

# Star ESG

ENVIRONMENTAL SOCIAL GOVERNANCE



## The Sustainability Challenge for Malaysia

With a new year comes new challenges for the nation to confront. How will Malaysia deal with these issues, be it the escalating natural disasters that arise from climate change, to the rising cost of living and food security concerns

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# The transition to sustainability

By NIK NAZMI NIK AHMAD

As Malaysia's Natural Resources, Environment and Climate Change (NRECC) Minister, I understand that my portfolio areas are increasingly of great concern to the public for what it entails for the future of Malaysia. Therefore, it is such a privilege and an honour to have been given this critically important role.

Addressing the sustainability challenge is a crucial task for businesses and countries alike. It also presents Malaysia with an opportunity for growth even in the face of global economic uncertainties in 2023.

My priorities include addressing climate change, strengthening energy and water security, carrying out our carbon emission reduction commitments and hopefully shifting public values towards internalising green culture.

It cannot be denied that climate change is a reality for Malaysia. Our average surface temperature increased between 0.14°C and 0.25°C every decade from 1970 to 2013.

The NRECC is adopting a multi-prong approach to deal with this crisis. On the one hand, we are carrying out immediate and short-term mitigation responses such as constructing at least 40 flood barriers, walls, and drainage systems in vulnerable states like Kelantan and Terengganu.

Besides the on-going work on the National Adoption Plan, the NRECC will also ensure that a Climate Change Act is passed by Parliament in 2024. We have likewise proposed the setting up of a Parliamentary Select Committee on Environment and Climate Change to ensure the *rakyat* has a voice in how related policies are shaped.

While we have reduced electricity subsidies for multinational companies and big businesses, the Unity Government has maintained them for the *rakyat* and SMEs, taking cognisance of the need to control the rising cost of living.

Apart from improving energy efficiency, our existing reliance on fossil fuel energy must be re-examined with a holistic plan to ensure that Malaysia is powered sustainably and affordably. We must be willing to

“Apart from improving energy efficiency, our existing reliance on fossil fuel energy must be re-examined with a holistic plan to ensure that Malaysia is powered sustainably and affordably.”

consider energy from all safe, reliable and affordable sources as well as be able to adopt the latest technological breakthroughs.

As for water, the focus will be on preventing disruptions to supply and reducing shortages, as well as addressing pollution. We will work towards increasing coverage of sewerage services to 90% and reducing the rate of non-revenue water to 25% by 2025, from the current 35%.

The Unity Government remains committed to Malaysia's aspiration to achieve net-zero greenhouse gas (GHG) emissions as early as 2050, as well as to maintain at least 50% of our forest cover.

My ministry has submitted the country's Fourth Biennial Update Report (BUR4) to the UNFCCC, which will give insights into our GHG inventory for 2017-2019 and our emissions trends since 1990. This will assist us in charting a clearer pathway for Malaysia to achieve net zero emissions.

We will continue with the implementation of the Low Carbon Mobility Development Plan 2021-2030. This will help reduce GHG emissions by 165 million tonnes of CO<sub>2</sub>, save fuel expenditure of RM150bil over 10 years and encourage the use of low-carbon transportation generally.

I also recently launched the Bursa Carbon Exchange (BCX). I believe economic instruments such as carbon pricing will assist in greening the business operations of Malaysian companies and attract sustainable investments.

Moving forward, we must ensure that the transition to sustainability, as well as the setting and implementation of ESG frameworks in general, are just and inclusive.

No one should be left out as we move towards a sustainable future.

Efforts must be made to ensure that jobs are not lost or made obsolete unnecessarily. And if this is inevitable, to replace them with “green jobs”, including in renewable energy, ecotourism and green manufacturing.

Energy efficiency solutions must be accessible and affordable for individuals, households and businesses alike, including SMEs.

These are just some of the things that the NRECC, despite our relative “youth”, is working on in tandem with our colleagues in other ministries.

Sustainability is the work of generations that all nations are seeking to come to grips with. Therefore, it requires patience and long-term planning.

The government must lead with wise policies, frameworks and catalysts. But the buy-in of the people is also essential.

There must be a willingness to embrace the paradigm shifts that the transition demands with open minds, including on the part of the private sector, civil society and the public at large.

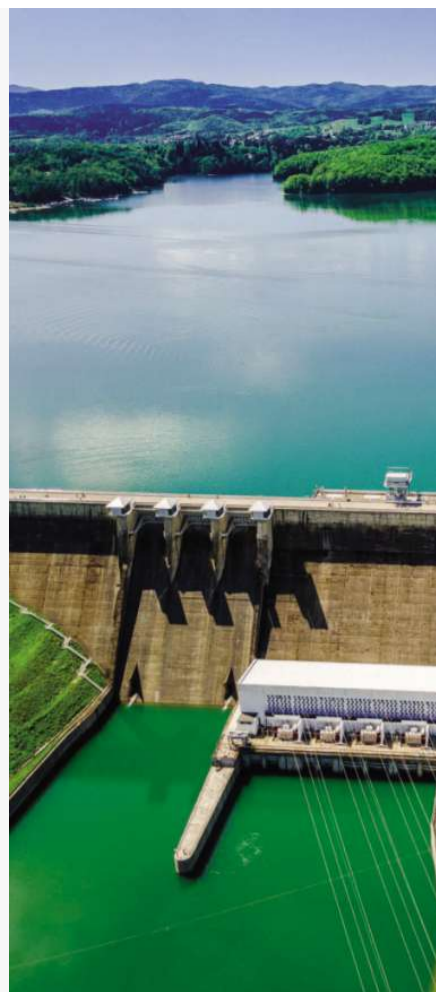
Nevertheless, the NRECC fully understands the need for urgency in addressing the issues entrusted to us. We will work conscientiously, but also tirelessly to discharge our responsibilities, always bearing in mind that the work we do will have an impact that will last for generations.

Media outlets like Star Media Group can help Malaysia meet its sustainability challenge, including through its ESG pullout. I trust its readers will find this publication extremely insightful and thought-provoking.



Nik Nazmi Nik Ahmad is Malaysia's Natural Resources, Environment and Climate Change (NRECC) Minister, Keadilan vice president and Member of Parliament for Setiawangsa.

## SME Banking



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# Facilitating the ESG transition for SMEs

Bank Islam's SME Smart Eco Financing programme mobilises finance for smaller companies to embrace sustainability



**(Pic above)** Bank Islam aids in the public tender programme for LSSP, which allows companies from the private sector to build, own and operate solar plants to generate RE in large capacities.



**(Pic left)** There is increasing external pressure for organisations of all stripes to adopt ESG practices to participate in the global supply chain, meaning that SMEs must not be left behind in the sustainability agenda.

By **CALYN YAP**  
ESGeditorial@thestar.com.my

**T**O ensure that SMEs embrace the environmental, social and governance (ESG) agenda is vital.

The sector forms the backbone of the economy, be it through its contribution to the gross domestic product or its role as the largest employer in Malaysia and now, its part in realising the nation's ambition to achieve carbon neutrality by 2050.

SMEs integrating ESG practices into their operations will not only translate into positive social and environmental impact, but also a business imperative as they will no longer be able to export to more developed countries or participate in the global supply chain otherwise.

There is increasing pressure for organisations of all stripes to adopt such practices from external economies, most notably the European Union and the United States, in the form of embargoes or higher barriers of entry for countries and companies that are not ESG-compliant.

That's not to mention the rising difficulties that SMEs will face in accessing capital, as financiers are moving full steam ahead with ESG to mitigate climate and environmental risks.

In recognition of the need to mobilise capital to ensure a just, equitable transition to a sustainable future, Bank Islam has rolled out its SME Smart Eco Financing (ECO) programme in mid-November 2022. Coinciding with the United

Nations Climate Change Conference (COP27) in Egypt, the financing programme continues the bank's commitment to banking sustainability with the October launch of its environmental, social and governance (ESG) risk management framework.

"The objective of developing this product is to promote and facilitate the adoption of green sustainability practices by SMEs, whether as producers or users," said Bank Islam SME banking director Rizal Mohd Yusof.

In this sense, producers can use ECO as capital expenditure to produce green products, whereas users can leverage on the programme for green technology utilisation.

ECO serves to benefit SME companies that produce and/or adopt green technology for their businesses, such as producers seeking to purchase business inventory, equipment or services relating to sustainable initiatives and users looking to implement sustainable practices.

It is also available to finance working capital for the purchase of raw materials in green production, as well as enable companies to acquire or purchase assets listed under MyHijau, which have been verified as green technology assets by the Malaysian Green Technology and Climate Change Corporation (MGTC).

Those eligible to apply for the financing programme are



“ECO is developed as proof of the bank's commitment to ensuring that what we do will create a positive and lasting impact on our society, economy, environment and country.”

Rizal Mohd Yusof

sendirian berhad (private limited) companies or sole proprietorships or partnerships that fall within SME Corporation Malaysia's SME definition, which have operated for at least two years and are profitable for at least one of those years.

As for the financing amount, ECO provides up to RM15mil for producers and up to RM5mil for users, while the financing limit for sole proprietorship/partnerships is capped at RM2.5mil.

At the same time, ECO customers are eligible to benefit from government tax reliefs, incentives and discount under the Green Initiative, such as the Green Investment Tax Allowance (GITA) and Green Income Tax Exemption (GITE) under MGTC, as well as the extension of Investment Tax Allowance (ITA) for the purchase of green technology assets and Income Tax Exemption (ITE) on the use of green technology services and systems under the Malaysian Investment Development Authority.

Overall, the ECO financing programme also contributes towards achieving the Government's target for Malaysia to be a net-zero emission economy by 2050 with a focus on sustainable energy including Renewable Energy (RE) and Energy Efficiency (EE) and supports the Government's green technology initiative.

Moreover, it also aids in the public tender programme for Large Scale Solar Programme (LSSP), which allows companies from the private

sector to build, own and operate solar plants to generate RE in large capacities.

ECO is the latest in the bank's initiatives to support SMEs by providing access to financing, with some others including SME Biz Grow, SME Exporter and Go Halal SME – as a full-fledged Islamic local bank and the first to be listed on Bursa Malaysia's Main Market, Bank Islam is mandated to support the growth of the country's halal economy.

The financing programme ties back into the bank's values-based intermediary core business model and how it takes ESG aspects into consideration when designing its products and services, alongside how it conducts its operations or initiatives with an emphasis on communities' well-being and the preservation of wealth and natural resources.

"ECO is developed as proof of the bank's commitment to ensuring that what we do will create a positive and lasting impact on our society, economy, environment and country," said Rizal.

This shows that for Bank Islam, sustainability is about investing for long-term growth and the future of the organisation, which translates into the bank's five-year growth strategy and business plan (LEAP25) – that aims to double its current 2.3% ESG-rated financing assets and sustain its industry-leading return on equity at above 15% – to become a champion in offering shariah ESG total financial solutions and to establish its leadership in social finance and digital banking.

For more information on the SME Smart Eco Financing programme and the bank's range of initiatives to support the growth of SMEs, visit your nearest Bank Islam branch or its website at [www.bankislam.com/business-banking/sme-banking/eco/](http://www.bankislam.com/business-banking/sme-banking/eco/), or email [sme-assist@bankislam.com.my](mailto:sme-assist@bankislam.com.my).



As a company that owes much of its success and legacy to the environment, sustainability is non-negotiable for Boh Plantations.

## Preserving nature's gift

HERE is a distinct charm to Cameron Highlands in Pahang. A strong sense of "nature" abounds. The air is fresh and the earth is rich and fertile.

It is here on virgin jungle terrain, way back in 1929, that J.A. Russell started the country's first highlands tea garden, now known as Boh Plantations.

Shaped by the strong values and passion inspired by its founder, Boh has been nurtured by generations of tea experts devoted to producing teas of exceptional quality, character, aroma and freshness for over 90 years.

As Malaysia's largest tea producer and one of the world's few fully-integrated tea companies, Boh grows, processes, packs and markets its own brand of authentic, homegrown Malaysian teas for the domestic market, as well as tea lovers around the world.

With Boh owing much of its business success to nature's gift and fertility of the land, how has the company set its sights to safeguard and sustain its brand and tea growing legacy in the years to come?

"Boh is committed to be a fully sustainable tea grower in the near future. To achieve this, we have intentionally made sustainability a key consideration in every aspect of our operations. "So, in as much as we prioritise efforts to continually perfect our tea craftsmanship, we are equally passionate to find ways to operate and grow our teas without harming the environment," said Boh executive chairman Caroline Russell.

Standing at the core of its sustainability plan is its 1,200 hectares of agricultural land across four plantations with three (Boh Estate, Fairlie and Sungei Palas) in Cameron Highlands and one in Bukit Cheeding, Selangor.

"With technological advancements, becoming a sustainable tea producer is certainly plausible as well as manageable. We recognise that adopting sustainable practices does incur additional cost," she added.

"However, the cost of not adopting sustainable measures has an even larger adverse impact. As a company that owes much of our success and legacy to the environment, sustainability is non-negotiable.

"Boh will do all we can to ensure that we preserve the conditions that allow us to continue growing teas for many years to come."

Boh's concern for the environment has resulted in proactive measures in various aspects of its operations, from tea growing to tea production and management of its tea centres.

Ongoing reviews are conducted to ensure the environment is safeguarded, wastage minimised and its carbon footprint

lowered.

Some of Boh's responsible agricultural practices include selecting only the best teas from its clonal and seed banks for planting. It also employs integrated pest management strategies, which includes propagating anti-pest plants to reduce dependence on pesticides and planting grass to improve soil strength against soil erosion.

Organic fertilisers and waste from tea production are used in different areas of its planting process to sustain soil fertility and ensure a bountiful tea harvest.

Boh also ensures a balanced ecosystem for its surrounding forest lands. At the Bukit Cheeding plantation that borders the Kuala Langat North Forest Reserve, a protected peat swamp and home to endangered flora and fauna, Boh maintains a buffer zone between its planted area.

On Boh's key initiatives, its chief executive officer Jason Foo said: "We recently installed solar panels at our Bukit Cheeding packing factory to tap into solar energy for our electricity needs, lower our dependence on fossil fuel and reduce carbon dioxide emission.

"Installation of solar panels at our Cameron Highland estates are also ongoing. Our adoption of clean energy solutions complements our long-term commitment to environmental initiatives.

"Boh has also adopted a holistic 3R approach of reducing, reusing and recycling our product packaging. Many of our products now come in a tear box structure that eliminates the single use of plastic shrink wraps."

The tear boxes use Forest Stewardship Council (FSC) certified paper sourced from responsibly managed forests, while the tea bags are also biodegradable and products in pouches and sachets are packed using recyclable polypropylene material.

Consumer education initiatives continue to be prioritised. Through its *Mesra Alam* product descriptor on its packaging, Boh keeps consumers informed on packaging elements that are recyclable or biodegradable.

Environmentally friendly initiatives continue to be introduced at its tea centres at the Boh Estate and Boh Sungei Palas, both popular tourist destinations, such as the usage of biodegradable paper straws and oxo-degradable bags respectively. Food waste is also composted into fertiliser for gardens around the tea centres.

In the pipeline are plans to avail water dispensers with eco-friendly cups instead of having plastic water bottles for sale.

"We acknowledge that there is much that needs to be done to preserve Mother Nature for generations to come. As a brand, we remain committed to walking the distance in our green agenda," Foo said.

# Solar advancements

As the world explores more ways to replace carbon-based fuels as a source of energy, one of the ways that has been discovered since the 1870s was solar electricity, using selenium.

However it was only in 1954 that the first silicon photovoltaic (PV) cell was made at Bell Labs.

Today, PV cells are one of the best alternative sources of electricity, but whether this remains viable and affordable, solar experts share their views.



**Regine Choo**  
Project director  
Yongyang Solarroof

Firstly, for technological advancement we are now more concentrated on mono-crystallised hybrid technology with higher cell efficiency.

Back 10 years ago, we were getting 200-watt panels but now we have almost three times the capacity, with 600-watt panels on the way.

Installation-wise, we could see the advancement moving from rooftop installation on houses scaling up to commercial, industrial and agricultural, even to governmental and the community.

We also see the market moving on to utility skills on-the-ground as well as looking beyond rooftop to carport and land, floating solar, and the building faster application.

Prices have come down tremendously in the past 10 years, having dropped more than 80% - making it affordable, especially when coupled with an attractive payment scheme for domestic installation.

Commercial users could actually leverage on government tax incentives to accelerate returns in investment in less than three years.

Everyone's concern is about how

they will be getting on the return of their investment (ROI) as solar is considered an investment.

Previously the ROI has been about seven to eight years but now we hope to see an improvement, especially for residential and depending on the economies of scale, this may go down to about three years.

Solar PV systems actually qualify for renewable energy credits.

There have been early adoptions of renewable energy credits programme that enable the solar PV system to be registered and to get the renewable energy credits and a certified documentation as proof on their carbon emissions and also their carbon footprints.



**Jonathan Kan**  
Managing director / co-founder  
ERS Energy

Since 2009 until now we have seen a 75% reduction in cost and it has become very accessible to everybody. The industry has been budding as we have the right climate to take advantage of the solar resources and that's why this has made solar PV systems generate cheaper electricity than even some gas plants.

Although back in 2009 when people talked about solar they were thinking about solar water heaters but the popularity has picked up within the past few years. The uptake is

real due to solar being more affordable and accessible.

However there are remaining issues with the current technology, such as intermittency and that's why energy storage has to also be considered. Solar will be driving the next stage of growth.

Solar PV modules generally come with a 25-year performance guarantee, which means after 25 years you will get 80% of its capacity, but these are backed by insurance companies that ensure your warranties last even if the companies do not.

Having said that, in a practical sense in 10 years time whatever solar panel you buy today you will not be able to source for the exact same one and that's because the industry and technology will continue to advance.

Although considered expensive, battery storage for solar energy is here to stay. And while there are talks about new sources of solar energy types, these will need time to be commercialised, but batteries are here and becoming more accessible. That will drive the cost down in years to come.



**Mitch Gelber**  
Chief executive officer  
Malaysia Green Building Council

The Green Building Council is a leading non-governmental organisation in Malaysia that is non-profit and a member of the World Green Building Council and part of the over 70 national councils worldwide.

We have recently been expanding beyond green buildings and considering issues such as the circular economy, health and well-being, net zero and zero carbon building.

One programme that we plan to



**Yusrizal Mohd Yusof**  
Managing director  
TNB Renewables Sdn Bhd

The availability of financing especially for household solar are available, with options such as credit cards being one, or having cash outlay from the homeowners.

The availability of the net energy metering scheme that allows the surplus energy to be transported back to the grid will enable homeowners to claim some sort of rebate from the energy that is being transmitted.

There are also companies that have attempted to provide zero capex solutions even for housing options but it's quite limited. There are also financial options offered by banks in terms of personal loans specifically for the solar installation.

roll out early this year is a carbon score that shows how close the building is to achieve the ultimate zero carbon emissions goal.

One of the key components of this is solar, which involves the decarbonisation of the electricity grid and on-site solar from rooftop or on-site PVs.

When it comes to ESG, the environmental impact is the most urgent and that is to release our use of fossil fuels.

Our grid sits at about 92% fossil fuel use, and accounts for the emissions associated with fossil fuel burning.

Malaysia has committed internationally to the United Nations to reduce emissions by 45% as compared to 2005 levels and to achieve the ultimate goal of zero carbon neutrality by 2050.

Solar electricity is by far the best and most immediate most actionable solution that we have now and the economics already makes sense, so this is how solar contributes to ESG.

CNI zero-capex solutions are widely available and most installations are under this scheme, as the costs are driven down in the market.

We can see at any time now installation of even relatively smaller installations of 100 or 200 kilowatts are able to provide a tariff lower than whatever the customers are buying from degree so it's a very promising segment.

In any energy system design the designer or the policy needs to address three main components, which are economics, environment and the reliability of the system.

When addressing these three main factors it is best to balance them although at the moment, the emphasis is being put on the economy, which makes sense as a growing country.

And much like continental Europe, which has a very well interconnected power grid, we are also embarking on an Asean power grid initiative with Singapore, Thailand and West Sumatra, as well as plans to link to Borneo.

There are also options for offshore floating solar installations that minimises the impact of land use, which all large-scale solar developers are concerned about.



# The nutrition imperative in climate action

## Regenerative farming for a healthy, sustainable environment

By **CHOW ZHI EN**  
ESGeditorial@thestar.com.my

LAST Nov 30, PWD Smart Farmability founder Dr Billy Tang shared how regenerative farming would play an integral role in feeding Malaysia during a forum by the Malaysian Research Accelerator for Technology and Innovation.

The forum, dubbed I-Nation 2022, was held in conjunction with World Soil Day on Dec 4 and covered the theme of *Raising B40 living standards and exploring agritech in food security*.

A paraplegic farmer himself, Tang, 57 this year, shared: "We need to rethink the food system. People can't afford a healthy diet and this is a very serious problem.

"Across the world, farmers are putting regenerative practices into place.

"From developing agrifood startups to large scale farms, farming for a better climate is proving to yield positive results."

According to Tang, regenerative practices foster healthier soils, improved water infiltration and reduced soil erosion and have been recorded to sustain yields and lead to reduced production costs.

Tang is no stranger to ethical, regenerative farming as he and PWD Smart Farmability have been empowering Malaysia's disabled community through regenerative agriculture principles and values by making nutritious food and food-growing skills accessible to them.

On top of persons with disabilities, their beneficiaries also include B40, homeless shelters, drug rehabilitation centres, prisons, single mothers, indigenous people and others who fit their criteria.

Our issue with food scarcity remains pervasive as food production is centralised, with those most affected being the underprivileged.

Food shortages also happen due lack

of adequate logistics, concentrating all raw materials and produce in limited areas.

This in turn affects the availability of food for the populations who are prone to discrimination.

Meanwhile, the Egyptian Presidency of the United Nations Climate Change Conference (COP27) recently collaborated with the World Health Organization (WHO), the United Nations Food and Agriculture Organisation (FAO), the Global Alliance for Improved Nutrition (GAIN), and others to create the Initiative on Nutrition and Climate Change (I-CAN).

This global multistakeholder, multisectoral initiative aims to accelerate transformative action at the intersection of climate change and nutrition.

"Climate and health are inextricably linked; nutrition serves as a vital link between the two.

"We need to bring these two worlds together," said GAIN executive director Lawrence Haddad to United States-based non-profit organisation Food Tank.

"Unless something is done about climate change, you're going to be fighting against the tide when it comes to food and nutrition," he added.

To tackle this centralised production issue in our country, Tang had also looked into setting up mini satellite terrarium production hubs in centres with an established network of persons with disabilities.

He also noted the challenges for Malaysians to get the nutrition they need, citing the lack of healthy snacks, with what is currently available being typically high in sugar, dairy and cholesterol for children.

He emphasised: "Nutrition begins with parents making the right food choices for their stunted and malnourished children especially in the

urban city."

With two decades of private research and involvement in agri-agro-based industries, Tang is also responsible for creating the world's first regenerative organic vegetable terrarium, Hopebox, alongside a multitude of other nutrition-driven initiatives.

"What's the human face that comes to mind when you think of climate change? For PWD Smart Farmability, it's the marginalised and indigenous communities that can't compete physically, mentally and financially with the rest of society for safe and nutritious food," he stressed.

The Hopebox terrariums are capable of self-regeneration with sunlight for a guaranteed year without fertilisers, making them a fresh food bank in your own home.

Each Hopebox can be adopted for RM200 and can be self-picked-up at Tang's 200sq t smart farm house in Subang Jaya, Selangor.

To date, Tang and PWD Smart Farmability have deployed over 4,700 terrariums to the homes of the urban poor, hidden hunger, malnourished families and welfare homes.

He calls this the My Carbon Farm Awareness and sees it as a conversational greenhouse piece on basic soil health within the comfort of your own home, without any agriculture experience or knowledge and helps to demonstrate zero-energy, zero-waste, zero-miles-diet and carbon sequestration.

Consequently, it aids our personal role as a responsible consumer in accelerating urban action of human settlements for a carbon-free world and circular economy without jeopardising planetary health.

"You are no longer harvesting but foraging – as agriculture is no longer about farming but feeding for health and nutrition to save a nation," he said.

# Sustainability challenge for Malaysia

## Changing Malaysia means changing Malaysians

**M**ALAYSIA has been gearing towards sustainability since the early 2000s. The government approved the National Policy on Climate Change 2009 (NPCC) back in November 2009, during the time of former prime minister Datuk Seri Najib Razak.

The NPCC, then, served as a framework to mobilise and guide government agencies, industries, communities and other stakeholders to address climate change and its effects in an integrated manner.

According to a study by Universiti Kebangsaan Malaysia a decade ago, there were already signs that we needed to take sustainability and global rising temperatures seriously. The study found that there will be a possible climatic change in Peninsular Malaysia by 2041 to 2050.

This would result in temperatures rising by two degrees Celsius and more extreme hydrological conditions, such as higher maximum rainfall, lower minimum rainfall, higher high river flow and lower low river flow – with the latter becoming more pressing as issues with floods and landslides had curtailed the new year's celebrations with sombre sobriety.

Many will also be watching this February to see if the present government will keep several green and sustainable initiatives from Budget 2023, which was tabled but never passed due to the dissolution of Parliament. This included RM15bil for flood mitigation measures that current prime minister Datuk Seri Anwar Ibrahim has suspended pending an investigation into possible irregularities.

The budget included RM216mil for river cleaning and treatment, as well as RM36mil for programmes to protect wildlife and their habitats and increase the number of park rangers.

Emphasis for a green economy was reiterated during a press conference on Jan 17 whereby Datuk Seri Anwar Ibrahim said: "Digital advancement, small and medium enterprises and green economy will be the focus of the revised 2023 Budget."

He noted that these are among initiatives that will be given a boost in the Budget, given its importance and potential. "This new administration will make some adjustments to the budget," he said when opening the Budget 2023 consultation session on Jan 17.

Suffice to say, it's becoming an immediate imperative for the government to make actionable plans in the areas linked to sustainability to rein in escalating negative impacts, against the backdrop of inflation that is bound to affect our cost of living and financial stability.

With the Climate Change Bill expected to be tabled and our own National Adaptation Plan in the works, key ministries and industries will be under scrutiny based on what they can propose and put into action for a greener Malaysia. But to really affect change for the nation in the pursuit of a sustainable future, we have to mobilise every individual Malaysian to support the cause.

And knowing is half the battle, which is why *StarESG* is taking the opportunity to highlight the importance of sharing knowledge on sustainability with our readers, in conjunction with UN International Day of Education on Jan 24.

Transforming our future necessitates an urgent rebalancing of our relationships with one another, with nature and technology which pervades our lives, bringing with it both breakthrough opportunities and serious concerns about equity, inclusion and democratic participation. Now, more than ever, Malaysia needs to look at its attitude towards ESG and what we can do on a personal level to further our green aspirations.

From natural disasters, financial inclusivity and food security, creating a sustainable Malaysia means addressing these multifaceted, macro-level ESG issues beginning with what is closest to heart for most Malaysians. – **By CHOW ZHI EN**



Dr Tang (right) with the PWD Smart Farmability regenerative 'soil-Ution' satellite farm, which ensures that communities in need can enjoy fresh, organic and nutritious meat and vegetables in the long run.



The Batang Kali landslide, which claimed the lives of 31 victims in December last year. – IZZRAFIQ ALIAS/The Star

# Here comes the rain again

Climate change brings more floods, landslides – but can we avert them?

By ERIC QUAH

ESGeditorial@thestar.com.my

**A**T THE end of 2021, a tropical depression cut a swathe through Peninsular Malaysia and did more than dampen the holiday spirit – it cost the lives of 55 people with an overall loss of RM6.1bil.

Then last year, in the same month, a deadly landslide occurred that claimed the lives of 31 campers, 12 of whom were children and a one-year-old baby boy, at Batang Kali, Selangor. It was considered the worst recorded in Malaysian history with a total of 92 victims.

The cause for the landslide, as reported by the Public Works Department on Dec 18 was contributed by high soil saturation and pressure from the accumulation of underground water beneath the campsite.

According to the British Geological Survey, landslides occur due to many factors, of which the top ones are the introduction of water and soil erosion, among others.

One common denominator in these tragedies is the comparatively higher incidence of rain, which can be indicative of the insidious and pervasive effect of climate change.

From Dec 17 to 19, 2021, the amount of rainfall was equivalent to the average rainfall for a month, according to the Water and Environment Ministry, a situation that was dubbed a “100-year weather event.”

Universiti Malaya meteorologist Dr Azizan Abu Samah explained that the interaction between the low pressure weather system, the seasonal north-east monsoon and typhoon Rai, which has ravaged the Philippines contributed to the floods (Channel NewsAsia, CNA).

While the unexpected rainfall was the main reason for the deluge, the rainforest is able to absorb at least 30% of the downpour with its canopy, with the remaining water being soaked up by the soil and roots (ISEAS – Yusof Ishak Institute).

However, when these areas are cleared for development, these natural floodgates are removed, allowing the

torrent of water to gush down, which inadvertently swell rivers and hence causing floods.

And according to the Global Forest Watch, Malaysia experienced a net change of -1.12Mha (-3.8%) in tree cover from 2000 to 2020. It lost 2.77Mha of primary forest from 2002 to 2021, which makes up 33% of its total tree cover.

Yet much of the hillsides and forested areas may still be up for grabs, as claimed by independent initiative Rimba Disclosure Project (RDP).

RDP, which promotes Malaysian rainforest protection, allegedly identified over 43,000ha of land in forest reserves, central forest spine habitat linkages and indigenous customary land on sale through 28 listings on several websites.

The report indicates that despite the increasing number of natural disasters, there is little thought or knowledge among those involved of how hillside developments, precipitated with inclement weather, can affect the surrounding environment.

In a proposed framework for Flood Disaster Management Cycle in Malaysia by Muzamil et al of Universiti Tun

Hussein Onn Malaysia (UTHM), the team identified three main challenges in managing flood disasters.

He listed “a lack of integration in executing disaster catastrophe circles among agencies, unproportionate arranging in debacle hazard control and inadequacy in preparing for long-haul recuperation.”

In the wake of the Batang Kali tragedy, construction experts advised that risk analysis and vulnerability assessment at landslide-prone areas should be a continuous exercise and not a one-off job.

Furthermore, Universiti Teknologi Malaysia (UTM) Faculty of Engineering dean Prof Dr Edy Tonnizam Mohamad pointed out that the landslide tragedy showed that past development history needs to be well documented and assessed for future development planning (*The Star*).

He said many landslides in the country involved cut-and-filled soil during construction, which is loose and highly susceptible to rain.

This weakens the strength and reduces stability of the soil and when water flow is introduced, the risk of soil failure will increase.



The floods in Taman Sri Muda and surrounding areas in Shah Alam back in December 2021 saw the water reaching up to waist level.

# Towards more resilient cities

By CALYN YAP

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DISASTROUS events such as floods and landslides, which are increasing in frequency and severity, can be said to be the result of the climate change emergency and rapid urbanisation in the way our cities are designed.

The lack of permeable surfaces with rainwater runoff, for instance, has exacerbated the problems we are simultaneously facing from climate change.

“We need to take a holistic approach and systems thinking with a broad raft of solutions to resolve some of the challenges that we’re facing, as there isn’t really a magic bullet that can solve all our problems,” said Arup Malaysia country leader Lawrence Yeap.

Arup, a United Kingdom-headquartered collective of 16,000 designers, advisors and experts across 140 countries, works across diverse geographies and sectors – including infrastructure, property, transport, energy, cities, sustainability and digital – to deliver a wide range of services that are united by the shared purpose of shaping a better world through sustainable development.

Among the recent projects that it has worked on include the Climate Action Plan 2050, providing key technical input for the research and development to help achieve Kuala Lumpur’s mission of becoming a carbon neutral city by 2050; managing grants under the UK PACT Climate Transition Programme; contributing to Merdeka 118 and reference designs for Line 2 and 3 of the Klang Valley Mass Rapid Transit project.

At the same time, it has developed Terrain, a global planning digital tool that combines data analytics, machine learning and automation and satellite imagery to access the “sponginess” of a city, which basically means the proportions of green (greenery) and blue (water) or nature landscape versus hard infrastructure – such as sea walls and drainage systems – in the city space.

Arup Australasia co-chair Kerry Coker said: “The digital tool not only demonstrates how digital can be used as an enabler to respond to and help us better understand and mitigate extreme events, but also touches on the important role of nature and biodiversity in responding to climate events and creating liveable cities and environments that people want to live in and can thrive in.”

“Increasingly, there’s enormous opportunity for integrated design solutions that work with and embrace the power of nature through blue-green infrastructure and sponge cities to get better outcomes than can be offered by hard infrastructure solutions,” added Arup Australasia co-chair Kate West.

From this perspective of nature-based design, mitigation and adaptation are intertwined to ensure that the overarching structure of resilience is maintained to future-proof cities. But this means that integrated mitigation assessment strategies are key, requiring different stakeholders across government agencies and the private sector, in a wide range of disciplines, working in partnership to come up with solutions for these complex problems and help combat future challenges.

At the moment, most of the decision-making, planning and governance are fragmented.

West noted: “We must maintain that focus on mitigation to ensure that we limit global warming, so we must be doing enough on that, while we simultaneously have to build adaptation into our infrastructure.”

The cost of inaction is vastly more than the cost of taking action, as the true cost of loss needs to be taken into account to transform the approach to investment to accurately capture the cost and potential impact of disasters and properly value resilience.

It is not just about resources spent on rebuilding an asset, say a hospital destroyed in a flood, but also the tangential secondary impacts on health outcomes for the community during its downtime, as Coker and West stress on the importance of this cost-benefit analysis as a key to investing in resilience.

“You do need to look at it very broadly on all the positive and negative impacts of inaction, leveraging systems thinking across the full project lifecycle, taking this perspective from the operations to asset maintenance and feeding it back to the front end of the project lifecycle, when you’re actually thinking through site selection for infrastructure,” explained West.

Lastly, she highlighted the importance of ensuring an equitable transition in the sustainability agenda.

“It’s absolutely critical that we think about how to make this agenda accessible to everyone and that it’s an equitable transition so that nobody gets left behind,” she said.

# Malaysia's first voluntary carbon market

## Cap-and-trade policy to regulate climate change

By **CHOW ZHI EN**  
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COUNTRIES all over the world have set ambitious (and perhaps foolhardy) net zero carbon emissions goals to curtail emissions.

Last December, Bursa Malaysia Berhad launched Malaysia's pioneer shariah-compliant voluntary carbon market with the introduction of the Bursa Carbon Exchange (BCX) at an event officiated by Natural Resources, Environment and Climate Change Minister Nik Nazmi Nik Ahmad.

The objective of this newly launched BCX is to enable companies to trade voluntary carbon credits from climate-friendly projects and solutions, with the aim to offset their emission footprint and meet climate goals.

However, analysts and experts have found other concerns related to the whole approach of turning CO<sub>2</sub> into a commodity and establishing an offset system that allows the continuation of business-as-usual without addressing the fundamental flaws in today's production and consumption patterns.

### Policy signals readiness

In a report by KPMG Malaysia on our net zero readiness, KPMG Malaysia Sustainability Advisory executive director Phang Oy Cheng said that our biggest hurdle is decarbonising our energy-centric economy whilst facing population growth pressure and rural poverty.

"The transition to net carbon zero will require not just political will but also significant structural and legislative reforms on a national scale," he said in the report.

To achieve net zero carbon emissions by 2050, the introduction of a carbon market – much like with the BCX – is the next logical step for the sustainable development of various industries.

Currently, about three quarters of Malaysia's industrial output come from small and medium-sized enterprises (SMEs). They typically require government direction and regulation to decarbonise, but are trailing

behind despite incentives.

In this regard, Bursa Malaysia – as a frontline regulator – remains one of the most vocal proponents of good ESG practices and disclosures within Corporate Malaysia.

"Through the work of the International Sustainability Standards Board, we are seeing the convergence of sustainability reporting standards and frameworks in the landscape of sustainability reporting," said Bursa Malaysia chief executive officer Datuk Muhamad Umar Swift.

To enhance listing requirements, Bursa Malaysia will require main market public listed companies (PLCs) to include four areas of disclosures in their sustainability statements:

- A common set of prescribed sustainability matters and indicators that are deemed material for all PLCs.
- Climate change-related disclosures that are aligned with Task Force on Climate-related Financial Disclosures (TCFD) recommendations.
- At least three financial years' data for each reported indicator, corresponding targets (if any) as well as a summary of such data and corresponding performance target(s) in a prescribed format.
- A statement on whether the sustainability statement has been reviewed internally by internal auditors or independently assured.

"In terms of climate change reporting, ACE Market PLCs are now required to disclose a basic plan to transition towards a low carbon economy," said Umar.

"To aid PLCs on internalising these practices and disclosures, the Exchange provides a revised Sustainability Reporting Guide as well as related toolkits which are available via our Bursa Sustain platform.

"We will also intensify our capacity-building efforts in 2023 to ensure that our PLCs are better prepared to address heightened demands and expectations on the ESG front."

By requiring mandatory reporting, we can accelerate our net zero transition. Analysts agree that corporate transparency on emissions, climate-related financial risks, and readiness for a net zero transition are critical to spur private sector innovation and harness the financial sector's power.

Besides enhancing the sustainability reporting framework, Bursa Malaysia also partnered with the Companies Commission of Malaysia to exchange data and to drive the ESG agenda which will encourage both PLCs and SMEs to focus on improving and implementing ESG disclosures.

Essentially, these efforts will elevate PLCs' ESG practices and disclosures, broaden the ESG ecosystem, while also supporting the Exchange's goal of being a sustainability catalyst in the Malaysian capital market.

This all alludes to the fact that a well-managed carbon market and pricing would provide companies with a standard way to measure their progress and assist them in building green capital if implemented correctly.

### Potential of carbon markets

So far, the country has reduced its carbon intensity rate to 33% since 2019, but additional support in the form of climate finance, national-level policy and technology transfer will help Malaysia further decarbonise.

Policies can effect real change in combating emissions and can be implemented in a couple of ways – via Emissions Trading Systems (ETS) and voluntary carbon markets. ETS are part of a compliance carbon market (VCM) which is in the form of a cap-and-trade scheme. On the other hand, voluntary carbon markets are a project-based system in which there is no finite supply of allowances.

Today, the compliance carbon market has reached a value of more than US\$850bil (RM3.68tril) in 2021, covering nearly a fifth of the world's greenhouse gas (GHG) emissions. By comparison, the voluntary carbon market



'For 2023, the Exchange will continue to focus on strengthening sustainability practices and disclosures by PLCs, including broadening the coverage of FTSE4Good ESG scoring to eventually cover all PLCs and exploring ESG corporate reporting solution to increase disclosure of climate related risks and opportunities for investors,' says Umar.

(VCM) is much smaller than the compliance carbon market, which has a value of up to US\$2bil (RM8.67bil) with a trading volume of 500m tCO<sub>2</sub>e in 2021.

However, despite a smaller global carbon market share, the VCM is growing – being fueled by a combination of new corporate climate aspirations, such as carbon neutrality and net-zero, as well as increasing demand for carbon-neutral products.

"Carbon pricing has long been regarded as an effective form of reducing GHG emissions. In this regard, carbon offset projects are already focusing on emission reduction and companies investing in carbon offsets should only consider buying carbon credits that are of high quality," Umar noted.

"We don't encourage companies to depend solely on carbon offsets as their only decarbonising strategy in the pathway to carbon neutrality or net-zero aspiration, but they should consider the mitigation hierarchy of implementing decarbonising projects, complemented by carbon offsets to address their emissions residual gap," he emphasised.

Ultimately, the effectiveness of a voluntary carbon market in driving emissions reduction is through the implementation of projects that demonstrate strong additionality and yield high quality carbon credits.

By **CALYN YAP**  
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## Supporting Malaysia's net zero ambition

WITH clear expectations on the role of the financial sector in supporting the country's transition, Bank Negara Malaysia (BNM) is mindful of the importance of managing transition risk.

BNM works closely with other financial regulators and industry players to create a conducive environment and establish the key building blocks that will enable financial institutions to be the catalyst or agent of change in supporting and accelerating the transition of their clients towards green and more sustainable practices.

BNM deputy governor Jessica Chew said that BNM and the Securities Commission, via the Joint Committee on Climate Change (JC3), also continue to engage with the relevant stakeholders, including government ministries and agencies to ensure alignment between financial sector climate actions and national goals and strategies.

"We advocate for key ecosystem

enablers to be in place for a conducive green ecosystem, including apex legislation and clarity on national and sectoral transition pathways, a carbon accounting framework and comprehensive data infrastructure. This reflects a 'whole-of-nation' approach, which is needed for Malaysia to accelerate its journey towards net zero in a just and orderly manner," she shared.

"BNM also strives to lead by example through sustainable and green practices in our own operations. This includes integrating sustainability considerations into our investment decisions and operating to become an organisation with a low-carbon footprint."

At the same time, BNM's commitment in ensuring that the financial sector supports a successful transition to low carbon and greener practices is reflected in the Climate Change and Principle-based Taxonomy (CCPT), which was rolled out to the financial sector in

2021. The CCPT is a common and consistent classification system for financial institutions to assess and categorise economic activities according to the extent to which the activities meet climate objectives.

The CCPT also recognises commitment and willingness of financial consumers to improve practices towards greener activities. This preserves and encourages continued financial flows to businesses that are making credible efforts to transition.

In order to ensure an orderly and just transition towards realising the country's ambition to achieve net zero greenhouse gas (GHG) emissions as early as 2050, an important focus is the small and medium enterprises (SMEs), which account for about 97% of all Malaysian businesses.

"While individually SMEs have a small environmental footprint, the aggregate impact of SMEs is substantial. There are however major challenges faced by SMEs

to transition, such as lack of information and awareness on opportunities, limited access to knowledge networks, innovation assets, and financial and non-financial resources including technologies, particularly funding," she explained.

In its aim to help the sector pivot towards greener practices, BNM has launched dedicated funds such as the RM1bil Low Carbon Transition Facility (LCTF), which matches funds provided by financial institutions to expand the amount of affordable funding available to help SMEs embrace sustainable and low carbon practices in their business operations; as well as another RM800mil allocated under the High Tech and Green Facility to help SMEs and innovative start-ups in strategic green sectors and technological fields.

Under the LCTF, one of the pilot projects being pursued is the Greening Value Chain (GVC) programme, which was launched in



'We advocate for key ecosystem enablers to be in place for a conducive green ecosystem,' says BNM deputy governor Jessica Chew.

conjunction with the Finance Day at COP27. The GVC programme aims to provide SMEs with the necessary tools, in the form of technical advice and funding via LCTF, to measure and manage their GHG emissions.



By ERIC QUAH  
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SINCE the dawn of mankind, food has been a major motivation of how homo sapiens spread throughout the world.

About 11,700 years ago the nomadic lifestyle switched towards a sedentary one and sparked the start of a thriving community, which grew into cities and nations and a burgeoning population.

After the Industrial Revolution, there was a population explosion, turning a blue ocean environment red. In fact, UN statistics showed the current world population at eight billion in November last year – from 2.5 billion in 1950, a 220% increase in just 72 years.

The United Nations projected that this increase will continue unabated until 9.7 billion in 2050 and crest at 10.4 billion by the mid-2080s.

Such an increase means more resources are required to sustain the population, something that eventually became a glaring issue last year, when 2022 became the year that was declared “the year of unprecedented hunger” by the World Food Programme (WFP).

Citing “as many as 828 million people go to bed hungry every night,” the WFP reported that those who face acute food insecurity soared from 135 million to 345 million since 2019, while a total of 49 million people in 49 countries were pushed to the brink of famine.

Caused by a convergence of factors that include a war, climate change, the aftermath of a two-year worldwide pandemic and soaring costs, the prolonged effect could trigger mass migration, refugee situations and destabilised governments.

Closer to home, as Malaysia moved away from the pandemic with optimistic hopes for greater development, we were hit by several natural disasters which took the form of floods and recently, a fatal landslide that claimed 31 lives.

As if past oversights came crashing down in one fell swoop, unrelenting rains at the end of 2021 saw 48 deaths reported as of Dec 27 in *The Star* – the highest in the history of flood disasters in Malaysia.

The floods also affected corporate earnings in the final quarter of 2021 and impacted businesses of local port operators and manufacturers, as well as the country’s plantation and tourism industries. On Dec 21



# Sustaining food sources

A National Food Security Framework has been set up to ensure Malaysia has ample food resources to sustain the people

that year, CGS-CIMB Research said it expected the severe flooding to lead to a slight dent in corporate earnings in the fourth quarter.

According to the UN Food and Agriculture Organisation (FAO), “disasters destroy critical agricultural assets and infrastructure and they cause losses in the production of crops, livestock and fisheries.

“They can change agricultural trade flows and cause losses in agricultural-dependent manufacturing subsectors such

as the textile and food processing industries.

“Disasters can slow economic growth in countries where the sector is important to the economy and where it makes a significant contribution to national gross domestic product.”

2022 saw a marked increase in the prices for both eggs and chicken, caused by rising imported feed prices owing to the Ukrainian-Russian war and inflation due to foreign exchange.

In fact, since 2010, the country’s consumer price index has risen by 47.7% (source CEIC Data).

As a response to strengthening national food security and to ensure Malaysia has ample resources to sustain its population, the current Ministry of Agriculture and Food Security (MAFS) has prepared a National Food Security Framework (KSMN) that includes four main components: availability, accessibility, utilisation and stability and sustainability.

These correspond with the latest concepts as recommended by the FAO and will be backed by strategies, supports and enablers that focus on political, social, economic, environmental and technological factors.

It also covers aspects of employment, stability and sustainability of resources, climate change, investment, studies and research as well as food security governance structures across agencies and ministries.

WHETHER it’s cell-based, cultured, cultivated or lab-grown – these are just some names of the latest addition to the alternative protein scene.

Climate change, public health, ecosystem disruption, environmental degradation, human rights violations and animal welfare are all driving significant changes in food production and consumption.

Cultivated meat alternatives could prove to be a solution to agri-agrochemical emissions, declining biodiversity and food insecurity.

However, as this technology is still being developed, some detractors argue that its high cost alongside regulatory hurdles and unproven scalability makes it mostly hype for the time being.

Still, it’s an exciting future alternative for

## A primer on cultivated meat

The potential of lab-grown food alternatives

those who don’t opt for the plant-based alternatives already available in the market.

### From plant-based to cell-based

Plant-based meats are often made from soya or other non-meat ingredients. You might recognise Harvest Gourmet and Beyond Meat in your grocery store since these two are high-profile companies producing plant-based meat products.

Cultivated meat, on the other hand, is created by harvesting cells from live animals, “feeding” the cells with nutrients so they

can grow in a bioreactor, with the end-result becoming a product that people can consume.

Bloomberg even reported (Jan 5) that Singapore introduced cultivated chicken, beginning with government and VIP guests at COP27 over the last few months.

The lab-grown white meat passed its first hurdle with the US Food and Drug Administration, and “a landmark global agreement to protect biodiversity applied new pressure to rethinking how beef, pork, chicken and seafood are produced.”

But when it comes to the climate impact of cultivated protein, the answer isn’t entirely as simple as switching to cell-grown meats. While it does use far less energy and land compared to traditional agri-agroculture, it still requires a significant amount of electricity to keep the cells growing to a “harvestable” point.

There’s more at stake too when it comes to our fisheries and waters too, but that’s a story for a different day. Stay tuned to read more about cultivated seafood alternatives in our upcoming issues.

# A help out not a handout

Earned wage access: A rising financial solution for Malaysia

By **CHOW ZHI EN**  
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**A**S OUR working lifestyles continue to evolve and change, so are financial services and technology.

Malaysian inflation has risen by 3.4% since June of 2021, with the highest increases recorded in the food and non-alcoholic beverage (6.1%) and transport (5.4%) categories. In fact, as mentioned previously, the country's consumer price index has risen by 47.7% since 2010.

More concerning, we should expect a shrinking middle income group and upper income group alongside a growing lower income group, with what was B40 now becoming B60.

While one-off monetary aids were given to lower income communities, this type of assistance is simply temporary relief and lacks the sustainability for Malaysians to overcome the cost of inflation.

Following this, certain financial trends have cropped up. Some of these you may have heard of like micro-loans and buy-now-pay-later (BNPL) solutions.

Currently, the newest player in Malaysia is earned wage access (EWA) – with players like Paywatch coming into the foray.

With these challenges ahead, financial literacy and inclusion play a big part in rebuilding a healthy middle income group and building sustainable financial habits.

## Enabling financial inclusion

EWA, also known as pay-on-demand, is one particular area of alternative, inclusive financing that is growing in relevance.

There's a fundamental disconnect between our consumption patterns of goods and services and how we are paid in the current day and age.

While employees still get compensated in fixed payroll cycles, there's a growing demand for real-time, on-demand financial systems – especially for segments of the population who don't have a significant amount of disposable income or savings at a time where basic wages are trailing behind the rising cost of living.

Having started out in the fast-moving consumer goods (FMCG) industry before transitioning to consumer finance, Paywatch chief executive officer Richard Kim believes that EWA can prevent high-interest and even predatory money lending by offering an alternative to how employees are paid, creating an inclusive environment for lower-income employees and the unbanked.

"I founded Paywatch because when I was running my own business, I had young part-time staffers who came to me to ask for an advance on their wages. They didn't ask for a full month's worth of wages, just for the days they had already worked for," said Kim.

Cash flow issues have always been the prevalent issue among the low-income workforce, which had been exacerbated by the pandemic.

Kim noted his interaction with young part-time staffers drove him to navigate this problem, by reducing the financial burden on his low-income workforce, which eventually led him to found Paywatch.

"Our focus group found that this segment too were ineligible for bank loans or credit cards which could drive them to seek out other methods to get the funds they need in emergencies."

Given the current economic climate as well, EWA can transform the traditional payroll system in Malaysia by



Kim: 'Business leaders across various sectors are seeing the need and benefits of financially supporting their employees during these turbulent economic times and find that Paywatch is a great way to help relieve the burden of financial emergencies.'

enabling businesses and corporations to provide employees with access to secure funding, without compromising their careers or finances.

He noted that we also have a generation of low-income or gig workers who are not only supporting themselves but also their families due to the lack of welfare systems to help our ageing population.

"Through our partnerships with institutions like Bank Negara Malaysia, we're able to provide an EWA solution that's interest-free for users and only charges a nominal withdrawal fee – akin to an ATM fee.

"This would help support the low-income workforce in Asia on a day-to-day basis with early access to their earned wages," he emphasised.

## An alternative that works

Setting aside a part of your salary to cover payments from the past month is not new. Many of us use credit cards to cover expenses upfront that we then pay with our salary the following month.

The difference is that many of these workers don't even have access to

financial aid like credit cards and bank loans. More importantly, they shouldn't be burdened with high interest rates that perpetuate their debt.

Industries that rely primarily on a minimum wage workforce or gig workers were initially drawn to EWA solutions due to pervasive cash flow issues among their employees.

"90% of employees in Malaysia find themselves in situations where they needed emergency funds, but had no access to it.

"This has led them to borrowing from various lenders – we've seen this last year with personal microloans (with interest rates as high as 36%) and withdrawals from the Employees Provident Fund (EPF) retirement savings.

"With solutions like Paywatch, Malaysians can access up to half of their salary earlier as a financial buffer during these emergencies, instead of digging into their retirement savings or even borrowing from loan sharks.

"Our goal is to provide safer financial solutions for the underbanked – EWA is just one way to do that," said Kim.

Paywatch was designed to be a solution for cash flow issues between paychecks to be used only in case of emergencies. However, it's still important for employers to educate their employees on the correct use of EWA.

That said, Paywatch does have safeguards in place to prevent frivolous overspending. For instance, there's a 50% withdrawal limit and fee cap to ensure workers don't withdraw too much of their earnings.

The reality of the situation is that in cases of emergency, many lower-income workers don't have the resources to cover unexpected expenses out-of-pocket.

By integrating EWA, it gives the workforce a way to withdraw money they have already earned, to use if needed, safeguarding them from further incurring debt from high-interest repayments down the line.



The Paywatch Malaysia, South Korea and Hong Kong team meet.

# ESG

in the news

## Jan 2

• Companies in the Asean bloc, including Malaysia, lack a holistic sustainability strategy amid the ESG initiatives gaining strong momentum in the region.

To ensure success and that sustainability strategies are impactful and comprehensive, **Kyndryl Malaysia** managing director Joey Mak said companies must collaborate with partners that are aligned with their goals and hold them accountable.

He told *StarBiz* that the move to value creation is an important paradigm shift as it focuses on potential business opportunities posed by the sustainability agenda, adding that integrating sustainability and digital transformation drives stronger business performance.

## Jan 3

• Sufficient manpower and talent acquisition are among some of the challenges in the energy efficiency (EE) business, says **PRG Holdings Bhd** group executive vice-chairman Datuk Lua Choon Hann.

He said this applied across the industry and was not specific to the company.

PRG recently ventured into the EE business via Singapore's Energy Solution Global Ltd (ESGL), which was acquired by its 50.45%-owned subsidiary Furniweb Holdings Ltd.

"Awareness and strict enforcement to achieve the target of reducing our carbon footprint will also determine how fast the EE industry will grow in Malaysia," Lua told *StarBiz*.

The acquisition of ESGL is part of PRG's long-term plan to move into the heating, ventilation and air conditioning, energy management system business.

## Jan 5

• Cypark Resources Bhd, which was previously affected by cash flow and debt concerns, has received a helping hand from textile wholesaler **Jakel Group** which invested RM67.13mil into the renewable energy player.

Via its investment arm Jakel Capital Sdn Bhd, Jakel acquired a 23.08% stake in Cypark at 38 sen per placement share, making it the single largest shareholder.

In a statement, Jakel Group said the strategic investment in Cypark would help to "rebalance its investment exposure" by incorporating ESG investing into its portfolio.

Currently, apart from textile trading and wholesale, Jakel Group is also involved in property development.

Jakel Capital chief executive officer Muhammad Ashraf said the investment in Cypark provides Jakel Group with a timely opportunity to play an active role in shaping the ESG issues in the country.

## Jan 6

• More electric vehicle (EV)-related incentives are in store in the revised Budget 2023, says **Natural Resources, Environment and Climate Change Minister Nik Nazmi Nik Ahmad**.

Prime Minister and Finance Minister Datuk Seri Anwar Ibrahim will table the revised Budget 2023 in the Dewan Rakyat on Feb 24.

"The government is looking forward to announcing more EV-related incentives in the revised Budget 2023," said Nik Nazmi at the memorandum of understanding signing

ceremony between Cyberview Sdn Bhd and Roda Emas Industries Sdn Bhd on the development of a smart-mobility ecosystem in Cyberjaya.

The Main Market-listed Computer Forms Malaysia Bhd's (CFM) joint venture (JV) with Energy Absolute Thailand Public Co Ltd will import 200 electric buses for use in Malaysia.

The 50:50 JV, called Energy Absolute Malaysia, is also looking at setting up a manufacturing plant in Malaysia over the longer term in the second phase of its plans, said CFM managing director Datuk Justin Lim.

Energy Absolute, which has a market capitalisation of around 380 billion baht or RM45bil, is among Thailand's Top 10 public-listed companies and is known for its renewable energy business in that country.

"It will not only be limited to buses but also electric ferries and trains. We are also looking at turning the airport into a green city airport where things like baggage handling system will go green.

"There are a few phases to this partnership," Lim said at a briefing after the signing ceremony.

## Dec 7

• **CSH Alliance Bhd's** wholly owned subsidiary, Alliance EV Sdn Bhd (AEV) is currently applying for approved permit (AP) from the Ministry of International Trade and Industry and other approvals from relevant authorities to bring in the complete-built-up units of BYD T3 electric vehicle (EV) into the country.

In a filing with Bursa Malaysia, CSH said AEV had obtained the manufacturing licence for the assembly of commercial electric vans and model approval for local assembly of electric commercial vans, primarily the BYD T3 EV.

The local assembly of the said model shall be done in Tanjung Malim, CSH noted.

## Jan 10

• **Gamuda Bhd** has partnered with OCBC Bank (M) Bhd and OCCB Al-Amin Bank Bhd (collectively OCBC Malaysia) for its maiden syariah-compliant sustainability-linked financing facility with an embedded sustainable derivative solution.

According to a joint statement, OCBC Malaysia is the sole sustainability structuring adviser for Gamuda's first ESG-linked holistic financing solution, totalling up to RM550mil.

Gamuda believes the signing of the holistic sustainable financing with OCBC Malaysia is aligned with its Gamuda Green Plan 2025 roadmap, where the group is committed to a structured, accountable approach to decarbonisation.

• **EP Manufacturing Bhd** (EPMB) has won its first major deal to supply electric bikes (e-Bikes) to the Indonesian and Vietnamese markets, with an initial order of 23,000 units to be delivered from the first quarter of 2023.

The price for each e-Bike is expected to be within the range of US\$1,850 to US\$3,900 (RM8,095 to RM17,064), the company said in a statement.

"We begin 2023 with this exciting development as the five-year deal will create a new source of revenue for the group with a healthy margin.

"This will put us on an accelerated growth as we work towards securing more such buyers in the future.

"While our electric vehicle (EV) venture only began less than a year ago, we have been seeing a strong response from prospective clients," EPMB acting chief executive officer Lim Sim Yee said in the statement.

• **Citaglobal Bhd** has inked a memorandum of understanding (MoU) with Indonesia Battery Corp (IBC) for a proposed battery cell manufacturing plant and battery energy storage system (BESS).

A joint statement by Citaglobal and IBC said both companies have strategic plans to expand into the renewable energy (RE) space, and noted that the global market for EVs is growing at a compounded annualised growth rate of 21.7%.

The battery is one of the main cost components for EVs, making up some 35%.

"Scaling up battery storage is critical for the development of RE whether in Malaysia or Indonesia.

"The Energy Commission of Malaysia has made known its intentions of adopting up to 500MW of battery storage technology.

"With Malaysia's strategic location for high solar power potential, our government has been very proactive in choosing areas that are suited for solar power adoption, especially for BESS," said Citaglobal executive chairman and president Tan Sri Dr Mohamad Norza Zakaria.

## • Hong Leong Asset Management Bhd

(Hong Leong AM) has launched its syariah-compliant ESG fund, the Hong Leong global syariah ESG fund.

In a statement, Hong Leong AM said the fund aims to provide investors with medium to long-term capital growth by investing in a globally diversified syariah-compliant portfolio of securities with focus on ESG criteria during its investment process.

It added that Hong Leong Islamic Asset Management Sdn Bhd (Hong Leong Islamic AM) has been appointed as the external fund manager for the fund.

## Jan 12

• **Gamuda Bhd** has earmarked RM2bil to invest in the Malaysian and international renewable energy (RE) space over a five-year period.

Group managing director Datuk Lin Yun Ling said the investments would entail several types of RE sources and "not so much on solar".

Lin highlighted that Gamuda was looking at developing some hydro pump projects in Australia, describing the country as a "very important and key market" for Gamuda.

• **Sime Darby Plantation Bhd** (SDP) has unveiled its net-zero emission commitment with a clear roadmap, aiming to achieve 100% absolute overall emission reduction under Scope 1 and 2 by 2050 with all unabated Scope 3 emissions balanced by an appropriate amount of carbon removals or offsets.

In a filing with Bursa Malaysia, the world's largest producer of certified sustainable palm oil said it has aligned its action plans with the Paris Agreement targets to limit global temperature rises to no more than 1.5°C.

## Jan 13

• The **International Trade and Industry Ministry** aims to attract RM20bil in investments in electric vehicles (EV) by 2025.

Minister Tengku Datuk Seri Zafrul Tengku Abdul Aziz said the ministry is also targeting investments to rise to RM40bil by 2030.

"We need to look at the EV ecosystem and the supply chain as a whole and we will also discuss efforts to further strengthen the EV industry through further discussions with the task force," he said after witnessing the memorandum of agreement signing ceremony between Artroniq Bhd and US-based Beno Inc.

• **Tenaga Nasional Bhd's** (TNB) venture into the setting up of the electric vehicle (EV) charge point infrastructure (CPI) is set to benefit its ESG rating and investor perception.

The investment into the EV charging ecosystem has a lot of potential but TNB's management has told TA Research that the CPI business is not expected to break even until EV usage gains scale in the country.

The research house stated that over the longer term, TNB would benefit via the increased utilisation of its electricity transmission and distribution network and maiden profits from EV charging stations.

"Based on TNB's projections, the EV market will generate annual electricity revenue of RM1.25bil by 2030.

"Additionally, unit sales of electricity from EV charging stations are expected to reach 15% of TNB's revenues by 2040," TA Research said in a report.

## Jan 14

• **Tenaga Nasional Bhd** (TNB) is keen to explore opportunities involving energy solutions related to gas, solar, wind and hydro as well as battery storage in Indonesia's future capital of Nusantara in East Kalimantan on Borneo Island.

TNB said in a statement it was also eager to explore any opportunity in the grid interconnection business through collaboration with Indonesia's PT Perusahaan Listrik Negara (PLN) to develop a secure and reliable high-voltage transmission infrastructure in Nusantara.

The utility company recently handed over a letter of intent (LoI) to Nusantara Authority chairman Bambang Susantono through International Trade and Industry Minister Tengku Datuk Seri Zafrul Abdul Aziz.

TNB president and chief executive officer Datuk Baharin Din said the LoI would help strengthen the bilateral relations and cooperation of both countries and expedite the development of clean energy in both countries.

• **PTT Synergy Group Bhd** has inked a memorandum of understanding with Sany International developing (M) Sdn Bhd and Rootcloud Technology (Singapore) Pte Ltd to explore a collaboration in an electric vehicle (EV) project.

In a filing with Bursa Malaysia, PTT Synergy stated the parties intend to explore opportunity leasing services and provision of renewable energy and zero-carbon logistics instruments.

# Letters & opinions

Hi editor,  
Just wanted to highlight the irony of *StarESG* pullout section using less environmentally thicker/heavier and more heavily bleached white papers compared to the main paper.

Anyway, it is good to see local effort to promote ESG awareness. Thanks.

Regards,  
YM Chen

Firstly, our thanks for your kind words concerning our efforts in highlighting the importance of ESG to our readers.

We would also like to point out that the *StarESG* pullout is printed on wood-free papers that are endorsed by the Programme for the Endorsement of Forest Certification. Similarly, our newsprint papers are certified by the Forest Stewardship Council as appropriate for newsprint, food wrapping and for copying and printing.

Sincerely,  
Star ESG

Write to us and submit your views on our stories, or on ESG-related issues that matter to you.

Email us at [ESGeditorial@thestar.com.my](mailto:ESGeditorial@thestar.com.my)

YOUR  
OPINION  
MATTERS



# Eco-friendly CNY

Environmental advocate shares her personal experiences on sustainable living, especially during festivals like the Chinese New Year

By **MING TEOH**  
ESGeditorial@thestar.com.my

Environmental advocate Dr Jamie Chong shares how Malaysian families can practise sustainable living and have an eco-friendly lifestyle during festivals like Chinese New Year.

"Tradition says that everything must be new and extravagant to bring in the best of luck, fortune, health and wealth during Chinese New Year. But in reality, what truly matters is being grateful and the whole family coming together – that is our true fortune," says the 45-year-old director of Asia Pacific Environmental Consultants (Aspect).

Chong, who is married and has two sons aged 11 and seven, says there are many ways to do this and the whole family can be involved.

## CNY decorations

Instead of buying brand new decorations, you can reuse previous years' decorations which don't have the animal zodiac symbols, or make your own.

"In my family, we always reuse our CNY decorations every year. We've had these decorations and have been reusing them since we moved into our current house in 2014. Some of them, such as the lights do double duty because they're also used for Christmas," she says.

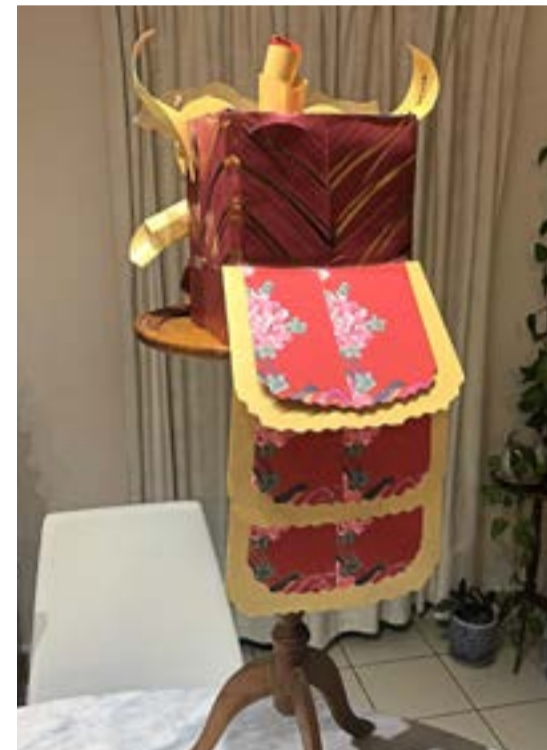
"Another way, which also helps reduce packaging waste, is to save any gift packaging decorations such as tassels, cute soft toys, ang pows, and others, to be added to the CNY decorations. That way, there isn't any need to buy any new decorations, unless it's to replace some that have broken due to wear and tear," she adds.



Environmental advocate Dr Jamie Chong encourages Malaysian families to live sustainable and eco-friendly lifestyles, even during festive times. – Pictures by Dr JAMIE CHONG



Chong's niece Annika with a lion head that she has made out of Ang Pow packets and old boxes for CNY.



Back view of decorative lion made of Ang Pow packets and old boxes.

Some perishables such as fresh flowers can be dried and kept as part of floral decorations, where possible, says Chong. You can also have live potted plants which can continue to grow after the celebrations.

It's also possible to make your own CNY decorations.

"My niece, Annika who studying architecture in Sydney, Australia, is amazingly creative and uses old angpow packets to make CNY decorations for her home. She even made a lion out of ang pow packets and old boxes," she says.

## Ang Pows

Instead of giving traditional paper Ang Pows, you can give electronic or e-Ang Pows. This reduces the usage of paper and trees killed, as well as the carbon footprint from having to go to the bank to get new red packets, new money notes and depositing the Ang Pows received.

One of the positive effects of the pandemic is in advancing the usage of technology, especially for those who might not have considered it a necessity previously.

My tech-savvy 79-year-old father was already giving e-Ang Pows before the pandemic, especially when DuitNow was widely promoted after its launch in 2018. However, it was only when the pandemic started that my own family and my sister Robyn's family, have started this practice and we've since continued doing so for other occasions such as birthdays.



Have a sustainable Chinese New Year by recycling CNY cookie containers and using tiffin carriers to take away food.

## Cookies

Cookies are a must at every CNY and there are many ways to enjoy them sustainably. Make your own cookies or if you don't bake, return or reuse the cookie containers instead of discarding them.

"My husband likes supporting his retired friends by buying CNY cookies from them. As they are close friends, we would return the empty and washed cookie containers so that they can reuse them.

"My sister-in-law, Pauline, who resides in Sydney, bakes her own CNY cookies and reuses the empty store-bought cookie containers to store her own cookies or other goodies," she says, adding that .

Chong adds that there are stores (especially bulk food stores) and recycling centres that accept used but clean food containers.

## New clothing

Traditionally, CNY is believed to be a time of new beginnings and abundance for the coming year, therefore new clothing and abundant food servings are a must to usher in good fortune.

"But, having new clothing for CNY is a choice, and not compulsory by most parents these days. If you have to buy new clothing, then choose multi-functional clothing that can be used for other occasions too and not just for CNY," says Chong.

"In our family, our progressive parents are not fussy about us not wearing new clothes for CNY," she says. "However, we'll still wear red and gold coloured - but not new - clothing to take our family photo together."

There are also vintage stores that offer branded bargain at rock-bottom prices.

## Reunion dinner

The reunion dinner - an important part of CNY - can be done in a sustainable way with a home-cooked meal, or if at a restaurant, with portion control to minimise wastage and if taking away, bring your own containers.

"For our CNY eve reunion dinners the past few years, we've been eating at home - partly because of the pandemic - and also to avoid the crowds,"

"We also didn't wish to order any set dinners although they're a convenient way for restaurants to manage risk and reduce variability. However, this usually leads to over-consumption and food wastage as we are not big-eaters," says Chong.

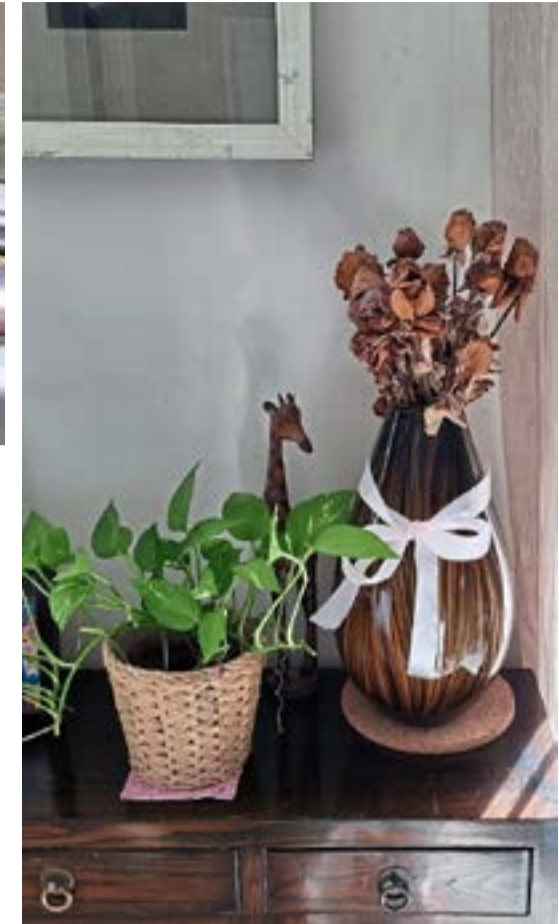
"By having our reunion dinner at home, we're able to control our portion sizes, reduce food wastage, and also, we get to eat what we want rather than what's dictated by set menus," she says.



Carpooling with relatives and friends who are going back to the same hometown for CNY is a good way to reduce one's carbon footprint. – Filepic/The Star



If you really need to use paper Ang Pow packets, then consider reusing previous years' ones instead of getting new ones. – Pixabay



Make your own decorations such as dried flowers or having live potted plants which can continue to grow after the festival.



Giving e-Ang Pows during CNY not only reduces the need for the red packets and new notes, and hence, paper, but it also our overall carbon footprint because we don't have to go to the bank.



Dr Jamie Chong's CNY reunion dinner in Kuala Lumpur last year with her family (from left her mother-in-law Lucy, husband Dominic Chegne, father-in-law Richard Chegne and sons Matthew and Marc.

"In our household, we believe 'less is more'. My father-in-law would normally steam a nice chicken for dinner so we don't even have to order in.

"Eating good quality food at an appropriate quantity is better for our health, environment and wallets than an abundant spread of varied foods and drinks on the table, of which a majority might end up in the bin," she adds.

"But when having meals with extended families during the 15-day CNY celebrations, we'd bring along our own containers should there be a need to pack any leftover food. My sister-in-law, Elaine, gifted me with a colourful tiffin-carrier which I normally use.

"If we are using the restaurant's containers, we'll usually wash and later donate them to soup kitchens or recycling centres," says Chong.

## Balik kampung

Even though Chong and her family don't need to balik kampung for CNY since the entire family are mostly located in the Klang Valley, she says there are ways to balik kampung sustainably if you have to.

"Every year, we'll have an early CNY meal with my husband's side of the family as his sister's family would be back from Sydney but would have to leave before the actual CNY celebrations. We'll also have a small and quiet CNY eve reunion meal with my

father-and-mother in-law at home. As both sides of the family are located within the Klang Valley, we don't need to balik kampung," she says.

"If driving back to your hometown, use a fuel-efficient type of car. Make sure the car tyres are pumped in accordance to your car's specifications because underinflated tyres generate more rolling resistance and increase fuel consumption, which equates to more exhaust emissions," she advises.

"Plan your journey properly to avoid heavy traffic because constant braking, sudden accelerations and travelling at a lower gears use up more fuel than when driving when there is light traffic on the highways.

"A longer time on the road equates to higher amounts of carbon emission. Use public transportation such as trains or buses instead of air travel whenever possible, but plan early. Or carpool with your relatives, colleagues or friends," she adds.

All in all, our family motto is that moderation is key to ensuring the sustainability of our health and well-being (people), environment (planet) and our finances (profit). CNY is about being with our family, and being grateful that our parents and relatives are still able to celebrate another year with us. We can still enjoy the festivities using what we have, by recycling and reusing, or doing without, she concludes.



Home-cooked food and decorations at in-laws' place.

# Green is the new red

## How to prepare sustainably for Chinese New Year

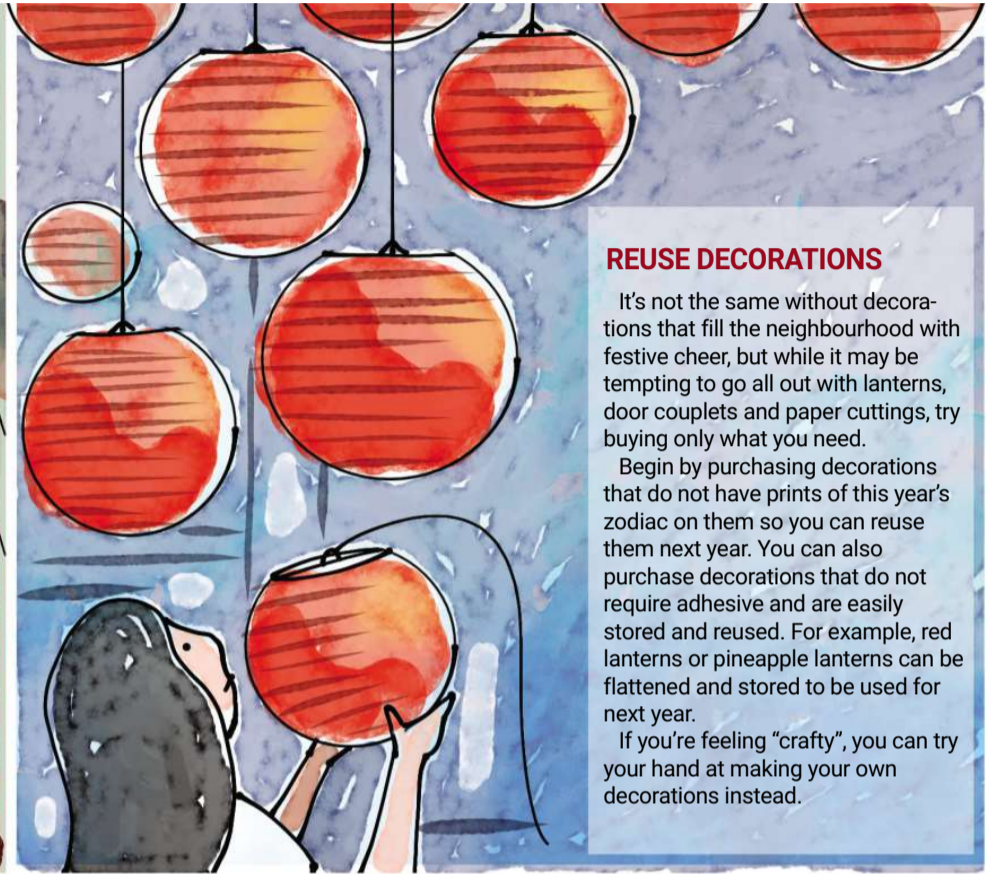
Every Chinese New Year (CNY) usually involves a lot of decorations – as with most festive holidays – but when's the last time you thought about where your pineapple lanterns or used red packets go after the 15 days of celebration? It's easy to buy whatever decorations we see and like in the hopes of ushering in some of that good fortune and luck to our homes, but preparing for a sustainable celebration is not impossible. Here are some ways you can usher in good cheer, good fortune, and good health for an eco-conscious CNY.

### RECYCLE LAST YEAR'S RED ENVELOPES, STOCK UP ON PLAIN RED ENVELOPES

One of the most iconic traditions of CNY is giving out red packets (or angpao). Every year the zodiac changes and traditionally too, the icons on these red packets follow suit – in some cases, it's considered bad form to give a red packet with the "wrong" zodiac.

You can instead start stocking up on simple, plain red slot-in envelopes that don't have any print on them for next year, if not this CNY.

Otherwise, try out the increasingly popular e-angpao method, which also helps us be more sustainable, with e-wallets like Touch n' Go offering the option to sign off with greetings.



### REUSE DECORATIONS

It's not the same without decorations that fill the neighbourhood with festive cheer, but while it may be tempting to go all out with lanterns, door couplets and paper cuttings, try buying only what you need.

Begin by purchasing decorations that do not have prints of this year's zodiac on them so you can reuse them next year. You can also purchase decorations that do not require adhesive and are easily stored and reused. For example, red lanterns or pineapple lanterns can be flattened and stored to be used for next year.

If you're feeling "crafty", you can try your hand at making your own decorations instead.

### BE AWARE AND "RE-WEAR"

Spring cleaning and decluttering is a must before CNY to get rid of bad luck and misfortune.

While cleaning out your house, you can use eco-friendly, non-toxic cleaning supplies and donate any unwanted goods to local charities. Things like outgrown clothes and electronics can be donated or even upcycled for future use.

Additionally, as it's also tradition to wear something new (to signify new beginnings), you can pick out something that's evergreen so you can get more use out of it after CNY.



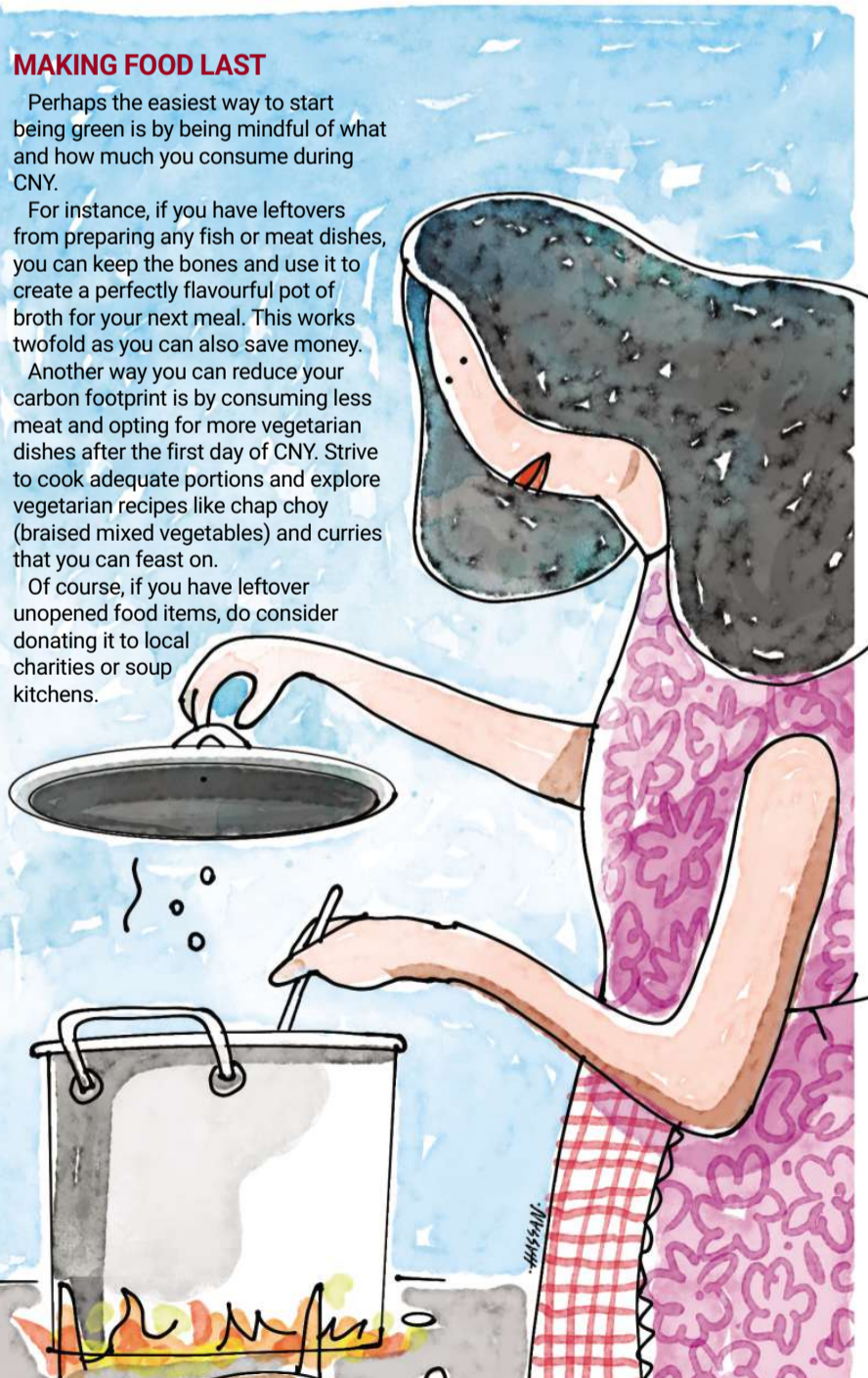
### MAKING FOOD LAST

Perhaps the easiest way to start being green is by being mindful of what and how much you consume during CNY.

For instance, if you have leftovers from preparing any fish or meat dishes, you can keep the bones and use it to create a perfectly flavourful pot of broth for your next meal. This works twofold as you can also save money.

Another way you can reduce your carbon footprint is by consuming less meat and opting for more vegetarian dishes after the first day of CNY. Strive to cook adequate portions and explore vegetarian recipes like chap choy (braised mixed vegetables) and curries that you can feast on.

Of course, if you have leftover unopened food items, do consider donating it to local charities or soup kitchens.



### UPCYCLE YOUR PLASTICS

Food waste is undoubtedly one of the more obvious issues during celebrations. With it too comes plastic waste as most snacks come packed in plastic containers.

Here, you can make a difference simply by washing the containers with baking soda and lemon to get rid of any grease. Then, reuse them by storing your perishables or even personal knick-knacks in them.

Alternatively, you can use glass jars to store your CNY snacks as they are reusable all year round and don't produce microplastics.

This goes for CNY gift boxes too. You can always use them as elegant storage boxes for storing everything from your accessories and valuables to reusing them as gift packaging for relatives and friends.

