Reserve to fulfill daily needs.

Instilling board directors with understanding of governance

Bursa Malaysia and the SC have made governance compulsory in PLCs

WITH the rising importance of the governance role in sustainability, the Securities Commission (SC) and Bursa Malaysia had jointly launched a mandatory sustainability onboarding programme for Bursa Malaysia public-listed company (PLC) directors.

Announced on June 6, the Mandatory Accreditation Programme (MAP) Part II: Leading for Impact (LIP) is an extension of the existing MAP Part I, which was also formed under the listing requirements (LR) of Bursa Malaysia's Main and the ACE Markets.

MAP's main focus is on corporate governance, including director's roles, duties and liabilities as well as other obligations under the LR.

Recently, Bursa Malaysia unveiled the Bursa Malaysia ESG Reporting Platform, which will act as a repository for disclosures conforming to the prescribed format mandated under Bursa Malaysia's enhanced sustainability reporting requirements — a move that further strengthens the bourse's role in driving the environment, social and governance (ESG) agenda.

'The MAP serves as a cornerstone in building the knowledge baseline for board directors of PLCs on Bursa Malaysia,' says Helene Li.

Forging greater ESG comprehension

The development of LIP is in line with the SC's Corporate Governance Strategic Priorities 2021-2023 and provides a step forward in sustainability education within the region.

It aims to strengthen the boards' ability to address sustainability considerations effectively and has been carefully curated to focus on the baseline knowledge and key considerations surrounding sustainability.

This includes questions that boards should direct towards management in the effort to ensure a more robust and effective oversight of sustainability risks and opportunities of the company.

It also provides directors with a platform to engage and learn from their peers.

The requirement came into effect in August this year, with first-time directors and directors of listing and transfer applicants must complete the programme within 18 months from the date of appointment or admission, respectively.

Existing directors of PLCs on Bursa Malaysia's Main and ACE Market must complete LIP within 24 months from the effective date.

The Institute of Corporate Directors Malaysia (ICDM) — the knowledge partner for MAP Part I — was appointed to conduct LIP, in line with its mandate to enhance the overall effectiveness of boards and to promote excellence in sustainability-driven governance.

One of the appointees as a faculty member of this newly launched programme is GoImpact Capital Partners (Singapore) Pte Ltd (GoImpact) chief executive officer and co-founder Helene Li.

GoImpact is a startup advisory and investment firm focused on sustainable finance and was developed around three key pillars – GoLearn (education), GoNetwork (structured advocacy) and GoInvest (deal flow platform for sustainable investments).

Through its partners network with online-to-offline initiatives, the company connects investors with deals relevant to their interests and provides learning opportunities to drive real change by example for everyone who is keen to understand more about the sustainable finance agenda.

Li's appointment to the programme is a testament to her extensive experience and dedication to sustainability leadership.

This role places her in the company of seasoned professionals, which reflects her commitment towards advancing sustainability initiatives.

Driving corporate governance

MAP by ICDM plays an essential role in driving better governance in Malaysian PLCs, as Li highlighted.

"As a mandatory programme covering the full spectrum of sustainability, the MAP serves as a cornerstone in building the knowledge baseline for board directors of PLCs on Bursa Malaysia, and better enables them to provide directional input to these companies," said Li.

She said the programme was organised around the 11 principles of the enhanced Sustainability Reporting Framework of Bursa Malaysia.

Various modules rich with industry insights reinforce the key themes such as climate risks, sustainable supply chains and more, which form a cohesive programme tailored for board directors of PLCs.

"Our team at GoImpact worked closely with all the stakeholders such as the SC, Bursa Malaysia and ICDM to develop the modularised content and we are one of the five founding faculty delivering this programme," she explained.

MAP takes a deeper dive into use cases and industry insights that align with the 2022 enhanced Sustainability Reporting Framework that Bursa Malaysia unveiled.

She pointed out that the LIP enhances the participating directors' ability to oversee sustainability risks and opportunities within their organisations through an interactive format that builds engagement.

The MAP programme also employs regional and local industry use cases that are designed to provide an immersive learning experience pitched at the board level.

"The illustrative use cases help the participating groups to identify risks and opportunities inherent in a range of sustainability-related topics," she added.

"This is a ground-breaking initiative as Bursa Malaysia is the first exchange to mandate sustainability training programmes at this level.

"Through the practical insights-driven content and interactive format, this will build solid groundwork for a more robust adoption of sustainability into corporate strategies and plans of publicly listed companies."

She said the programme's key objectives and learning outcomes will help ensure a consistent baseline of industry knowledge and insights that board directors can call upon to make directional input as part of their fiduciary duties.

"This programme is commissioned by the SC and mandated by Bursa Malaysia Malaysia for all publicly listed companies on the Exchange.

"It is a pioneering initiative with thorough foresight into equipping board directors with essential knowledge around this important but complex and rapidly evolving agenda."

Ways to reduce loss of clean, treated water

Apart from utilities providers, it is also our duty as consumers to help reduce levels of non-revenue water

WORLD Water Loss Day on Dec 4 was established in 2019 by the International Water Loss Association (IWA) to "raise awareness of the enormous problem of water losses from drinking water distribution systems and the need to get more serious about fighting it."

Based on IWA's calculations, daily losses from drinking water supply networks worldwide reach a staggering 346 billion litres. A 30% reduction in these water losses could potentially provide 800 million people with treated water.

According to the Water and Sewerage Fact Book 2022 by Suruhanjaya Perkhidmatan Air Negara (SPAN), the loss of treated water supply in Peninsular Malaysia and Labuan was at 5,389 million litres per day (MLD) – an increase compared to 2021's 5,041 MLD.

The loss of clean, treated water during the distribution of water supply to consumers is known as non-revenue water (NRW).

Utility providers have not only recognised the challenges posed by NRW but have also taken robust and strategic measures to mitigate its impact.

Their multifaceted approach includes incorporating technological innovation to effectively identify leaks, gather data and address anomalies, setting up smart meters, implementing pressure management to decrease pressure, and enforcement on illegal tapping. (See story on Page 7: *Fighting against the current of water loss*)

Nevertheless, the responsibility for NRW management extends beyond government agencies, water utilities and services providers; it also involves the community as managing and safeguarding this invaluable and precious commodity becomes significantly important.

By being vigilant and proactive in monitoring water usage and detecting leaks, consumers can play a crucial role in reducing NRW and promoting water conservation in their communities.

Here are ways that we as consumers can potentially spot water issues, including pipe leaks or pipe bursts, meter malfunctions, and unauthorised tapping that bypasses billing systems:

Regular checks on water meter

A meter leak refers to a situation where a water meter is not functioning properly and is allowing water to leak due to various reasons such as faulty components.

When a meter leak occurs, water may continue to flow through the meter even when there is no water usage or when all water fixtures are turned off. This can lead to inaccurate readings, resulting in higher water bills.

Keep a close eye on your water meter and note for any unusual readings including unexplained increases in your water bills. A sudden and unexplained increase in your water consumption, especially if your usage habits haven't changed, may signal a hidden leak.

Inspect pipe leaks

Check all exposed pipes including those under sinks, showerheads, base of toilets, and other fixtures in and around your home. Search for any visible signs of leaks, drips, dampness or moisture.

Additionally, listen for uncommon sounds like dripping within your plumbing system. If persistent noises occur when water isn't actively in use, it may suggest a concealed leak.

Water can physically cause structural damage to a building which can be financially harmful. More than that, mould and dampness could pose a risk to our health, particularly those with respiratory issues.

Detecting illegal tapping or water theft

Illegal tapping involves unauthorised changes to the water distribution system, including pipes and meters, suggesting tampering.

Detecting illegal tapping can be challenging due to deliberate efforts to avoid detection but there are signs that may help give an indication:

> Unusual fluctuations in water pressure or volume, especially if the water pressure drops significantly during peak hours.

> Broken seals or unauthorised markings on your water meter.

> Any suspicious activities or unauthorised connections including signs of digging or disturbance around your property, especially near your water lines.

Spot a burst pipe

A burst pipe involves a large volume of water being released rapidly from a sudden and significant rupture in a pipe. Pipe bursts can cause substantial damage to the surrounding area.

> At home: The sound of hissing or gurgling coming from your pipes could indicate a leak. These noises are caused by water rushing through a damaged pipe.

Another point to note is the sudden drop in water pressure. This is especially noticeable if the drop in pressure occurs in a specific area of your home, such as a bathroom or kitchen.

> Out of home: The most obvious and easy to spot is if you happen to drive past a burst pipe with water gushing out, flooding the surrounding area.

Stay tuned to the next issue to find out how you can make a difference to a better future.

Infographic by SMG Brand Studio