

PropertyGuru

**ASIA  
REAL ESTATE  
SUMMIT**

# The Power of Data Revolution

Insights on proptech, smart cities, and sustainable development





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# Asia Real Estate Summit





# Time for adaptive change

*The crucial role of data in driving overall business successes  
and achieving sustainability outcomes*

*By Stephen Oehme*

There are pivotal events and milestones that directly affect us. Sometimes, these events change everything. One such event is the COVID-19 pandemic, which has certainly been an unprecedented driver or accelerator of change; signalling a major milestone; a new era.

This new era will significantly change our foundational assumptions. It compels us to think about whether anything will return to "normal." As in any new era, nothing will remain the same.

Concurrently, a universe of data has been unleashed in combination with an unprecedented focus and call to action for sustainability. All of this, in combination, are extremely challenging dynamics.

Data, and all the technologies that capture, expand and facilitate data's transformation into information, and beyond, is changing our world. There is no going backwards but where will all this take us? This is an open question.

To discuss this, and other related issues, over 70 speakers and panellists, came together in ARES 2020 and ARES 2021. Together, we discussed the real estate industries' needs, the power of data in combination with the call to adapt to a changed world, the quest for more sustainable outcomes and optimal business successes, including maximising business profitability.

Sustainability has become a crucial part of corporate strategies across various industries. Sustainability is fundamentally a path away from "business as usual", i.e., to achieve sustainability, we need to change and evolve progressively; to do that we need to build on the past but not be limited by it.

We need reliable data to support our vision, objectives, and goals. Ultimately, it is data that can bring highly specific focus, enabling us to examine more accurately, test our assumptions, determine our benchmarks and monitor our 'actual' progress. Data is essential as industries adapt to pursue sustainability initiatives and contend with the significant forces and dynamics of this new era.

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### The four pillars of sustainability

In ARES 2020 and ARES 2021, there was emphasis on the importance of sustainability across all four pillars: being the environment, human, social, and financial.

Environmental sustainability does not only pertain to CO2 emissions or even overall carbon emissions. That said, the global focus on reducing carbon emissions, striving for carbon neutrality, etc are highly indicative of the holistic strategies and approaches needed to achieve all aspects of environmental sustainability.

Also essential are the other three sustainability pillars: the human, social, and financial. These are even more dynamic with how the pandemic has changed and influenced the ways we conduct our daily affairs. It has changed our needs and perceptions in every workplace, for example, in terms of office space, purpose, and associated amenities. It has changed the way we make transactions, with, for example, retail organizations shifting their focus evermore onto online channels and so much more.

The pandemic marks a major point in time where our human and social dynamics have significantly changed and will never go back to a historical baseline. At the same time, our perceptions and measures of value have irrevocably changed. This new era has significantly shifted all parameters associated with the 4 pillars of sustainability.



## CO2 emissions progress update

Sustainability is the path for positive change and progress. It is the path that so many of us are gladly dedicated to, but dedication, passion, and vision are not enough.

'Actual' outcomes are the only 'real' measure of success.

CO2 levels are a direct measure to climate change concerns. These are also an indirect measure of the levels of pollution, inefficiency, waste, and other concerns; all of which need to be addressed to achieve a sustainable future.

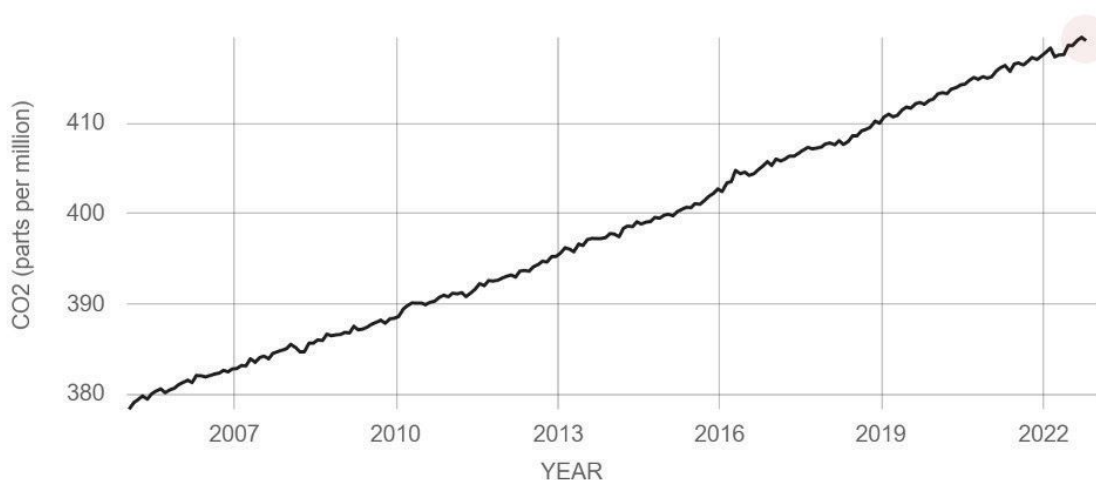
At ARES 2020 and ARES 2021, we highlighted the consistent rises in CO2 global levels since the formation of the Intergovernmental Panel for Climate Change (IPCC) back in 1988. Despite all the attention and focus on CO2 in previous decades, CO2 levels have consistently, and steadily, risen.

With the COVID-19 pandemic causing business disruptions, economic slumps via lockdowns, travel slowdown and so on, it was expected that there might be one positive outcome: that overall CO2 levels would be reduced. But this did not happen. Global CO2 levels have only kept increasing.

This chart from the NASA website shows the National Oceanic and Atmospheric Administration readings of CO2 levels from 2005 at 378 ppm to October 2022 at 419 ppm.

### DIRECT MEASUREMENTS: 2005-PRESENT

Data source: Monthly measurements (average seasonal cycle removed). Credit: [NOAA](#)



Source: NASA - Carbon Dioxide | Vital Signs – Climate Change: Vital Signs of the Planet ([nasa.gov](#))

There has effectively been no interruption to the rise of global CO2 levels at any time; this shows how entrenched carbon emissions are in our lives that even the global pandemic did not have an impact.

With great focus, it is possible to achieve desired outcomes, but this is not happening yet in terms of reducing global CO2 emissions.

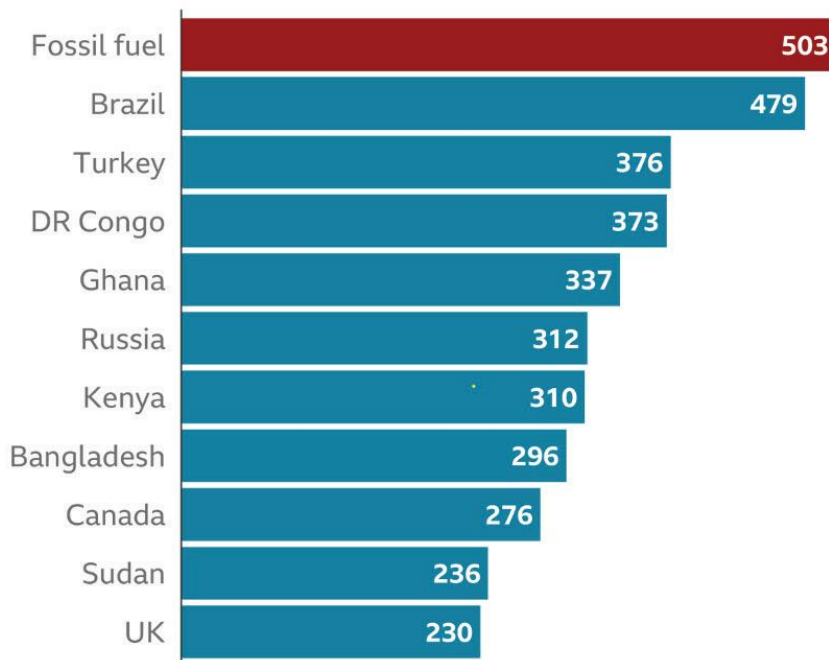
If organisations resolve to make slow yet steady improvements every year, then outstanding results will be achieved.

The Conference of the Parties (COP 26) in Glasgow held in 2021 did achieve some outcomes and broadened the focus for environmental sustainability in a number of areas. The outcome on the longstanding issue of carbon emissions was for all parties to further consider increasing their commitments and meet a year later at COP 27 in November 2022. COP 27 has occurred and yet these binding and/or assured commitments and actions did not occur as expected or required.

While there is progress in global meetings, pledges, and other actions, there are issues with timing, scope, and surety.

As reported by the BBC, delegates from fossil fuel companies at COP 26 in 2021 outnumbered the representatives from many individual countries.

### COP26 delegates associated with fossil fuel industries outnumber national delegations



Some delegates associated with fossil fuel industries are also included in national delegation totals

Source: Global Witness





It could be considered excellent that representatives from the fossil fuel industry are at the table and are pledging to take significant actions. However, people are concerned that reductions in carbon emissions may continue to be delayed. 62 percent of anthropogenic CO<sub>2</sub> emissions, the emissions caused by man, come from fossil fuels – mostly coal and gas. It was reported by the BBC in 2022 that the delegation from the fossil fuel industry increased by a further 25 percent at COP 27.

The pledges and intentions, by governments, corporations and others, to achieve carbon neutrality by 2050 or other dates need to be assessed and considered as promises or aims, which means they are not yet assured.

To achieve these commitments in under 28 years, we would have to all but stop electricity production from coal, gas, and other fossil fuel energy sources. Realistically, this might not happen given the timeframe. In ARES 2020 and ARES 2021, delegates have explored the challenges and actions required in the real estate sector, and this remains a hot topic for ARES 2022.

### A piece of the climate change challenge

CO<sub>2</sub> emissions are only a part of the story. To illustrate, 25 percent of anthropogenic climate change, being the climate change caused by man, come from methane. Methane is a highly potent greenhouse gas. CO<sub>2</sub> emissions get a lot of attention while methane emissions do not.

As every individual, organisation, sector and region contributes directly and/or indirectly to methane (CH<sub>4</sub>) emissions data gathering, analysis and strategic actions to achieve reductions are required. Paradoxically, global levels are not reducing, CH<sub>4</sub> levels are also significantly increasing.

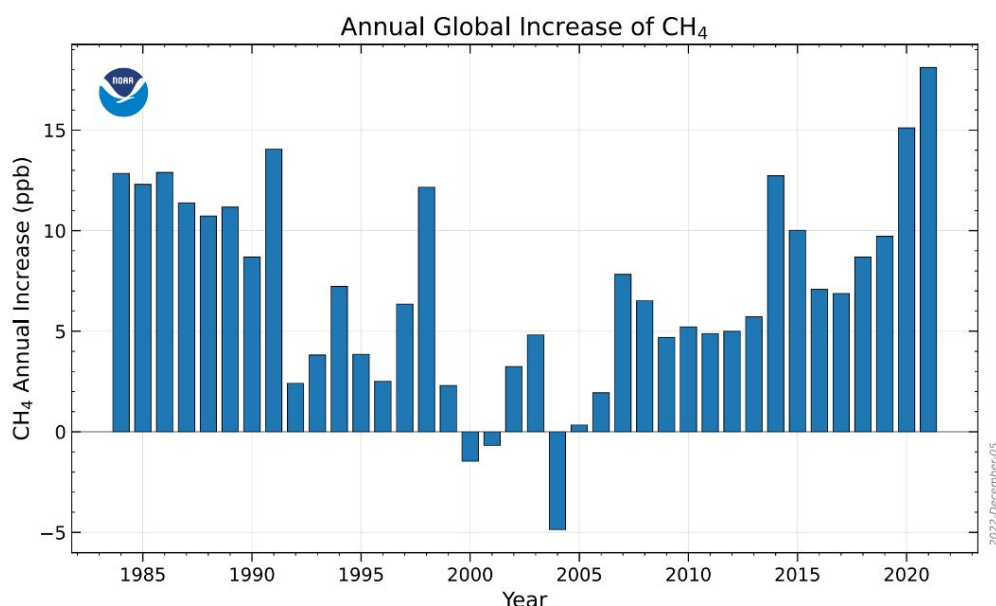


Image source: Earth Systems Research Laboratory

The above is only one example that highlights the need and importance that holistic approaches and strategies are needed for sustainability.

COP 27 was recently held in Egypt in November 2022, and there was mixed reaction to the outcomes. The 'Loss and Damage Fund' for vulnerable countries was considered progress, however, while other actions associated with climate change fell short of expectations at COP 26.

COP 28 in the UAE to be held in November 2023 will need to have very different outcomes if the intentions discussed in 2022, which, for example, is to halt the rise of CO<sub>2</sub> by 2025, is to be achieved by that date, or even by 2030.

The full range of carbon emissions (CO<sub>2</sub>, methane, etc.) are not the only issues that need to be considered, as carbon emissions are only a part of the overall environmental sustainability agenda.

Holistic approaches and strategies are required from all perspectives.

In the real estate sector, sustainability applies not only to new buildings but also to existing buildings. This should be done under a step-by-step approach as part of building managers' facilities management programmes. For instance, setting a goal of 3.5 percent annual reductions in energy consumption is achievable and is highly beneficial in terms of environmental and financial sustainability, including increased revenues and profitability.

Every real estate company can, and should, be engaged in sustainability action now. The goal is not just to achieve results by a specific period in the distant future like 2030 or 2050 – but as early as 2023 or 2024 – and beyond.

It is possible, and essential, to assure actual outcomes and overall success is achieved year on year – every year.

Advancing sustainability in our sector is easier with capital renewal programmes, major real estate refurbishments, and, of course, in new project developments; but is this really happening? No. For new projects, in many places worldwide, sustainability practices are not being comprehensively applied and in some sustainability is not considered at all.

With so many opportunities and rewards for businesses, what is holding them back?

**Not a cost but an opportunity**

Many people think that high cost is an unavoidable outcome in any attempt to achieve sustainability, but this is simply not true.

Sustainability initiatives may increase capital costs, with investment costs earned back in the form of operational savings over time. This is an investment approach and can often result in reliable, assured and financially positive outcomes.



However, this is not the only approach. In my personal experience, being focused on value and sustainability outcomes for clients globally, I have never come across an activity, project, organisation, etc that could not improve its sustainability and reduce costs simultaneously.

This is why all businesses and organisations should review and assess all aspects of sustainability strategically and holistically so they can see that integrate sustainability and reduce all costs – both capital expenditure (CAPEX) and operational costs (OPEX).

Sustainability should always have positive financial outcomes and may, and often does, result in savings for both upfront and ongoing costs.

### Strategic and holistic actions

As outlined above organisational decisions do not boil down to choosing between either making profits or being more sustainable; with holistic reviews and data-driven planning, both can be reliably achieved.

That said – it is not easy. Nor is it difficult. Beyond vision it needs holistic reviews and dynamic strategies to navigate through the challenges and maximise the opportunity outcomes.

For example, a significant barrier to 'actual' sustainability outcomes is greenwashing. This often involves the misuse of data via presentations of information that is incomplete, misleading, or just patently incorrect. The feedback we received from ARES 2020 strongly supported our calling out of greenwashing as a very significant issue.

Unfortunately, greenwashing is widely practised. Alarmingly, its perpetrators believe in what they are promoting. This can occur from a range of unintended but misguided beliefs. This could be simply an unconscious bias or, more often, a belief in their teams, by unchallenging their actual status against their teams' unachieved intentions or contentions.

Greenwashing is becoming a serious liability for organisations. It is essential to make concerted efforts to eliminate greenwash so that only authentically green products and services are developed and marketed. With the explosion of data, benchmarking, and comparative reviews, the impacts of greenwashing can be seriously diminished or eliminated.

Without doubt, data is crucial to accelerating sustainability efforts. However, data alone does not assure progress. The key to sustainability outcomes are adaptive strategies informed by holistic approaches.

## It's in our hands

Every company in every country knows and accepts that attaining sustainability status is a key differentiator. This is evident in the statements being made by every leader in private enterprises and government organisations worldwide.

There is no magic bullet. Everyone must take immediate action if we are to see results. Looking at the biggest lessons from COP 1 in 1988 through to COP 27 in 2022, from the UN Sustainable Development Goals launched in 2015, and from every organisation and government action(s), we are taught that assured changes and lasting outcomes are made in small, strategic, and holistic increments.

The future and sustainability progress is in our hands, it will cost us too much if we falter or fumble.





# Asia after COVID: A story of uneven recovery and reinvention

*Some countries are moving ahead pretty quickly, while others are lagging behind in their recovery*

*By Dr. William D. Thomas*

For many of us, 2020 was a year of responding to a crisis; 2021 provided valuable lessons for the future; and 2022 was when we transformed our organisations to meet the demands of the new business environment.

It's worth noting that several factors shaped this new business environment and helped private sector leaders create plans and build budgets for the coming years. Let's examine the different markets across the region to understand their current status and anticipated direction.

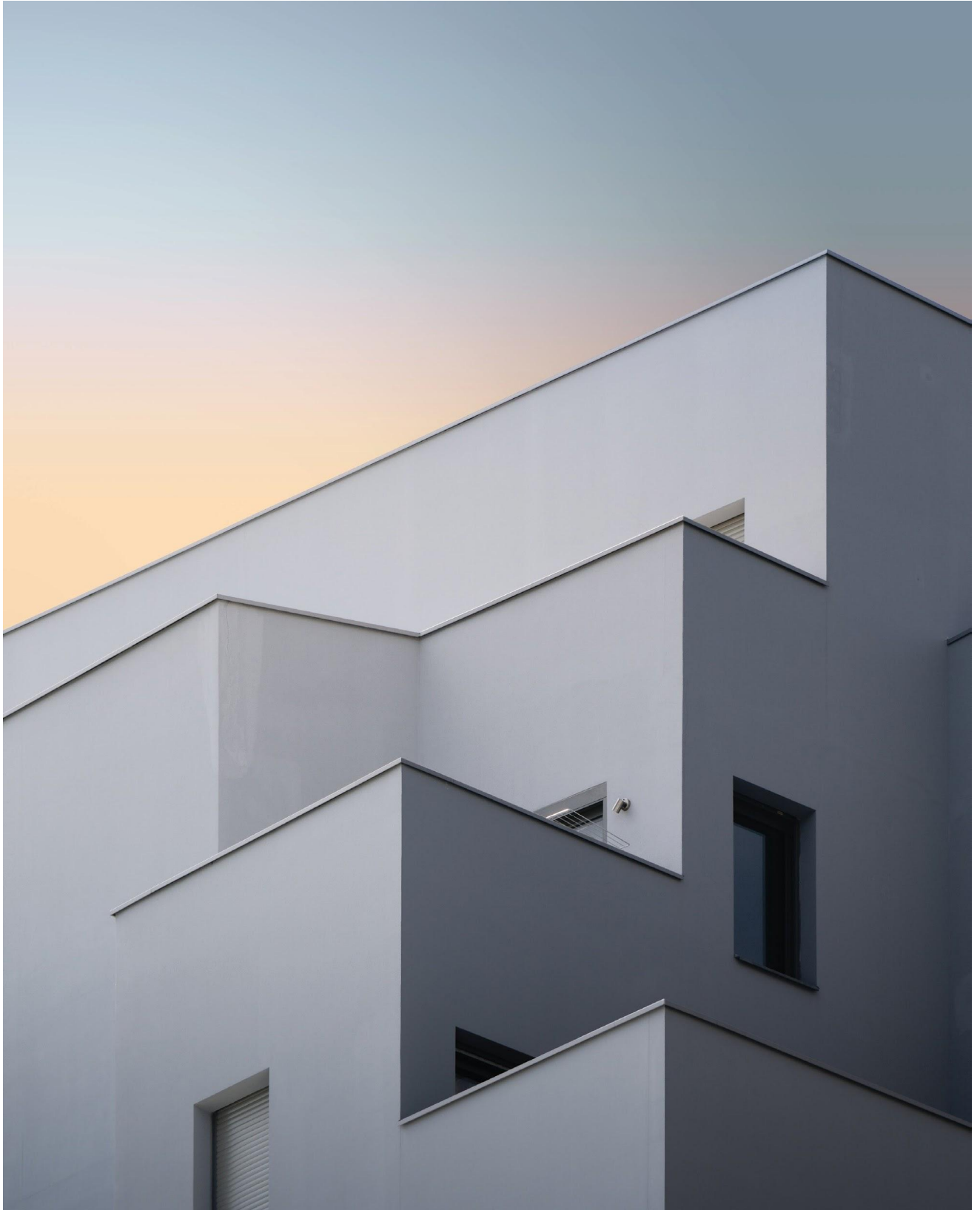
## Positive global forecast hides market-level idiosyncrasies

Several markets, including China and Vietnam, saw GDP growth in 2020 and built up on that momentum in 2021. Their growth in 2020 wasn't as dramatic as they typically experience, but any market that saw growth in 2020 was performing admirably.

Australia, India, South Korea, and Indonesia experienced a drop in GDP growth in 2020 but managed to recover from those losses in 2021. Despite facing some setbacks, these markets showed pretty decent growth last year and are building upon that momentum in 2022.

Hong Kong, Malaysia, and Singapore lost ground in 2020, didn't quite recover in 2021 but bounced back in 2022. On the other hand, Japan, Thailand, and the Philippines are going to take just a bit longer.

Several key factors influence economic recovery, such as the dominant industries in a particular country and how they were affected by the pandemic.





South Korea, which was heavily reliant on consumer electronics exports, performed well in 2020 and 2021 due to increased global demand for gadgets like tablets during lockdowns. Additionally, those working from home drove the need for new laptops and monitors to facilitate their work.

By contrast, Thailand and the Philippines, where tourism is a dominant industry, were basically shut down in early 2020.

Incidentally, one of the factors that enables a country to reopen during the pandemic, especially those heavily reliant on tourism, is vaccination rate.

#### Vaccination forecasts remain fluid

Many countries initially set mass vaccination targets at 60 percent of the population. However, with the emergence of the Delta variant, many have realised that setting the target to 80 to 85 percent of the population was more ideal.

The pace of vaccination showed significant improvement from quarter to quarter. For instance, Malaysia commenced its vaccination process in late February 2021, later than some other countries. Initially, The Economist projected that Malaysia would achieve mass vaccination by late 2022, but revised it to early 2022. Nevertheless, Malaysia surpassed expectations and accomplished mass vaccination by late 2021, with approximately 80 percent of the population fully vaccinated.

As the pandemic-induced crisis continued, governments injected substantial funds into the economy to keep struggling businesses afloat. This raised concerns that the influx of money might lead to a surge in consumer demand once countries reopen, potentially causing inflation to rise.

At the same time, prices continued to rise, partly attributed to the cost of supplies and transportation, as well as the limited manufacturing activity in countries that maintained safe distancing requirements.

#### Recovering demand causes inflation to spike

In 2021, price increases due to recovering demand were projected to be temporary, but factors unrelated to the pandemic, most especially the Russia-Ukraine war, caused inflation to increase further in 2022.

#### Organisations rapidly adopt digital transformation

For years, many companies planned to adopt digital transformation but didn't implement it. However, in 2020, they didn't have much of a choice. As people transitioned to remote work, as business travel halted, and as consumers could no longer go to physical stores, a number of digital tools came into play.

On the consumers' side, customers had to adapt to online shopping, AI-powered customer service, digital payments, and other convenient digital tools. When making purchases, customers now consider the ease of purchasing to be equally important as the product they're buying.

### China is expanding its international presence

China has been expanding its international presence over the last few years in absolute terms but also relative to the United States.

Notably, the US has experienced a decline in influence in Asia. For one, it is not a party to the major trade agreements in the region, such as the RCEP or the CPTPP. Moreover, there have been too many US embassies without an ambassador in the last few years. Evidently, the US has stepped back a bit from Asia, leaving a gap that China has filled.

Meanwhile, China is expanding the Belt and Road Initiatives (BRI) to include a health BRI and a digital BRI in addition to the physical infrastructures that they've been building. They've also been engaged in vaccine diplomacy, providing vaccines to countries in Southeast Asia.

### Companies are implementing a China +1 strategy

China continues to exert its influence in the region, driven largely by its rocky relationship with the US. This, in turn, has benefited certain countries in Southeast Asia. Vietnam, in particular, has experienced a pretty dramatic growth in manufacturing partly because of the US-China conflict.

The growth of manufacturing in Vietnam actually began before the US-China trade disputes. It started when wages were rising in China but remained relatively low in Vietnam. Companies viewed this as an opportunity to relocate some manufacturing operations to Vietnam. As trade disputes intensified between the US and China, several companies further expanded or shifted to Vietnam while still maintaining operations in China.

This compelled many firms to have a China +1 strategy. Observing this situation, other countries within the region, such as Indonesia and Thailand, have questioned, "Why does Vietnam have to be the 'plus one'? Why can't it be us?".

Thus, both Indonesia and Thailand are witnessing growth in manufacturing infrastructures and a focus on developing new forms of export manufacturing. Indonesia, in particular, is developing not only their export manufacturing facilities, such as airports and seaports, but they are also hoping to tap into domestic consumption. The country is also expanding its roads and rail systems to enhance its domestic supply chains.

Thailand has established its eastern economic corridor (EEC) comprising three provinces in the country's eastern region, with a focus on 12 key industries. The country is also capitalising on its established expertise in certain areas. For instance, leveraging its automotive knowledge, Thailand aims to develop next-generation automobiles, including electric vehicles (EVs) or self-driving cars.

#### Self-sufficiency or de-globalisation?

While the pandemic has brought about numerous challenges, it has also shed light on specific vulnerabilities in APAC countries, including political and technological issues beyond their control. For instance, global trade was disrupted when a ship got stuck in the Suez Canal. Clearly, having a significant portion of the supply chain outside of one's control is far from ideal.

Consequently, companies are now looking to expand their manufacturing operations in Southeast Asia to regionalise their supply chain. At the same, the RCEP coming into force in 2022 and beyond will facilitate the growth of a more regional supply chain in Asia.

However, this doesn't mean that companies are pulling back entirely from the global supply chain. This is not the end of globalisation — it is merely being reframed into regionalisation.

#### Share of online retail sales will increase

One of the things affecting supply chains is the growth of online retail and the use of direct-to-consumer shipping. Instead of prioritising store restocking, manufacturers are now focused on delivering products directly to customers. This trend became prevalent in 2020 when physical store visits were limited, and it continued to flourish in 2021 and 2022 as online retail continued to grow.

It's no longer just about offering customers a choice between in-store and online shopping. Sellers and merchants should recognise that customers now seek an omnichannel option, which entails providing them the flexibility to purchase from brick-and-mortar stores, websites, or shopping apps like Amazon and Lazada.



## Redefining organisational roles in a post-COVID world

In a post-COVID world, several new critical skills are emerging, which many employees may not possess. But instead of replacing them with an entirely new set of employees, business leaders should support their upskilling and adjust their roles based on their newly acquired skills.

Some employers may expand their workforce by hiring individuals who might not typically be part of the country's workforce. This could include persons with disabilities and mothers who wish to return to the workforce in more flexible capacities. Incorporating these individuals into the workforce can be part of employers' long-term strategy in addressing talent shortage problems.

## Market analyses

Here's a look at where certain APAC markets are now and what their future looks like.

### Singapore

In 2020, Singapore experienced a loss of nearly five and a half percent of its GDP, but it made significant progress in recovery during 2021, largely attributed to its highly successful vaccination campaign. With over 85 percent of the population fully vaccinated, Singapore was able to shift away from its zero-COVID strategy. This decision was crucial for the country, given that a significant portion of its economy relies on being a regional hub for businesses, as well as serving as an airline and shipping hub.

### Malaysia

Similar to Singapore, Malaysia experienced a loss of about five and a half percent of its GDP in 2020 but managed to regain some ground in 2021. However, the emergence of the Delta variant resulted in relatively restrictive lockdowns during this period. Nevertheless, Malaysia bounced back in 2022, thanks to its manufacturing industry and the substantial return of domestic consumption.

### Vietnam

Although Vietnam experienced some growth in 2021, the wave of coronavirus infections during that year slightly slowed down its growth. However, in 2022, Vietnam showcased robust growth, mainly due to the increase in tourism and its transformation into a high-tech manufacturing hub. And even though the country is expected to increase the minimum wage in 2023, it will remain wage-competitive compared to other countries around the region.

## Thailand

Thailand was utterly decimated by the complete shutdown of the tourism industry, losing a significant percentage of its GDP in 2020. The country gradually recovered in 2021 but not by much in 2022. The country's progress has also been very slow, but it is expected to recover from the pandemic and reopen its borders. It's just going to take some time — by 2023 or 2024 — before tourism revenues return to their pre-pandemic levels.

## Indonesia

Over the last few years, Indonesia has been focusing on expanding its manufacturing capabilities. Some of its infrastructure projects, however, were delayed during the pandemic because the legislature had to focus on other spending bills and thus wasn't able to address infrastructure spending. But some projects have been moving ahead of schedule. For instance, its export manufacturing capabilities is currently growing, as well as its domestic supply chain capabilities, mainly due to the expansion of roads and rail systems.

## The Philippines

The Philippines experienced some severe challenges in 2020, which held back its economic growth in 2021. There are several reasons for the slow economic growth in the Philippines. One significant factor was the substantial decrease in remittances, which play a major role in the country's economy, in 2020. However, as other economies worldwide began to reopen, remittances have rebounded in 2021 and continued to grow well into 2022. It is anticipated that remittances, which experienced reductions in previous years, will return to pre-pandemic levels in 2023.

In addition, tourism plays a critical role in the Philippine economy, and there were concerns about the country's ability to fully reopen due to its slow vaccination rate.

## India

India lost about 7 percent of its GDP in 2020, and it was originally predicted that the country will experience a double-dip recession in the form of a continuing drop in GDP in 2021.

However, in March 2021, the government introduced certain measures that led to a forecast of a 14-percent GDP growth. By the end of 2021, some adjustments were made, resulting in a revised estimate of its GDP growth to about 8.2 percent. In any case, the country managed to recover from the economic losses experienced in 2020.

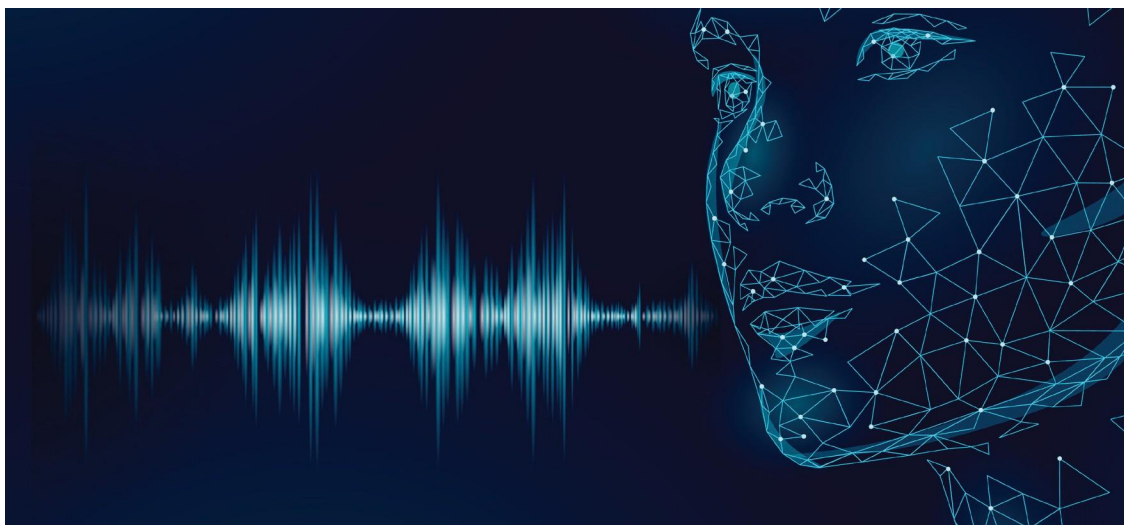
Recently, the country has been bringing in more foreign direct investment, thanks to some interesting incentive programmes. India has also begun reinventing itself as a foreign direct investor mainly in emerging markets around South Asia.

Based on what we have observed, the countries that prioritised overcoming the pandemic and undertook efforts to reinvent themselves have exhibited the fastest economic recovery in Asia, if not globally.





# Siri tells it all: Becoming the voice of AI



23

*Susan Bennett, the voice behind the world's most iconic virtual assistant, talks about how Siri came to be*

*By Gynen Kyra Toriano*

Technology has eased our lives in ways we did not even know were possible — from smart lighting systems that automatically set the brightness inside a room to smart home appliances that enhance our daily lives. We can enjoy these conveniences, thanks to a smart central hub or voice-activated technology. The key to all this is artificial technology (AI).

## From robotic to human-like

The most prominent manifestation of voice-activated tech has to be Siri, Apple operating systems' widely known virtual assistant. Although Siri may sometimes frustrate users when it misunderstands commands, it's undeniable that AI voice technology has come a long way in terms of how AI voices sound — Siri is no longer the robotic sounding assistant that you can barely interact with.

At the 2021 PropertyGuru Asia Real Estate Summit, the voice actor behind Siri Susan Bennett put it interestingly: "Don't feel bad when she doesn't understand you. She doesn't understand me, either — and I give voice to her!"

Over the years, AI voice has improved to the extent that it now sounds more human-like, which explains why more and more households are using Siri.

“The original voice of Siri was so iconic for a reason. She was the first concatenated voice that really did sound human. She had a personality, a sense of humour, and a bit of an attitude. She was the whole package, and for that reason, she became very popular and successful,” said Bennett.

She also stated that Apple founders Steve Jobs and Steve Wozniak were deeply involved in developing the application. Jobs himself added his personal touch to Siri by injecting it with his trademark humour and wit and dropping some Easter eggs. For example, when you ask Siri what the meaning of life is, the response will likely be: “42 is the answer to the meaning of life.” This answer is taken from ‘The Hitchhiker’s Guide to the Galaxy’, Jobs’ favourite Douglas Adams novel.

“Siri had human traits, so people spoke with her as if they were speaking to another human being, which was pretty cool,” continued the ‘real’ Siri.

### Not an Apple original

The most surprising tidbit that Bennett shared during her talk at the annual Summit was the fact that Apple did not create Siri. Engineer Adam Cheyer, computer scientist Tom Gruber, and Norwegian entrepreneur Dag Kittlaus — none of whom were connected to Apple — were the brilliant minds behind the iconic voice tech.

In 2015, Kittlaus revealed that if he were to have a baby girl, he would name her Siri, which means ‘a beautiful woman who leads you to victory’ in Norwegian. However, Kittlaus had a son. Nevertheless, his AI ‘daughter’ Siri would eventually win over the hearts of Apple users all over the planet.

But Bennett had an interesting take on Siri as a character. According to her, Siri was “the feisty woman who tells you where to go.”

### A welcome surprise

Since taking on voiceover duties as Siri, Bennett has been relishing the endless opportunities that came her way, such as being invited to appear on shows like CNN–HLN, The Queen Latifah Show, Late Show with David Letterman, and Mariah Carey’s Magical Christmas Special.

She was, however, initially wary of this newfound fame. When Siri was publicly launched on the 4th of October 2011, Bennett was unaware that her voice had been chosen. She said she only found out about it when one of her voice actor friends called her on that momentous day to ask if she was the voice of the iPhone app.

“And I’ll have to say, it was kind of shocking to be this ubiquitous voice and to represent a company like Apple. You would think that I would have had to audition for that role.”

As a voice actor, she preferred to remain anonymous since her profession required her to sound like different people and embody different characters. She did not want to be typecasted as that would have affected her voiceover career.

### Drowning out the voice of fear

Prior to becoming the American voice of Siri, Bennett was the voice of different characters, including Malicia the Evil Queen, the little elf Star, and fortune teller Madame Francesca. She also sang the jingle of one of the first ATM machine commercials that circulated in the US in the '70s.

Interestingly, it took her nearly two years before she publicly admitted that she was the voice of Siri due to certain fears. She had a fear of failure, of looking foolish, and of not meeting people's expectations. These are fears that could have prevented her from being in dangerous situations but also from getting to where she was meant to be.

"If you can ever get the courage to face your fears and make a leap of faith, you'll realise how amazing it is that the universe has your back. That simply means that the universe is helping you and opening doors all the time," said Bennett.



# A future like Wakanda: Why big cities should embrace and build on their past

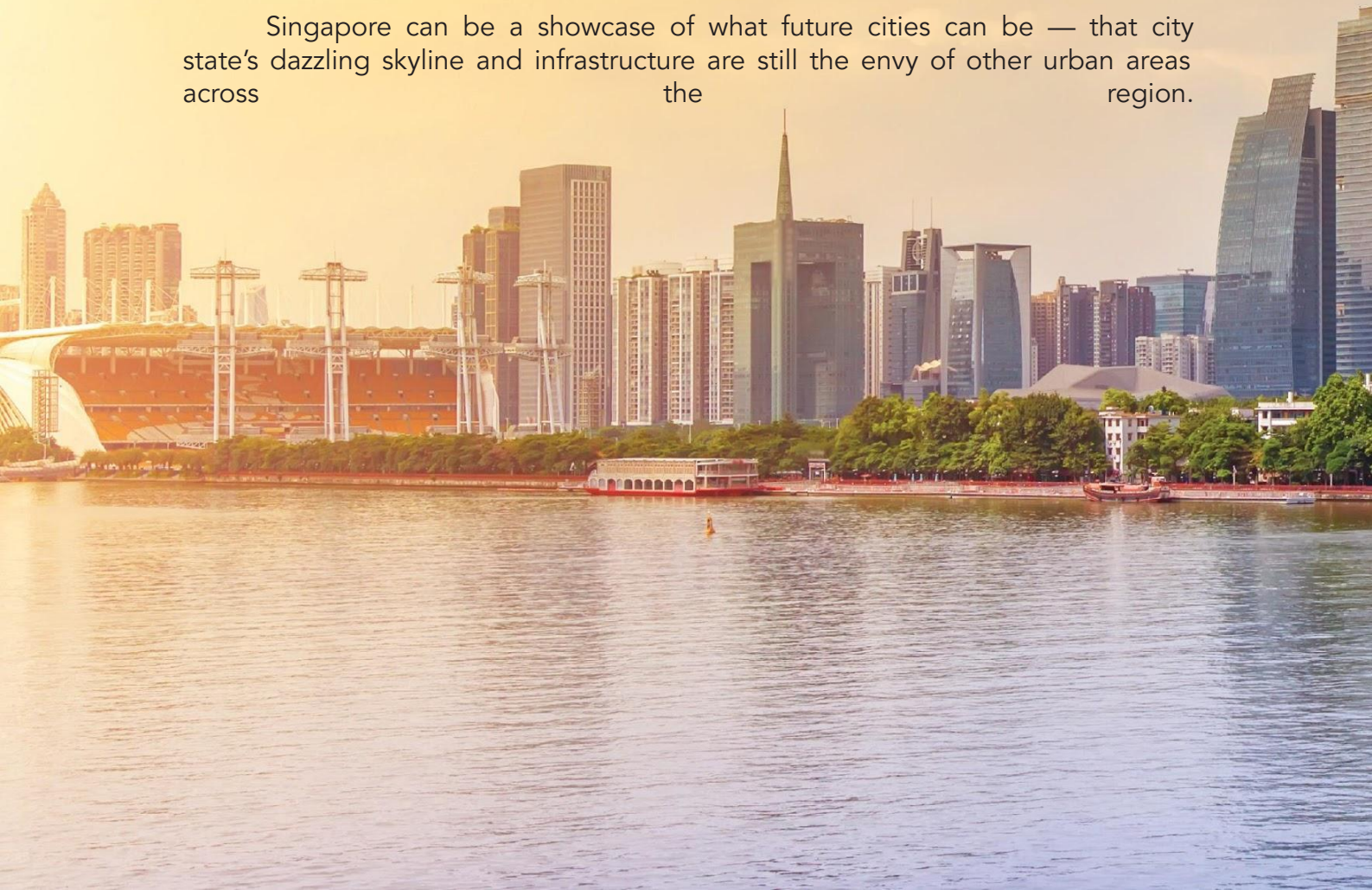
*Making Asian cities highly sustainable in the future is all about balance*

*By Curtis S. Chin*

'Black Panther' is a futuristic film set in Africa hundreds of decades in the future focused on a mythical city called Wakanda. I would compare this fictional city to Singapore, where I spent most of my time pre-pandemic.

Like Wakanda, the world's best cities should embrace and build on their past. Whether it's fictional Wakanda or a very real Singapore, there are lessons that we can take from stories that we might read about in books or watch on screen.

Singapore can be a showcase of what future cities can be — that city state's dazzling skyline and infrastructure are still the envy of other urban areas across the region.







## Communities underneath skyscrapers matter

When I look at the dazzling Singapore skyline, I tell people not to forget what is at the base of these dazzling skyscrapers. Too often, we're too focused on one specific property and overlook the surrounding community and environment it belongs to.

What is cool about a high-tech city like the fictional Wakanda is that amidst those skyscrapers and vehicles floating through the air, there is also a vibrant community that exists around them.

This is a key lesson on how we change policies to reflect the reality of how cities are being developed. Often, regulations designed with good intentions, such as those for commercial areas, may prove ineffective as the real world evolves. For example, in New York, despite the city's path to recovery, midtown business development still faces challenges and remains relatively stagnant.

People haven't fully returned to their offices, which is why many office buildings remain empty. The absence of workers in the communities surrounding these buildings, including the food trucks, retail outlets, and taxis, has caused certain parts of the cities to resemble ghost towns.

## Zoning and developing cities

It has become evident during the pandemic that there is a need for more mixed real estate developments. Even in the United States, a persistent challenge of what I refer to as the "reality of inequality" remains, partly driven by the way cities have developed, with certain areas labeled as either the "good" or "bad" part of town.

Shouldn't we think about why some areas are good and why some of them are bad? How can we bridge those differences?

The pandemic has presented significant challenges for urban areas, especially in the United States, where people have chosen to leave urban settings. During this time, people have carefully considered their living preferences, and those fortunate enough have made the decision to relocate.

Consequently, those who left behind the urban areas have left others to bear the brunt of the resulting inequality caused by the dominant developments we have become accustomed to. These individuals continue to face the harsh realities of the disparity in living conditions.

## Past mistakes, future choices

"We realised we were destroying a vibrant part of our cultural heritage that we were demolishing what tourists found attractive and unique about Singapore," Former Prime Minister Lee Kuan Yew said as Singapore developed.



Singapore has once again struggled with balancing the past and the future. In March 1995, Lee Kuan Yew said, “We have made our share of mistakes in Singapore, acknowledging that many significant buildings were demolished as the nation was built.” He went on to say that we can learn from that. Similarly, Southeast Asian developers should move forward and learn from past mistakes.

That brings us back to knowledge management. The data encompasses more than just numbers; it comprises a collection of anecdotes and lessons learned.

The fact is, the diversity of Asian culture is much more than physical buildings. Traditional communities and neighbourhoods also need to be nurtured even as we seek to preserve some of the living culture — the textual and verbal history that we cherish so much in Asia.

Let us also share that sense of community that Asia has also long been known for, even before the rise of the megacity.

### Ensuring urban sustainability

The United Nations Department of Economic and Social Affairs’ World Urbanisation Prospects report tackled double-digit growth for many of our cities. They projected that from 2015 to 2025, Bangkok would grow from 9.3 to 11 million people and Jakarta would grow by 22 percent, from 10.3 million to 12.6 million people. The data revealed figures across all Southeast Asian cities.

In ensuring urban sustainability, we should consider Thailand’s Bio, Circular, Green (BCG) economy model and the notion of looking holistically at development.

Cities across the world need energy, but Asian cities also have waste to deal with, particularly the garbage that we see going into our oceans and gulfs. One way to think about it is how we can turn that waste into energy, which we can turn into a product that leads to brighter, better cities.

### Building smart cities

So how do we ensure more sustainable urban futures for everyone?

The key phrase now is “smart cities” and how we will implement various technologies to monitor learn from existing urban processes.

When envisioning a smarter and more sustainable city, it's crucial to remember that not all solutions need to be expensive or high-tech. We should also consider green spaces and eco-friendly initiatives that offer cost-effective alternatives. These contribute significantly to a city's sustainability without relying solely on the latest and most advanced technologies.



## Cities in Asia Pacific can lead the way

'Black Panther' ends with the leader of Wakanda being questioned about what the nation can offer to the world. The answer was that there was no predetermined setting for how urbanisation will unfold in the future.

Each city across the region will need to forge its unique path in navigating this rapid transition as rural areas in Asia progressively evolve into bustling urban centres.

Let us learn from the past and begin with small, impactful changes to make Asian cities even more magnificent. With this, we hope that cities beyond our region will look to Asia as an example of how they, too, wish to develop.

In a time marked by growing divisions and toxicity, developers, government officials, and anyone addressing urbanisation concerns must unite. I firmly believe that the Asia Pacific region, especially our cities, has the potential to lead the way.





# People, planet, and partnerships: A framework on sustainable living in Asian megacities

*'We all want this ideal, beautiful, green, sustainable, resilient world — and the key is sustainable cities and communities'*

- Curtis Chin

Condensed by Property Report Editors;  
based on Curtis Chin and Mallika Gadepalli's interview



PropertyGuru Group's Mallika Gadepalli and Milken Institute's Curtis Chin talk about sustainable housing solutions in post-pandemic mega-cities and the technology that will shape the future of the Asia property sector.

Gadepalli: Curtis, you've been exposed to Asia for a long time. How has it changed?

Chin: When I think about 1995 Beijing, as well as Tokyo, Hong Kong, or even Manila, the prevalent narrative is one defined by urbanisation. How do the leaders of those cities provide for the people and how do city officials give their constituents the basic infrastructure needed for a better life?

Gadepalli: In terms of volume, a report from the UN indicates that by 2025, we will have nearly 350 million people residing in these cities in Southeast Asia alone. Is this level of urbanisation sustainable?

Chin: During the Climate Change Conference (COP26), the UN also talked about how we needed to be green. Yes, we need to be, but we also need to be realistic. Many housing and office properties in Southeast Asia and the Asia Pacific region lack environmentally-friendly features. It's crucial to acknowledge that some of these buildings are "brown," meaning their designs fail to consider the adverse environmental consequences associated with their usage and maintenance.

Developers, tenants, and other stakeholders should actively contemplate what they can do to drive progress and sustainability while they inhabit and own these properties.

Gadepalli: There are indeed many ways that communities, governments, and private sectors can come together to collaborate and spearhead initiatives, including turning brown buildings green. For instance, PropertyGuru's "Green Score" sustainability rating system assesses buildings based on criteria like their accessibility to public transport and the green awards they have received.



The Green Score enables consumers to view sustainability from various perspectives. Apart from raising awareness about sustainability issues, it empowers consumers with greater choices, and it fosters a heightened desire within communities to embrace a more sustainable way of living.

Chin: We all want this idealised green world, and the key is sustainable cities and communities. But getting there requires sacrifice. Ultimately, it boils down to paying a marginal one percent more or a substantial ten percent more. Nevertheless, the past two years have been overshadowed by the global challenges posed by COVID.

The pandemic has forced people to remain confined at home, and it has starkly highlighted the existing inequalities. Consider a family residing in a small home with restricted Internet access. How can parents manage remote work and children attend virtual classes simultaneously when the internet is insufficient for both? Can that family spend on solar panels for a little bit of energy savings?

This raises the issue of finance. Sometimes, it requires capital to take a green idea to the next stage.

I know PropertyGuru is involved here in Singapore, as well as in Malaysia, Vietnam, and other parts of Southeast Asia. Do you have insights as to what consumers want in these markets?

Gadepalli: There are big gaps and differences in the types of challenges that you see in different places.

For example, Malaysia has a huge informal employment sector, and affordable housing is a significant issue. In our consumer sentiment survey, one in three consumers wants to own a home, indicating a strong desire for ownership. However, more than half of those surveyed said that they couldn't afford the down payment. Another 40-plus percent said that not having formal employment was a barrier.

At PropertyGuru, we've integrated various fintech solutions and modules into our platform to help Malaysian consumers find homes that match their budget. We conduct a set of questions based on financial criteria to inform them about properties within their budget.

Chin: Traditional banks often inquire, "Do you have any collateral to purchase?" or "Do you have a steady source of income to rent?" The approach may vary from country to country, but across Asia, banks tend to treat consumers similarly.

Fortunately, fintech offers the chance to revolutionise the property market, and it helps both lessees and lessors. Through fintech, potential tenants can better understand what they can afford given their salaries. Property owners, in turn, can expand their network of potential tenants.

**Gadepalli:** Another crucial point is the role that financing plays in ensuring inclusivity. What is your experience with inclusive cities and varying approaches to creating sustainable cities?

**Chin:** Ten years ago, while serving on the board of directors of the Asian Development Bank, our primary focus was on economic growth and prosperity. However, we found that we needed more inclusive, equal, and balanced growth. We thought of different ways to give people access to housing, and to give them better access to housing, we had to give them better access to capital.

One of the things that really became clear during the pandemic was how housing, work, and health were all related — that housing was not just about where we live but how we live.

**Gadepalli:** This period also highlighted other issues, such as racial inclusion. In Singapore, we found out that there is racial discrimination in the rental market, so we worked with the government, our agents, and with listings. Using AI technology, we identified and flagged listings that might have had discriminatory language, and then we blocked those listings.

**Chin:** We often hear about negative things about technology, but there have been examples of technology aiding in promoting inclusion. It's no longer just about fintech but also about making sure that gray areas like racial inclusion do not undermine our efforts to strengthen our communities.

**Gadepalli:** We should also discuss what you think makes a great future for sustainable cities. Based on PG data, public transport is such an important enabler of inclusion and security. To illustrate, being connected to public transport makes a huge difference to children's future.

Broadly speaking, better public transport leads to better life outcomes. This is evident based on how popular our geosearches have become. To geosearch in our platform is to perform public transport node searches. In Singapore, users can search by MRT station, whereas in Thailand, users can search by BTS station. This is a very useful feature for Asian megacities, as it allows people to travel to work efficiently and be connected to the broader city ecosystem effectively.

Chin: One of the key takeaways I had during my time at the ADB was a Chinese saying that goes, “To get rich: first, build a road.” To add to that, one of the Milken Institute panels that I attended focused on “real assets,” which pertains not only to real estate but also infrastructure.

As we think about cities and housing, we must also give importance to basic services — transportation, energy, water, and sanitation systems — because the infrastructure of an increasingly urbanised Asia is either over-burdened or outdated.

We want public transportation and utilities that work. Here in Singapore, we might take electricity for granted, but for my friends in Nepal and elsewhere around the region, access to electricity is not always guaranteed.

Gadepalli: Home developers are also making changes in how houses look and feel because these aspects and people’s preferences have changed a lot. Moreover, employers are changing their policies about where you can live and work, and offices of the future are going to change too.

Chin: Unfortunately, movies and TV shows have led some of us to believe that everyone’s living in gigantic houses, and we don’t see the consequences of that. One of the great things about Singapore is that it’s a city-state that continues to learn from its past. Lee Kuan Yew, at one point, regretted that they tore down so many historic buildings.

Interestingly, some of the things that have been preserved are from a time when we didn’t have air conditioning, which raises the idea that we might have lost some knowledge on constructing buildings that can be cooled efficiently without relying heavily on modern cooling technologies.

Gadepalli: We actually saw low-energy strategies during COVID. Here, for example, air conditioning dues were drastically reduced because workers were working at home, where they could just open their windows to keep cool. This has led to other changes, such as an increase in the use of recreational parks and public spaces, especially during COVID.

Chin: You’re absolutely right about how COVID showed us how we benefit from green spaces. These spaces provide an opportunity for people who live in a small home to benefit from such shared public areas. A great city is not solely defined by beautiful skyscrapers but also by the combination of greenery and impressive buildings.

Gadepalli: COVID certainly had its pros and cons, but it also provided valuable lessons that, hopefully, will contribute to positive changes in the future. On that note, do you have any final thoughts on sustainable living in Asian urban cities?

Chin: As we look up and become dazzled by luxury megastructures, let's not forget the communities below. Do we really need that new jumbo shopping mall, and if we do need one more, let's think about the people who might be displaced. We must not forget inclusivity because the strength of any city isn't the fanciness of its skyscrapers, but the resilience of its community.

Gadepalli: There was a gap in government action, so the private sector and the communities rose up together.

Chin: When I was with the ADB, I probably drove some people crazy because I would always talk about what it would be like if we were serious about more balanced and sustainable development.

I insisted that we should focus on what I call the 3Ps: people — again, we mustn't forget the poorest in the community; planet — as we develop real estate, let's remember its impact on our environment; and partnerships, the ones that bring the government, private sector, and civil society together. At the end of the day, a strong community is what is at the heart of a resilient, sustainable city.

Gadepalli: That's a great framework — people, planet, and partnerships. Those are the 3Ps for responsible — and hopefully — sustainable urban development.

I completely agree. For me, it would be all those actionable levels, whether it's at a personal or company level, where you can increase awareness of this really important topic and bring about solutions, just like what we're trying to do at PropertyGuru.

At a personal level, we've launched an app that tracks your energy emissions and makes you think about whether you're taking the public transport today or not, your usage of plastic, or even whether you're eating meat or not, as that's a big contributor to greenhouse gas emissions.

At the company level, PropertyGuru has undertaken many internal and community initiatives last year, such as the green score we mentioned earlier.

I think your framework really works well because it is all about people, planet, and partnerships — communities, corporations, and governments working together to make all of these sustainability changes happen and come to life.





# Earth, wind, water, and fire: Preparing properties against the next climate disaster

*Amid concerns over intensifying weather events and their toll on property, the IFC calls on the world to act*

by Al Gerard de la Cruz

In 2020, Filipinos locked themselves up at home for fear of the death and devastation raging outside.

No, it was not the fear of catching COVID-19 — which caused enough suffering by itself — but of Typhoon Rolly, caught in a vicious staredown with the Philippines. Unleashing winds at speeds of 315 kilometres per hour, the cyclone left more than PHP20 billion (USD353 million) worth of damages in its trail.

A few weeks later, Ulysses arrived. The typhoon pelted the archipelago with up to 305mm of rainfall, filling Luzon Island's dams to the brim and causing widespread flooding in Metro Manila.

At this point, the International Finance Corporation (IFC) has had enough. By the end of that year, the global development institution chose the Philippines as the pilot country for one of its latest innovations: the Building Resilience Index.

As it stands, the web-based hazard mapping and resilience assessment framework is a fitting choice for the Philippine property sector. The Building Resilience Index maps out hazard information specific to a location and proposes measures for building owners to mitigate the risks therein.

Set in a firing gallery of typhoon belts, as well as the Pacific Ring of Fire, the Philippines is one of the most vulnerable countries to natural disasters. The country recorded the fourth-highest number of natural disasters globally over the last 20 years.

“Some of the worst natural hazards on record have added fresh impetus for calls to accelerate efforts to transition to a greener, resilient, and more inclusive Philippines,” says Jean-Marc Arbogast, country manager for the Philippines at IFC, in a statement.

### A system of transparency

A complement to IFC’s EDGE certification programme, the Building Resilience Index offers a system of transparency in markets where it is sorely lacking. It discloses information on a building’s ability to withstand shock and function thereafter, letting everyone from governments to lenders know how and when to act in anticipation of catastrophe.

A building is graded R to A+ on the index, the former being the least resilient and the latter having contingencies long after a location is cut off from power and necessities. The levels of the Building Resilience Index are as follows:

A+ – ‘A+’ is equal to an ‘A’ with operational continuity measures. The building meets all level ‘A’ requirements, plus three or more measures of operational continuity.

A – The building incorporates global best practice mitigation measures for all applicable individual hazards, which are generally set above the local building code. It will likely survive all applicable hazards at a high level.

B – The building incorporates local latest building code requirements for all applicable hazards and many recommended good practices. It will likely survive some applicable hazards at a moderate-high level.

C – The building incorporates local building code requirements, some of which may be outdated, and some recommended practices. It may survive some applicable hazards at a moderate level.

R – The building fails to meet the requirements of any of the above levels. It will likely not survive most applicable hazards, even at a moderate level.

### Uninsured, unreported

Natural disasters have impacted 4.3 billion people and constituted USD3 trillion in economic losses worldwide over the last two decades. “The interesting fact there is that when you look at many of the emerging markets, the assets are not insured,” says Ommid Saberi, the global lead for the Building Resilience Index programme and global technical lead for the EDGE programme. “The insurance condition is not like in developed countries. Many assets are not insured; therefore, the losses are not really fully reported.”

IFC, a member of the World Bank Group, offers the Building Resilience Index as a way for insurance companies and banks to review projects before underwriting. Financial institutions are able to see the cost of mitigating a project: saving time and resources on evaluation processes. The Bank of the Philippine Islands, for instance, uses the index to make key investment decisions.

Donors and development agencies can also use the index as a tool for financing retrofits or improvements to an existing building. Property developers, on the other hand, can use the tool to differentiate their brands as builders of resilient structures.

“The building developer can print this and take it to the bank or the insurance company and say, ‘Look, my building has this specific verified rating. My building has this level of resilience in its design or construction,’” explains Saberi.

#### Of building codes and mitigation measures

The international community needs to act post-haste as countries like the Philippines bear the brunt of extreme weather events attendant on climate change — a legacy of oft richer, carbon-emitting countries. Funded by the governments of the Netherlands and Australia, as well as the Rockefeller Foundation, the index encourages authorities to enshrine incentives for resilient buildings into local policies.

The IFC also invites public organisations with access to risk maps to share data, with an eye towards crowdsourcing machine learning capabilities into the index. Reading data from different sources, the index can tailor even better solutions to a location.

“Imagine one day when we would have a rating for every single building in a town, in a city,” says Saberi. “This can provide opportunities for improvements to buildings that have lower ratings. We can create jobs. We can provide support for retrofitting these buildings.”

Saberi, an architect by profession who has collaborated with many structural and civil engineers, knows well how natural hazards become blind spots during the design process. While important, the building codes that so many architects and engineers follow are not failproof preventives against disasters.

“The codes are designed to minimise the cost of construction to protect human life,” says Saberi. “However, the codes are not designed to protect the asset. What it means is that these codes are only doing the bare minimum to keep the people [safe]. Thus, your building may not be protected. Your building may be damaged to the extent that the whole structure is at loss.”



Identifying the risk is the first step towards making a building resilient. Accessible to the public, the index provides design teams with a list of mitigation measures relevant to various kinds of hazards. These measures guide stakeholders on how to best plan and design structures under previously identified conditions. The engineer then assesses if the built space meets the requirements, leading to a rating.

### Not a cost

What if we just demolish a building and build a new one?

To that, climate activist Greta Thunberg would probably say a curt “How dare you?”

Building anew adds to more embodied carbon in the atmosphere. Embodied carbon, which comes from the manufacture, use, and disposal of construction materials, accounts for 10 percent of a building’s lifetime operational emissions. Therefore, the best, most sustainable buildings are the ones that already exist.

For every USD1 spent on building resilience, the owner saves USD6 in repair costs, according to Saberi, citing a study from the National Institute of Building Sciences. “Resilience is not a cost; it’s an investment,” he says.

Such investments take centre stage in a world likely to cross what climate scientists are calling the ‘point of no return.’ Developing nations such as the Philippines can be assured of more destructive weather events in the meantime. The oceans and the provenance of cyclones will continue absorbing heat trapped by greenhouse gases, creating the next powerful storm.

The planet simply cannot brook the construction of weak edifices. “If you look at this situation, you realise that we have a lot of exposure around the world,” says Saberi. “But what is happening here is that we are basically building time bombs. And these time bombs are going to go off at some point.”



# Green crusade: The power of data to promote sustainable real estate

*Data-driven decisions are gaining ground in the real estate sector, and consumers are taking notice*

by Gynen Kyra Toriano

On the 15th of November 2022, the world welcomed its eighth billionth person. And as the hashtag #8BillionStrong trended on Twitter, so did the appeal to promote equal treatment and sustainable development for all.

In the next few years, the United Nations forecasts the population to expand to 8.5 billion by 2030, 9.7 billion by 2050, and 10.4 billion by 2080. Most of these population increases are expected to occur in eight major countries: the Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines, and the United Republic of Tanzania. These countries unfortunately lack the solutions, innovations, and resources to keep pace with growth.

Though the Philippines is the only country named in Southeast Asia, over 650 million reside in the region and several millions are relocating to cities in search of a better quality of life. What this means for the real estate industry is the nonstop construction of more residences, commercial centres, educational and medical facilities, and entertainment hubs to cater to people's needs.

As per the Chief Executive Officer and Managing Director of PropertyGuru Hari Krishnan, particularly for the residential segment, "Tens of millions of them are looking for homes today. They will keep looking for decades to come."

## Untapped resources

During Krishnan's session at the 2021 PropertyGuru Asia Real Estate Summit, he emphasised the immeasurable number of resources the real estate and construction industry has at their disposal, with "tens of billions of dollars spent by investors," as well as inexhaustible real estate data.

By utilising data science, the real estate sector can anticipate industry trends, reduce potential risks, optimise business strategies, and better understand consumer behaviour. Yet, with all the resources available, the local industry is behind data science, without a trustworthy third-party source that can provide intelligent property decisions to investors, consumers, and property owners.



“Reliable third-party data underpin the multibillion-dollar industries of the markets in North America, Western Europe, and Australia. Our markets should be no different,” maintains Krishnan.

### Harnessing data for good

Though the Asian real estate sector may already be accustomed to the current processes, PropertyGuru’s head honcho insists that the sector is not as efficient as it should be, sharing that it can only reach its full potential by adopting workflow automation software and utilising data-driven insights.

“We have the opportunity to transform our workflows from within, making sure that we’re using data-driven insights to make intelligent decisions on how we build and what we build, how we match demand and supply of real estate, and then how we manage the property. Data-driven insights can underpin all parts of the real estate ecosystem,” clarified Krishnan.

Indeed, data science can support all branches of the real estate ecosystem, from aiding urban planners and master developers in the planning phase to offering valuable insights to agents and property seekers during the selling stages, and to property managers after the purchase of a home or commercial space.

### The green crusade

The real estate and construction industry is at the forefront of climate action and holds the responsibility to not only reduce its carbon footprint but to also help property seekers make intelligent decisions.



PropertyGuru is pioneering the drive to help build the industry back stronger, better, and greener.

In 2021, PropertyGuru introduced the PropertyGuru Green Score in its Singapore portal, which attributes a sustainability rating to properties listed. “Through this, we hope to empower consumers to choose sustainable homes that align with their eco-conscious values and continue raising awareness around green living,” said the team in a press release.

This feature will shed a light on a project’s sustainability status, proximity to public transportation, and potential awards from the Building and Construction Authority in Singapore and from the PropertyGuru Asia Property Awards series itself.

“We believe there’s an opportunity to build better efficiency, but more importantly, increase the effectiveness of the products that we build for tomorrow. And we look forward to partnering with each of you in building this future together,” concluded Krishnan.







# Conversational AI, the brains behind intelligent virtual assistants

*Nick Myers, CEO of RedFox AI, and Tina Ryan chat about chatbots and conversational AI, an ethical innovation for the people*

by Property Report Editors

Conversational AI (CAI) systems are becoming increasingly sophisticated in their ability to converse in a human-like manner. Today, it goes beyond simple responses provided by Alexa or Siri, as CAI systems navigate complex dialogue, understand nuanced intent, and articulate on-point responses.

Thanks to machine learning, CAI can learn and improve over time. Also, a tremendous amount of funding and talent has been devoted to developing language models for it in recent years, according to Forbes.

## Conversation starter and game changer

Chatbots are widely used in almost every industry, but it's intelligent virtual assistants that could take things a step further. Powered by CAI, virtual assistants would be developed with a set of capabilities, built to be integrated seamlessly into end-to-end processes.

Deloitte suggests that these assistants will play a significant role within the real estate ecosystem, especially since personal contact is no longer essential in many processes. Instead, service deck automation and CAI provide value-enhancing capabilities that customers need: 24/7 availability, fast response times, and a low error rate. What's more, personalised agents will be equipped to perform relevant tasks. They will evolve and have additional capabilities, including making suggestions based on collected user insights.

To maximise the effectiveness of virtual assistants and digital service platforms, they must be integrated with as many elements of the real estate ecosystem as possible. Virtual assistants will also be more efficient if they have an in-depth understanding of all underlying real estate-specific workflows and tasks, as well as provide open interfaces for connectivity to systems like CRM/ticketing, ERP, individual databases, CRM/ ticketing, and to external service providers.

It is also crucial that virtual assistants are adaptable enough to stretch their scope or to integrate microservices.

## Conversational AI in Asia Pacific

Data from Research Dive revealed that by 2028, the global conversational AI market is projected to generate USD13,291.3 million in revenue and grow at a CAGR of 21.4 percent.

Its market in the Asia Pacific region is expected to see the fastest growth during the forecast period, garnering USD3,022.4 million in revenue by 2028.

Several technologically advanced APAC countries, including China, India, Japan, and Singapore, will play a significant role in the rapid growth of the region.

## From childhood dream to dream come true

Nick Myers, CEO of RedFox AI, recalled how the idea for the company came about.

When he was eight years old, he was diagnosed with Acute Lymphoblastic Leukemia and struggled to complete home tests without accurate and reliable healthcare information.



Many years later, after using Amazon Alexa, he was struck by the idea of building a conversational AI-powered voice assistant that would help patients who are struggling with administering home health tests — similar to how his parents struggled all those years ago.

Today, the company has developed a human-centric CAI that can guide users and troubleshoot issues in real-time.

### Serving patients and homebuyers

Nick clarified that while V Lab is specifically designed to facilitate at-home medical testing, it is now possible to configure the platform to serve any industry.

He also pointed out that the service is completely web-based. There are no hardware and app required, which means that — compared to Amazon Alexa, Google Assistant, and Siri — V Lab is the most accessible voice assistant in the market.

“It can learn from every interaction, track a wide variety of data points, and collect user insights like semantic data that, currently, not many organisations are able to collect and analyse,” stated Nick. He added that with V Lab, there would be no need to touch, scroll, or swipe through pages, as it can easily navigate websites, as well.

Is it sustainable technology? Absolutely. Or as Nick puts it, “It is a crucial part of digital transformation and migration automation in that it removes outdated manual labour and allows users to manage every facet of real estate, from scheduling showings and processing paperwork to helping buyers research and purchase a property without ever having to interact with a human being. It can do all that whilst ensuring accuracy and reducing costly mistakes.”



## Pursuing a career in sustainability paves a path for a green, resilient, inclusive property sector

*Sam Oh speaks with World Bank Group's Angelo Tan on his journey to get to where he is now at the IFC*

Condensed by Property Report Editors; based on the live interview

In this Fireside Chat with Narrow Door Podcast Host Sam Oh, Angelo Tan opens up about his work at the International Finance Corporation (IFC) and how studying at the University of New South Wales made him understand the role of sustainability in the planning and developing stage with other "starchitects" and real estate professionals.

He also mentions various ways one can study in universities in East Asia and the Pacific for those who are looking to get a job in real estate.

Sam: You are the perfect person to inspire others to start a career in sustainability. Could you talk about what you do and how you get started in this path?

Angelo: I work towards democratising green and resilient buildings for developing countries. Democratising, in this sense, means making green and resilient buildings much more accessible for everyone. This is key to my current work on EDGE green building certification and building resilience index, as well as to the work that I do in the Philippines and Indonesia.

When people hear your title or the kind of work that you do, they may find it intimidating, but it's worth noting that you actually came from a modest background.

I was born and raised in San Juan, La Union. I went to a public elementary school and then attended high school and college in the same area. Then, I decided to go to Manila and work there. Fortunately, I found a job in real estate development.

How did you make the jump from commercial real estate to the sustainability side of things?

I initially began my career in real estate development, focusing on creating mixed-use townships. Later, I became engaged in commercial real estate and architecture. During my extensive tenure in the private sector, I often observed that sustainability initiatives were frequently overshadowed by the pursuit of profit. I realised that I needed to upskill and learn more about the sustainable development of buildings, and decided to get a master's degree in sustainability.

Today, climate change remains a major concern globally. But because of lockdowns at the height of the pandemic, many people have seen the positive impact that staying indoors had on the environment. This realisation struck you during the mandatory two-week quarantine you had to undergo upon returning from Sydney after completing your masters programme.

While quarantined, I thought about how small my apartment was and how unsustainable its design was. This made me look back on my childhood experience living in a modest house, which featured some elements of vernacular architecture. It wasn't strictly a green home, but it had many sustainable features that you don't find in many houses nowadays.

Vernacular architecture uses locally available materials and certain passive design technologies that manage how heat flows through a home. An example of its shading and natural ventilation principles can be seen at some models of the bahay kubo. They have pitched roofs and shading, and they're made from locally available materials, and were, therefore, highly sustainable.

What can you advise students and young leaders about the path they should take to have a career in sustainable development and what educational programmes are available to pursue it?

There are many paths to having this type of career. One way is to look at it through the lens of change management theory. According to that theory, there are different types of directed change: incremental, transitional, and transformational.

Incremental stage changes refer to changes done in smaller degrees. Take the example of an architect working in real estate development who might say, "I want to alter the design of this structure to make it more sustainable." It's about examining the aspects that can be enhanced, step by step, to achieve sustainability goals.

There's also transitional change, in which you look at how you can replace your process and the technology you use. An example of this change is to replace an unsustainable technology with one that is.

Transformational change goes much deeper, and it's exactly what happened to me. I had a realisation that I needed to change myself and take action, leading me to decide to upskill. That's when I began exploring masters programmes.

You obtained your masters degree in sustainable built environment at the University of New South Wales, which was pivotal to how you ended up doing what you do. Can you tell us how you got into that programme?

When I decided to upskill and learn more about sustainable development, I found the Australia Awards Scholarship, a developmental scholarship sponsored by the Australian government's department of foreign affairs and trade. I applied for the scholarship, and after several rounds of interviews and submissions I was lucky to have been granted the scholarship.

As I was finishing the programme, I found a job post on LinkedIn by the IFC for the role of green building country lead. I think it was good timing, but I also had a strong hunch that I was the guy they were looking for. I felt that the role was perfectly aligned with my education, professional background, and personal values. I then quit my job and studied for a master's degree in sustainability.

Can you talk about the importance of upskilling and learning for real estate leaders and professionals?

In an increasingly digital and competitive world, I believe that refusing to upskill will hinder your ability to stay competitive in the market. And if you don't keep abreast of these changes and learn new skills, technologies, and methods, then you're not contributing to sustainable development.



People should also look beyond applying for a masters programme. I must admit that I'm biased towards Australia. If you explore the courses offered by the Group of Eight Ivy League universities in Australia, you'll discover that they all provide exceptional master's programmes in sustainable architecture.

Consider also applying for MicroMasters programmes, short courses, and massive open online course or MOOCs. Look into edX and similar platforms. Some online courses are even offered for free.

How would you define data-driven education?

Data-driven education tends to be more quantitative and analytical rather than speculative, and it emphasizes the importance of timeliness in learning. It is informed by realistic, technical, and business considerations. It is grounded in reality and is backed by case studies on actual events.

This entails asking questions such as, what happens outside of actual hard data? What does it take to have all our buildings net-zero by 2050? What does it mean to limit temperature rise by 1.5 degrees Celsius compared to pre-industrial levels? How does it impact people living in the coastlines in the Philippines? These are the types of questions that we need to ask in a data-driven and data-informed educational environment.

To your point about democratising buildings, how can real estate professionals and students create a greener, more resilient, and inclusive property sector?

That is an important question, especially in the Asian context. East Asia Pacific is urbanising at a rate of 3 percent per annum. We see a lot of development happening around us, but the infrastructure cannot keep up. As our regional director Kim See Lim at the IFC said, the race to net-zero is anchored in East Asia and the Pacific, and this is a race that no one will win unless everyone makes it to the finish line.

My personal philosophy is not to measure our success in terms of the number of green, certified, iconic trophy buildings that are designed by "star-architects" or architects who are very popular. Instead, we should measure our success based on the number of people across all income segments that could participate and benefit from green and resilient building design and construction.

Having access to all the relevant information and undergoing the necessary training has made you well positioned to advance changes in achieving sustainable development. How does the IFC augment all that learning, especially considering that MOOCs offered in certain countries are somehow involved with the organisation?

Our focus on inclusivity does not only apply to green building certification but also to the education of sustainability professionals. In relation to this, we've created a free online course called "Design for Greater Efficiencies" (DFGE).

DFGE adopts a more holistic, data-driven approach to sustainability education, and it includes modules on green buildings, energy efficiency, water and materials efficiency, HVAC, and circularity. Students will then need to submit a final design project, which has to be a design for a net-zero building.

This project will give them an opportunity to apply what they have learned to be evaluated by our team. What's great about our DFGE programme is that it's based on real case studies, which is especially relevant to emerging markets.

How do these courses use data to analyse design trends that impact the environment? Is there a connection and does it lead to forecasts?

What we do for EDGE, which is a green building rating system, is actually underpinned by the EDGE app that allows real estate developers and building professionals to identify the most cost-effective measures to build green. It is a modeling software that identifies the sustainability measures implemented and what the cost implications are in terms of efficiency improvements across energy, water, and materials.

Ultimately, the use of that app is integral to the MOOC, which is strongly driven by data. So, the whole certification process happens within the platform.

Are there any face-to-face learning programmes out there, as well?

We also offer the DFGE scores in partnership with the top architecture universities in Asia including India, Indonesia, and Vietnam, where students at the undergraduate, postgraduate, and even continuing education levels, can enroll in either mandatory or elective courses on DFGE. The course content more or less follows the sequence of our online course, but it also incorporates teachings on how to present the business case for green buildings.

Sustainability is arguably 50 percent sustainable design in buildings and 50 percent sustainability communications, so our architects also need to learn how to effectively communicate the value of developing green and resilient buildings. Otherwise, they won't be able to present a very compelling case to business owners.

So, enrolling in and finishing the DGFE courses will empower you to explain sustainable development to anyone who is interested.

That's right. You need the ability to present the business and financial cases for sustainability to make them more compelling for decision-makers.

Are there any more programmes on the horizon for you?

I'm looking at other masters programmes, as I'm seeking to learn about the business side of things. I want to learn the financial instruments that can create a more enabling environment for green buildings to flourish.

I believe that continuous, self-driven learning is essential to remaining competitive in the market and contributing to sustainable development as architects and built environment professionals.

Your story is really inspiring for a lot of people out there. What would you like to say to those who want to venture into the same path as you have?

I would like to emphasise how important it is for architects, engineers, and other building professionals to delve into sustainability, especially in our current context. We're currently at various environmental tipping points, and we all have critical roles in ensuring that we implement sustainable development objectives in designing, constructing, and operating our buildings.

It's not just about constructing green and resilient buildings but also making them more inclusive. This entails ensuring that more and more people can participate and benefit from these interventions as we pave a path towards a low-carbon future.





# Women have what it takes to lead and build

*Female leaders make a strong case for why women should rule in male-dominated fields*

by Property Report Editors

Landscape architect Kotchakorn Voraakhom, the 2021 PropertyGuru Visionary of the Year awardee and CEO and founder of Porous City Network, and Jean Jacquelyn de Castro, CEO of ESCA Incorporated, discussed sustainable development and the significance of women assuming prominent roles in traditionally male-dominated industries like engineering and architecture.

## Accelerating women in male-led industries

In the fields of engineering and construction, where male dominance has long prevailed in Thailand and the Philippines, Kotchakorn and Jean concur that women now find themselves with more opportunities than ever before.

In these industries, women play a crucial role, not only by contributing their expertise and actively engaging in digitalisation strategies but also by championing their fellow women. Jean highlighted how women are reshaping the concept of success to embrace inclusivity and sustainability. However, she also expressed regret that women remain relatively unseen in the field of urban planning.

Building upon these observations, Kotchakorn emphasised that the pandemic has starkly exposed the extent of the gender gap. Recognising our shared responsibility as global citizens, she stressed the importance of providing women with opportunities to have a seat at the table, enabling them to empower emerging leaders and inspire one another.

## Designing for sustainability

Both Thailand and the Philippines have borne the brunt of climate change's impact on lives and properties. Kotchakorn's Porous City Network, centered on designing and bolstering urban resilience, directly confronts these challenges and aims to bring transformative solutions to vulnerable communities in need.

"I founded Porous City Network because I noticed that many people were underserved due to the prevalent business focus on maximising profits and minimising construction costs. In countries like Thailand and the Philippines, this is evident in the substandard living conditions in slum areas. It is as if people's right to afford a good home in the city has been taken away."

She added that the solutions developed by the company are based on resilience and flexibility rather than fear. "I think that as women, we are more in touch with nature. We are more attuned to the flexibility, change, and care it needs."

Jean emphasised that fear should not hinder logic in design, stating, "We can't design to control, but we can design with nature to build a more sustainable home." This resonated across communities, especially during the pandemic when there was typhoon after typhoon.

### Women taking charge

When it comes to transforming cities post-pandemic and dealing with other social challenges, Jean and Kotchakorn asserted that women simply must be heard.

"Women offer a different perspective. We deserve to be part of the conversation because our distinctive approach can make a difference," said Jean.

Women have the tools to tackle issues like climate change, sustainability, and creating a better and safer environment, particularly in the post-pandemic era. But because society is still adapting to this reality, women advocating for positive change often encounter challenges. Kotchakorn highlighted the need for the right mindset when tackling climate change, stressing that the conversation should go beyond focusing solely on "high technology and high maintenance."

She added, "Cultural preservation is crucial, and I believe that we shouldn't be so afraid to adopt other people's technological innovations. We must also remember to take lessons from the past."

### More than just aesthetics

Kotchakorn explained that their profession goes beyond the surface; besides designing urban landscapes, they also contribute to enhancing communities' quality of life. "The goal of each project is more than just aesthetic improvement. There is a heavy focus on urban design because we are experts in the ecology, landscape, and dynamics of the land. But more importantly, we are all about maximising the potential of the land to meet and exceed our clients' needs."

She pointed out that innovation is crucial in their industry because there are always bigger, more pressing issues that need better solutions.

Jean noted that women in the industry should embrace their power and not be afraid to have a voice, as they possess the valuable knowledge and expertise. They can support each other's advocacies for making things better. They only need the courage to release their ideas into the world.

As a landscape architect, Kotchakorn emphasised that their projects consider the well-being of the communities and offer sustainable solutions to protect the environment.

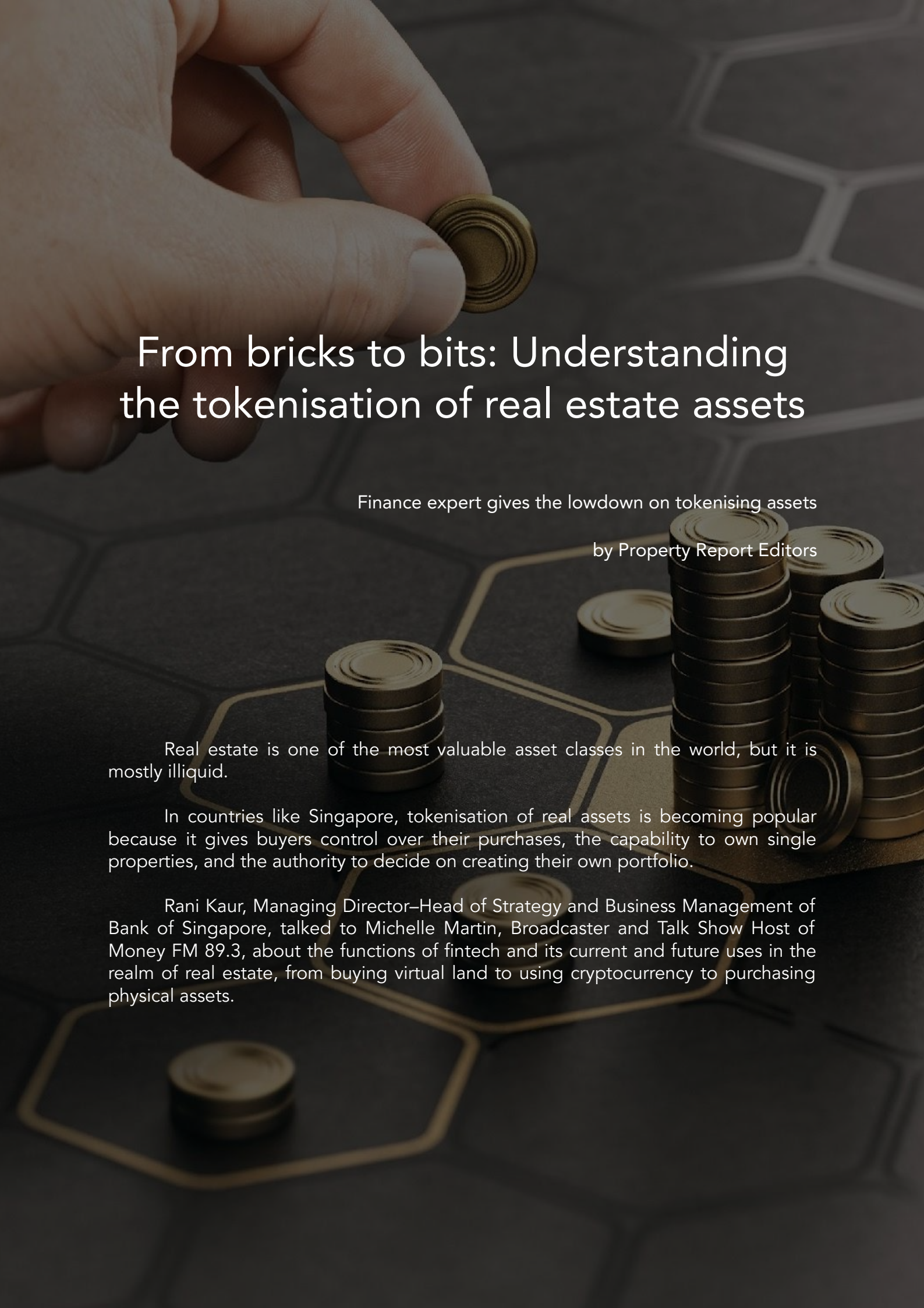
### A woman's work is never done

When asked about the ways women from across the region have inspired them, Kochakorn stated that she and her team were presented with various solutions that can benefit her own city. And apart from growing as a landscape designer, she also earned a learning experience that has helped her become better informed.

She also believes that it is important to give back to the community and to work towards inspiring the younger generation as they embark on careers in the industry. Ultimately, creating solutions and testing them should transcend gender boundaries and rather shift the focus on championing a better future.

That fact is that not many people are aware of the trials and tribulations behind the success of female leaders in Kochakorn's and Jean's respective fields. It is a journey of learning and empowerment, particularly in male-dominated spaces.

Jean left on an important note that as women, their jobs are never done. Apart from being leaders, they are also responsible for spearheading innovation in their industries to cater to everyone. After all, every single person, wherever they may come from, deserves protection from environmental and health hazards.



# From bricks to bits: Understanding the tokenisation of real estate assets

Finance expert gives the lowdown on tokenising assets

by Property Report Editors

Real estate is one of the most valuable asset classes in the world, but it is mostly illiquid.

In countries like Singapore, tokenisation of real assets is becoming popular because it gives buyers control over their purchases, the capability to own single properties, and the authority to decide on creating their own portfolio.

Rani Kaur, Managing Director–Head of Strategy and Business Management of Bank of Singapore, talked to Michelle Martin, Broadcaster and Talk Show Host of Money FM 89.3, about the functions of fintech and its current and future uses in the realm of real estate, from buying virtual land to using cryptocurrency to purchasing physical assets.



## Real estate assets tokenisation 101

There's still a long way to go before a legislative framework for digital assets is created and solidified. But what's interesting to note is that tokenised real assets are similar to a share certificate in that ownership information, construction plans, and investor rights are all mapped in digital form and recorded in a smart contract.

A smart contract is a programme that runs when predetermined conditions are met. It runs automated processes to solve or match the owner's clauses. Once it goes through the process, the value of the property is then distributed among a fixed number of tokens, which are issued to investors along with a digital receipt.

The most common use case for tokenised assets is the ownership of an underlying asset (e.g., equity, interest) in a legal entity that owns the asset, which applies in countries like Singapore and Hong Kong. Simply put, tokenisation makes it possible for several entities to share in the profits generated by the asset.

After the initial issue of the tokenised assets, you can put them on other available digital exchanges. You can also trade among your peers, and that is where most of the liquidity comes in. It's almost like listing them and enabling more participants to partake in them.

The unique thing about tokens is that they can be fractionalised, which means that these assets can be broken down into smaller portions so that they can be made available to more people at a lower unit cost.

### To buy or not to buy

In Singapore, regulations require REITs, or real estate investment trusts, to distribute 90 percent of income to unit holders. In this regard, it would be more beneficial to invest in tokenised real assets than REITs, as these assets have a strong technology-enabled investor base. And because it's single-property ownership, you get all the income.

For example, you can potentially own a fraction of a good class bungalow (GCB) in Nassim Hill and participate in the upside of the investment. Use that token on the blockchain securely, trade it, and share in the valuations.

Investing in tokens also allows you to create your own portfolio, which means lower fees.

Kaur noted that the risks associated with the tokenisation of property are still being studied, but he cited investor protection, security, and corruption as primary examples of such risks.

According to Kaur, public awareness surrounding non-fungible tokens (NFTs) and cryptocurrency has increased significantly, saying, “With more time, deeper understanding, greater regulatory protections, and more extensive legislative measures, trust in these assets will also increase.”

Kaur also mentioned Mars House, the world’s first digital house that sold for ETH288 (USD500,000 at the time), and the fundamental belief that people will be spending more time in digital homes, offices, and other spaces, meaning there will be more avenues to monetise virtual real estate within the metaverse.

Indian entrepreneur Vignesh Sundaresan spent USD69 million on digital art but does not own any real estate assets outside the metaverse. He is, however, asset-heavy in the virtual world. He also firmly believes that people will be spending more time in the virtual world.

She also commented on whether or not she would use cryptocurrency to buy physical real estate assets, stating, “I don’t want to convert my crypto to fiat and then be subject to capital gains tax.”

She added: “If there were a stablecoin, a coin that is backed by an existing currency, then I would probably use that to pay for physical property.”

### It’s getting real

“Three things come to mind when talking about future trends,” Kaur mused, citing the Internet of Things (IoT), artificial intelligence (AI), and big data, which, ultimately, is what provides information that can be used to make better, more informed real estate decisions.

Hopefully, there will be more standardisation and indexing to increase transparency, which also drives capital inflow.

The future of fintech lies in several key trends such as prop tech, legal tech, and regulatory technology (RegTech) because these make the process less cumbersome and paper-intensive.

Client experience will also be a key differentiator. There are now tenant engagement apps that let customers rate their experience with the services provided. This, in turn, will lead to fintech companies and/or relevant entities gaining more insights and data from consumers as they specify their likes and dislikes, which can only improve valuations.

When asked about the entities involved, as well as how large a disintermediation force tokenisation is in real estate, Kaur said, “There is space for everyone to participate. Also, there are still a lot of offline contributions from stakeholders who continue to play a part in the whole end-to-end creation of a tokenisation value chain.

“However, there are some things that third parties used to do that might be automated. For example, smart contracts will still have to automate many of the binary decision-making aspects of the entire process, which I think won’t cause disintermediation in a significant way, but that might change over time,” she added.

### Virtual status symbol

NFTs cannot be exchanged for fiat.

In the past, there was virtually no way to protect the value of digital art. But with tokenisation, you can now verify that you are the owner of a certain digital asset or NFT, especially on platforms like Twitter.

The phenomenon of having digital proof of ownership of unique assets is gaining traction, and the real estate sector is catching up.

Kaur used as an example the Bored Ape Yacht Club to explain how it all works, saying, “A bunch of apes just doing different random things are generating USD600 million in sales in a year. This is an instance of apeing, in which someone buys an NFT without considering the risks involved.

“I’ve realised that NFTs are becoming a digital status symbol. An increasing number of companies — especially in the tech industry — are participating, and it’s all taking place in what I would call the ‘online luxury collectible space.’”

### Physical and virtual trading hubs

The environments where real estate investments are can be divided into two categories: physical and virtual. Interestingly, it is possible to convert your property into NFT in the physical world. TechCrunch co-founder Michael Arrington, who recently auctioned his loft in Kiev for about USD20,000, is exploring one application, in particular.

Furthermore, the metaverse and companies like Meta (Facebook), Decentraland, and SuperWorld are giving people the opportunity to own real estate through NFTs online.

SuperWorld, for instance, is geographically mapped to 64 billion plots of equal size, covering the surface of the earth. You could literally buy whatever you want on earth and pay approximately USD2,000, which is currently the average spending amount on SuperWorld.







## 66 Developers and migrant workers: Not going at it alone

*Why developers should partner with civil society to tackle social sustainability in supply chains*

By James Eckford

Thailand's residential sector is predicted to make a strong post-COVID recovery, and behind the planned residential projects and countless number of cranes that populate Bangkok's skyline lie the migrant communities powering Thailand's robust and growing construction sector.

Despite their contribution, migrant workers are often invisible and rarely acknowledged as equal stakeholders in real estate developers' sustainability reports. The lack of acknowledgement means the lack of engagement, which, in turn, translates to shortfalls in risk and materiality assessments. A weak materiality assessment only deepens supply chain risk — hiding from the problem does not solve the problem.

## Worker welfare deserves attention

There are developers and construction contractors, however, who have begun to pay attention to the welfare of the workers at the bottom of their supply chain and take action to improve these workers' standard of living. This is part of their efforts in addressing unseen risks and driving positive social change.

In tackling the significant challenge of engaging workers, these companies have invited civil society to work together. Through such collaboration, developers can assess the hidden human rights impact of business operations and relationships throughout the lower tier of their supply chains and generate change for worker communities.

*"Doing it alone will have a small impact; however, if we do it together, it will generate a massive impact."*

–Chiang Mai Rimdoi

## Not going at it alone

This approach can support businesses as they claim to credibly understand and address their operational risks. Given the fractured and complex nature of construction supply chains, building an understanding of hidden risks requires first recognising the reality of the workers themselves.

*"We would like to see a better construction sector. However, we don't have enough knowledge of the process to help society or how to improve the quality of life of people living in construction sites."*

–BUILK One

Civil society can provide the necessary expertise to develop tools and training for effective engagement with workers. Such initiatives are gaining traction across sectors and supply chains where specialist organisations collaborate to tackle complex and invisible problems hidden in supply chains. As the Thai property and construction sector is poised to follow, the Asia-Pacific real estate sector can seize this momentum to become part of the responsible business movement.







# Inspirations for the future

*We need to meet the challenges of the post-pandemic world and find ways to turn them into opportunities*

By Stephen Oehme

Is there an industry that is as responsive as real estate?

Perhaps there isn't, and the reason the real estate sector is highly responsive to market forces is because it has to be. In the last few years, the sector had to contend with having to accelerate change due to the COVID-19 pandemic, other global forces, and the quest for sustainability. For the most part, the sector saw opportunities.

At ARES 2020, we focused on sustainability, the single greatest catalyst for change across the globe, as well as other forces of change. Meanwhile, at ARES 2021, we identified that the rise in energy costs worldwide was going to be highly significant. That turned out to be the case, and it has been further intensified by global events in 2022.

Data-informed, not just data-driven

On the other hand, at ARES 2022, we explored the benefits and challenges of the data revolution and tackled the need for data to be transformed into clear and actionable information. The complexity of most data can hinder our simple aims. But we must remember that data doesn't change the world — leaders do.

Hundreds of leaders were brought together at ARES 2022 in Bangkok on the 8th of December 2022. ARES 2022 was focused on the changed world post-COVID, amid the dynamics and forces of sustainability across all four sustainability pillars: environment, human, social, and financial. These forces are represented in many different ways, including the emergence of ESG across global markets, the pledges for carbon emission reductions, the 17 United Nations Sustainable Development Goals, and more.





### Small steps, big results

Progress in attaining value and sustainability will most likely be achieved by taking small steps. And with 40 percent of the world's overall carbon emissions coming from real estate, our sector can make a considerable difference. On the demand side of carbon emissions, we are the consumers, and the outcomes and reductions required lay in our hands.

Organisations in our sector could commit to reduce energy consumption and lower their carbon emissions incrementally every year. With these efforts, we can achieve significant reductions.

If leaders in the real estate sector take small steps, such as aiming for 2021 energy consumption levels and becoming determined to save, on average, not less than 3.5 percent of that baseline every year, it is possible to achieve zero carbon consumption by 2050. This same principle applies to every sustainability parameter.

Making pledges for the future (e.g., in 2030, 2050, and so on) is good, but it is not enough. What could be truly beneficial is to make gradual progress every year. Changing organisational cultures and working towards a singular purpose to establish sustainability could be what it takes to achieve desired outcomes — and we may not have to wait until 2050 to see results.

### No financial risks

The financial risks of small yet progressive sustainability actions are nil. On the contrary, these actions will reap handsome rewards in the form of positive staff and customer responses, which are becoming more and more valuable.

If real estate organisations keep doing things the same way they've been doing for 10 or 20 years, they are missing substantial benefits and outcomes. Some organisations have adopted a wait-and-see approach, while others are making commitments to take action many years from now. But these strategies do not benefit anyone.

When organisations set small sustainability targets yearly, the overall outcomes can be quite significant. The path towards this is to create strategic, data-driven annual sustainability plans and take incremental actions. These plans must be comprehensive and harness the power of data, which most organisations unfortunately do not have.

This is why organisations need to start adopting processes, including benchmarking, determining key performance indicators, and approaching all aspects of the four pillars of sustainability like they would in every other important business activity.

The outcomes for value and sustainability progress will take time. It is the vision, goals and objectives that need urgent attention. This was the inspiration for the Segments of ARES 2022:

- Segment 1 – ReStart / ReBound
- Segment 2 – Revive / ReBoot
- Segment 3 – ReThink / ReSet
- Segment 4 – ReImagine / ReSet

Leaders in the real estate sector are focused on revolutionising their approaches and strategies to maximise value and achieve sustainability progress.

It is more than introducing feedback and lessons learned from activities. Strategic plans and forecasts formed five years ago, or even more recently, do not reflect the dynamics that exist now.

In our sector, the scope for achieving sustainability is vast and compelling. Seeing outcomes and progress will take time, but everyone must pay urgent attention to the vision, goals, and objectives on hand. Ultimately, the real estate sector has the power to shape societies for the benefit of the present and future generations.

It is the real estate sector that, in so many ways, moulds and orientates our world, our societies, and our horizons, including those of future generations.

We need to be more progressive.

We need to be more holistic.

We need to achieve solid and lasting outcomes — step by step, year on year.

The focus for these need to be in terms of sustainability across all four pillars — the environment, human, social, and the financial. We need to meet the challenges of the post-pandemic world and take hold of the new global dynamics and all the opportunities this presents.

We need to achieve so much — and we must. And together, we can.







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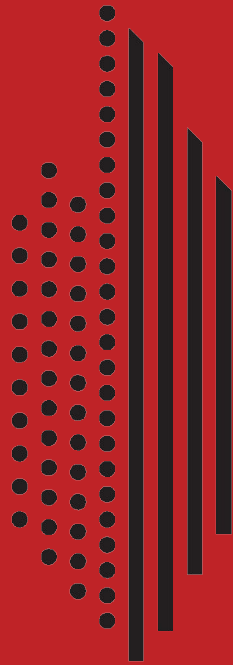
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