

# INFOCUS

Revise the Present,  
Shape the **FUTURE**

Market potential  
of the halal economy

Islamic finance for  
economic recovery

Urban solutions for  
climate change

Web3 explained

Global cooperation for  
a sustainable future

The arts a vital contributor  
to the economy

Abu Dhabi's investment  
landscape

Taiwan's growing halal industry

#14THWIEF











# 14<sup>TH</sup> WIEF

WORLD ISLAMIC ECONOMIC FORUM

## GLOBAL ECONOMIC AGENDA: SHAPING A SUSTAINABLE FUTURE

ABU DHABI, UNITED ARAB EMIRATES | 6 - 8 FEB 2024

<b>7</b> PLENARY SESSIONS	 Technology	 Economic Growth	 Economic Shift	 Investment	 Sustainability	 Net Zero	 Future Power Generation
<b>6</b> PANEL SESSIONS	 Youth Empowerment	 Women in Tech	 Opportunities in Islamic Finance	 Sustainable Farming	 Food Security	<b>3</b> MASTERCLASS SESSIONS	 Environmental Education in Schools
 BUSINESS NETWORKING		 Business Exchange	 LinkedUp	 Complementary Programme	 ScaleUp	 Digital Health & AI	 Role of Halal Industries

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### About *IN FOCUS*

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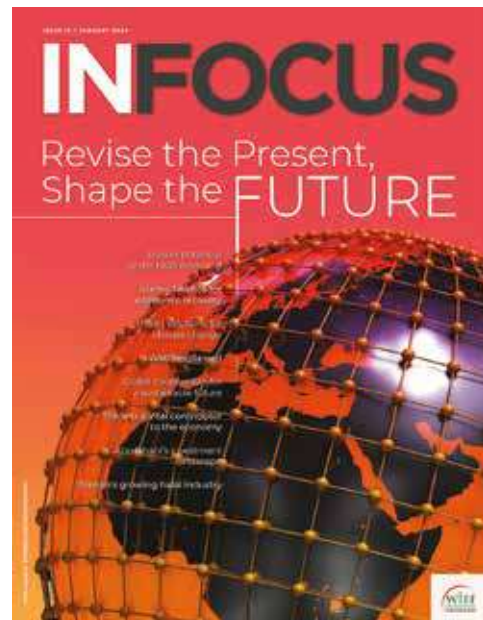
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### On the cover of issue 13

*Revise the Present, Shape the Future*

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## FIRST WORDS

Welcome to the latest edition of *In Focus*. With each issue of this publication, we embark on a journey of exploration and discovery, seeking to unravel the ever-evolving dynamics of the global economy.

In an era defined by rapid change and uncertainty, the need for meaningful dialogue, collaboration and shared insights has never been more crucial. WIEF Foundation, as a catalyst for change and progress, remains committed to facilitating this discourse, fostering connections and promoting sustainable economic development across the world.

Our *In Focus* magazine serves as a platform for knowledge exchange and an avenue to showcase diverse voices, ideas and perspectives shaping the global economic narrative. Within these pages, you'll find a wealth of information on topics such as Islamic finance and sustainability to entrepreneurship and innovation.

Now, more than ever, the strength of our interconnectedness and the need for collective solutions equate to resilience, adaptability and innovation. WIEF Foundation, together with our partners and contributors, remains steadfast in its commitment to promoting economic growth that is inclusive, sustainable and equitable. We believe that by embracing diversity and harnessing the power of collaboration, we can chart a course toward a more prosperous future for all.

As we embark on this intellectual journey, I encourage you to engage with the ideas and perspectives presented by experts within these pages, to challenge assumptions and envision a world where economic prosperity is synonymous with shared well-being.

Together, we can shape a brighter economic future for generations to come. ■

**Tan Sri Syed Hamid Albar**  
Chairman, WIEF Foundation

### Yet another year ends.

It certainly has been an exhausting year of ever-evolving global economics pushing us to critically and endlessly examine as well as revise the way we exist. Pushing us to build an economy that is sustainable, equitable and prosperous.

First step, it'll make sense to acknowledge challenges and opportunities that lie ahead. Without a doubt, decisions we make today shapes the direction and growth of our economies for years to come.

Complexities that include: growing income inequality, environmental degradation, technological disruptions and geopolitical uncertainties, make it necessary for a serious re-evaluation of current economic systems. One thing's for sure, this digital age in which we live, plus adoption of innovative approaches, pave the way for a resilient and inclusive future.

Now, let's talk specifics. Revising the present economic state isn't a mere exercise in theory. It requires a concerted effort from all – this means governments, businesses, individuals. There has to be international cooperation, exploiting collective intelligence and diverse perspectives. It has to transcend traditional boundaries. Only then can there be economic systems that are adaptable and responsive to the needs of a rapidly changing world.

What's important when it comes to shaping future economy is recognising that economic growth shouldn't happen at the cost of environmental well-being. There can be no more shortcuts and no more linear economic system. It's time to be

# Revising Present Economic State to Shape Future Economy

visionary and realise long-term sustainability. This includes adopting circular economy principles, consuming renewable energy and weaving environmental issues as a primary concern into the fabric of our economic systems.

By now, we're realising how economic growth should be distributed equally across all segments of society. Inclusivity must be at the heart of any economic revision efforts such as bridging the digital divide, empowering marginalised communities, promoting gender equality and providing quality education as well as healthcare to all.

Results of these efforts will not only reveal untapped potential of people from all levels of society, but also ensure that the benefits of economic progress are shared by all.

## EDITOR'S NOTE

AI, automation and digitisation present immense possibilities. But they are not without significant challenges. On one hand, they have the potential to boost productivity and drive economic growth. On the other, they raise concerns about job displacement and privacy, among others. Yes, life in the 21st century can be perplexing and conflicting. Nevertheless, we continue seeking the right balance, mindfully.

This issue of *In Focus* coincides with 14th WIEF in Abu Dhabi. Thus, topics and theme complement those of the forum. You'll find interviews that shed light onto what drives the economy and how we can shape a sustainable economic future through expert opinions, as well as inspiring examples to guide collective efforts.

At the very least, we hope, the articles will put into perspective the world we are living in and serve as a catalyst for dialogue, action and change.

Other topics include updates on the potential of the halal industry, web3 and Abu Dhabi as an investment destination. You'll also find reads such as the arts industry as a vital economic contributor and opinions from artists from MOCAfest at 14th WIEF on the impact of their art on the economy.

Hardly anything worthwhile is ever easy, *they* say. Likewise, revising the present economic state is no mean feat, but it's worth undertaking for the sake of an economy that's sustainable, inclusive and resilient. A lasting legacy for generations to come.

As Nike has been saying for decades now, *Just Do It*. ■

**Su Aziz**

# #NOF LTER



## What Drives the Economy?

*Concise opinions from a few industry folk and experts on what or who will be drivers of the economy in the future.*

“ Despite the gloomy economic outlook, we believe the emerging market and developing economies will lead the recovery. Astute governance and innovative technology will likely be key drivers of economic dynamism and resilience now as well as in the coming years.

*Dr Zamir Iqbal, vice president – finance of IsDB, Saudi Arabia* ”

“ I will briefly mention three things that I think will drive the economy. The first and foremost is China, the second issue is public debt and third is the growth of AI.

*Todd Knoop, David Joyce Professor of Economics and Business at Cornell College, the United States* ”

“ From the technology perspective, I would say, probably three things will drive the economy. Starting it off is the use of smart contracts. Next, within financial markets is the tokenisation concept. Finally, digital identity.

*Neil Tan, Chairman of Fintech Association of Hong Kong* ”

“ From an automaker's point of view, several key factors are driving the economy both now and in the near future: transition towards sustainable and electric mobility solutions, integration of advanced technologies such as autonomous driving and smart mobility services and, lastly, circular economy as well as sustainability initiatives.

*Hans de Visser, Managing Director of BMW Group Malaysia* ”

“ I believe the economy now is driven by the creative industries. We need to create a platform that will cater to all creative fields, from the arts and culture to science and innovation – a platform that will support creatives of all ages and industries. Also, policies that understand the wants and needs of the creative and the country alike.

*Sumayyah Al Suwaidi, artist and art curator, Abu Dhabi* ”



# Defining a Sustainable Future

Here's a playbook to help understand what is a sustainable economic future and navigate the complex interplay of economic growth, environmental responsibility and social equity in this century. **Su Aziz** unearths some points.

We're on the cusp of the third decade of the 21st century. The concept of a sustainable economic future has taken centre stage in countless global discussions. There's an urgent need to balance economic growth with environmental and social responsibility. In fact, it is critical. To define what is a sustainable economic future involves envisioning an economic system that thrives in the present while preserving resources, supports societal well-being and prosperity for generations to come.

Sounds good, right? Now, how do we go about achieving all that, you ask? Let's explore fundamental principles and strategies that can shape a sustainable economic future beginning now.

## Defining a Sustainable Economic Future

Ideally, a sustainable economic future is one that harmonises economic

growth, protecting the environment and social equity. Most of all, the concept highlights the economy as an integral part of the big picture of the ecosystem and society. Also, its success must be measured by more than just GDP growth.

### Key Tools of a Sustainable Economic Future

**Resource Efficiency:** Efficient resource use is a cornerstone of economic sustainability. This entails reducing waste, maximising lifespan of products as well as materials and adopting circular economy principles. Resource efficiency conserves natural resources and reduces environmental footprint of economic activities.

**Environmental Responsibility:** It necessitates responsible environmental stewardship which includes reducing greenhouse gas emissions, protecting biodiversity, mitigating pollution and preserving ecosystems. This means, businesses and industries must transition to cleaner, renewable energy sources and adopt sustainable

practices that minimise ecological impact.

**Social Inclusivity:** Economic sustainability goes hand in hand with social inclusivity. It requires equitable distribution of wealth and opportunities, ensuring accessibility to education, healthcare and more for marginalised communities. This will develop social stability and reduces disparities that hinder societal as well as economic progress.

**Long-term Outlook:** There must be a strict shift from short-term thinking to long-term planning to achieve sustainability. Those in both public and private sectors must consider the consequences of their actions on future generations. This involves investing in sustainable technologies, infrastructure and policies that produce lasting benefits.

### Now, the Challenges

No one said the path to a sustainable economic future will be easy. In fact, it's guaranteed to be fraught with

challenges, many of which are deeply intertwined with the existing economic system. Careful consideration and innovative solutions are needed to face them:

**Economic Growth Standard:** The conventional standard focuses on constant expansion that often leads to resource depletion, environmental degradation and social inequalities. Shifting a sustainable economic model will require redefining success that's more than just GDP growth.

**Curbing Consumerism and Greed:** Why the need to curb what we consume? Because a sustainable future requires responsible consumerism and a circular economy – reduce, reuse, recycle. Overconsumption, driven by gluttony, advertising and a throwaway culture, strain natural resources and generate excessive waste.

**Short-term Thinking:** Or as some call it, 'short-termism', in business and politics hamper investments in sustainable technologies and practices that may have initial costs but hold long-term benefits. So, encouraging long-term perspectives is crucial to overcoming this.

**Economic Inequality:** This is usually characterised by a concentration of wealth and power in the hands of a few. It threatens social harmony and interferes with moving toward a sustainable economic future. Regulatory reforms addressing income disparities and promote wealth redistribution are important.

**Role of Technologies:** Tech offers solutions to many challenges, but it can also exacerbate environmental problems if not applied responsibly. The trick is to strike a balance

between technological innovation and ecological responsibility. This is a critical challenge.

### Next, Effective Strategies

Like in everything else, a good strategy builds a good sustainable economic future. For this, governments, businesses and societies must come together to shape as well as implement effective strategies. Their roles would be:

**Green Economic Transition:** Prioritises renewable energy, sustainable agriculture and eco-friendly industries. To encourage this shift, governments can incentivise such transitions through subsidies, tax incentives and regulations.

**Sustainable Investment:** Encourage sustainable investment practices that consider ESG principles to direct capital towards environmentally friendly and socially responsible projects. Financial institutions and investors can play a key role in this.

**Education and Awareness:** Educate on sustainability and create awareness to change consumer behaviour, create a demand for sustainable

products as well as practices. Educational institutions and media outlets can contribute to this effort.

**Regulatory Revisions:** Regulations that promote sustainability such as emissions standards and safeguarding the environment can level the playing field for businesses. Governments as policymakers should enforce them.

**Public-Private Collaboration:** Governments, businesses and societies should join efforts because partnerships can facilitate exchange of knowledge, resources and expertise to accelerate transition toward a sustainable economic future.

**Sustainable Innovation:** Investing in research and development for sustainable technologies such as clean energy, resource efficiency and sustainable agriculture can drive economic growth while reducing environmental impact.

**Economic Diversification:** Diversifying minimise reliance on a single sector and increase resilience as well as sustainability. Governments can support diversification through economic policies and incentives.

## Last Words

Stop viewing a sustainable economic future as a distant utopia when it is an urgent necessity for our planet and future generations. It requires a significant change in our approach to economic growth, prioritising resource efficiency, environmental responsibility, social inclusivity and long-term thinking. Despite challenges listed, proactive measures mentioned that includes education, regulatory reforms and innovation can pave the way towards a more sustainable and equitable economic future. What to remember is, our decisions and actions today define the economic landscape for years to come. Thus, choose the path of sustainability. ■

# Revise the Present.

*Just what we are doing wrong in terms of economic recovery and how to make it right, thus, ensuring sustainable future economic growth for developing countries? **Su Aziz** asks an economics professor of Cornell College some questions.*

# the Future



Economics professor, Todd Knoop, observes a key mistake that countries often make when it comes to economic recovery efforts following a crisis. “There is an old adage that the most expensive words in finance are, “This time it’s different.” I think that the same is true in terms of economic stabilisation policy,” he says. “In reality, I think economics has developed a solid understanding of economic crises and a reasonably effective tool kit and playbook to (imperfectly) address these crises. But too often, policymakers bet that this time is different, that the bubble will never pop, that the painful remedies for crises can be avoided and that passing the buck until tomorrow will make the problem go away.”

The 54-year-old David Joyce Professor of economics and business at Cornell College in the United States aptly puts it, “Another way of

saying this is that economists have a fair amount of consensus about how most economic crises should be addressed, that the policies that are most likely to ameliorate the crash. When used judiciously, these policies have been shown to be effective. But economic policies are increasingly determined by politics and political ideologies that presuppose solutions regardless of actual reality. The breakdown of political consensus and radical populism seems to me to be the biggest challenge in economic policymaking during crises.”

On the question of how countries can better anticipate and address potential external shocks, such as global market fluctuations or geopolitical events, that might disrupt economic recovery efforts, Todd responds jokingly with, “If I knew this, I would be so rich. I would be lying on a beach in a luxury resort and not working as an economist.” But on a more serious

note, he adds, “Unpredictable shocks are just that—largely unpredictable. What economists should encourage is for policymakers to maintain flexibility. They should encourage monetary and fiscal policy restraint during good times, and aggressive policy stimulus during difficult times. If balanced correctly, this approach would avoid a build-up of inflation and public debt, both of which threaten the economic recovery of many nations at this present time.”

When it comes to the balance between short-term stimulus measures and long-term structural reforms that impact the effectiveness of economic recovery and strategies governments can use to strike that right balance, Todd stresses that, “Striking a sustainable balance between expansionary policy during recessions and contractionary policy during expansions is the best way to avoid accelerating inflation and accumulating large amounts of debt.

This creates flexibility to not only deal with short-term economic cycles, but also the space to make the kinds of public investments needed to fuel productivity-enhancing public investments.” This is also his advice to policymakers and government leaders on ensuring economic recovery efforts are well-structured, adaptive and conducive to steady economic growth, especially during times of uncertainties.

In terms of sectoral focus, there are areas often overlooked during economic recovery plans. The question here is, how should governments prioritise investments to ensure equal recovery across different industries? “What differentiates a recession from a depression is the extent of turmoil in financial markets. The existence of multiple financial crises – asset market crashes, exchange rate crashes, public debt crises, or banking crises – guarantees a large economic contraction that impacts every sector

by restricting borrowing and lending, investment and consumption,” Todd replies.

“In my opinion, the best way to ensure broad-based growth is to prioritise financial stability. This doesn’t just mean bailouts when crises occur. It more importantly means detailed prudential regulation to make sure that risk and leverage don’t build to unsustainable levels that could trigger the next crisis,” Todd adds.

In the context of global economic interdependence, what collaborative measures or international cooperation strategies are crucial for steady and sustained economic recovery on a global scale? “There currently exists a huge imbalance in the global financial system,” Todd explains. “The American dollar continues to serve as the global currency and there is no realistic option. Yet US monetary policy rarely takes into account the dramatic impact that

higher or lower interest rates in the United States have on global currencies, international trade, financial systems and global growth. It has been “America First” in the American monetary policy for a long period of time.”

Even though Todd would like for the United States Federal Reserve to take global economic conditions more into account when setting policy, he is in the opinion that this is not likely to happen in the future. “In fact, as both political parties appear to view global economic interconnectedness more sceptically, we are more likely to have even less collaboration in economic policy in the future. I am not sure there’s any solution for this, other than some dramatic global economic crisis that reminds every country how dependent we are upon each other – in a way similar to how the Ukrainian War has promoted more international political and military cooperation in its aftermath.”



## Country Examples of Economic Recovery

Todd Knoop observes a few successful examples of countries that have effectively managed their economic recovery and achieved steady growth and lessons that can be learned from them. ‘Scandinavian countries such as Denmark and Sweden, Chile and Canada are a few examples of countries that have aggressively pursued economic stimulus early during the pandemic, and turned the faucet off at the peak of the crisis in order to avoid accumulating too much public debt or spiralling inflation. In other words, they’ve maintained their flexibility to respond to future crises by being flexible in responding countercyclically to current events. These countries are a good example of how healthy political systems create growth-enhancing economic policies and resilient economies.’



## FOOD FOR THOUGHT: What Drives the Economy Now and Beyond?

by Todd Knoop

Three things are currently driving the economy and shall do so in the next few years:

1. The first and foremost is China. Growing problems in their housing, public debt and financial markets coupled with a growing demographic crisis and productivity slowdown bode very ill for an economy that fuelled a huge proportion of global growth over the last 40 years. In addition, there are a wide range of geopolitical and military events that could impact the Chinese economy and every other country in the world.
2. The second issue is public debt. Can the United States and other developed countries continue to accumulate debt faster than their economies grow? Is there a point where the public’s demand for this debt diminishes or even stops? What would be the impact of such a sudden-stop on fiscal policy, interest rates, financial markets, wealth and global growth?
3. The third is the growth of AI. This is a very big topic. To what extent will AI fuel productivity growth and stimulate economic growth? But will this economic growth support job growth, or come at the cost in a reduction of jobs – particularly in the white-collar jobs that benefited so much from the last technology boom in information technology. What will be the social and economic disruptions that result from the fact that AI is likely to change the fundamental nature of how most people do their jobs? ■

# Market Potential of the Halal Economy



Right now, in an increasingly interconnected world, the global marketplace is witnessing a remarkable transformation as the economic significance of the halal industry continues to gain traction. Beyond its traditional association with Islamic dietary laws, the halal economy has expanded its reach across diverse sectors that range from finance, cosmetics to travel and pharmaceuticals. With an estimated worth exceeding trillions of dollars, the halal economy is more than a niche market, it represents a dynamic force of global trade.

Neha Anna Thomas who is a program manager, Economic Analytics at Frost & Sullivan, delves into the market potential of the global halal economy, explains myriad opportunities and challenges it presents. She also sheds some light on its far-reaching impact on both business and society.

**Neha’s Quick Take on the Halal Economy**  
From a global perspective, the halal economy has evolved beyond a niche sector to an emerging sector with sizeable growth

*Discover dynamic growth, untapped opportunities and economic impact of the burgeoning halal market, where tradition meets innovation in a multi-trillion-dollar industry. Neha Anna Thomas of Frost & Sullivan helps unlock the treasure trove.*

prospects. A key factor driving this outlook is the expectation of strong halal economy growth across both, Organisation of Islamic Cooperation (OIC) and non-OIC economies. These expectations were also vetted in a live April 2023 Frost & Sullivan poll on the halal economy outlook, conducted as part of a virtual panel think tank session on *Exploring the Halal Economy: Opportunities for Growth and Diversification*.

In effect, while halal refers to legal under Islamic law, the halal economy will increasingly be defined beyond purely the lens of alignment with Islamic principles – whether it’s the growing preference for halal food options over conventional choices, as halal is linked with healthy and safe eating, or the boost to halal fashion industry from more conservative global shoppers.







### Sectors Driving its Growth

'A combination of demand and supply-side drivers is seen to be boosting the global halal industry,' Neha explains. 'From the demand perspective, fast-growing Muslim population demographics will be a pivotal factor behind higher halal consumption prospects, add to this, growing demand from non-Muslims as well. The facilitation of OIC–non OIC trade and growing import demand will also support growth prospects, especially as exporters seek to grow beyond their traditional markets and boost geographic diversification.'

On the supply-side, according to Neha, there is growing government regulatory and policy support to drive the development of the halal industry. 'This can be seen through initiatives such as Indonesia's launch of a 2019 – 2024 Islamic economic masterplan and the country's approach to mandatory halal certification for foods by 2024. Then there is Malaysia's vision to further enhance its Muslim-friendly tourism industry under the 2020 – 2030 National Tourism Policy. Also, Saudi Arabia's 2022 launch of the Halal Products Development Company, under the ambit of Vision 2030. It's aimed at economic diversification with the firm responsible for the development of halal production competencies within the country.'

Indeed, halal food is a key sector within the halal economy, with Islamic law prohibiting items such as alcohol and pork, as well as the requirement of halal compliance within food ingredients. 'Near-term growth drivers include halal food consumption by non-Muslims, expansion of halal cloud kitchens, food apps and halal grocery e-commerce options,' Neha adds. 'Over the long term, improvements in the regulatory framework with regards to standards and certification and higher food imports bode well for growth. Progress in certification will also be a key enabler for halal pharmaceuticals which again should not have ingredient traceability linked back to pigs or alcohol, aside from other requirements.'

As for which key sub-sectors are also driving the halal economy, Neha shares insights on sector-specific growth drivers, 'Islamic finance has emerged as a fast-growing segment, with Islamic fintech to particularly boost this sector. The halal tourism sub-sector, increasingly characterised by digital transformation and luxury halal tourism experiences, will benefit from the emphasis on tourism promotion within GCC economies as part of diversification efforts. Adding to this is the demand boost coming from millennial Muslims with higher spending power who value differentiated travel experiences.'

### Responding to the Pandemic

COVID-19 pandemic has had a significant impact on various industries. Neha observes how the halal industry was affected and significant economic adaptations



that came up as a response to it. 'The halal industry was no exception to the pandemic, witnessing a contraction in 2020. With regards to response measures to the pandemic, in 2020, German companies for example were seen to increasingly expand into halal products to boost export potential.' In fact, she adds, 'German-based pharmaceutical giant Merck KGaA secured halal certifications for one of its pharmaceutical's product lines in 2021. These initiatives are reflective of the added revenue-generating potential from halal products to counter setbacks in traditional export markets.'

### Tips for Business Expansion

'Market potential of the halal economy is looking bright.' Neha's advice to businesses, entrepreneurs and investors interested in entering or expanding within the global halal market, 'It's important to look beyond the traditional OIC economies and increasingly consider non-OIC economies for halal expansion. The growing demand potential combined with what could be an underdeveloped halal market in these economies opens growth opportunities. Recent expansions into markets such as Italy and the United Kingdom in the space of halal e-commerce and food as well as Islamic fintech, for example, are indicative of growing business prospects.'

She warns that consumer trust issues combined with low levels of awareness in some halal segments are restraints to growth. 'Halal food have been marred by instances of fraud involving pork traces or mislabelling. In this case, it becomes vital for food manufacturers and suppliers to increasingly invest in

best practices to address consumer scepticism,' she reminds. 'Blockchain technologies, for example, can play a key role in driving farm-to-fork traceability and curtailing cross-contamination. Halal cosmetics, on other hand, are challenged by low consumer awareness levels, necessitating enhanced marketing and consumer education strategies to drive market penetration.'

### Forecasting Halal Industry Trends

As for upcoming trends or developments shaping the future of halal industry, Neha foresees adoption of innovative technologies. 'In an era of digital transformation, technological adoption will have growing application within halal industry as a means to enhance consumer trust and drive accessibility as well as inclusivity. IoT sensors, for example, can be deployed along the halal food value chain to monitor slaughtering practices while blockchain technologies will enhance traceability.'

Furthermore, she observes how with the rise of the Muslim millennials

and their demand for innovative easy-to-use financial tools, AI-driven solutions will find increasing applicability within Islamic fintech. 'The use of virtual reality in halal tourism showed evidence of strong demand potential even pre-pandemic. Chatbots and AR are expected to increasingly help travellers locate prayer rooms and halal food locations, especially when travelling to non-OIC economies.'

Neha adds that leverage of these advanced technologies will also be driven by government policy support for cloud services, IoT and other technologies in national halal economy masterplans, as already seen in Malaysia and Indonesia. 'Within halal trade, beyond final goods, increased trade of halal-certified ingredients will take place over coming years. This is following developments such as a greater push towards halal certification and standardisation, with halal-certified inputs and raw material supporting speedier certification.'

## LAST WORDS

To conclude, Neha deliberates on the outlook for the global economy and what impact will this have on halal economy prospects. 'While fears of a global recession have not materialised in 2023, the global economy is in a period of slowdown. The United States could just narrowly avoid a recession, while China stages uneven growth recovery following the lifting of pandemic-related lockdowns. In these precarious global conditions while demand slows from China and key advanced economies, it becomes imperative for businesses to export to alternative markets while also expanding the portfolio of offered solutions.'

She reminds, 'While GCC (Gulf Cooperation Council) economies are also experiencing slowdown this year, there will be impetus from the extremely high growth rates seen in 2022, which should lend growth to the halal economy. The Indian economy has emerged as a global economic bright spot with an expected 6 – 7 per cent growth for 2023-24. India has also been seeing a rise in halal certification demand, indicating growth potential for local and international halal players.' ■

## FINANCE

Islamic finance has the potential to make significant contributions to sustainable economic recovery and growth through various means. One of the foundational principles is risk-sharing, which fosters a cooperative approach between public and private sectors, financial institutions and individuals or businesses. This encourages the equitable sharing of profits and losses in economic activities, promoting responsible financial behaviour, economic as well as social justice, and enhancing overall economic stability.

Another core tenet is the prohibition of interest, or *riba*, which plays a crucial role in discouraging leverage and speculative activities that can lead to financial crises. By discouraging outright debt and replacing it with asset-based real economic activity, Islamic economics and finance avoid over-financialisation of the economy, promoting a more stable and sustainable economic environment.

Asset-backed financing is also emphasised, where each financial transaction must be backed by a real asset or service. This emphasis promotes responsible lending and investing, mitigating the risk of asset bubbles and financial instability. Moreover, Islamic finance discourages speculative and purely financial activities that don't contribute to genuine economic growth. The emphasis is placed on productive economic endeavours, further promoting sustainability.

Ethical investments are encouraged, with Islamic finance principles prohibiting investments in sectors like alcohol, gambling and tobacco. Instead, the focus is on investing in industries that benefit society and the environment, aligning with the goals of sustainable economic growth.

# ISLAMIC FINANCE AND ECONOMIC RECOVERY

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*Islamic finance could be a catalyst for sustainable economic recovery and growth, **Dr Zamir Iqbal**, vice president – finance and CFO of IsDB, explains more.*



Islamic social financing can stimulate economic activity by utilising traditional instruments such as zakat, sadaqa, waqf as well as microfinance instruments through modern tools such as blockchain, fintech and AI. It often encourages a longer-term perspective in investments and economic activities. This longer horizon helps counteract short-term thinking that can lead to economic instability and promotes more sustainable economic planning.

### The Islamic Finance Approach and Impact

COVID-19 pandemic recovery has created an atmosphere of volatility, with unsustainable growth leading to a rise in inflation, debt and income inequality that could endanger the recovery. In addition, faster-than-expected monetary tightening to control inflation in advanced economies, combined with financial turbulences against the backdrop of high risks and uncertainties will compound the issue of sustainable development financing.

Since COVID-19, over 51 million people in our member countries were pushed into extreme poverty. About three out of four member countries are dependent on commodity exports and more than one-third are in fragile, conflict-affected situations. To tackle these and other development challenges, we need to look beyond mere recovery and ensure that we build resilience and help chart a long-term sustainable growth path for IsDB member countries.

According to the Institute of International Finance in the first quarter of 2022, the global debt had touched USD305 trillion, this was three times the global GDP. Any solution to combat the present crisis should be devised in a manner that avoids the creation of further indebtedness of individuals, businesses, societies and countries. Fiscal



space for most developing countries has already shrunk with no capacity for further borrowing and are facing serious threats of debt sustainability. IsDB believes that non-conventional measures are needed to solve many of these issues, which are adequately found in core tenets of the Islamic economic and financial system.

The global Islamic finance industry is projected to reach USD3.7 trillion by 2024 showing healthy growth in banking, capital markets and takaful sectors. The Islamic finance market is still emerging as a fast-growing industry globally. While a post-COVID recovery poses challenges, it offers great opportunities particularly for industries like Islamic finance to help the economies through its:

1. Prohibition of risk transfer and creation of debt and leverage, as well as other rules that control dichotomic growth of finance separated from real economic activity.
2. Financing sustainable, resilient and green infrastructure through risk-sharing instruments
3. Provision of safety nets with Islamic social finance, inculcation of cooperation and risk sharing that provide support during the economic downturns.

According to one study, the global economy would need to invest around USD90 trillion in infrastructure assets over the next 15 years, which corresponds to a USD5 – USD6 trillion yearly investment in cities, transportation networks, energy systems, water, sanitation and telecommunications. This level necessitates more than doubling current infrastructure spending of USD2 – USD3 trillion per year. Using Islamic finance to fund infrastructure projects is a perfect fit as the core of Islamic finance structures is asset-backed nature, along with a degree of risk sharing and it serves the same objective of asset-backed redistribution.

Public Private Partnerships, or PPPs, are also an excellent investment possibility for Islamic financing because of their asset-linked and risk-focused characteristics. Such financing has significant liquidity and growth potential, making it a good match for PPP financing, and it can support long-term development and positive socioeconomic outcomes.

Unlike conventional stimulus and relief aid which can exacerbate debt levels, Islamic social financing instruments such as zakat, waqf and qard hassan, or benevolent loan, can provide financial and economic support to vulnerable segments without overburdening them with debt. Leveraging these instruments, governments can strengthen social protection schemes and aid those affected by crises. Thus, facilitating economic recovery, while making economies more resilient to future shocks.

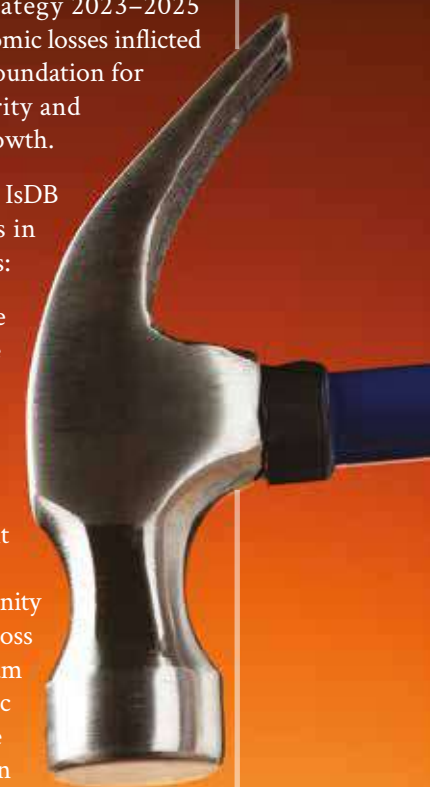
IsDB implemented multiple initiatives and strategies to promote the integration of Islamic finance into sustainable economic growth frameworks. They

## Integrating Islamic Finance into Recovery Plans

include mobilisation and channelling of funds towards productive economic activity and inclusive development initiatives that drive sustainable growth trajectories in member countries. IsDB's Realigned Strategy 2023–2025 focuses on boosting recovery from the economic losses inflicted by COVID-19 pandemic, while laying the foundation for tackling poverty, building greater prosperity and sustained, inclusive and green economic growth.

In order to achieve these strategic objectives, IsDB will finance priority development projects in its member countries in two strategic pillars:

1. Develop green, resilient and sustainable infrastructure such as clean and renewable energy, multi-modal transport, Vagriculture, rural development and social infrastructure.
2. Support inclusive human development such as health needs and services, resilient and quality education, nutrition and food security, disaster risk management, community development, SMEs and job creation. Across these priority areas, the IsDB will mainstream the cross-cutting priorities namely Islamic financial ecosystem development, climate change mitigation and adaptation, women and youth empowerment.



Key characteristics of sukuk, such as requiring an underlying real asset, no harm to the environment and its components, make it the perfect fit for financing critical infrastructure projects that are essential for sustainable development.

Capital raised through sukuk issuance is directly linked to financing infrastructure projects, such as roads, airports, or renewable energy facilities. Depending on the structure, sukuk may adhere to risk-sharing principles, meaning that investors share in both the risks and returns of an underlying project. This encourages responsible project management and minimises the risk of misallocation of funds, thereby supporting sustainable development.

## Sukuk, a Primary Instrument

Sukuk generated funds are channelled toward ethical and sustainable projects that align with environmental and social responsibility objectives. Sukuk can also be employed in conjunction with PPPs, where the public sector collaborates with private investors to initiate and manage infrastructure projects. It can provide necessary funding for private sector participation, facilitating critical infrastructure growth.

IsDB is rated AAA by the global rating agencies. To fulfill its funding requirements, it frequently issues sukuk in the global capital markets under its USD25 billion Medium Term Note programme, listed on Euronext Dublin, Nasdaq

Dubai and Bursa Malaysia. Since 2003, IsDB has successfully issued sukuk worth more than USD42 billion, with roughly USD22 billion currently outstanding in the markets. Proceeds of IsDB's sukuk issuances are exclusively earmarked for sustainable development projects in its member countries and Muslim communities.

Calls to tackle emerging global challenges brought about a reorientation of capital markets where impact and sustainability took front seat. In this context, IsDB created its Sustainable Finance Framework that adheres to Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines, as set out by International Capital Market Association. This enables IsDB to issue green and sustainability sukuk that play an important role in effective resource mobilisation for climate action, green growth and comprehensive social development.

The debut sustainability sukuk raised USD1.5 billion in June 2020, fully earmarked for COVID-19 projects of 'access to essential services' and 'SME financing and employment generation'. This was the first ever AAA-rated sustainability sukuk in global capital markets. The issuance supported IsDB's contribution in the Group-wide Strategic Preparedness and Response Programme. The second sustainability sukuk is IsDB's largest sukuk issuance ever. It raised USD2.5 billion in 2021. 90 per cent of the proceeds will be deployed towards social projects and 10 per cent will be allocated to green projects.

IsDB's model for Islamic microfinance leverages Islamic finance to drive economic inclusion. The fundamental principles that can expand access include:

- 1. Focus on economic inclusion beyond credit provision.** IsDB, through its partner financial institutions, employs tools like value chain analysis to identify opportunities for low-income group. This contributes to sustainable livelihoods rather than just debt obligations.
- 2. Use appropriate Islamic financing structures.** This includes murabaha or cost-plus sale, ijara or operational leasing and musharakah or profit-loss sharing partnerships can provide shariah-compliant financing for microenterprises and low-income groups with flexibility for their circumstances.
- 3. Build the capacity of beneficiaries.** IsDB partner financial institutions to incorporate training and support for entrepreneurial skills, financial literacy, and more, to help beneficiaries make the most of access to finance.
- 4. Develop win-win partnerships.** Collaboration across public, private and civil society sectors combines specialised capabilities to address multidimensional challenges marginalised groups face.
- 5. Leverage innovative technologies.** Digital solutions can lower costs and increase scale to serve remote low-income populations often excluded from traditional finance sustainably.



## What Drives the Economy?

*By Dr Zamir Iqbal, vice president – finance and CFO of IsDB*

Despite the gloomy economic outlook, we believe the emerging market and developing economies will lead the recovery. Astute governance and innovative technology will likely be key drivers of economic dynamism and resilience now and in the coming years. Good governance builds confidence among citizens, businesses and investors by fostering accountable institutions, evidence-based and participatory policymaking, transparency and efficient public service delivery. This enables economies to respond to complex uncertainties and risks nimbly.

Rapid technological advancements – from digital platforms to clean energy solutions – substantially boost productivity, expand financial inclusion, improve health and education access and enable environmentally sustainable solutions. Prioritising dynamic governance capabilities and investments in human capital and technologies to capitalise on 4IR can put countries on sustainable recovery pathways. ■

## Islamic Microfinance

# Positive Effect of Islamic Finance

by Dr Zamir Iqbal

During economic downturns, governments often resort to monetary and fiscal measures to stimulate the economy. The absence of conventional debt instrument in Islamic finance affects the effectiveness of these measures in promoting recovery. But in mainly positive ways.

The absence of debt instruments in Islamic finance can have both positive and challenging implications for the effectiveness of monetary and fiscal measures during economic downturns. On the positive side, Islamic finance's prohibition of interest discourages individuals and businesses from accumulating

excessive debt, promoting more responsible borrowing practices that reduce the risk of financial bubbles and crashes.

Additionally, Islamic finance's emphasis on asset-backed financing and investments in tangible assets can lead to a focus on real economic activity during downturns, fostering productive investments and job creation. The interest-free nature of Islamic finance compels greater fiscal discipline, utilisation of fiscal policy and macroprudential regulations to manage business cycles.

## There are Challenges

However, challenges arise in monetary and fiscal policy implementation. In terms of monetary policy, interest

rate as a tool of monetary policy is challenging in the Islamic finance framework which means central banks in Islamic finance must rely more on non-conventional interventions like rate of return and liquidity management. A different framework of monetary policy intervention has been provided by researchers. Additionally, Islamic banks' reliance on profit-sharing rather than interest income could impact the speed and effectiveness of credit provision during economic downturns, affecting the support for recovery efforts.

To address these challenges, governments and financial institutions in Islamic finance jurisdictions often need to adapt and innovate their policies and financial instruments to stimulate economic recovery effectively. Central banks and monetary authorities employing

shariah-compliant instruments to achieve policy objectives use asset-backed tools when they need to employ mark-up-based instruments.

For instance, they use instruments such as musharakah or equity partnership, and mudharabah or asset management financing, to provide liquidity to Islamic banks for onward financing to sectors in need. Profit-sharing investment accounts help absorb excess liquidity or inject liquidity. Reserve requirements, capital adequacy ratios and credit controls can also be adjusted. These instruments can stimulate economic activity and stabilise the financial system during crises.

## Examples of Islamic Finance in Promoting Economic Recovery

**Global Financial Crisis, 2008:** During this time, conventional financial systems faced severe challenges due to excessive debt and speculative practices. In contrast,

Islamic finance's avoidance of interest spared Islamic banks from many of the issues plaguing conventional counterparts. Islamic financial institutions remained relatively stable. Islamic finance has exhibited unique crisis-resilient and countercyclical capabilities to stimulate real economic activity during periods of downturn. The ethical undertones appeal to global investor bases with mandates for responsible and sustainable investments.

## Infrastructure Development:

Islamic finance has played a pivotal role in funding critical infrastructure projects. For instance, Malaysia pioneered the issuance of the world's first sovereign sustainable sukuk to finance environmentally friendly initiatives. This highlighted how Islamic finance aligns with sustainable development objectives and attracts ethical investors. Sukuk structures link financing to specific infrastructure assets and ensure that capital is directed toward tangible projects.

**Microfinance:** Islamic microfinance has effectively provided financial services to marginalised populations. Organisations like Grameen-Jameel in the Middle East have applied Islamic microfinance principles to support small businesses and alleviate poverty.

## Islamic Social Impact Bonds:

Other than IsDB's green and sustainability sukuk initiatives, another good example is, IFFIm's sukuk transaction with IsDB Group in 2019. Sukuk raised USD50 million to accelerate funding for immunisation programmes that saved children's lives in the world's poorest countries.

**Islamic Venture Capital:** Islamic venture capital firms have actively supported startups and entrepreneurial ventures, often engage in equity-based financing, aligning with Islamic finance principles. Initiatives like Ideal Ratings have established sharia-compliant investment platforms that connect startups with ethical investors. ■



# Islamic Finance

and a

Sustainable Future

*The role of Islamic finance and investment in shaping a sustainable future is more and more prominent. Dato' Mohamed Rafique Merican, Group CEO Islamic Banking and CEO Maybank Islamic, explains further.*

The alignment between sustainability goals and objectives of Shariah has been well established. For Islamic financial institutions, pursuing the objectives has been paramount and it continues to be pursued. For Maybank Group as a whole, our sustainability journey encompasses our commitment to uphold good ESG practices, which includes promotion of sustainable finance.

In humanising financial services, we aspire to create a sustainable future for all. Our ultimate ambition is to embed sustainability across all our operations to drive change for a better world. The crux to the value proposition of Islamic finance is the application of maqasid al-shariah, or objectives of shariah, namely protection of life, property, health, religion and dignity. In what we do, we want to be able to measure these objectives against the impact of our decisions or investigate the impact from what we're doing.

Islamic finance, we believe, plays an important role in achieving the broader ESG outcomes. Islamic principles on environment and natural resource conservation

aren't only based on prohibition of over-exploitation but also on sustainable development. We can play a pivotal role in actively engaging clients on sustainability by first understanding the progression of their sustainability strategy, followed by the formulation of bespoke sustainability transition solutions.

### Crucial Role of Financial Institutions

We've been progressively integrating ESG into our business decisions since 2015. That was when we established our responsible lending guidelines, followed by our ESG Risk Management Framework in 2017 and a Sustainable Product Framework five years later. The intended objectives of these guidelines and frameworks are to define our approach in evaluating the risks associated with higher ESG risk industries, setting risk acceptance parameters and developing collaborative models to assist clients in their transition journey.

In strengthening our ESG offerings and integration across businesses to achieve long-term sustainability commitments, our sustainable solutions for stakeholders include:

1. Mobilising RM80 billion in sustainable finance by 2025

2. Improving the lives of two million households across ASEAN by 2025
3. Carbon neutral position for scope 1 and 2 emissions by 2030 and net zero carbon equivalent position by 2050
4. Living sustainability by achieving one million hours per annum on sustainability and delivering 1,000 significant UN SDGs related outcomes by 2025

Maybank Islamic has year-on-year been a significant contributor towards the Maybank Group's sustainability commitment #1, where in the first half of 2023, we contributed more than 50 per cent of the Group's sustainable finance achievement.

As for sustainability commitment #2, Maybank Islamic has impacted communities through zakat funded programmes including various Islamic social finance programmes (economic empowerment capacity building and microfinancing), education sponsorships and humanitarian aid. Between 2018 and 2022, initiatives such as Maybank Islamic Community Programme positively impacted over 50,000 beneficiaries with total zakat funds disbursed amounting to RM25.5 million.

### Islamic Finance Aligns with ESG Principles

Islamic finance principles have universal applicability. There's confluence between Islamic finance and ESG. At Maybank Islamic, we have a dedicated centre of excellence unit focusing on the framework of ethical banking principles for the Group. The framework embeds following principles:

1. Promotion of economic value creation while eliminating oppressive, speculative and harmful activities
2. Transparent and fair dealings
3. Uphold excellence in quality-of-service delivery
4. Financial inclusivity
5. Preservation of the environment

Certain activities which have long been forbidden under Islamic finance such as gambling, alcohol, tobacco and weaponry are also included in the ESG blacklisted activities for financing and investment.

### A Role in Advancing Green Finance

Through sustainable commitment #2, we will mobilise RM80 billion in sustainable finance by 2025. This includes integrating ESG criteria in direct lending, investments, arranging, syndicating, fundraising, underwriting and advisory services. Three key strategic pillars were established and they're also aligned with the Maybank Group's M25+ strategy with the aim to be a sustainability leader in Southeast Asia.

The three key strategic pillars of Maybank Group's transition strategy are:

1. Supporting clients to decarbonise via
  - Engagement with clients to support their decarbonisation journey
  - Providing sustainable or transition financing to top emitting clients
  - Limiting exposure to new and existing high emitting clients
2. Accelerating differentiated investment in sustainable financing such as:
  - Incentivising green projects
  - Financing innovative technologies that help reduce emissions
  - Financing nature-based solutions
  - Setting KPIs for sustainable or green financing
3. To take industry leadership position in building capabilities and solutions through:
  - Building partnerships and collaborations
  - Establishing research team to develop thought leadership

Our sustainability agenda is a journey. Hence, support from clients is crucial for us to continue offering innovative solutions and bring about solutions that create value. In our effort for environmental sustainability, we've not forgotten that at the core of a sustainable and inclusive economy is the idea of fairness and justice – that people will be provided with opportunities and treated fairly regardless of their status in society and also in their economic activity with others.

## Sukuk Gaining Traction as a Financing Tool

As a financial industry player, we believe that the capital market can, and is, well-placed to facilitate a more sustainable nation. Malaysia being a leader in Islamic finance offers the solutions to realise this vision. As opposed to conventional financing, sukuk issuance requires thorough shariah screening process to ensure the objectives of shariah are met.

These days, we see banks as traditional providers of debt finance for infrastructure development projects, having less appetite for longer dated risk. This triggered investors to tap on the capital market to provide them with debt finance for infrastructure projects, given that such projects offer high yields amid other types of fixed income deposits.

Traditional banking and finance are mainly driven by the effort to maximise risk-adjusted returns. Environmentally sustainable investors and sukuk investors on the other hand, aim to use their money in a manner that conforms to their values and beliefs. Hence, a sukuk in which the proceeds are used to fund specific environmentally sustainable infrastructure projects, could appeal to both sukuk and conventional investors. So, we're seeing the market for sukuk growing significantly now.

Benefits for *sukuk* issuers are:

1. Strong investor appetite and this drives higher sukuk issuance volume while enhancing liquidity in the market
2. Alignment sukuk fundraising

objectives with SDGs reinforces sustainability commitment for stronger credibility

Benefits for *sukuk* investors are:

1. Allocation of assets towards SDGs
2. Participation in a highly liquid market with diverse market players

The common philosophies between ESG-related instruments and Islamic finance, we believe, will continue to serve as a bridge for sukuk in becoming a mainstream source of financing.

## Future of Islamic Finance in Shaping a Sustainable Global Economy

Islamic finance is structured on the central tenets of Islamic law and designed to achieve the objectives of shariah, which effectively promotes wellbeing of society, upholds the sanctity of Islam and preserves the environment for future generations. It's heart-warming to note that in recent years, it's not uncommon to hear of the general consensus on the alignment between ESG principles and Islamic teachings.

Maybank is not alone in aiming at becoming a prominent provider of shariah compliant or ESG financing solutions. We've heard or read about similar plans by other financial institutions, be it Islamic or conventional. This is not surprising as financial institutions have an important role to play in the global economy and the responsibility to develop as well as provide climate friendly financial solutions that can create real and meaningful impact.

The potential Islamic finance has in

playing a significant role to shape a more sustainable global economy can be achieved through financing and investment portfolios that prioritise fair, transparent, inclusive and sustainable financial practices. To me, the mission of Islamic finance isn't merely to generate financial gains or complex structures, but it's about creating value in the real economy while connecting hearts and minds as well as creating social impact, not just for the present, but also generations to come.

In recent years, through robust active product and services innovations as well as collaborations, more and more have advocated how Islamic finance can and must play a key role in contributing and achieving sustainable development, in the economy and socially.

An avenue where Islamic finance can amplify its potential is by embracing fintech innovations. By leveraging advancements in fintech, Islamic finance can introduce new technologies and solutions aimed at improving efficiency, reducing costs and enhancing transparency. For instance, the growing presence of fintech companies developing blockchain-based platforms allows for automation of Islamic financial transactions, particularly to support micro-businesses.

Lastly, within Islamic finance, sustainability is a key agenda. Combined with social finance, through instruments like zakat, sadaqah and waqf, Islamic finance can assist in creating employment, protecting livelihoods, ensuring greater equality and alleviating poverty.



## Dato' Mohamed Rafique Merican on sukuk as the best avenue to fund environmentally sustainable projects and infrastructure development

- Sukuk structures adhere to shariah principles, promoting ethical investments in line with environmental sustainability
- Appealing to socially responsible seeking investors, enhancing funding for green projects thus increases the availability of capital for sustainable projects
- Sukuk are funding based on underlying assets, ensuring that funds raised are tied to tangible assets such as green infrastructure, this provides a transparent link between investment and environmental impact, increasing investor confidence
- Islamic finance principles prohibit investments in activities harmful to society or environment
- Sukuk issuance naturally excludes projects with negative environmental consequences, contributing to a greener portfolio
- Ongoing development in sukuk structures allows for innovative financing solutions for green projects
- Structures can be tailored to meet specific needs of environmentally sustainable initiatives

## Dato' Mohamed Rafique Merican touches on waqf

The concept of waqf is integral to Islamic finance. Modern interpretations of waqf can harness to support innovative initiatives addressing contemporary challenges like education, healthcare and eradicate poverty. Here's how:

Waqf started as a simple act of benevolence. In the traditional model, the subject matter of waqf mostly involves immovable properties. For example, a waqf land or building is placed for lease and the rentals are used for charitable purposes. In the modern context, it has evolved and integrated into a financial industry with the introduction of wide range

of innovative products such as waqf-based microfinance, sukuk, unit trust and takaful.

In many Muslim societies today, a number of humanitarian projects are operated through the waqf institution. Examples include development of springs to provide water for public consumption, building houses for the needy, building bridges, helping the poor and handicapped, as well as financing orphanages and homes for the elderly.

Waqf assets can be diversified, including financial assets, real estate

and investments in businesses, to generate sustainable income streams for addressing contemporary challenges. Modern waqf models has the potential to facilitate partnerships between governments, private institutions and non-profit organisations.

These collaborations can pool resources and expertise to address complex challenges more effectively. For example, Al Jalila Foundation of UAE is developing a AED46 million residential building in Dubai Healthcare City through waqf fund to generate revenue to fund medical education and research. ■

**Taiwan** began its economic activities as a trading port and later evolved into an economic power based on knowledge-intensive IT industries. Its strong foundation in advanced technologies enables the pursuit of multiple industries, including the processing of halal products, selected as one of the focused sectors under the new south-bound policy. The new south-bound policy initiated by the government in 2016 aimed to encourage business cooperation and trade with Southeast Asian nations.

Taiwan Halal Center (THC) was established in 2017 to build a closer connection between Taiwanese industries and the Muslim community. According to the record from the Taiwanese halal certification bodies, more than a thousand Taiwanese companies from different sectors have obtained halal certification, with over 20,000 halal-certified products in Taiwan in 2023. The year THC was established, the number of halal-certified companies increased by 35 per cent. It has assisted Taiwanese SMEs in applying for halal certificates and promoting Taiwanese halal products abroad through trade shows, cooperation with local distributors and business matchmaking events.

**Unique Challenges and Solutions**  
Taiwan has matured processing technology for food, healthy food, cosmetics and biotechnology with perfect quality control. Also, Taiwanese companies have strong and adequate research and development capacities, which contribute to the rich, innovative flavour and characteristics of Taiwanese products. However, we often struggle with

high tariffs and trade regulation limitations during trading with ASEAN countries, which is the target for our industries that would like to develop the halal market.

The dilemma of high tariffs needs to be resolved through negotiations between our government and governments of other countries, as a trade promotion organisation, Taiwan Halal Center could establish a beneficial partnership in the halal industry with other Muslim countries, which could facilitate local strategy alliances and encourage collaboration within the industry supply chain.



# Halal Industry in Taiwan



Taiwan learned to embrace Muslim culture and develop its halal industry to enter into the halal market, believing halal is a way of life, inherently signifying health, safety and sustainability – traits that meet most Taiwanese enterprises pursuit of ESG. **Frances Chia-Yi Lin** of Taiwan Halal Center explains more.



For example, we recognise Malaysia's manufacturing expertise and positive reputation in the Muslim market, and by collaborating in the Halal supply chain, we can leverage our strength. We can provide semi-processed products from Taiwan and then engage in manufacturing and distributing final products like biscuits, tablets, or capsules in Malaysia.

The other direction for THC is to encourage our enterprises to actively obtain halal certification to enhance their ability to export halal products. To address this issue, THC not only organises seminars to show the vast business opportunities in the halal market but also invites official halal certification bodies and promotional corporations, to share the

latest information about certifications and market trends in order to strengthen willingness and capabilities for our enterprises to obtain halal certification.

**Insights into Taiwan Halal Industry**  
Various factors contributed to the development of Taiwan's halal industry. All of them relate to the increase in halal business opportunities and potential of the global halal market. The government initiated a new southbound policy in 2016, encouraging business cooperation and trade with Southeast Asia.

1,061 Taiwanese companies obtained halal certification by 2023. Most of them are companies of raw materials and processed products, followed by hotels, Muslim-friendly tourist sites, restaurants, travel agencies and hospitals. According to Taiwan Halal Integrity Development Association (THIDA), a Taiwanese certification body recognised by Malaysian JAKIM, food-related products have the highest percentage among raw materials and processed products. Thus, contributing 80 per cent overall.

Even though Taiwan isn't a Muslim country and has a relatively small Muslim population of around 300,000 people out of which 250,000 are foreign residents living here, our commitment to ESG, sustainability and pursuit of a pure, natural lifestyle is aligned with halal principles. Products related to the impression of carbon-reduced, organic and environmentally friendly are likely to gain favour with Taiwanese consumers and some of these are directly related to halal. The average price of Taiwanese halal





products is higher than expected. Apart from the quality 3C products like mobiles, laptops and consumer electronics, Muslim consumers like halal such as beauty and food.

### On Halal Certification

Taiwan has no official agencies for halal accreditation or government authorities issuing national halal certificates. Halal certification bodies in Taiwan issue certificates of their own or assist companies on applying for halal certificates overseas. There are 12 halal certification bodies in Taiwan, run by private associations or businesses. Taiwanese companies can apply for halal certificates through different certification bodies in Taiwan or overseas based on their needs.

For example, THIDA is recognised by JAKIM of Malaysia and many Taiwanese companies like to obtain certificates from them to enter Malaysian market. Companies interested in Indonesian market can apply through the assistance of Sincung Halal for Taiwan Co. Ltd., a certification agent of Majelis Ulama Indonesia in Taiwan. For those wanting to penetrate Middle East halal market can apply for GulfTIC certification through Bellcert Asia Ltd.

Applying for halal certification is essential for businesses that wish to enter halal markets, but it's also a challenge for our enterprises to meet halal regulations. For example, food manufacturers might have to allocate an entire production line exclusively for halal

products, change ingredients and redesign their packaging, which may significantly increase production costs, posing a considerable challenge, especially for SMEs. Moreover, each Muslim country has its own halal regulations.

It's challenging for Taiwanese SMEs interested in different halal markets to apply for different halal certificates. A universal halal certification can solve this issue. We believe a number of Taiwanese enterprises already meet the standards for halal certification, but they may not have decided on their target market, or due to their own marketing strategies, they've not applied for the relevant halal certification.

### The Usefulness of THC

THC promotes the halal industry via hosting and participating in international trade shows, holding seminars, forums and workshops related to the halal industry. We encourage SMEs to apply for halal certification through incentive programs, as well as assist certification bodies to be recognised by international leading accreditation organisations such as JAKIM in Malaysia.

Our soft events such as Taiwan Halal Food Festival and cooking contests establish closer connections with Muslim consumers and enhance positive perception of Taiwan's halal industry and products. For example, the Taiwanese Halal Food Cooking Contest in Malaysia was conducted for two consecutive years, collaborated with local Malaysian chefs and

culinary school students, and utilised Taiwanese products to create innovative dishes. This event not only showcased the culinary excellence of Taiwan's halal products but also fostered cultural exchange and appreciation.

Taiwan's halal industry is set to grow due to the rise in demand for halal products and services. The global halal industry is steadily growing due to an increasing Muslim population. Taiwan has been making efforts to tap into this market, catering to both its Muslim population and international buyers or visitors looking for halal products.



Taiwan has also been actively promoting itself as a Muslim-friendly destination. The 2023 Global Muslim Travel Index, conducted by Crescent Rating and Mastercard, has ranked Taiwan as the third best destination in the category of 'Non-OIC Tourist Destinations', after Singapore and the United Kingdom. Taipei has also been awarded 'Most Promising Muslim-friendly City Destination of The Year (non-OIC)' for

the first time. Investments in halal restaurants, accommodations, and tour services can be lucrative as the number of Muslim tourists continues to rise.

Adopting sustainable and ethical practices will help tap into a broader customer base, but careful market research and compliance with halal standards remain key to seizing these opportunities.



### Emerging sectors that show promise in Taiwan

One is **plant-based meat** and those related to nature, health and carbon reduction appeals. Taiwan has approximately three million vegetarians and a long history of vegetarianism. Taiwanese manufacturers have developed a technology that replicates texture and taste of meat using plant-based ingredients, allowing Taiwan to be a leading player in the global plant-based meat business.

The other emerging sector is **bubble tea**, which has become a global tea cultural icon and symbolises Taiwan's food innovation. Many Taiwanese bubble tea suppliers have obtained halal certificates to win the trust Muslim clientele.

Taiwanese **beauty products** also show growth in the global halal market. In the past, Taiwanese manufacturers primarily exported halal products as semi-finished goods and raw materials. Now, many Taiwanese cosmetics brands have successfully exported products in halal markets like Malaysia and Indonesia.

### Last Words

Although Taiwan is friendly towards Muslims, it is still a non-Muslim country. The local halal market in Taiwan is relatively small. Muslims in Taiwan could be divided into local Muslim and foreign residents. The preferences between these two groups are different. If International businesses want to enter the Taiwanese halal market, they need to know their target customers' needs. When it comes to partnering with Taiwanese companies, they are really good at diverse materials and semi-processed products. Working with our companies as a team could meet the diverse needs of customers. ■

### About the Author

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# Abu Dhabi's Investment Landscape

*Two government entities, namely ADDED and ADGM, shed some light on the evolving and maturing investment landscape of Abu Dhabi.*



The role of Abu Dhabi Department of Economic Development (ADDED) and Abu Dhabi Global Market (ADGM) in catalysing macro-economy is bringing the best of mainland and offshore financial jurisdiction to the benefit of international investors. They focus on continuous evolution, economic diversification and building integration, thus, building a prosperous 'falcon economy'.

Abu Dhabi has established itself as a global leader in developing a sustainable economy that aligns with humanitarian principles. The emirate has successfully integrated Islamic finance into mainstream policymaking and business practices. It now has a strong Islamic finance and banking sector, with robust ecosystem and institutions. Islamic finance has become an important tool for economic growth and social development, providing a socially responsible alternative to traditional finance.

To cultivate a socially responsible economy, ADDED directs government spending towards environmentally and socially responsible products and services. The government also provides incentives for startups in sectors such as agritech, fintech, healthcare, biopharmaceuticals, energy, tourism and IT. These high-productivity sectors create opportunities for future generations in a sustainable and responsible manner.

Abu Dhabi's mainland and offshore jurisdictions are an elaborate symphony of strategies and initiatives by Abu Dhabi Inc. entities that include ADDED and ADGM. Abu Dhabi offers a wide range of incentives for both local and international investors, such as ease of doing business, access to capital, access to markets and double taxation treaties with over 130 countries. The government is also actively investing in R&D, as well as innovation and technology, to further support the private sector.



As part of its strategy to diversify, ADDED is realising many goals for Abu Dhabi's macro-economy. It's forging ahead and reshaping the economy with its plans to develop and implement policies and initiatives to address geopolitical, economic, scientific and technological developments. A total of 25,593 new onshore economic licences were issued last year. Meanwhile, ADGM has experienced growth in recent times with foreign companies choosing Abu Dhabi as the location in which to expand their business. The number of operational entities

the government with innovative solutions and opportunity to leverage private sector capabilities.

In 2022, several major PPP projects were successfully tendered in Abu Dhabi, including the Zayed City Schools project and Phase Two of Abu Dhabi's LED Road Lighting Programme. The Khalifa Fund for Enterprise Development has been another contributor to the private sector by boosting the efficiency and capability of entrepreneurs and SMEs with its financing and service options, as well as networking

in infrastructure projects and delivery of public services. The emirate is continuously committed to enhancing financial sustainability and flexibility by spreading infrastructure investment costs over the life of the asset. It also facilitates better execution and service delivery by encouraging private sector efficiencies and innovation in the implementation and operation of major infrastructure projects.

### Potential to Expand

Embracing technological innovation and developing a conducive environment for conducting business are why Abu Dhabi and the UAE's financial sector thrives. In less than a decade, there have been increased digitalisation of main financial products such as contactless payments, e-commerce transactions and remittances.

Abu Dhabi is leveraging its strategic geographic location, as well as economic and political stability to cement its position as a major financial hub in the region. It invests in modern infrastructure, innovative

technologies and skill development to attract international talents, investors and businesses. This boosts the emirate's competitiveness and increases its local and global attractiveness. It has led to significant economic growth and job opportunities for citizens and international talents alike.

Home to some of the world's largest sovereign wealth funds, with combined assets of more than USD1.5 trillion, and two of the largest banks in the region, Abu Dhabi continuously strengthens its financial ecosystem as the 'capital of capital'. In recent years, the market capitalisation of the Abu Dhabi Securities Exchange (ADX) has almost quintupled to more than USD754 billion by end of H1-2023. ADGM further strengthens Abu Dhabi's position as a leading international financial centre. The growth has expanded tenfold. To meet the growing demand for businesses, Al Maryah Island and Al Reem Island were combined to bring 14.38 million sqm under its jurisdiction and become one of the largest financial districts in the world.



Abu Dhabi's pioneering regulatory framework encourages foreign direct investment. It's investing in various initiatives to promote knowledge-based economy through programmes developed and led by key players including Abu Dhabi Investment Office, ADQ and HUB71. As a result, the market will have better opportunities and many sectors will be able to show their activities in the long run.

### Business Opportunities of a Digitally Empowered Economy

ADGM has been supporting Abu Dhabi's digital transformation since its launch. From introducing the world's first virtual asset regulatory framework to bringing fintech sandbox to the region, its initiatives have built an empowering digital and tech ecosystem, boosted entrepreneurship and enabled established as well as tech startups to call Abu Dhabi home.

ADGM's framework has been designed to address all risks associated with digital asset activities, including those relating to money laundering, consumer protection and technology governance. It also regulates activities undertaken by exchanges, custodians

in ADGM increased by 36 per cent year-on-year to reach 1,590 entities as of June 2023.

When talking about ADDED's public-private partnerships (PPP) model, which underpins Abu Dhabi public-private sector ecosystem is the cornerstone of its overall approach. This model ensures that the private sector can access resources and support available from the government, allowing it to collaborate and benefit from each other. It also provides

opportunities with various stakeholders. In 2023, ADDED launched a major new PPP tender in collaboration with Khalifa University to deliver accommodation and facilities for 3,250 students.

In addition, ADDED recently awarded two leading private entities in the emirate contract for Zayed City Schools PPP project. More broadly, Abu Dhabi supports growth of the private sector by increasing domestic and foreign private sector investment



and other intermediaries within ADGM. Additionally, as part of its holistic approach to the regulation of digital assets, ADGM FSRA also published its virtual assets guiding principles last year. Thus, providing clarity and transparency to market participants seeking to conduct digital asset activities within ADGM's progressive regulatory framework.

Abu Dhabi's digital-first economy has enhanced job opportunities in new sub-sectors created as a result of digitalisation as well as increased employment opportunities in some existing occupations in all sectors. A good example is ADGM Squares' workforce which has reported a growth of 29 per cent in 2022 almost touching 11,000 talented individuals and this number continues to increase. It also resulted in increased footfall on Al Maryah Island, enabling retail businesses on it to prosper. A rise in B2B and B2C connections is evident, resulting in businesses improving their revenue drastically.

Leading global tech ecosystems are supporting the growth of startups and tech companies. Hub71's incredible 102 per cent increase in its community numbers in 2022, now accommodates more than 200 startups and has raised over USD1.2 billion in venture capital and created over 900 jobs.

### Support for the Private Sector

ADDED identified five emerging clusters that will constitute new drivers of growth in the next decade for Abu Dhabi: ICT, fintech, healthcare and biopharma, agritech,

energy, as well as tourism. Non-oil sectors have already contributed more than 50 per cent to last year's total GDP despite remarkable rise in oil prices during the same period. This growth proves the remarkable progress of Abu Dhabi in diversifying its economic base and sources of income.

By allowing 100 per cent foreign ownership of companies, Abu Dhabi further opens up its economy to the world. This move strengthens its appeal as a market for foreign investors, businesses, startups and successful entrepreneurs across borders. Furthermore, under the new law, investors now have a real competitive benefit in terms of ease of business establishment wherein all nationalities can wholly own their business in Abu Dhabi if it falls under the list of allowed sectors. These decisions are a few of many initiatives taken to boost the private sector and enhance the status of the emirate on the global investment map.

### Strategies to Attract FDI and Talent

With new government policies to support businesses and industries, Abu Dhabi aims to attract even more FDI in the coming years. The UAE remained the largest recipient of FDI in the Arab world and 16th in the world ranking, with flows increasing from USD 19.9 billion in 2020, to USD20.7 billion in 2021 and USD23 billion in 2022. The UAE continued its strong trajectory of attracting investment to the country bucking the global slowdown, which resulted in decline of FDI by 12 per cent last year.

According to UNCTAD' World Investment Report 2023, the UAE now proudly stands as the world's fourth largest recipient of greenfield projects, with nearly a thousand ambitious ventures announced in 2022, an outstanding 84 per cent increase. Abu Dhabi remains a key contributor to the UAE's FDI flows with a



strong investment environment. Abu Dhabi Investment Office (ADIO) is making Abu Dhabi home to various international companies. The emirate is ranked 12th in fDi's Global Cities of the Future 2021/22.

ADDED's macro strategy focused on advancing a knowledge-based, innovation-driven economy in the emirate and attracting high-level expertise within key sectors. The initiative is led by Abu Dhabi Residents Office (ADRO), an arm of ADDED, to develop key areas including culture, healthcare, R&D and real estate. It has reached more than 160 million people from its target audience to date.

From an investment perspective, the specific high-growth areas include financial services, tourism, agritech, ICT, healthcare and manufacturing. The initiative is also driven by the

importance of enabling long-term residency opportunities and encouraging a broad range of global talent to see Abu Dhabi as a home. There is also the Abu Dhabi Golden Visa provided by ADRO to attract high-skilled international talent in key sectors.

### Abu Dhabi Industrial Strategy

To strengthen Abu Dhabi's position as the region's most competitive industrial hub, its government

ADIS global initiatives and partnerships accelerate ADDED to deliver its ambitious objectives: six programmes of talent development, Industry 4.0, circular economy, ecosystem enablement, homegrown supply chain and value chain development have helped in driving significant manufacturing growth during the first year. The number of new industrial licences acquired in Abu Dhabi rose by 16.6 per cent and an increase of USD3.4 billion in the value of investments made by operational manufacturers was

recorded. The manufacturing sector experienced growth of 9.7 per cent in 2022, contributing 16.4 per cent to Abu Dhabi's non-oil GDP and represents 49.9 per cent of the total industrial sector in the UAE.

With a great variety of free zones and special economic zones to accommodate a wide range of activities, Abu Dhabi's industrial sector stands as the second-leading sector in terms of contribution to the emirate's GDP, valued at around USD24.7 billion in 2022. ■



launched Abu Dhabi Industrial Strategy (ADIS) in 2022, investing USD2.7 billion across six transformational programmes. This is to more than double the size of its manufacturing sector to USD46.8 billion. Thus, creating 13,600 skilled jobs with a focus on Emirati talent, increasing Abu Dhabi's non-oil exports to USD48.7 billion by 2031. Increasing access to financing, enhancing the ease of doing business and attracting FDI are key to achieving these goals. Over USD13.9 billion has already been invested to set up infrastructure for the sector over the past 15 years.

# 5 Urban Solutions to Tackle Climate Change in Cities

As urbanisation continues to surge, cities face the dual challenge of accommodating growing populations and combating climate change. **Charlotte Davey** explores bold steps cities are taking to tackle the latter issue head-on. This article first appeared on Earth.Org.



Roads melting, fires raging, people dying – the fact that we’re living in a climate crisis has never been more apparent than at this moment in time. Across the globe, temperatures in cities across Europe, Asia and the United States have reached record highs once thought impossible. Alongside temperatures, cities have been suffering from flash flooding, rising sea levels and infrastructure failure as a result of extremes that they’re simply not equipped to contend with. Given that 56 per cent of Earth’s population lives in urban areas, it’s about time we rethink our cities and change how they are designed, constructed and managed. Here are five innovative urban solutions leading the way.

## Hamburg’s Algae-Powered Building

A building powered by plants? This is no longer science fiction, as the Bio Intelligent Quotient, or B.I.Q., apartment building located in Hamburg, Germany, demonstrates. The striking algae biomass façade generates renewable energy from biomass and solar thermal heat. Since the system is fully integrated with the building services, the excess heat from the photobioreactors can be used to help supply hot water and heat the building. Alternatively, it can be stored for later use. Nine years after B.I.Q was constructed, the integration of biomass into architecture is still in its initial phases. However, this project has proven that micro-algae can outperform other renewable resources with their potential to absorb carbon dioxide, recycle wastewater and release oxygen. Living algae buildings provide an exciting prospect for future green cities.



## Green Tram Tracks

A common site across many European cities such as Bordeaux, Frankfurt and Barcelona, green tram tracks provide an abundance of benefits. The vegetation reduces incidents of flash flooding by absorbing rainwater, besides cooling the surrounding area as the vegetation transpires. With flash flooding increasing in frequency and intensity because of climate change, green tram tracks are a critical small step cities can take to protect themselves. The benefits go beyond diminishing flood risk: the swathes of green tracks provide a habitable zone for numerous insects as well as invertebrates, and the soft surface also lessens the vibrations and noise of tram wheels.



## Trees in Paris

After recording a temperature just shy of 43 degrees Celsius in 2019, the French have desperately been looking at ways to cool their sweltering capital, Paris. The answer to their problems may come in the form of the planting of 160,000 trees. The summer of 2023, a temperature of 56 degrees Celsius was recorded bouncing from the surface of one of the treeless streets – this was double the 28 degrees Celsius found in the shade of a nearby tree-lined boulevard. Such temperature rises are known as the urban heat island effect, which refers to the situation in which a lack of tree cover and greenery makes urban areas much hotter than rural areas. Trees are the city’s best allies in reducing inner city temperatures, as well as fighting climate change.



## Greece’s White Buildings

Among the most innovative urban solutions around the world, we can’t omit the white buildings dominating landscapes of islands like Santorini in Greece. It turns out that these white houses don’t just have aesthetic purposes. Humans have used the knowledge that white colours reflect the sun for hundreds of years. A recent study of buildings using barium sulphate paint has shown that this is able to keep internal temperatures around 4.5 degrees Celsius lower than the outside air temperature. Technological breakthroughs like this may massively help those struggling in overheated homes. It also has the potential to significantly lower the cost of cooling buildings by reducing reliance on air conditioning.



## Bringing Nature into Buildings

The key to tackling climate change in cities is incorporating nature into their infrastructure. Third on our list of urban solutions is The Valley – a mixed-use skyscraper in the financial district of Amsterdam and an innovative project which is a shining example of how biophilia can be embedded into city life. The 13,000 plants, trees and shrubs incorporated into the building’s façade provide improved air quality, enhanced well-being, and localised cooling benefits. The integration of nature into cities must be the default design principle. Only then can cities continue to thrive in a changing climate. ■

## About the Author

**Charlotte Davey** is a sustainability consultant based in London, helping clients to save carbon and enhance biodiversity. She graduated in 2020 with a degree in environmental science from The University of Nottingham, where she spent a semester studying in Malaysia. Her interests lie in biodiversity conservation, wildlife trade and climate change.

# Global Cooperation for a Sustainable Future

*Scientist and educator, Tan Sri Dr Zakri Abdul Hamid, discusses on ways to strengthen international cooperation on sustainability issues and how to promote a multilateral approach to global governance.*

Key challenges in promoting a multilateral approach to global governance for sustainability, and ways to effectively address these challenges:

The global community was aware of the need to be equitable and fair as far back as 1992, when the Earth Summit was held in Rio de Janeiro. The principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) – a landmark principle of international environmental law – reflects equity concerns in a world marked by high inequalities in levels of human development and environmental resilience. It addresses the different capabilities and differing responsibilities of individual countries in addressing global challenges such as climate change and biodiversity loss.

In promoting a multilateral approach, one must take note that we need a level playing field and that is quite impossible to achieve. Take the case of climate change. Human activities from the burning of fossil fuels such as coal, oil and gas release greenhouse gases (GHG) such as CO<sub>2</sub>, which has caused the temperature of Earth's atmosphere to rise to levels that cannot be explained by natural causes, scientists say.

Historically, global warming started in industrialised countries, known as Global North, since the dawn of industrialisation. The major carbon emitters have been the developed countries, only recently joined by countries like China and India. Smaller developing countries in the Global South contributing the least GHG, bear the brunt of the impacts of climate change. According to International Rescue Committee, these include Somalia which experienced drought and extreme food insecurity, Congo, Yemen, Chad and South Sudan.

Combating climate change is not a cheap affair. A report commissioned by Britain and Egypt released at COP27 of the UNFCCC said that developing countries alone need a combined USD1 trillion a year in external funding to meet the goals set out in their Nationally Determined Contributions (NDCs). This funding is over and above their countries' own expenditure and is needed for things like cutting emissions, dealing with disasters and restoring nature.

Malaysia's share of global GHG is a mere 0.80 per cent, compared to the United States at 14 per cent, China at 32 per cent and India at eight per cent. Malaysia's December 2021 flood, partly attributed to climate change, resulted in damages amounting to USD1.3 billion, 50 dead and 40,000 people displaced. In Pakistan, the massive floods of 2022 affected at least 33 million people and killed 1,739 and caused USD14.9 billion of damage and USD15.2 billion of economic losses. The causes of the floods were monsoon rains and melting glaciers arising from a severe heat wave, both of which are linked to climate change.

Africa is responsible for only three per cent of the emissions that humans have ever put into the atmosphere, but the continent is suffering from multi-year droughts that affect food production and well-being of wildlife. It's quite standard practice during COP meetings for developing countries to request the developed countries to pay for consequences of their emissions. Africa alone reckons that they need USD277 billion annually to meet their NDCs. In 2019 and 2020, they received less than USD30 billion annually. Where will the funds come from? This has remained unanswered.



**Countries can effectively collaborate to address global sustainability challenges like climate change and biodiversity conservation, only if:**

First and foremost, we must build understanding and knowledge about the importance of climate change and biodiversity conservation. This shouldn't be confined to just academic knowledge but must emphasise negative impacts of these twin problems to every man on the street.

For example, consider the incidence of the 2021 big flood in Malaysia – victims or the public, must be told that the floods were triggered by global warming and each citizen must reflect on what we can do to mitigate and adapt to climate change by initiating some actions. These actions can be as simple as separating one's domestic waste into organic and non-organic, being efficient in our electricity usage and to use water in a judicious manner. One must also be taught to respect the environment such as the role of tree planting in increasing our carbon sink.

This civic consciousness could then be articulated with policymakers and political leaders at national level so that relevant laws can be revised, or new ones enacted, to ensure we walk the talk on sustainability.

Eventually, we should be talking to our neighbours – in this case, members of ASEAN, so that we strengthen our common positions, build new ones and develop programmes as well as strategies to promote sustainable development in the region. International organisations like WIEF Foundation should be leveraged to advance the cause on sustainability, in particular on climate change, conservation and sustainable use of biodiversity.

Sustainability is not just about the environment but also job creation, income generation, economic prosperity and a healthy state of existence.

**Strategies recommended to foster greater international cooperation on sustainability issues while accommodating different national contexts:**

To begin with, there's already a high degree of understanding of sustainability issues at the international level. The milestone event could be the 1972 UN Conference on Human Development in Stockholm. It was the first major conference to make the environment a major issue. It also gave birth to United Nations Environment Programme. 20 years later, the UN convened the Earth Summit in Rio de Janeiro to discuss the linked problems of environmental degradation and sustainable development. It was attended by 180 heads of governments and launched Agenda 21, a blueprint to implement sustainable development in the 21st century at all levels – local, national, regional and global. Two international treaties were signed in Rio, namely the UNFCCC and the UN

Convention on Biological Diversity.

UNFCCC's Kyoto Protocol, adopted in 1997, commit industrialised countries to limit and reduce GHG emissions in accordance with agreed individual targets and places a heavier burden on them under the CBDR-RC principle.

In 2015, UN member states adopted the Paris Agreement which aspire to keep the rise in mean global temperature to well below two degrees Celsius above pre-industrial levels, and preferably limit the increase to 1.5 degrees Celsius, acknowledging that this would substantially reduce the effects of climate change. In the same year, world leaders meeting in New York agreed to adopt the 2030 Development Agenda with its 17 SDGs calling an end to poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity.

After more than 30 years of trying to halt biodiversity loss, in 2022, the international community achieved a landmark decision by agreeing to the Kunming-Montreal Global Biodiversity Framework in Montreal. It sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050 and to ensure that biodiversity loss is halted.

From the foregoing, it's obvious that the international community has spent considerable time and effort to plan, initiate and carry out numerous programmes to improve the human condition as well as to protect the planet for future generations.

However, the outcomes are still sketchy in many places. The science of climate change and biodiversity is very sure of our predicament. For instance, the Intergovernmental Panel on Climate Change has recently warned that the world is likely to surpass its most ambitious climate target, limiting warming to 1.5 degrees Celsius above preindustrial temperatures, by early 2030s. Beyond that threshold, scientists have found climate disasters will become so extreme that people will not be able to adapt.

In 2019, the Intergovernmental Platform on Biodiversity and Ecosystem Services declared that up to one million species of animals and plants are under threat of extinction due to unsustainable human activities.

Since the challenges are multidisciplinary and multisectoral in nature, international collaboration – multilateralism – is the only way forward. Each national leader must demonstrate their political will to strengthen this cooperation. Each must also commit to set their house in order – policies and programmes at local and national levels with accompanying national budgets. Furthermore, leaders of industrialised countries must commit new and additional funding to assist developing countries in mitigating as well as adapting to climate change and to steadfastly halt biodiversity loss.

**Envisioning the role of regional and global partnerships in strengthening international cooperation on sustainability issues:**

As someone who worked in the UN for several years, I can speak with some confidence that the current structure is quite adept in managing sustainability issues faced by the global community today. Its two main organs, UNDP and UNEP, are coordinating well. The establishment of the UN Environment Assembly in 2012 signals a new era of putting the environment on the same par as peace, poverty, health and security.

Also, there are many on-going international cooperation on sustainable issues. The plethora of UN conferences described earlier is one of them which eventually translate into various cooperative programmes between UN agencies and governments at national or regional levels. At regional level, the 2015 ASEAN Charter sets out that ASEAN is committed to ensuring 'sustainable development for the benefit of present and future generations and to place the well-being, livelihood and welfare of the peoples at the centre of ASEAN community building process'.

There's also ASEAN Community Vision 2025 which emphasises a regional focus on environmental protection for now and the future, adapting and responding to climate change, as well as green technology and development. However, despite these lofty declarations, the most recent review of progress by the UN suggested that none of ASEAN member states are on track to meet any of the 17 SDGs by 2030.

## Last Words

No one nation, however powerful and rich, can solve the problems of climate change, biodiversity loss or microplastic pollution on its own. They need an international collaborative structure. Furthermore, the issues are underpinned by science. Scientific advancement is part of the problem, but it is also part of the answer. The scientific community hold the knowledge, but to make that knowledge relevant and useful, it must be articulated effectively to policymakers and political leaders.

This is a new realm of pursuit known as 'science-policy nexus'. It is to promote a two-way dialogue between scientists and politicians with the hope that the latter can be equipped with science-based advice and eventually be able to formulate better policies as well as legislation. The international cooperation that ensues is embodied in 'science diplomacy', an area that promotes dialogue and interaction among multilateral stakeholders, in particular, countries.

Centres of excellence in science diplomacy are actively being created in the Global North. None has been established in developing countries. In an unprecedented move, the International Institute of Science Diplomacy and Sustainability was recently officiated at UCSI University by Malaysia's Minister of Foreign Affairs in Kuala Lumpur.

Science, technology and innovation can play a pivotal role in achieving the 17 SDGs. This is also an area where North-South cooperation can be fully utilised. It need not be a one-way street. Technology-rich countries can lend their expertise and skills to countries of Global South. However, gene-rich developing countries, many of whom are mega-diverse in biodiversity, can offer raw materials which can be developed jointly through R&D to produce new products for the world market.

Ours is the last generation that can impart positive change via enhanced international cooperation on climate change and biodiversity conservation. Do not walk away. ■



## About the Author

*Tan Sri Dr Zakri Abdul Hamid* is a scientist and educator at Universiti Teknologi Petronas in Malaysia. He is a distinguished professor and founding director of International Institute of Science Diplomacy and Sustainability of UCSI University in Kuala Lumpur. He was a science advisor to UN Secretary-General Ban Ki-moon and director of Institute of Advanced Studies at United Nations University.

# The Importance of Environmental Education for a Sustainable Future



*Environmental education is not just a subject but a vital tool for nurturing a sustainable future. Charlie Fletcher looks at the importance of environmental education and how to address climate change in classrooms. This article first appeared on Earth.Org.*

**Environmental education is vital to winning the fight against climate change.** Without it, leaders of tomorrow will be ill-equipped to overcome environmental challenges the world will face. Parents and teachers can help students understand their role as environmental stewards by encouraging student outdoor learning programs and supporting young folks who engage in student activism.

Education can make a difference in the fight against climate change. Recent surveys show that people with more education were more likely to view climate change as a threat and that, today, most people see climate change as a major threat to our planet. However, promoting environmental education in schools can be tricky. Climate change is seen as a bipartisan 'political' issue in some countries and many educational bodies push against climate education entirely.

More must be done to ensure that young people have access to environmental education. Robust climate education will give decision-makers of tomorrow the skills they need to advocate for nature, protect vulnerable environments and mitigate the effects of global warming.





## The Importance of Environmental Education

Education is often overlooked in the fight against climate change. While policy changes and global commitments are necessary to prevent global warming from further worsening, improved education is the first step toward achieving our goals.

Environmental education can help alleviate climate anxiety, too. This is broadly defined as a ‘chronic fear of environmental doom’ and may be exacerbated by a lack of understanding. Educational resources that clearly explain mechanisms behind global warming equip students with the knowledge they need to do something about climate change. This can help them feel empowered and foster a greater appreciation for the planet’s resources.

Environmental education can also promote critical thinking, communication and problem-solving skills. This is particularly important today, as students need to be able to evaluate the long-term impact of social, economic and ecological policies. Combating climate change effectively requires a global effort and activism often relies heavily on a thorough understanding of the issue and ability to persuade others that something must be done.

Improvements in public education may also promote a sense of stewardship and aid conservation efforts. In particular, environmental education programming can make a real difference to researchers who are advocating for policy changes. For example, recent public programmes

like BBC’s *Planet Earth II* and *Wild Isles* appear to have significantly impacted researchers at the University of Exeter in the United Kingdom. Reflecting on the public programme, Professor Callum Roberts states that the ‘UK must now deliver genuine protection for wildlife’ and should focus on building resilience against climate change.

## Connecting Students with High Quality, Reliable Resources

Environmental education can empower decisionmakers of tomorrow and improve the public understanding of climate change. However, connecting students with resources they need to understand global warming can be difficult – particularly if students live in a nation like the United States, where climate change is seen as a partisan ‘political’ issue.

Climate-aware parents can introduce their children to climate change with outdoor play in natural environments. Natural playgrounds, like those built from sustainable materials and found objects, are the perfect place to discuss environmental protection and importance of stewardship over the Earth’s resources.

Living a sustainable lifestyle at home can be an important part of children’s environmental education. Parents can help their kids understand the importance of sustainability by reducing their home’s carbon footprint together, by implementing and practicing environmentally friendly habits in the home. Simple

sustainable activities — such as upcycling furniture and composting leftover food scraps as well as teaching children how to recycle – help reduce our own emissions and promote a sense of responsibility for the environment.

## Student Activism

A sense of stewardship is vital for long-term preservation of the Earth’s natural resources. However, students who care about climate change should be empowered to engage in activism, too. Youth activism has a meaningful impact on policy and shows politicians that climate change is a hot-button issue for future voters.

Successful activism begins by educating students about the issues. Teachers can strengthen their students’ understanding of climate change and ecological protection by hosting student projects that encourage outdoor learning. By building ecosystems on school grounds or signing up for community clean-ups, students will learn to take pride in the world around them and become well-equipped to share their knowledge with others.

Most high schools and universities have a climate advocacy group that young people can join to amplify their voices and make a difference. Students can further their climate advocacy by joining groups that have partnered with Climate Action Network, or CAN, which helps more than 1,900 organisations get support and funding they need to prevent environmental degradation and fight climate change.

Climate-conscious students can also partner with NGOs like WWF, African Conservation Foundation, Born Free USA and Break Free from Plastic. These NGOs tackle the biggest environmental issues today and can put students in a position to maximise their impact and gain important professional development skills.



## Professional Development

Preventing climate change requires more than goodwill and public understanding. Decisionmakers of tomorrow need to be equipped with interdisciplinary skills to tackle challenges that climate change presents. However, many teachers are ill-equipped to teach environmental education in their classrooms.

More must be done to empower climate-conscious teachers. Professors should feel comfortable discussing facts of climate change in their classrooms. They should be able to identify transferable skills that their class can give to climate-conscious students.

Fortunately, teachers today can find plenty of free resources from sites like our own environmental news website dedicated to our younger audience, Kids.Earth.Org, NASA’s Vital Signs of the Planet, WWF’s Science that Affects Our World and British Council’s Climate Resources for School Teachers. These resources are entirely free and can be weaved into any class. A climate-inspired project will help students connect with the importance of environmental education and give them the skills they need to take on sceptics in the future.

## Conclusion

Environmental education is key to understanding and preventing climate change. A robust climate education can empower students and help them engage with advocacy and activism groups. Even minor education experiences, like participating in a community clean-up, can help students understand the importance of stewardship and build the interdisciplinary skills they need to advocate for environmental protection. ■



## About the Author

**Charlie Fletcher** is a freelance writer from the lovely ‘city of trees’, also known as Boise in Idaho. Her love of writing pairs with her passion for social activism and search for the truth.

## Let's get started on the journey to understand web3 better.

First up, we need to understand the evolution of the web. 'Web 1.0 was basically read only. It was just about learning new things off the internet,' begins Neil Tan, chairman of Fintech Association of Hong Kong. 'Then on web 2.0, it was read and write. People started to use a lot more social media. They started to create things, to post things, comment, share and engage on the platform. Now, on web 3.0, or web3, it's read, write and own with new types of technology like decentralised platforms, blockchain – it's where you have the opportunity to really own your content.'

Neil's been in Hong Kong for well over a decade now. Born and bred in the United States, he is also a part of Hong Kong government's newly formed web3 Task Force that promotes web3 development. Here, he gives an overview of web3 and its technologies.

### The Big Picture

'Right now, when you throw things onto Facebook or even on LinkedIn, you should be backing up those things,' Neil advises. 'A friend of mine was telling me, even things that you're posting on LinkedIn, you should back up because there's a lot of security issues at this point. There are a number of different attacks right now. But the underlying technology of blockchain is really helping to facilitate that third party ownership.'

This means, different transactions or different items can be on the decentralised ledger to be recorded. 'It can basically eliminate a lot of the intermediaries inside the entire space. I think this is the real advantage of web3. Ultimately, it comes down to usage or adoption. But as technology becomes much more accessible, people will start using it,' adds Neil. 'I think that's really the idea of web3.'

To paint a better picture, Neil gives an example – the metaverse. 'There's a reason why Facebook changed its name to Meta instead of Microsoft changing its name to Meta, because it's really more tied to the social media aspect of it. When you think or talk about going into the metaverse, it's the next level of engagement on social media. It's at conceptual point but it's already been deployed. Although, the adoption isn't all there yet.'

However, Neil, along with the global tech community, predict that people will use the metaverse a lot more for different types of engagement and interaction. 'In fact, the metaverse will facilitate different types of transactions. It's the next stage of social media.'

### Usefulness of Web3

The question on most entrepreneurs' minds when it comes to adopting web3 is: Just how will web3 elevate products and services and what is needed to use it? 'Technically, there's of course, infrastructure – like for web 2.0, you'd ask what sort

# Web3 Explained

*Chairman of Fintech Association of Hong Kong, Neil Tan, sheds some light on web3, its usefulness and how businesses can navigate this new ecosystem successfully.*

of web browser to use and if you want to facilitate payments, what wallet am I going to pay through or what applications do I use to make those payments,' Neil replies. 'So, you're definitely going to need hardware and software services and solutions inside of web3.'

You see how people put on those high-tech goggles, nowadays? Well, according to Neil, those have to be there. 'The software, the thing that's overlaying inside of that hardware has to have very high quality, high resolution or high fidelity in terms of images it outputs. Payment solutions using CBDC (central bank digital currency), crypto, tokens and the like, interplay in the web3 space.'

The usefulness of web3 extends further than the finance industry. Neil gives the medical space in Hong Kong as an example to further illustrate its usefulness. 'There's a company called Medicom. What they do is interesting – they try to facilitate a lot of the medical or healthcare services through blockchain,' he explains. 'One of the biggest things they're trying to track is health issues in China and people trying to get second opinions.'

Let's say, for example, a patient who had a diagnosis and wants a second opinion, but how do they get a second opinion from outside of China? 'What they want to do is they want to NFT (non-fungible token) some of the authorisations. Obviously, you need to authorise data. Due to data privacy and security, you have to authorise your medical records to be released to other third

parties. What they do is facilitate that cross-border interaction using web3,' Neil says. This is just one example. There are a lot of other different use cases, of course.

Web3 is universally applicable to a lot of things. 'Let me give you a little background. I was running, until recently, a company called Neptune Digital. Essentially, it's a layer one technology and we deployed a Chinese version of Ethereum on what's called a national [blockchain-based] infrastructure in China. Of course, there are different types of [blockchain-based] infrastructure in China. We deployed NFT and metaverse type projects inside of that space. What happened was, we started moving into other industry sub-segments such as healthcare, logistics is a big one, arts and collectibles. Education is also huge,' Neil adds.

### Getting Smart About Contracts

Neil says to think of smart contracts as a unique identifier. 'Why would you NFT a receipt? Because instead of just having a plain old receipt, a company can look at an Excel spreadsheet and know what you have bought from a grocery store, the different items listed, how much was paid for them and where discounts were given. The company can see the buyer's profile, monthly spend and more from the smart contract.' Basically, everything will be recorded.

It's a step up from the loyalty programmes stores have these days.



'Here in Hong Kong, loyalty programmes are very popular. Everybody has those and people are giving away that information as it is,' Neil points out. 'Before smart contracts, I literally have to go into different areas of a database to gather data, centralise it, and then, I had to analyse it. Today, if I just pulled all the smart contracts for a buyer's transactions, everything is in it – how do they spend? What's their average spend? Did they buy crackers or cookies? Well, give her a discount for this the next time she walks in.'

Neil simplifies it further, 'Think about it this way, in WhatsApp, back in the day, you're writing and chatting with your friends and they do all these emojis like a big thumbs up and a smiley face. Now, when they do it, you can highlight that particular single line and give a thumbs up. What has happened is, from data perspective and storage, instead of storing five thumbs up, I only got one, and so, I saved that storage space. It counts. It makes a difference. I've saved that much storage space and reduced cost. Also, I attributed the thumbs up to the specific message. That is within the same context of a smart contract – because now everything is in one place, the efficiency is significant.'

## TECH FORECAST

Neil Tan thinks the next big trend in Hong Kong will be tokenisation. 'Let's say, if all of shares were in NFT form and put it on to a smart contract, then you can give different types of instructions to it and attribute ownership,' he explains and gave an interesting example: tokenising race horses. 'Not many people own their own horse. What's happening now is, they're tokenising race horses. What that unlocks is fractional ownership opportunity. Which means, you and I can own a horse, let's say, in Australia where there are different ranches raising and breeding race horses. Why tokenise a horse? Because you might get more than selling it to only one individual.'

A horse is broken down into, let's say, a hundred different shares or tokens which people can buy. It can be placed onto an exchange where people trade the tokens and bid up the particular horse or just due to general interest. 'It also means there's potential in terms of straight capital gain or dividends. If the horse starts winning races, there's some sort of proceeds off those winnings for all token owners. Just like that, you now have different business models – one is tokenisation and two, fractional ownership,' Neil explains. Which means, winnings are paid out to multiple token holders instead of just one or two owners. 'It's giving more opportunities for ownership, more liquidity. It's about accessibility.' ■



## LAST WORDS

Web3 has a lot of different use cases across different sectors. 'But if you look at it in Hong Kong, the big push is within its financial services and that has a lot to do with who is leading its web3 Task Force – Paul Chan, the financial secretary,' says Neil. 'Hong Kong has always been a financial hub, and they want to be a very strong one. Web3 looks like it will make that happen.'

Although Hong Kong's web3 Task Force advises the government on policies and on regulatory matters when it comes on the technologies involved, Neil concludes, 'Hong Kong government is open to public feedback. For example, the policy address that's coming out, they have already opened it up to the public for feedback in the context of different financial regulations, rules and regulations. They also have a consultation paper which they then provide to the public. Fintech Association of Hong Kong does a lot in terms of providing feedback and all the way to consultation.'

# REVVING UP CHANGE



*The automotive industry, a cornerstone of modern economies, has been going through a profound transformation in recent years driven by advances in AI and automation technologies. What this means is, these changes are reshaping every aspect of the industry - from vehicle design, manufacturing to driving experience.*

More and more, AI and automation are integrated into the auto industry. Their impact is multifaceted, influencing safety, efficiency, sustainability and the very concept of mobility. Here, Hans de Visser, managing director of BMW Group Malaysia delves into far-reaching effects of AI and automation on the century-old company, explores challenges, opportunities and implications of this tech revolution.

**How has AI and automation transformed BMW Group's manufacturing processes and supply chain management and what benefits has the company realised from these advancements?**

**Hans de Visser:** The use of AI is a central element of the digital transformation process at BMW Group. We have been using AI throughout the value chain to generate added value for customers, products, employees and processes. Impact of AI and automation is evident in visual quality assurance – thanks to AIQX (Artificial Intelligence Quality Next).

We adopted AIQX, which is a new IT platform that uses cameras along the production line to focus on various elements and details of a new car, such as the BMW badge on the bonnet or the door locks. The cameras carry out highly automated quality control in a split second and are more efficient than anything that has before. Orchestrated by AIQX, the process is

based on AI, or deep-learning-based computer vision, to be more precise. AIQX is already in use in every BMW Group plant around the world and is revolutionising the end-to-end quality control cycle in vehicle production.

We revolutionised the driving pleasure through BMW Intelligent Personal Assistant which was introduced in 2019. It's an intelligent digital on-board companion and it responds to the prompt 'Hey BMW'. It allows the car to be operated, functions to be accessed and information obtained by voice command alone. This technology enables direct communication and natural interaction with the vehicle and it is helped by AI.

What's more, the adoption of these technologies has enabled development of innovative business models, such as subscription-based services, autonomous driving technology and data-driven insights to enhance customer experiences and generate new revenue streams.

*Undoubtedly, AI and automation are revolutionising the automotive industry. Managing director of BMW Group Malaysia, Hans de Visser, talks about the impact technological innovation has on one of the world's premium automakers.*



**As AI and automation technologies continue to evolve, how do you foresee their impact on the design as well as development of BMW vehicles in the future?**

**Hans:** These technologies can enhance the vehicle design process through simulations, virtual testing and optimisation which leads to faster prototyping and more informed design decisions. For instance, AI can control the operation of highly sensitive automotive production equipment even more precisely, as a pilot project in the paint shop at our Munich plant has shown.

If levels of dust increase due to the time of year or a sustained dry period, the algorithm picks up on the trend at an early stage and brings forward the timing of a filter change, for example. Working in conjunction with other analysis tools, additional patterns can be recognised. Another result of the analysis might be that fine adjustments need to be made to the machine

using ostrich feathers to remove dust particles from the car body.

Our AI experts see great potential in dust particle analysis. Supplied with information from numerous sensors and data from surface inspection, the algorithm monitors more than 160 features of the body and can predict the quality of a paint application with great accuracy.

**Implementing AI and automation often requires significant investment in employee training, infrastructure and technology. How does BMW Group justify these investments and measure ROI in the context of long-term benefits?**

**Hans:** The company justifies its investments in AI and automation by considering the long-term benefits they bring. These technologies can lead to increased productivity, improved product quality and better customer experiences. The company measures ROI through key performance indicators such as

production efficiency, defect reduction rates and customer satisfaction scores, all of which reflect the positive impact of our investments.

**How does BMW Group strike a balance between automation and maintaining job opportunities for its workforce?**

**Hans:** AI is the key technology in the process of digital transformation but for us, the focus remains on people. AI supports our employees and improves the customer experience. We're proceeding purposefully in the expansion of AI applications within the company. The BMW Group implements appropriate human monitoring of decisions made by AI applications and considers possible ways that humans can overrule algorithmic decisions.

We invest in training programmes to equip employees with skills needed to work alongside advanced technologies. Furthermore, as automation streamlines certain tasks, employees can be redeployed to higher-value roles that require creativity, problem-solving and decision-making – areas where human expertise is crucial.

**How does BMW Group plan for future-proofing its AI and automation systems?**

**Hans:** At BMW Group, we have a team of IT experts at the Innovation Hub in Dingolfing rethink and reinvent production processes. But that's not all they do. They also underscore the company's endeavours to develop digital solutions that will boost sustainability, efficiency, security and satisfaction of customers as well as associates.

TECH

LET'S TALK CHALLENGES

with Hans de Visser of BMW Group Malaysia

'One of the main challenges is to ensure that AI technologies are used ethically and efficiently. The BMW Group's centre of competence for data analytics and machine learning ensures rapid knowledge and technology sharing across the company. AI projects play a key role in the ongoing process of digital transformation at the company. They support efficient development as well as scaling of smart data and AI technologies,' explains Hans de Visser. 'One of the developments to come out of Project AI is a portfolio tool that creates transparency in the company-wide application of technologies making data-driven decisions.'



Valuable lessons learned from the journey of adopting AI and automation, Hans recalls, 'We learned the importance of strong change management strategies, involving employees in the transition process and continuously refining automation systems to align with evolving needs. Besides, the company is committed to developing and using AI applications that promote the well-being of customers, employees and partners. This aligns with our goals in the areas of human rights and sustainability, which includes climate change and environmental protection.'

When it comes to concerns about data privacy and security due to AI-powered systems in vehicles, 'BMW Group extends its state-of-the-art data privacy and data security measures to cover storage and processing in AI applications,' says Hans. 'This includes rigorous encryption, secure data transmission protocols and compliance with data protection regulations. We also provide transparent information to customers about data usage and implement strict access controls.'



FOOD FOR THOUGHT: What Drives the Economy Now and Beyond?

by Hans de Visser

From an automaker's point of view, several key factors are driving the economy both now and in the near future. First and foremost, the transition towards sustainable and electric mobility solutions is shaping the automotive industry and the broader economy. Governments and consumers worldwide are increasingly prioritising sustainable mobility, which is pushing automakers to invest in electric and hybrid technologies. This shift creates opportunities for innovation, manufacturing and job creation within the electric vehicle ecosystem.

Furthermore, connectivity and digitalisation are becoming central to the automotive landscape. The integration of advanced technologies such as autonomous driving, connected vehicles and smart mobility services is reshaping the way people interact with vehicles. Automakers are not only producing cars, they are also providing integrated tech-driven solutions that enhance convenience, safety and efficiency. This trend

contributes to economic growth through software development, data analytics and creation of new service-based revenue streams.

In addition, the global supply chain dynamics are evolving due to geopolitical factors and disruptions like the COVID-19 pandemic. Automakers are adapting their supply chains to ensure resilience, local sourcing, and reduced dependencies on single regions. This shift could stimulate regional economic growth by creating new manufacturing hubs and enhancing domestic production capabilities.

Lastly, circular economy and sustainability initiatives are gaining prominence. Automakers are increasingly focusing on resource optimisation, waste reduction and eco-friendly manufacturing processes. These efforts drive innovation in materials, production methods and recycling technologies. Thus, fostering economic growth within the framework of environmental responsibility. ■



The Art of Prosperity

The arts industry is the hidden engine behind economic vitality, strengthens cultural identity and shapes a country's soft power. Abu Dhabi-based artist and curator of MOCAfest 2024, Sumayyah Al Suwaidi, looks at the multifaceted ways this indispensable sector contributes to an economy.



When it comes to my perspective on how the arts – this includes visual arts, performing arts and cultural initiatives – contribute to the economy of a country, I'd say the arts and culture programmes as well as initiatives are a testament of a country's progress and development. They work hand in hand. For an economy to rise, the arts and culture sector must also rise, and vice versa. Our arts programmes in Abu Dhabi, such as Abu Dhabi Art, brings in a lot of investors and garners a lot of attention of many to establish their business in our city.

On Cultural Identity

I've worked for the Abu Dhabi government for more than two decades now. I've seen how the UAE has experienced significant growth in recent years and how the arts have played a role in shaping our cultural identity while attracting both local as well as international audiences. Our cultural identity evolved with time, it became more identified by the international audience through our art initiatives locally and internationally. Within the arts sector our nationalism and our identity, of which we are so proud of, are very evident. We include them in many of our projects and now we are identified as advanced and our work is cutting edge. This is because our culture supports and grows with us.

## ARTS

### On International Relations

Undeniably, the arts contribute to our country's soft power, fosters positive international relations and economic partnerships. We're lucky to be in the UAE because our leaders recognise soft power from the beginning of our unity back in 1971. The leaders supported the arts and cultural programmes by individuals and helped them initiate institutions as well as foundations that launched careers of many pioneer Emirati artists. The richness of the showcase of the arts and culture in the UAE is proof of power and strength. What's more, our international relations through museums such as the Louvre and Guggenheim are evidence of that.

### On Digital Impact

As with the rest of the world, the UAE embraces the digital age which has influenced the accessibility of the arts as well as its potential economic impact. Going digital has brought new opportunities for artists to showcase their work online which has made it much easier for artists to be known and recognised. More people now know of artists because of social media. Even if they aren't into the arts, it can be hard to ignore what's right in front of them. More and more artists are getting freelance jobs through their online portfolios and this increases the economy in the country.

### On Challenges

Challenges are a part of any work landscape. As for the main challenge we face in the arts industry when advocating for the arts' economic value, I'd say is the value of artwork. Sometimes, we have entities that

don't look at the history of the artist behind the work, which has a major effect on the price of the art. To address this and ensure the arts are recognised as well as supported all around, such entities require an orientation on how art is valued – it's by the value of the artist and not as much as the size of the artwork, nor the materials used to create it.

### On Collaborations and More

While collaborations between artists, institutions and businesses become more common, these partnerships should enhance the economic benefits of the arts and create a mutually beneficial ecosystem. This can happen by laying laws and regulations that will force these collaborations to take place. Only then will there be an on-going beneficial ecosystem and the economy will benefit for years to come. This is because it'll open the eyes of many artists to the possibility of living solely on their creativity. Furthermore, it will encourage other creative folk to move to the UAE, build a future for themselves and their families.

International art fairs and exhibitions definitely contribute to the local economy by providing opportunities to artists and businesses in the art industry. For instance, they help open the eyes of the international market on UAE-based artists. Also, they open up dialogues and bridge the gap between artists in the UAE and international galleries, institutions and more. The more commissions and sales UAE artists receive, the better the economy becomes. This is because the money is invested in the UAE and it gets recycled within the country.

### Last Words

I've been an active artist for 22 years and a curator for 16 years. Drawing from my experiences I share a great example of how the arts have directly impacted our economy. An example would be Louvre Abu Dhabi. It draws the attention of many tourists from myriad walks of life – art enthusiasts, historians, collectors and more. It even attracts tourists who have nothing to do with the arts, but are curious to see the magnificent building and keen to have a unique experience. All this leads to adds to the revenue of the country, bettering its economy and the creation of more jobs. This results to a community with a better understanding of the importance of such projects. In return, we have an increase of young people majoring in arts and culture, and very interested to dive into the creative industries. ■



*Jalal Luqman, visual artist in Abu Dhabi*

#### What is the impact on the community and economy that you want from your art?

'My art is never decorative or thought to be beautiful. When I create art, it's the result of a lengthy cognitive process triggered by a visual or emotional stimulus. The resultant artwork must convey a message to the world, with an emphasis on our local culture. My art is multilingual and multicultural, addressing thought-provoking issues on a cerebral and mental level rather than in a visually morbid or offensive method. I like to attract attention to the situation of humanity and all of the sentiments and emotions that humans experience, whether consciously or unconsciously. Technology, natural or unnatural disasters, the atmosphere, conflicts, the list goes on. I then stand at a distance, witnessing the interaction that happens between my artwork and the viewer. I like to see when people stand face to face with raw, unfiltered emotions.'

#### What would be an example of how investments in the creative arts have positively impacted the local economy?

'The UAE has numerous examples of the impact of creativity and culture (soft power) both locally and globally. The Louvre Abu Dhabi is one example of bridging cultural divides across continents. It's an international museum that draws cultural tourists from around the world. Another example is hosting EXPO 2020. Where the world witnessed our ability to host a top-notch cultural spectacle to be enjoyed across the globe. On a more grassroots level, there's the Abu Dhabi Cultural Foundation, which has supported various talents since its foundation

in 1981. It has been my own starting point for my 32-year career. In 2015, the Sheikha Salama Foundation was established. All of which have provided job opportunities as well as exposure opportunities to staff, artist and creatives across the board.'

#### How does the creative arts industry in the UAE contribute and enhance its society's cultural identity?

'Art and creative expression are forms of communication. If you're fluent in your native language, you'll be able to convey your message clearly. However, not everyone who creates art is capable of communicating messages that are genuine to their identity. Many people achieve technical competence but fall short of presenting a true message from their real-life experiences. The internet has simultaneously been a friend and enemy of originality. Some artists choose to follow work and ideas which aren't indigenous to us in the UAE – mimicking, copying or executing secondhand ideas they see on the internet, which may not exist in our society. To me they are no artists, merely human cameras, or copy machines. The UAE has provided the new generation of artists with all the tools necessary to become competent artists of international level. International universities, experts and international art exhibitions are abundant all over the UAE. NYUAD, Sorbonne University, Zayed University, Higher Colleges of Technology, are a few options for those choosing a creative career path. Then there are international art events such as Abu Dhabi Art, Culture Summit Abu Dhabi, Art Dubai, Sikka Art and Design Festival, Sharjah Biennale and more.'

*A few artists including some from MOCAfest 2024 in Abu Dhabi answers to questions on the impact of their work and the role of creative arts industry on the economy as well as elevating cultural identity.*

# ARTS CREATIVES OPINION



**Sasan Nasernia**, visual artist and calligrapher in Canada

**What is the impact on the community and economy that you want from your art?**

'While art may not always be seen as a top priority compared to essential needs like infrastructure and education, it holds significant potential for societal development. Through my work, I aspire to broaden people's perspectives, providing them with valuable food for thought that enriches their spiritual and intellectual outlooks. This, in turn, can contribute to a more informed and engaged community.'

Additionally, I believe that a vibrant arts scene can boost the local economy by attracting tourists, creating jobs and fostering cultural exchange, which is a vital aspect of a thriving society.'

**What would be an example of how investments in the creative arts have positively impacted the local economy?**

'The Guggenheim Museum Bilbao stands as a prime example of how investments in the creative arts can positively impact the local economy. This iconic museum's establishment transformed Bilbao into a global cultural destination, attracting tourists from around the world. This surge in visitors led to job creation in various sectors, while businesses catering to tourism thrived. The museum's success not only enriched the city culturally but also stimulated economic growth, ultimately enhancing Bilbao's overall prosperity.'

**How does the creative arts industry contribute and enhance your society's cultural identity?**

'The creative arts industry plays a pivotal role in shaping and enriching our society's cultural identity. Arts and culture are the heart and soul of any community and they contribute to a distinctive

as well as respectful identity that sets us apart. Neglecting these aspects can have long-term consequences for society's development. A

notable illustration of this principle is the UAE, where, alongside impressive material and infrastructural progress, there's a dedicated

focus on advancing the arts and culture. This strategic emphasis is expected to yield significant dividends, further enhancing the UAE's unique cultural identity and its global recognition.'



**Ghaliaa**, singer and songwriter in the UAE

**What is the impact on the community and economy that you want from your art?**

'As someone who grew up in the UAE and kickstarted my career from there, I think [my work] helps foster creativity, spark discussions, promote cultural understanding and contribute to the local economy by attracting myriad types of audience and tourists.'

**How does the creative arts industry contribute and enhance your society's cultural identity?**

'The creative arts industry plays a huge role in enhancing cultural identity in any country, including the UAE. There are a lot of ways to contribute and give back: we can preserve our traditions and showcase our culture and celebrate diversity. We can create art to reflect on our society and discuss causes and movements. In a nutshell, the creative arts industry is a pillar in shaping and promoting a society's cultural identity.'



**Saiful Razman**, visual artist from Malaysia

**What is the impact on the community and economy that you want from your art?**

As an artist, an art exhibition is a platform to showcase my artwork and to engage my creative expressions through them. Art exhibitions could bring a dialogue with the community about artistic styles, aesthetics of techniques and new ideas on cultural contexts.

**What would be an example of how investments in the creative arts have positively impacted the local economy?**

One example is the Art Expo Malaysia where all major art galleries take part. This event creates job opportunities for the creative industry from art management to the production of artwork itself. The art event draws visitors from outside the creative community, boosting local businesses such as restaurants, shops and hotels.

**How does the creative arts industry contribute and enhance your society's cultural identity?**

Creative arts industries such as fine arts, music and films could bring a sense of belonging and pride to the society. Most new artistic creations are all about the story of our generation, and in this instance, my generation. The creative arts industry is like the voice [reflective] of what we are now and what we want to be. ■

### WIEF Roundtable (WRT)

WIEF Roundtable provides a unique avenue where regional and local entrepreneurs as well as investors congregate to discuss business issues. Also explore new creative ideas to existing objectives. This programme provides an important leverage on economic strengths that help transform a common vision into reality.

*Roundtables have been held in many cities including: Istanbul, Moscow, Johannesburg, Dhaka, London, Tokyo, Jakarta, Phnom Penh.*



**3,243 +**  
PARTICIPANTS

**32**  
COUNTRIES

### WIEF Education Trust (WET)

WET is established to promote and strengthen human capital development through collaboration, education and training. It aims to provide educational opportunities to people at large by garnering support and resources from the Muslim world.

*Programmes include: Global Discourse Series, Social Enterprise Forum, Face to Face and Awqaf Development Exchange (ADEX).*

WET

**1,484 +**  
PARTICIPANTS

**39**  
COUNTRIES

### WIEF Young Leaders Network (WYN)

WYN aims to promote cross-border business opportunities and social projects for the common good. It's a global youth network for young pioneers and changemakers to connect as well as collaborate focusing on creating top-class leadership mentality under the tagline Learn.Empower.Earn.Return.

*Programmes include: ThinkTalk, IdeaLab and Young Fellows.*

WYN  
WIEF YOUNG LEADERS NETWORK

**1,421 +**  
PARTICIPANTS

**146**  
COUNTRIES

### WIEF Businesswomen Network (WBN)

WBN has paved paths for businesswomen to access relevant entrepreneurial resources through various programmes. Its global partnerships and collaborations with other businesswomen organisations, empower businesswomen and support their positive economic contribution.

*Programmes include: Online Marketing Workshop, Women Entrepreneurs Workshop, WIEF TeaTalk, Businesswomen Forum and #iEmPOWER.*

WBN  
WIEF BUSINESSWOMEN NETWORK

**1,329 +**  
PARTICIPANTS

**50**  
COUNTRIES

### WIEF Powertalk (WPT)

POWERTALK is a series of short and powerful talks on global economic trends and updates, aimed to spread inspiring thoughts and ideas. The power of ideas can change lives, bridge islamic and non-islamic countries as well as solve current global issues. POWERTALK is a platform for influential thinkers to deliberate and share knowledge, inspiring communities near and far.

*Programmes include: Powertalk Webinar and Powertalk Interview Series.*

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POWERTALK  
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