

THE INSIDER'S GUIDE TO BUSINESS AND LIFESTYLE



VIETNAM

ECONOMIC TIMES

A PUBLICATION OF VIETNAM ECONOMIC ASSOCIATION

ISSN 2734 - 9683

Issue 427 | Monday | October 20, 2025

Emerging assets

Data centers crucial for digital transformation

Vietnam	US\$5.00	Britain	£6.90	France	FF50	Hong Kong . . .	HK\$75.00	Malaysia	Rgt 18.00	Singapore	S\$10.00	Switzerland . . .	SFr12.00	Thailand	Baht175
Australia	A\$13.00	Canada	C\$13.75	Germany	DM15	Japan	¥850	Philippines	P175.00	South Korea . . .	Won6,500	Taiwan	NT180	USA	\$10.00

VnEconomy has unveiled a significantly enhanced version of its AI-powered economic assistant, Askonomy. The new Askonomy draws on a language model exclusively developed by VnEconomy's partners, emphasizing accuracy and customization for economic information.

ASKONOMY PLATFORM

The AI toolbox for businesses



Smart Chat



Live Interpreter



Voice-To-Text



Text-To-Speech



Summarizer



Translator



AWS



Azure



Google Cloud



On-Premise

LETTER FROM THE CHAIRMAN OF THE EDITORIAL BOARD

Dear readers,

During Vietnam's digital transformation in general and in developing a digital economy in particular, data is considered an important resource and means of production, which, if effectively exploited and used, will contribute to improving workplace productivity, increasing product value, and even promoting the development of productive forces and changing modes of production.

Data is also a special commodity with high economic value that has a significant impact not only on the economy but also on society as a whole.

It is easy to understand why the development of data markets has now become an inexorable trend in almost every country, with data centers acquiring increasingly large capacity to meet needs in creating, updating, enriching, processing, and storing data as well as in exchanging and trading data, not only within a country or a region but also globally.

According to a report presented at the Data Center & Cloud Infrastructure (DCCI) Summit 2025, co-organized by Viettel IDC and partners on April 22 in Hanoi, the global data center market is forecast to reach approximately \$345 billion in 2025 and will continue to maintain stable growth. In Vietnam, market size is forecast to reach \$630 million this year and \$1.1 billion by the end of the decade, for a compound annual growth rate (CAGR) of 10.8 per cent.

Market demand for data centers in the country is increasing quite strongly, including hyperscale data centers, which are seen as "data highways" for the era of AI and the digital economy. To meet demand, in addition to domestic investors, it is especially necessary to attract foreign capital.

To encourage the private sector to participate in building telecommunications infrastructure and other infrastructure for national digital transformation by 2030, approved in Decision No. 2161/QĐ-TTg, dated September 29, 2025, from the Prime Minister, which include data centers, cloud computing, physical-digital infrastructure, and digital utility infrastructure, etc., the private sector is asked to invest in building new, modern, large-scale data centers that meet international and green standards that provide services to the public nationwide. A goal has also been set of attracting at least two leading global technology companies to invest in building and operating large data centers and AI data centers in Vietnam.

Decision No. 2161 demonstrates the government's strategic vision regarding the important role data centers play in national digital transformation in general and digital economic development in particular, especially the policy of attracting investment from leading global technology enterprises.

To provide readers with the latest information about the development and operation of data centers, or the "AI factories of the future", in the face of rising demand in the data market and to ensure socio-economic development in Vietnam, in which foreign capital and technology are considered important investment sources, our Cover Story in this edition focuses on Vietnam's incentive policies to attract more foreign investors to its data center market.



ARTWORK BY KIEU HAI

Warmest regards

A handwritten signature in black ink, appearing to read 'Chu Van Lam'. The signature is fluid and stylized, with the first letters being larger and more prominent.

Dr. CHU VAN LAM
CHAIRMAN OF THE EDITORIAL BOARD

VIETNAM ECONOMIC ASSOCIATION

HONORARY PRESIDENT: Professor Tran Phuong
PRESIDENT: Professor, Dr. of Science Nguyen Quang Thai

EDITORIAL BOARD

Dr. Chu Van Lam, Chairman
Mr. Dao Quang Binh, Vice Chairman
Ms. Chu Thi Hanh
Ms. Nguyen Thi Ngoc Diep
Mr. Vu Quoc Hung
Mr. Nguyen Si Hoang
Ms. Nguyen Lan Huong
Ms. Nguyen Thi Thu Huong
Ms. Ta Thi Thu Trang
Mr. Nguyen Quoc Uy

EDITOR-IN-CHIEF: Ms. Chu Thi Hanh
GENERAL MANAGING EDITOR: Mr. Dao Quang Binh

SCIENTIFIC COUNCIL

Professor, Dr. of Science Nguyen Quang Thai (*Chairman*)
Dr. Nguyen Ba An
Dr. Vu Thanh Tu Anh
Dr. Vu Tuan Anh
Associate Professor Le Xuan Ba
Professor Hoang Van Cuong
Associate Professor Vu Cuong
Dr. Le Dang Doanh
Professor Tran Ngoc Hien

Professor Nguyen Trong Hoai
Professor Nguyen Dinh Huong
Professor Ngo Thang Loi
Dr. Can Van Luc
Associate Professor Vo Dai Luoc
Professor Nguyen Mai
Professor Nguyen Cong Nghiep
Associate Professor Vu Van Phuc
Professor Luong Xuan Quy

Associate Professor Truong Thi Minh Sam
Associate Professor Nguyen Hong Son
Professor Truong Ba Thanh
Associate Professor Bui Tat Thang
Professor Nguyen Xuan Thang
Associate Professor Tran Dinh Thien
Professor Vu Huy Tu

MANAGEMENT BOARD

- Mr. Dao Quang Binh (Chairman)
- Dr. Chu Van Lam (Vice Chairman)
- Ms. Nguyen Thi Ngoc Diep
- Mr. Nguyen Manh Hung
- Ms. Pham Thi Tuyen

VIETNAM ECONOMIC TIMES WEEKLY

- **EDITOR:** Ms. Ta Thi Thu Trang
Ms. Tong Diep Linh
- **ENGLISH EDITOR:** Mr. John Harding
- **DESIGN & IMAGES:** VET Media

GENERAL DIRECTOR: Mr. Dao Quang Binh

HEADQUARTERS

HEAD OFFICE

96-98 Hoang Quoc Viet, Nghia Do Ward, Hanoi
Tel: 024 3755 2050 - Email: toasoan@vneconomy.vn

SOUTHERN REPRESENTATIVE OFFICE

1/1 Hoang Viet, Tan Son Nhat Ward, Ho Chi Minh City
Tel: 028 3811 7400 - Email: vetsgn@gmail.com

HAI PHONG REPRESENTATIVE OFFICE

8 Tran Dong, Hai An Ward, Hai Phong City
Tel: 097 229 9518 - Email: kinhtevietnamhp@gmail.com

THANH HOA AND NORTH CENTRAL REGION REPRESENTATIVE OFFICE

120 Han Thuyen, Hac Thanh Ward, Thanh Hoa City
Tel: 090 138 3789

DA NANG AND CENTRAL - CENTRAL HIGHLANDS REPRESENTATIVE OFFICE

92 Nguyen Thi Dinh, An Hai Ward, Da Nang City
Tel: 091 343 8025 - Email: kinhtevietnamvpdn@gmail.com

PR - ADVERTISING

VNECONOMY COMMUNICATIONS TECHNOLOGY INVESTMENT JOINT STOCK COMPANY

Add: 98 Hoang Quoc Viet, Nghia Do Ward, Hanoi
Tel: 024 3755 2050

DISTRIBUTION

Hotline: 098 289 8995
Email: phathanh@vneconomy.vn

editor.vet@gmail.com

www.facebook.com/vneconomy www.linkedin.com/company/vneconomy-vn

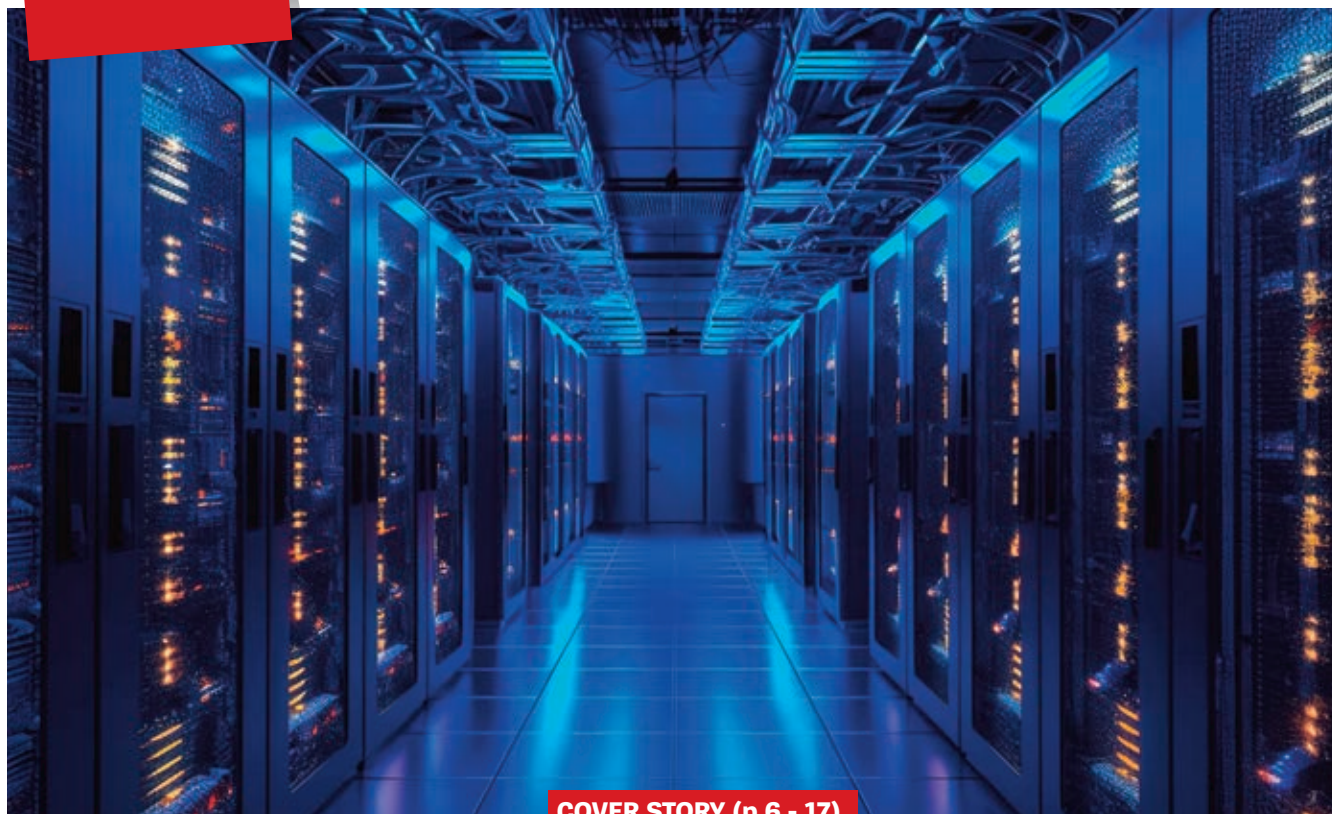
DIGITAL DISTRIBUTION PLATFORM



VNECONOMY ECOSYSTEM



ASKONOMY PLATFORM
THE AI TOOLBOX FOR BUSINESSES



COVER STORY (p.6 - 17)

Data has become a key resource amid global digital transformation, with demand growing significantly for data centers with sufficient storage capacity and high-level safety and accessibility measures. This growing demand has led to increasingly large capacity requirements, to meet storage needs and allow for the convenient exchange of data both domestically and globally. Vietnam is keen for the private sector to play a role in data center development, with the Prime Minister issuing Decision No. 2161/QĐ-TTg on September 29, which touches on data centers, cloud computing, physical-digital infrastructure, and digital utility infrastructure, among other matters. Vietnam also hopes to attract at least two leading global tech companies to invest in building and operating large data centers in the country. Among the issues it is busy addressing are the substantial energy, water, and land requirements and the resulting pressure on local ecosystems.

ECONOMY - POLICY

- Beyond expectations** IMF upbeat about Vietnam's growth and future performance **18**
- Not worth the cost** Recent changes to Law on VAT leave many existing issues unaddressed **22**

EXPERT PERSPECTIVE

- Broader cooperative scope** Mr. Ko Tae Yeon from the Korean Chamber of Commerce in Vietnam on boosting investment **24**

BANKING & FINANCE

- Fusing of technology & finance** Plans for Vietnam to open International Financial Centers well underway **26**

INVESTMENT

- Foreign friends** Localities around Vietnam establishing relationships with cities and regions overseas **28**
- Smart entry & exit** A greater focus on passenger convenience needed in airport planning **30**

EXPORTS - IMPORTS

- Market at risk** US tariffs on Vietnamese wood and seafood imports likely to affect future competitiveness **32**

GREEN ECONOMY

- At the heart of progress** Measures in place to equip young Vietnamese with the skills needed to tackle climate change **34**
- Targeted approach** Emission Trading System introduced to ensure sustainable emission reductions **36**

BUSINESS REPORTS

- Uncertainties persist; Shaping sustainable consumption **40**

PROPERTY

- A complete capital** Planning set to turn Hanoi into a smart, green and safe city **44**



Source of strain

Energy, environment, and infrastructure count among the fields impacted by the growth of data centers.

BACH DUONG

The Vietnam Cloud Computing and Data Center (VNCDC) 2024 Report revealed that Vietnam's data center capacity has seen significant breakthroughs, and is projected to jump from 45 MW in 2024 to 525 MW in 2025 and nearly 1,000 MW by 2030. Such a future is not unique to Vietnam but is a global trend, driven by the pressure to meet infrastructure demands for the next wave of technology.

Building a digital backbone

According to Mr. Nguyen Xuan Hoa, Global Market Manager of Secondary Integrated Solution at Switzerland's the ABB Group, the rapid growth of data centers brings challenges in energy, environ-



ment, and infrastructure. The issue is not just about expanding scale but also building sustainable facilities - a core requirement for a long-term digital economy.

Vietnam's biggest weakness today lies in its international connectivity infrastructure. Though domestic companies have grown strongly, the country still lacks participation from foreign investors, partly due to limited high-speed connections to the global network. He cited examples: Singapore, though a small nation, has become a regional "data hub" thanks to high-speed connectivity, while Ireland serves as a neutral center, hosting many of Europe's leading data facilities due to its strategic internet infrastructure. These are models Vietnam could consider, he believes.

Data centers are a critical component of national digital infrastructure, and the power grid is the "backbone" that ensures

stable operations. However, Vietnam's grid is not yet stable enough to meet high-capacity demands, while renewable energy sources remain limited. This is a major obstacle in attracting investment, especially from global tech corporations that prioritize green energy.

Investment incentives in Vietnam are also less competitive compared to the region. For example, Malaysia offers import tax exemptions and refunds for data center equipment, attracting strong international capital. In Singapore, data centers that adopt energy-efficient technologies or meet high-security standards receive special tax incentives.

Experts emphasize that to attract long-term investment, Vietnam must focus on establishing sustainability standards for the sector. Data center projects should be "robust", meaning capable of meeting market and societal demands while allowing rapid expansion as needs grow.

At the same time, operations must be optimized, with proper load management and real-time intelligent systems to maximize efficiency while minimizing energy consumption. This requires effective power and cooling design and the application of technologies that reduce operational losses. Sustainability must be considered throughout the project lifecycle, from design and operation to maintenance and equipment recycling at end-of-life.

Energy infrastructure must not only be sufficient but also green and clean. Vietnam needs a clear strategy to promote renewable energy projects. This approach not only reduces CO2 emissions but also serves as a key criterion for attracting international investors and clients.

Finally, Vietnam must develop strict energy management policies for data centers. It must quickly establish an energy management framework to ensure stable, environmentally-friendly infrastructure that meets international standards.

Powering the global AI race

Nvidia CEO Jensen Huang once said: "Data centers are the new computing units. Countries and companies that build these 'AI factories' will lead the next industrial revolution." His words capture the essence of a high-stakes global race - building "fortresses" for storing, processing, and computing data is becoming a key strategic advantage.

Global studies show that the data center market is expanding rapidly, at around 15 per cent a year. And it's not just the number of centers that's rising; so is their scale. What once required only a few



Data centers are a critical component of national digital infrastructure, and the power grid is the "backbone" that ensures stable operations. However, Vietnam's grid is not yet stable enough to meet high-capacity demands, while renewable energy sources remain limited. This is a major obstacle in attracting investment, especially from global tech corporations that prioritize green energy.

dozen MW now often reaches hundreds or even up to gigawatts (GW). Meta, for example, is building a 2 GW data center in Florida, roughly equal to the electricity needs of a small city.

Goldman Sachs forecasts that, by 2030, global data center energy demand could surge 165 per cent compared to 2023, accounting for 3-4 per cent of the world's total electricity. Mr. Bob Johnson, Vice President and Analyst at Gartner, warns that "by 2027, about 40 per cent of the world's AI data centers will face power shortages."

The strain goes beyond the power grid. Data centers also pose major environmental challenges. The Institute of Electrical and Electronics Engineers (IEEE) predicts that, by 2030, they could contribute up to 8 per cent of global carbon emissions - a sharp jump from just 0.3 per cent in 2022.

Data centers also consume vast amounts of water for cooling, occupy large land areas, and put pressure on local ecosystems. In response, many countries have introduced regulations on energy efficiency and sustainability in construction and operation. The US, the EU, Singapore, and Australia already require data centers to report energy usage periodically to improve transparency and efficiency.

At the corporate level, tech giants like Microsoft, Google, Amazon, and Apple aim to achieve carbon neutrality and use 100 per cent clean energy by 2030. AWS has signed a deal to purchase 1 GW from a nuclear plant in Pennsylvania, while Microsoft is considering restarting the US state's long-idle Three Mile Island nuclear plant to power its data centers. ■



Seeking certainty

Mr. Louis Nguyen, Chairman of Saigon Asset Management (SAM), tells Vietnam Economic Times / VnEconomy how Vietnam should become a true “magnet” for FDI in data center projects.



■ **The amended Law on Telecommunications, which allows foreign investors to own 100 per cent of data center projects, took effect in July 2024. However, foreign companies have yet to take advantage of this full ownership opportunity. What are your thoughts on that?**

The challenge for hyperscalers - tech giants that own and operate hyperscale cloud infrastructure - doesn't lie in ownership but in the certainty of Vietnam's data governance framework. They hesitate to invest billions of dollars in hyperscale data centers without clear rules on data sovereignty. Amending the Law on Telecommunications was necessary, but the amendments do not fully address practical concerns.

Even with 100 per cent ownership allowed, hyperscalers remain cautious because current regulations on data transfer and control are

not fully clear. For US-listed companies like AWS, Google, and Microsoft, clarifying how data is stored, managed, and transferred across borders is a prerequisite before committing billions of dollars.

For Chinese hyperscalers, these issues are generally less restrictive, unless they plan to list in the US. In short, the ownership barrier has been removed, but the legal framework on data sovereignty and compliance still needs improvement to build investor confidence.

Once these issues are resolved, Vietnam's fundamentals - rapidly-growing demand, strategic location, and infrastructure advantages - will make it highly attractive.

■ **Is that why hyperscalers have not yet built data centers in Vietnam?**

Exactly. Data sovereignty and privacy clarity are the biggest obstacles. Two other

factors matter - infrastructure readiness and domestic demand. Hyperscalers need reliable power (including renewable energy), land, water, fiber-optic networks, and submarine cable connectivity - to be in place before committing billions.

On the market side, Mordor Intelligence recently estimated Vietnam's data center market at around 525 MW. Our internal analysis suggests roughly 50 per cent of this is owned by local telcos, with 40 per cent served by hyperscalers from Singapore-based facilities and 10 per cent operated by banks or enterprises themselves.

As domestic demand accelerates, the incentive for hyperscalers to invest directly will be strong - capturing market share currently held by telcos, supporting domestic and international businesses with Vietnam-bound data, and meeting the rapid growth in AI training and inference. These

pull factors will determine when - not if - they establish data centers in Vietnam.

■ **The figure of 40 per cent of data potentially stored outside Vietnam is significant, don't you think?**

This number simply reflects customer preference - for example, for Meta (Facebook and Instagram) or Alphabet (Google and YouTube) - as well as the fact that major international data center operators are still waiting for clearer and more enforceable data regulations in Vietnam.

■ **If these "giants" enter Vietnam, can domestic partners meet their needs?**

In theory, hyperscalers could build data centers on their own, but in practice, they almost always partner with local companies to ensure smooth operations and reduce risks. For example, NTT from Japan, despite being in Vietnam for over 15 years, chose to cooperate with QDTek to launch a data center at the Saigon Hi-Tech Park in Ho Chi Minh City, while ST Telemedia from Singapore deployed a data center at the city's Tan Thuan Export Processing Zone with VNG.

Vietnamese companies like Viettel, VNPT, FPT, and CMC already operate data centers capable of meeting customer demand, and we play a role in connecting clients with these major data center providers.

Data center projects are extremely complex, not only in terms of investment but also regarding land use rights, power (including renewable energy), water, fiber-optic connectivity, and various permits. It is almost impossible for a foreign investor to handle everything alone, so strategic alliances with local partners are essential.

Typically, hyperscalers set up multiple redundancies, work with several partners, and allocate 10-50 MW of capacity to each, rather than relying on a single operator. This means even a single major deal can benefit multiple domestic companies.

However, it should be noted that hyperscaler standards are very strict. Sites need to be near Hanoi or Ho Chi Minh City to be close to customers, with fiber-optic and submarine cable connectivity, stable geology (to avoid flooding or fire risks), and guaranteed electricity and water supply. They also need partners who understand Vietnam, can operate at scale, and navigate legal procedures effectively. This is both a challenge and an opportunity - if Vietnamese companies can meet technical standards and provide confidence regarding ownership and data compliance, they may even gain direct access to customers.

We (SAM and the Katalyst Data Center) are working directly with hyperscalers and global tech giants. We understand their technical requirements and have an even deeper understanding of Viet-



"As domestic demand accelerates, the incentive for hyperscalers to invest directly will be strong - capturing market share currently held by telcos, supporting domestic and international businesses with Vietnam-bound data, and meeting the rapid growth in AI training and inference."

Mr. Louis Nguyen

Chairman of Saigon Asset Management (SAM)

nam's legal and business ecosystem. Therefore, we are determined to connect them with regulators so both sides can reach common ground, allowing Vietnam to seize the opportunity.

■ **What do you discuss with hyperscalers to encourage them to enter Vietnam?**

We focus on both principles and concrete commitments. From the foreign side, if Vietnam clarifies the legal framework, are they ready to commit billions of dollars, and what will they contribute to digital infrastructure? From the government side, the priority is protecting security and data sovereignty while still enabling growth. The main goal is to foster mutual understanding to reach practical compromises.

From one perspective, foreign companies are like tourists: they will only come and stay if the destination is attractive and welcoming.

■ **Six months after its launch, how is the SAM / Katalyst DigitalHub data center project progressing?**

Vietnam has chosen a development path based on technology and innovation. Data center infrastructure is the foundation of this transformation. With AI booming, from model training to everyday applica-

tions, demand for storage, computing, and AI training in Vietnam will surge in the years to come.

At SAM and Katalyst DigitalHub, we are in deep discussions with several international investors, including two major groups from the US and Japan, all of which have expressed strong interest in developing facilities on our 50-ha site. They see Vietnam's data storage demand growing rapidly year-after-year, and if they do not enter soon they risk missing opportunities in a young but fast-growing market.

We have observed that Malaysia has attracted over \$40 billion in just a few years, yet ironically, they are now limiting new permits due to power and water shortages. This opens a major opportunity. Hyperscalers will inevitably turn to Vietnam, Thailand, and the Philippines as nearby hubs. With proper alignment between hyperscalers and the Vietnamese Government, I believe Vietnam can welcome a similar wave of investment, in line with the country's vision for technology and innovation.

■ **What can Vietnam learn from Malaysia?**

Malaysia's success comes from a combination of clear regulations, proactive government support, and ready infrastructure. It positioned itself as a natural alternative when Singapore lacked land and power for new hyperscale campuses.

The Malaysian Government actively invited global tech giants by introducing transparent policies, fast approval mechanisms, flexible cross-border data regulations, and attractive incentives. It also prepared large land plots, reliable power (including renewable energy), and strong submarine cable connectivity - creating an ecosystem that reassures hyperscalers to invest tens of billions of dollars.

In reality, Malaysia's infrastructure is not necessarily superior to Vietnam's. International partners have already eyed Vietnam as a new market. We have a fast-growing digital economy, a young population, a strategic location, and increasing AI adoption.

To attract similar investment, Vietnam should focus on establishing a clear legal framework on data sovereignty, privacy, and cross-border flows; prepare large-scale infrastructure (power - especially renewable, and water, fiber, and land); and proactive government support with fast mechanisms, incentives, and international cooperation.

If policy and infrastructure align with market demand, Vietnam can not only compete with Malaysia but potentially surpass it, thanks to market size and proximity to Asia's digital growth centers. ■

Components in place

Mr. Dang Tung Son, Senior Vice President and Chief Strategy Officer at the CMC Corporation, tells Vietnam Economic Times / VnEconomy about Vietnam's strategy for developing hyperscale data centers and attracting leading global hyperscalers.



■ **Under Decision No. 2161/QĐ-TTg, dated September 29, 2025, Vietnam aims to attract at least two global technology giants to invest in and operate big data and AI centers in the country. How would you assess this goal and its alignment with AI-driven digital transformation?**

I believe this is a sound and timely move. The Decision reflects the government's long-term vision by identifying hyperscale data centers as a strategic component of the national digital infrastructure - on par with electricity, transportation, and energy.

If AI applications, cloud computing, and big data analytics were to be considered "high-speed vehicles", then hyperscale data centers are the "data highways" that allow them to operate safely, quickly, and efficiently.

Vietnam's digital economy is projected to account for around 20 per cent of its GDP by the end of the year, and the country has led Southeast Asia in the pace of digital

transformation for six consecutive years. This shows that Vietnam not only has vision but is also demonstrating real strength and breakthroughs in execution. If policy stability is maintained, alongside continued technological investment and regulatory improvements, Vietnam can absolutely become a regional hub for data and AI by 2030.

■ **What factors do you think make the country attractive to hyperscalers?**

In my view, there are three key groups of factors: policy, market, and internal capacity.

First, Vietnam currently has strong national-level consensus in terms of policies. Politburo Resolution No. 57-NQ/TW clearly defines science and technology, innovation, and digital transformation as the main drivers of national development, while Decision No. 2161 is about attracting hyperscalers. The legal framework is also becoming increasingly complete - from the Law on Telecommunications and the Law on Personal Data

Protection to the new Law on Electronic Transactions - enabling both domestic and foreign enterprises to invest in a long-term, safe, and transparent manner.

Second, in terms of market potential, Vietnam is one of the most dynamic digital economies in Southeast Asia, which accounts for around 18-20 per cent of GDP, and is recording the region's fastest growth rate. With a population of over 100 million, and hundreds of thousands of private, FDI, and multinational enterprises all pursuing digital transformation, demand for data, cloud, AI, and high-performance computing (HPC) is growing in the double digits each year - particularly in Ho Chi Minh City and Hanoi. This forms a large, naturally expanding market full of potential for global hyperscalers.

Third, the internal capacity of Vietnamese enterprises is rising rapidly. At CMC, we have invested in a chain of international-standard data centers, including CMC Creative Space in Ho Chi Minh City,

CMC Tower DC [Data Center] in Hanoi, and soon, CMC Hyperscale DC at the Saigon Hi-Tech Park (SHTP) in Ho Chi Minh City - a project valued at \$250 million that will not only serve Vietnam but also target regional markets, becoming core computing infrastructure for AI, cloud, and digital transformation applications. In parallel, CMC is partnering with European counterparts in technology transfer and workforce training in fintech and AI, while leveraging its international network to connect Vietnam and Europe.

■ What are Vietnam's competitive advantages in comparison with leading data centers in Southeast Asia?

First, Vietnam offers the lowest investment and operating costs in the region. The cost of building a data center in Vietnam is around \$6-7 million per MW, or 40-60 per cent lower than in Singapore.

Second, the country has an abundant and stable supply of green energy. Vietnam leads Southeast Asia in renewable energy, with wind and solar power accounting for nearly 30 per cent of total installed capacity and expected to reach 39 per cent by 2030.

Third, Vietnam maintains an open and stable investment policy. The Law on Telecommunications 2023 allows 100 per cent foreign ownership in data center and cloud computing businesses; a rare provision in the region. Additionally, Vietnam offers attractive tax incentives, including a 10 per cent corporate income tax for 15 years, four years of tax exemptions, and a 50 per cent reduction for the following nine years, underscoring its strong commitment to attracting high-quality FDI.

Fourth, the country's strategic geographic position and expanding digital infrastructure enhance connectivity. By 2030, the country expects to have 15 international submarine cable systems, alongside emerging digital hubs in Hanoi, Ho Chi Minh City, central Da Nang city, and northern Bac Ninh province, creating a strong foundation for large-scale data center development.

Fifth, the domestic market is growing rapidly. Vietnam's data center market is projected to reach \$1.2 billion by 2030, with a compound annual growth rate (CAGR) of over 10 per cent. The surge in demand is driven by booming sectors such as AI, cloud computing, fintech, and e-commerce, creating a large and stable consumer base for investors.

Sixth, there remains significant room for infrastructure expansion. Vietnam still has ample space to develop new data centers, particularly in industrial parks and key economic zones.

Seventh, the legal framework for data management is improving rapidly. The forthcoming national standards for data

centers and cloud computing will further strengthen investor confidence and attract more international capital.

■ Foreign investment in Vietnam's data center sector remains limited. Where do you think the main bottlenecks lie?

Vietnam is on the right track, but to truly break through and become a destination for global hyperscalers we need to continue improving across four key pillars.

First, energy infrastructure and stable power supply. Hyperscale data centers consume enormous amounts of electricity, while some regions still face shortages during peak seasons. Vietnam should develop a dedicated power plan for digital infrastructure, linked with renewable energy expansion, and accelerate the Direct Power Purchase Agreement (DPPA) mechanism so that investors can access green power - a core factor in international ESG (environmental, social, and governance) standards.

Second, investment and project approval procedures. Currently, data center projects must go through multiple regulatory bodies - electricity, land, fire safety, information security - which prolongs implementation timelines. Vietnam should create a "one-stop" mechanism dedicated to digital infrastructure, streamlining and digitizing licensing procedures to improve transparency, similar to models in Singapore or Malaysia, making it easier for investors to proceed.

Third, international connectivity and domestic transmission networks. Compared to Singapore, which has more than 25 submarine cable systems, Vietnam currently operates only about eight. At the same time, developing satellite data centers (Edge DCs) in industrial parks and key economic regions would help optimize performance and reduce load pressure on major cities.

Fourth, Vietnam's workforce is young and dynamic but still lacks engineers specialized in data center operations, energy management, cooling, and infrastructure security. The country should expand data center and cloud training programs through partnerships between enterprises and universities, targeting 50,000 AI and data center engineers within the next five years to meet the demands of national digital infrastructure development.

Fifth, climate adaptation and resilience. Given Vietnam's tropical climate, it is important to apply environmentally-friendly cooling technologies and enhance resilience against storms and climate change to ensure 24/7 operational safety for national data infrastructure.

■ Some observers believe that current regulations on data storage, security, and digital identity could be barriers for foreign investors. What is your opinion?



"Hyperscalers" are technology corporations that own and operate cloud computing infrastructure at an extremely large scale. Globally, they are mainly divided into two groups: The US group, including AWS, Microsoft Azure, and Google Cloud, currently accounts for about 75-80 per cent of the cloud infrastructure market. The China group, including Alibaba Cloud, Tencent Cloud, Huawei Cloud, and ByteDance, holds most of the remaining market share in China and parts of Asia. In Vietnam, the most active hyperscalers are currently AWS and Google. Instead of building their own infrastructure, they rent colocation space from local providers such as Viettel, VNPT, FPT, and CMC, while also offering cloud services directly to enterprises - meaning they compete with the very providers hosting their infrastructure.

Many see data regulations as barriers, but I view them as a strategic advantage. In the AI era, data is a national asset, and a transparent, well-defined legal framework builds trust among businesses and investors.

Vietnam has been improving its regulatory landscape, from data localization, digital identity, and personal data protection to information security, aligning increasingly with international standards such as the GDPR (General Data Protection Regulation) from the EU. A clear legal framework does not weaken investment appeal; on the contrary, it strengthens Vietnam's position as a stable and trustworthy destination.

Moreover, transparent data regulations allow Vietnam to establish cross-border data links through bilateral or multilateral data agreements - a critical enabler for international cloud computing models.

I believe that with strong infrastructure, clear policies, robust internal capacity, and global connectivity, Vietnam can absolutely become a leading hyperscaler destination during the decade to come. ■



Profitable endeavors

Mr. Vladimir Kangin, CEO of global technology services company IPTP Networks, tells Vietnam Economic Times / VnEconomy about the boom in AI and the resulting surge in demand for AI data centers to support the “AI wave”.



■ **Vietnam is now viewed by investors as a market of potential for AI data centers. Do you think there will be a wave of investment in these centers in Vietnam in the near future?**

The demand for building data centers first comes from the market, meaning that if there are enterprises developing AI, there will be demand for AI data centers. Meanwhile, hyperscale data centers (which are often AI data centers) arise from the internal needs of those who build them.

The initial demand for AI is related to defense and military systems. In my opinion, the Viettel Group will be one of the main drivers of AI development, as it has an important role and responsibility in this area.

Experience shows that technologies first used in defense are often later applied in civilian life. For example, GPS technology was originally developed for military purposes, but today every smartphone has GPS, even though it was born from military technology. This illustrates that the initial demand for AI data centers will likely come from the defense industry.

When a new technology is developed, an entire ecosystem and related applications emerge around it, not just the core technology itself. For instance, GPS led to innovations like Google Maps, Uber, and Grab.

■ **What factors will drive investment in building hyperscale data centers?**

Any facility with over 100 MW capacity is considered hyperscale, and hyperscale data centers are architecturally different from conventional centers. They primarily serve big tech companies - the world's largest technology corporations. The demand for hyperscale data centers comes from the needs of those very companies, not from the broader market. For example, hyperscale builders like Facebook or Amazon build them for their own use.

Therefore, hyperscale demand depends on two main factors. First, on the big tech company itself: if it anticipates consuming around 100 MW, it will build one. Second, it depends on government policies and incentives.

I expect that, in the near future, Vietnam will see two or three hyperscale data centers, as many big tech firms are showing interest or shaping strategies to enter the Vietnamese market. If Vietnam eventually hosts 10-20 hyperscale data centers, the big tech companies operating here will likely own two or three of them.

■ **In this era of booming AI and rising demand for AI data centers, what opportunities do you see for IPTP networks?**

In this era of booming AI and rising demand for AI data centers, what opportunities do you see for IPTP Networks?

I believe the AI data center market holds enormous potential. However, besides AI

data centers, international transmission latency is also a crucial factor. With our global network of over 200 submarine and terrestrial cable routes built over the past 29 years, we can ensure ultra-fast, low-latency channels that connect to international hubs in real time; an essential capability in today's interconnected world. Combined with robust data center infrastructure, this will create the ideal foundation for digital platforms and applications requiring real-time transmission, such as finance, blockchain, healthcare, and gaming.

Globally, the growth of data centers, especially hyperscale facilities, has shown signs of slowing down. For instance, several hyperscale projects in the US have been put on hold. In Vietnam, however, the market is far from saturated, leaving significant room and potential for new investment.

One of the key factors that will sustain Vietnam's data center momentum, even as global growth slows, is the country's data localization policy, which requires that data generated in Vietnam be stored domestically. This means that many companies currently storing Vietnamese data in Singapore, Hong Kong (China), or elsewhere will eventually need to migrate that data back to Vietnam, creating massive demand for domestic data storage and data center infrastructure.

As a representative from Viettel recently noted, the number of data centers in Viet-

nam would need to increase by 15-times the current level to meet future demand. Two additional factors also highlight Vietnam's market potential. According to global commercial real estate services provider Cushman & Wakefield, Vietnam currently has one of the smallest numbers of data centers in the Asia-Pacific region.

Moreover, in terms of investment per MW, Vietnam ranks among the two countries with the lowest construction costs and the highest profit margins (second only to Singapore). From an investment and profitability standpoint alone, the opportunity is clear. Other regional markets such as Indonesia and Malaysia are also ramping up their data center development, and Vietnam is well-positioned to follow suit.

■ Da Nang is being developed as an International Financial Center (IFC) with emerging models like blockchain and digital assets. On August 28, IPTP officially launched its AIDC DeCenter data center project at the Da Nang Hi-Tech Park. Is IPTP Networks building the AI data center to tap into this opportunity?

That is partly our goal, but we have been in Da Nang for many years. The opportunities from financial centers, digital assets, and similar areas are more recent, emerging as Da Nang positions itself as a new hub for technology and finance.

The main reason we came here is the strong local support. Since 2021, we have planned to open an office in Da Nang. Recently, the city has launched the Lien Chieu Port project - a free trade zone - and has favorable conditions for submarine cable landing stations. Figuratively speaking, the AI data center is the "beautiful version" of an idea we have long nurtured.

■ How much of the AI data center's capacity will be dedicated to blockchain, digital assets, and fintech businesses?

About 10 per cent of revenue will come from blockchain-related clients, as the AI data center serves multiple industries without any single sector dominating. However, blockchain applications are on the rise, and I see this as one of the most promising trends. Still, as a global service provider for diverse sectors, no single industry, including blockchain, has ever accounted for more than 10 per cent of our data center revenue.

■ Your total investment is \$200 million, but only \$20 million will be outlaid in the first phase. When will the full \$200 million be disbursed?

Within seven years at the latest. Of course, we will fully disburse the \$200 million as market demand grows and operations expand efficiently. In a more optimistic



Vietnam has one of the smallest numbers of data centers within the Asia-Pacific region, but in terms of investment per MW is one of two countries with the lowest construction costs and the highest profit margins - second only to Singapore. Vietnam's AI data center market is highly promising and attractive to both domestic companies and foreign investors. Over the next ten years, it is projected that at least ten AI-related data centers will be developed in the country.

scenario, that could happen in just three to four years, meaning we would also move forward with additional projects.

In practice, every time a new facility opens, it quickly reaches full capacity because market demand is so strong. Based on our projections, if operations run efficiently, we expect to recover the investment within just three to four years.

The AIDC DeCenter project spans 10,000 sq m, with a capacity of 1,000 racks, a minimum power output of 10 MW, and total investment of \$200 million, with Phase 1 accounting for \$20 million. Construction is expected to begin on March 29, 2026.

■ Vietnam's data centers are mostly concentrated in Hanoi and Ho Chi Minh City, raising concerns about an imbalance and connectivity risks. What is your view on this?

Obviously, concentrating too much in just two regions is not optimal.

In Western countries, there is the concept of "edge data centers" - small facilities located close to users, operating under a decentralized model rather than being clustered in designated zones. However, Vietnam's infrastructure is not yet well-suited for this model.

Other countries have also introduced the concept of "container data centers" - mobile, flexible facilities serving specific

areas. In my opinion, Vietnam should aim to have one data center every 100 km along the North-South route instead of focusing only on centralized hubs. This would ensure connectivity. In fact, it is no longer feasible to "compress" more capacity into the Hoa Lac Hi-Tech Park in Hanoi or the Tan Thuan Export Processing Zone in Ho Chi Minh City, so expansion will have to happen elsewhere. A distributed model, roughly one data center every 100 km, would be ideal.

■ How should Vietnam approach data center planning? Are there international models the country could learn from?

Vietnam's approach to telecommunications and data center planning is, in my view, quite methodical, emphasizing the importance of ensuring national network and data security. This approach is correct.

If Vietnam were to learn from another country's experience in data center network planning, I would suggest China, because China has done an excellent job protecting its national data sovereignty.

■ From your practical experience, what policies or strategies should Vietnam adopt to accelerate sustainable data center growth?

I believe there are two key factors.

First, telecom operators should be allowed to make use of existing infrastructure, for example leveraging power transmission systems to install parallel fiber optic cables alongside electrical lines. Utilizing such available resources could significantly cut the cost of building new cable networks. Moreover, since power lines already extend around the entire country, this approach would greatly enhance connectivity for telecom infrastructure.

Second, large-scale, billion-dollar data center projects are still rare in Vietnam and remain geographically limited. The largest facility today is Viettel's 30 MW data center at Hoa Lac. The core issue here is electricity. Vietnam needs to reform and improve policies to encourage more power generation, through various means, including nuclear power.

Overall, Vietnam should aim for a distributed but interconnected layout, expanding coverage while ensuring strong linkages. The first step is solving connectivity by sharing existing infrastructure and resources, as mentioned earlier. In addition, to achieve wider distribution, a stable power supply is essential, since no data center can operate without sufficient electricity.

In fact, domestic transmission routes are sometimes even more expensive than international ones. So why not make better use of the available, underutilized resources we already have? ■



Setting the scene

Experts and industry insiders outline strategic solutions to attract and accelerate foreign investment in Vietnam's growing data center industry.

As the Asia-Pacific data center ecosystem experiences rapid growth, Vietnam is a strategically-important link in the regional network, thanks to its geographic location and evolving digital infrastructure.

In my opinion, Vietnam should focus on establishing itself as a sub-regional data center hub for Indochina rather than directly competing to become a leading regional digital hub like Singapore. By positioning itself as a strategic hub serving the Indochina corridor (Cambodia, Laos, and Myanmar), Vietnam can leverage its unique advantages and capture targeted growth opportunities.

Today, there are multiple models of digital hubs, each requiring very distinct conditions for success. For instance, to become an AI hub like Johor in Malaysia, a country needs abundant and affordable land, stable electricity and water supply, and a strong preference for green energy. Meanwhile, economic digital hubs like Singapore depend on robust legal frameworks, strong governance, high-quality human capital, and secure, reliable infrastructure.

Vietnam already possesses several clear advantages, such as a digital ecosystem that is more developed than its neighboring countries, a stable regional cooperation pro-



Mr. Glen Duncan

Head of Data Centre Research APAC at JLL

file, and a high share of renewable energy, accounting for over 50 per cent of its power generation mix. These are increasingly crucial factors for global investors who are prioritizing sustainability.

That said, Vietnam faces stiff competition, particularly from Thailand. Bangkok is fast becoming a hot destination for data center investment, buoyed by its central location connecting China, South Asia, Southeast Asia, and Singapore.

Meanwhile, Vietnam has yet to attract significant investment from major cloud providers, known as hyperscalers. Vietnam now has numerous regulations surrounding data sovereignty and localization, which

global operators and hyperscalers are closely considering. While such regulations may stimulate domestic infrastructure investment, they can also pose barriers if investors perceive the legal environment as opaque or overly restrictive for cross-border data flows.

To attract foreign investment, Vietnam must first address foundational infrastructure requirements. This includes clean land availability, reliable electricity and water supply, and, critically, access to sustainable energy sources, which are fundamental to modern data center operations. In addition, long-term land use rights, infrastructure security, and clear legal commitments are essential to reassure investors.

Vietnam could adopt a multipolar strategy, leveraging Hanoi, Ho Chi Minh City, and key secondary cities like Da Nang and Da Lat, which are ideal locations for an edge data center ecosystem.

Finally, Vietnam should widen its strategic outlook to encompass the broader Indochina region.

If Vietnam successfully combines its internal strengths with flexible and investor-friendly policies, it can not only become a sub-regional hub but also play a pivotal role in the Asia-Pacific data infrastructure ecosystem. ■

Deploying AI is not merely a matter of installing GPU clusters. It is a complex equation that balances performance, cost, policy, and data sovereignty. As Vietnam's domestic AI enterprises continue to grow, the demand for scalable, low-latency, and green-powered data centers is becoming increasingly urgent.

This is not a challenge any single entity can solve alone; it requires industry-wide collaboration. In Vietnam, the National Power Development Plan VIII [PDP 8] has set a target of 200,000 MW in capacity by 2030, with a strong emphasis on the development of renewable energy. This is a promising sign that also helps attract international investors who are prioritizing ESG [environmental, social, and governance] criteria.

At the same time, the data center industry is witnessing an unprecedented "race against time". While it used to take up to 18 months to complete a data center, a 30 MW facility can now be delivered in just nine months, with some contractors committing to an even shorter timeline of six months.

To stay competitive, equipment manufacturers are being forced to shorten delivery and installation cycles to the bare minimum. Modern data centers must not only offer

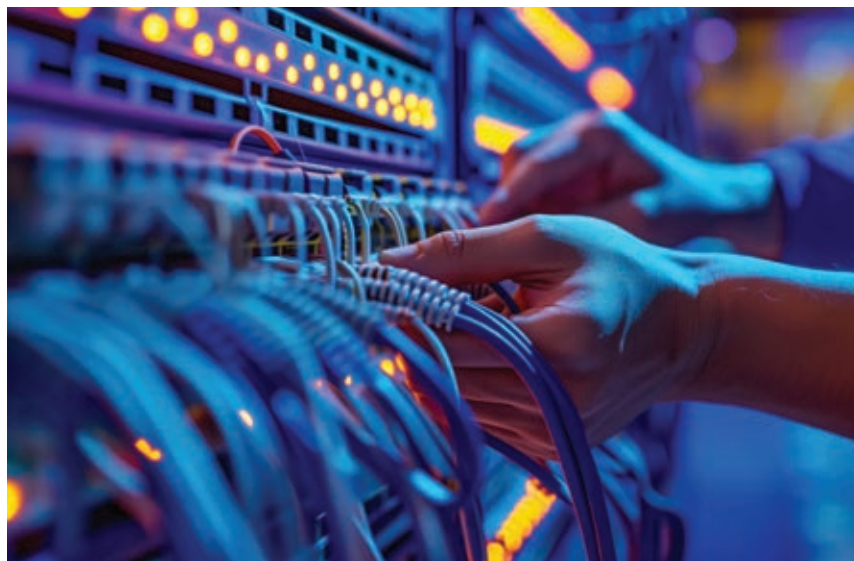
high performance but also be deployed rapidly to keep pace with the explosive growth in AI demand.

In the context of global value chain shifts, leveraging domestic capabilities will allow Vietnam not only to attract FDI but also to generate higher local value-add, thereby enhancing its position on the international technology map. ■



Mr. Pritesh Swamy

Head of Research & Insights, Asia, at Cushman & Wakefield



With data becoming a strategic asset in the digital economy, Vietnam is steadily reinforcing its data sovereignty through the introduction of new regulatory frameworks. This shift presents legal challenges for foreign investors but also opens the door to long-term opportunities in data centers and digital infrastructure.

Vietnam has identified data centers and cloud computing as two core pillars of its digital infrastructure by 2030. In line with this vision, many policies have been issued to strengthen the management of personal data and tighten control over cross-border data flows - a critical and increasingly sensitive issue in the global digital landscape.

Notably, Decision No. 142/QĐ-TTg, issued in 2024, formally designated data as a national resource under State sovereignty. Following this, two landmark laws have been passed: the Law on Data (effective from July 1, 2025) and the Law on Personal Data Protection (effective from January 1, 2026). Together, these laws establish clear

legal obligations for both domestic and international organizations involved in the collection, processing, or storage of user data originating from Vietnam.

Under these regulations, enterprises seeking to transfer data overseas must conduct data impact assessments, implement regular risk management procedures, and sign legally binding agreements with foreign data recipients. These requirements mark a significant shift in Vietnam's legal landscape, prompting many international technology firms operating in the country to reevaluate their business models, moving from remote cloud service delivery to direct infrastructure investment within the country.

However, these regulations also present an opportunity to establish international-standard data centers in the country. As a result, many new investors are now pursuing strategies involving either fully foreign-owned projects or partnerships with local enterprises. This approach not only ensures compliance with local laws but



Mr. Hoang Ha

Founder and CEO of Data Protectify, and Co-Head (Pro bono) of the IT and Data Committee at the Banking Working Group, Vietnam Business Forum

also provides access to a domestic market of nearly 100 million people.

Foreign investors must develop adaptive strategies built on strong legal compliance, particularly in areas such as personal data protection, access supervision, and data governance. This is no longer simply a matter of technology but a race grounded in regulatory capability, operational transparency, and long-term accountability. ■

AI servers will undoubtedly become the core foundation of future data centers. In line with this vision, CMC is planning significant infrastructure investments through 2030, including the development of three dedicated data centers for AI applications.

We are actively seeking additional capital and technological partnerships from international investors, as the number of domestic enterprises participating in this field remains limited. This presents a major opportunity for global investors to tap into and benefit from the accelerating wave of AI development.

While AI has experienced rapid growth in recent years, the journey began much earlier with CPU-based servers running increasingly optimized applications. Today's AI servers represent the evolution of traditional systems, moving from general-purpose servers to high-performance computing platforms specifically designed for AI. In many ways, this reflects the transition from conventional servers to infrastructure capable of supporting highly intensive workloads.

Looking ahead, AI servers will continue to require greater flexibility from data centers, particularly in terms of power efficiency and cooling capacity. These factors will be critical to scaling AI applications effectively while ensuring long-term sustainability. The objective is to reduce energy consumption, minimize hardware degradation, and increase processing speed. As a result, organizations will be able to run more AI applications on fewer, more efficient servers.



Mr. Pham Huy Hoang

Deputy Director of Data Centers at CMC Telecom

That is why we are now implementing green solutions, not only to comply with regulations but also to meet the expectations of major customers such as Google, Microsoft, and leading domestic banks and financial institutions. Sustainability has become a top priority in the selection of colocation services. At the same time, data center operators in Vietnam are undergoing a significant transformation, which includes adopting renewable energy sources, optimizing energy efficiency, and standardizing both construction and operational processes.

Though Vietnam is still in the process of developing its data center infrastructure, the country has demonstrated a strong commitment to keeping pace with global AI trends, particularly in balancing high performance with sustainable development. We are not simply providing data centers; we are building the foundation for the nation's digital future. ■



In terms of human capital, Vietnam aims to train 7,000 internationally-qualified AI experts by 2030, accounting for around 10 per cent of the workforce in the AI data center industry. At the same time, the country targets the incubation of approximately 500 AI startups, to foster the growth of the domestic digital ecosystem.

There remains a significant shortage of AI talent in Vietnam, both in quantity and quality. However, encouraging progress is being made. The National Innovation Center (NIC), in collaboration with Google, has launched a range of training programs, support policies, and AI-focused incubators and workshops. With the right investment and direction, Vietnam has the potential to build a strong pipeline of high-quality talent to support both startups and long-term growth. Leading technology corporations such as CMC and FPT, meanwhile, have established CMC University and FPT University, respectively, with the mission of training a new generation of tech professionals in key fields



Ms. Le Uyen Thao
Founder of AI Leaders Vietnam

such as AI and cloud computing.

On the infrastructure front, attracting major investors in AI and digital platforms will require Vietnam to demonstrate its capability to build data centers that are not only modern but also truly green and environmentally responsible. In my view, there are three strategic priorities:

First is renewable energy. Several major Vietnamese companies, including CMC, Viettel, and VNPT, are investing heavily in solar power or signing DPPAs [Direct Power

Purchase Agreements] with clean energy providers. This is a strategic move, not only for long-term cost efficiency but also to meet global ESG [environmental, social, and governance] standards.

Second is energy and water efficiency, specifically reducing Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE) metrics. Technologies such as liquid cooling, immersion cooling, and direct-to-chip cooling are being increasingly adopted to reduce energy consumption. Today, new data centers in Vietnam are targeting PUE levels below 1.4, compared to the current national average of around 1.65. Achieving this would not only save electricity but also significantly reduce CO₂ emissions.

Third is adherence to green design standards from the outset. This includes the selection of sustainable building materials, waste management systems, recyclability, and transparent, sustainable operational strategies, all of which must be standardized from the design phase onwards. ■





BEYOND EXPECTATIONS

Vietnam's strong fundamentals, prudent policy management, and reform-minded government lie behind the country's growth success, the IMF believes.

 **LINH TONG**

Vietnam's economy has been on a remarkable trajectory, transforming itself over the past three decades from one of the world's poorest countries into one of Asia's most dynamic growth stories. Speaking at a recent economic discussion, Dr. Jochen Schmittmann, International Monetary Fund (IMF) Resident Representative for Vietnam, Cambodia, and Laos, noted that: "It's fair to say that what we've seen in terms of reforms in the last year might be as much as has happened in the previous decade. This is a very exciting time to talk about Vietnam's economy and what lies ahead for the country, its people, and investors."

Even amid a turbulent global environment, Vietnam continues to outperform expectations, a feat the IMF attributes to strong fundamentals, prudent policy management, and a reform-minded government determined to keep the momentum going.

Big picture

Vietnam has experienced great success over the decades. "Growth has averaged 6.5 per cent during the last 20 years, and 6.8 per cent over the last three decades," he continued. "This places Vietnam firmly among the top-performing economies worldwide."

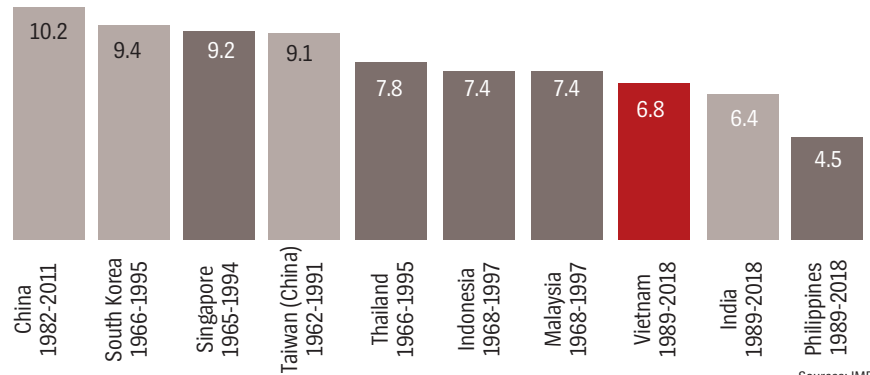
With this rapid economic expansion came social progress. The poverty rate has fallen from around 70 per cent in 2000 to less than 5 per cent today. Vietnam's growth has been built on integration into the global economy, with a trade-to-GDP ratio among the highest in the world, reflecting its deep participation in global value chains and openness to FDI, which has averaged between 4 and 6 per cent of GDP for decades.

That openness has fueled a remarkable structural transformation. "In 2000, Vietnam

Vietnam's Growth in Context:

Benchmarking Against Asia's Fastest-Growing Economies (%)

Fastest 30-year growth periods



Sources: IMF

was still heavily reliant on commodities, including oil, and light manufacturing such as apparel and footwear," Dr. Schmittmann said. "Today, about half of Vietnam's exports are machinery and electronics."

With an average of 6.8 per cent GDP growth over the last 30 years, Vietnam's performance compares favorably with Asia's success stories. While slightly below the growth rates posted by China, South Korea, Singapore, and Taiwan (China) during their peak periods, it is still an impressive record. "To achieve its ambition of reaching high-income status by around 2045, Vietnam will need to sustain and further boost its growth," he added.

The first half of 2025 underscored that ambition. Vietnam's economy grew 7.5 per cent - the highest first-half growth since 2011 - followed by an 8.2 per cent expansion in the third quarter, bringing the average in the first three quarters to 7.8 per cent. Growth has been driven by diverse factors. Export-oriented manufacturing remains strong, FDI continues to flow, and domestic demand indicators such as retail sales have nearly returned to pre-pandemic levels.

Tourism has also rebounded. According to the IMF representative, Vietnam has seen one of the fastest recoveries in tourism among Southeast Asian economies. Temporary government measures, including public sector downsizing and severance payments, also added short-term boosts to consumption.

Policy support has been key. The State Bank of Vietnam has maintained low interest rates and accommodative financial conditions, with credit growth projected at 18-20 per cent by year-end.

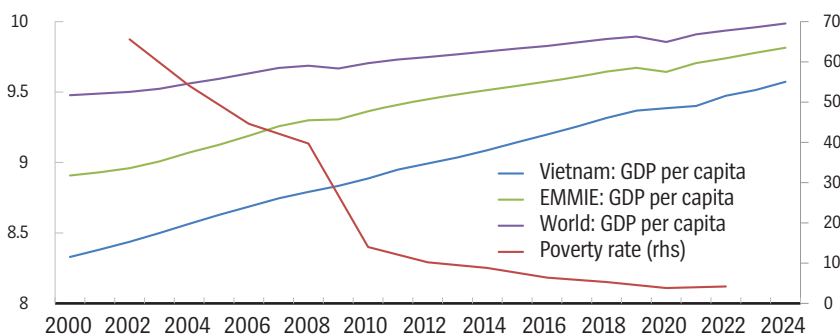
At the same time, Vietnam is pursuing an ambitious institutional reform agenda. The government has merged several ministries, removed one layer of local government, restructured party institutions, and significantly reduced the number of cities and provinces, by almost half. "The ambition and speed of these reforms are impressive," Dr. Schmittmann said. "Few countries have pursued such a restructuring agenda with this intensity." The ultimate goal, he continued, is "to enhance government efficiency, improve responsiveness to citizens and businesses, and strengthen the business environment."

Yet sustaining high growth will require navigating growing challenges. Vietnam's success has been built on global integration, but shifts in global trade dynamics pose challenges. The IMF projects that with comprehensive structural reforms, Vietnam could boost growth by as much as two percentage points above its baseline.

Still, risks loom. "Vietnam runs a large bilateral trade surplus with the US, surpassed only by China and Mexico, which poses potential risks for its export sector," he said. Financial vulnerabilities are another concern. "The credit-to-GDP ratio is now around 140 per cent, compared to an emerging-market average closer to 40 per cent." This heavy dependence on bank credit, he warned, raises concerns about asset quality and the efficiency of credit allocation.

GDP Per Capita and Poverty Rate

(Constant 2021 PPP, Log scale in LHS; % of population in RHS)



Note: Poverty rate refers to the poverty headcount ratio at \$3.65 per day, based on 2017 PPP.

Sources: World Bank database and IMF staff calculations

Banks also operate with relatively low capital adequacy ratios compared with peers in the region. In parallel, Vietnam is one of the most active crypto markets globally.

Demographics represent another long-term challenge. Over the next decade, demographics will provide much less support than in the past 20 years.

Productivity is another crucial factor. “Vietnam’s productivity growth has been roughly zero over the past 20 years,” he noted, with growth mainly driven by capital and labor inputs. This aligns with a high credit-to-GDP ratio and suggests inefficiencies in how capital is allocated. Financial markets do not efficiently channel resources to the most productive enterprises. Private enterprises face significantly higher borrowing costs than State-owned enterprises (SOEs), confirming that financing constraints remain a major barrier to private-sector growth.

Despite these structural issues, Vietnam’s human capital remains a standout strength. “Educational outcomes have been excellent,” Dr. Schmittmann said. In the Organisation for Economic Co-operation and Development (OECD)’s Programme for International Student Assessment (PISA) study, Vietnamese students perform above OECD averages in math, science, and reading. However, labor market data reveal mismatches, shortages of skilled workers in science, technology, engineering, and math (STEM) and vocational fields, alongside an oversupply of overqualified workers in lower-skill jobs.

Looking ahead, monetary policy may have limited room to maneuver, as interest rates are already low and credit growth is rapid. Vietnam’s debt-to-GDP ratio is only about 32 per cent, one of the lowest globally. That gives policymakers flexibility to provide targeted fiscal support if needed. In the longer term, Dr. Schmittmann emphasized that reforms, especially those that improve credit allocation, enhance

efficiency in public investment, reform SOEs, and upskill the workforce, will be essential. “As much as half of the additional growth under a reform scenario could come from a financial system that allocates capital more productively,” he said.

Steering towards sustainable growth

Vietnam’s reform momentum and macroeconomic resilience, as outlined by the IMF, provide the broader framework for understanding where the economy stands today. But beyond the data and forecasts, the real question lies in how policymakers and market participants interpret these shifts on the ground.

According to experts, exports remain a key driver of growth. Among the various headwinds facing Vietnam, US tariffs stand out. Dr. Pham Vu Thang Long, Senior Research Director and Head of Macroeconomics at the Ho Chi Minh City Securities Corporation, noted that Vietnam’s exports are second only to Singapore in ASEAN, with nine-month export value exceeding \$300 million.

“We expect that, due to the impact of reciprocal tariffs, both export and import activity this year will be heavily affected, declining to 5-5.5 per cent from our previous estimates of 11 per cent and 13 per cent for exports and imports,” Dr. Long said. Looking ahead to 2027, he expects Vietnam to regain momentum.

He explained that Vietnam remains competitive in the export market, with an average tariff rate of around 18 per cent following recent tariff measures. However, some sectors, including textiles, metals, and footwear, now face much higher tariff burdens, of about 37.5 per cent, for example, on textiles.

Mr. Michael Kokalari, Chief Economist at VinaCapital, agreed with the 18 per



cent tariff figure but argued that the number is likely to decline rather than rise. He noted that geopolitical and economic realities, including rising US inflation and extended trade negotiations with China, make higher tariffs unlikely.

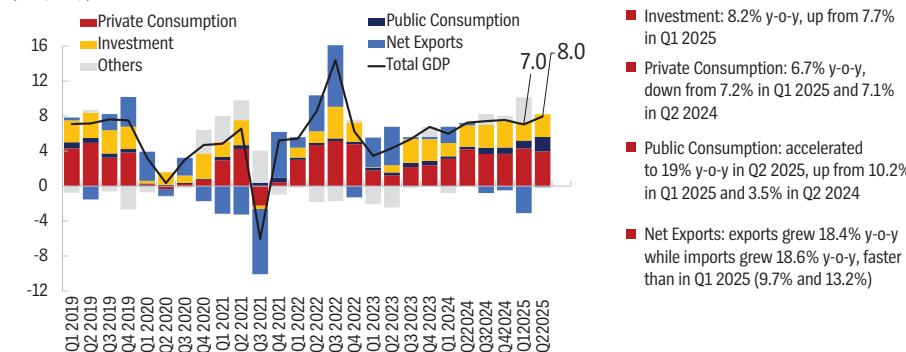
He also highlighted broader global factors. Tax code changes in the US, allowing accelerated capital expenditure write-offs, combined with policy shifts in Germany, point to stronger economic performance next year. He expects Vietnam’s exports to the US to grow by single digits, noting that export orders, which had fallen sharply during the summer, have recovered to nearly 50 on the Purchasing Managers’ Index (PMI). “So I think the export story next year will be much better than many people think,” he said.

Regarding concerns over transshipment, Mr. Kokalari cited a Harvard Business School study showing that Vietnam’s exports potentially routed from China ranged between 2 and 18 per cent, highlighting uncertainty in the data.

On how public investment could propel Vietnam towards high-income status by 2045, Dr. Schmittmann outlined Vietnam’s ambitious public investment plans, from a high-speed railway line linking Hanoi and Ho Chi Minh City to smaller rail projects across the north and south of the

First Half of 2025: Fastest Growth Since 2011, at 7.5%

Contributions to growth, by expenditure (Quarterly) (% , y-o-y)



Sources: Vietnamese authorities, IMF staff calculations.



country, some valued at \$10 billion, as well as new roads and power infrastructure and even discussions around nuclear power.

He stressed that transport and energy infrastructure are essential for growth and that Vietnam has the fiscal space to pursue these projects. However, financing remains a challenge. Low debt-to-GDP ratios do not automatically translate into readily available funding, and the domestic government bond market still requires significant reforms. Interest rates are very low, limiting foreign investor participation,

while the private sector's involvement through public-private partnerships (PPPs) remains an area that needs careful management. "This is a great opportunity to boost economic growth, but implementation will be key," Dr. Schmittmann said.

Dr. Long highlighted the country's untapped potential, noting that Vietnam's investment ratio is still much lower than China's. "The key is government efficiency and project governance, to make public investment effective," he said.

Addressing the challenges in Vietnam's

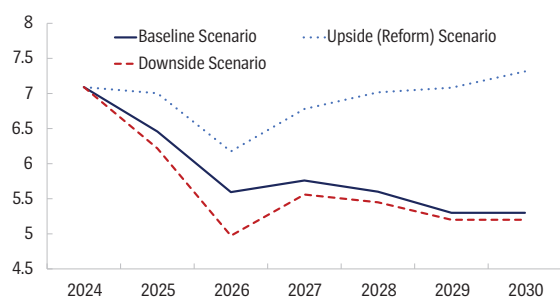
financial system, Mr. Kokalari noted the dysfunctions in the domestic bond market, complicated interbank linkages, and the need for a predictable policy framework. "The key will be reforms, with help from institutions like the IMF, to make the financial system operate in a more orthodox way," he explained. "That would pave the way for an upgrade to investment-grade status."

With strong policy direction, improved governance, and the right financial reforms, Vietnam's public investment push could become a central driver in its journey towards high-income status by 2045.

The Vietnamese Government is targeting 8 per cent growth this year. From the IMF's perspective, sustaining these levels presents both opportunities and challenges. Dr. Schmittmann noted that with the first three quarters already showing 7.8 per cent growth, an 8 per cent outcome for the year is within reach. "The government's target of 8.3-8.5 per cent would be a stretch for the last quarter, but it's clearly a very strong year," he said. However, he cautioned that sustaining double-digit growth for the years ahead is unrealistic. "My argument is for a risk management approach: be ambitious, but do it sustainably." ■

Future Growth Hinges on Trade and Reform Execution

Growth projections under the baseline and scenarios (% , y-o-y)



Scenario Assumptions:

Baseline: 20% US tariffs; 40% only applies to exports with very low domestic content

Upside: Successful implementation of planned infrastructure projects and comprehensive structural reforms

Downside: 20% US tariffs but onerous local content requirements

Notes: The baseline is based on 20% tariffs with limited reallocation gains in the near term. The downside scenario is based on 40% (20%) tariffs on goods with domestic value added of less (more) than 50% but no reallocation gains. The upside scenario is based on 20% tariffs but reallocation gains in the near term and growth dividends from scaling-up of public investment, conditional on broad structural reforms, in the medium term.

Sources: IMF staff estimates



NOT WORTH THE COST

Recent changes to the Law on VAT have many agriculture, forestry, and fisheries companies up in arms.

PHUONG LINH

Shortly after the Law on Value Added Tax (VAT) No. 48/2024/QH15 took effect on July 1, 2025, many businesses in the agriculture, forestry, and fisheries sector complained that it contained various shortcomings, particularly for businesses in the sector, due to inconsistencies in tax rate regulations. Conflicting provisions have made the application of tax policy a complex matter, even leading to a situation of two tax rates being applied to a single product.

VAT paradox

At the “Removing Barriers to VAT Policy for the Agriculture, Forestry, and Fisheries Sector” workshop, organized by the Viet-

nam Chamber of Commerce and Industry (VCCI), representatives from the Vietnam Tax Consultants’ Association noted that the main challenge lies in determining which entities are taxable or exempt. Domestic goods produced and sold directly by farmers or businesses are exempt, but once they enter commercial trading, a 5 per cent tax rate applies.

Many businesses in agriculture, forestry, and fisheries question whether applying this tax rate is truly efficient for State revenue and whether the returns justify the social and administrative resources that the State, businesses, and citizens must expend to pay, collect, and reclaim VAT.

Mr. Nguyen Tan Hien, Vice Chairman of the Vietnam Pepper and Spices Association (VPSA), said the 5 per cent tax on agriculture products imposes heavy pro-

cedural burdens on businesses while generating minimal revenue. VPSA reports that Vietnam produces around 200,000 tons of pepper annually, of which 190,000 tons are exported in raw form. Only some 10,000 tons are consumed domestically, and only around 5,000 tons are processed products sold to end consumers; the segment actually subject to the 5 per cent VAT. With such a structure, the taxable portion of goods is very small.

Though total pepper exports stand at about \$1.3 billion per year, the VAT collected amounts to only some \$1.62 million, while \$63.4 million must be refunded to exporters. Similarly, other spices such as cinnamon, star anise, ginger, turmeric, and chili generate around \$400 million in annual exports, mostly in raw form. Applying the 5 per cent tax yields only

about \$500,000 from domestic consumption, while \$19.3 million must be refunded for exports.

Overall, total revenue in the sector reaches around \$1.7 billion a year. When VAT is applied, businesses are required to pay up to VND2.25 trillion (\$86.5 million), but the State budget actually collects only VND55 billion (\$2.1 million), with the remaining VND2.195 trillion (\$84.4 million) subject to refunds.

Weighing down industry growth

Paradoxes in tax policy are trapping businesses in a cycle of blocked capital and rising costs. Industry groups such as the Vietnam Coffee and Cocoa Association (VICOFA) and the Vietnam Association of Seafood Exporters and Producers (VASEP) report that VAT deduction and refund procedures are creating bottlenecks in production cash flow. Businesses must pay taxes upfront and wait for refunds, while sellers must complete declarations and payments even if buyers have already met their obligations. This adds administrative burdens and financial risk, stalling capital in the supply chain.

The Vietnam Timber & Forest Products Association (VIFORES), meanwhile, noted that VAT refunds for plantation timber are increasingly constrained as the products are classified high-risk.

According to Mr. Hien, the pepper industry needs to cycle capital six times a year, of roughly VND7.5 trillion (\$288.5 million) in working capital, to generate VND45 trillion (\$1.73 billion) in revenue. With nearly VND2.2 trillion (\$84.6 million) tied up in refunds, businesses are left with only VND5.3 trillion (\$203.8 million), shortening production cycles and reducing both scale and profit. Corporate and personal income tax revenue also declines, while VAT from the pepper industry totals just VND55 billion (\$2.1 million), far below the broader economic losses caused by job cuts, reduced incomes, and weakened export competitiveness. “If VAT refund delays persist into a second year, businesses risk insolvency, forcing production cuts or temporary shutdowns,” Mr. Hien said. “Tax policy is unintentionally becoming a barrier to production, exports, and industry growth.”

Dr. Nguyen Minh Thao, Deputy Head of the Business Environment and Competitiveness Research Department at the National Institute for Economics and Finance under the Ministry of Finance (MoF), added that inconsistent refund procedures across localities trap capital and limit investment. She recommended shifting



from pre-audit to post-audit and managing refunds by risk level, and suggested a government resolution to address urgent issues before a full law amendment.

The current VAT refund system also carries potential fraud risks. Some businesses exploit refunds, leaving compliant companies “frozen” due to connections with non-compliant suppliers. Previously, due to fraud and low revenue, VAT on agricultural products was abolished in 2014. When reinstated in 2025, many old issues were still in place.

Policy stalls production

Current tax policies are hitting more than just agriculture, as industries like paper, particularly recycled paper production, are also feeling the strain. Sourcing materials from waste and recyclables often leaves businesses without proper invoices, making input VAT deduction impossible.

Mr. Tran Kim Gia from the Vietnam Paper and Pulp Association (VPPA), argued that focusing on collecting taxes “exhaustively” rather than “efficiently” may actually reduce overall revenue. Corporate income tax accounts for just 1-3 per cent of profits, while a 10 per cent VAT rate imposes a much heavier burden.

If unresolved, production flows could stall, cutting total tax revenue. Mr. Gia explained that the industry’s output could reach \$5 billion, but restrictive tax policies might halve it, costing the State VAT as well as corporate and personal income tax revenue. “Tax policy should prioritize efficiency, fairness, and sustainability,” he said.

Paradoxes in tax policy are trapping businesses in a cycle of blocked capital and rising costs. Industry groups such as the Vietnam Coffee and Cocoa Association (VICOFA) and the Vietnam Association of Seafood Exporters and Producers (VASEP) report that VAT deduction and refund procedures are creating bottlenecks in production cash flow.

“When businesses lack capital and workers lose jobs due to impractical policies, the economy’s competitiveness suffers most.”

Dr. Thao added that tax hurdles hurt both financial and investment opportunities. She urged sectors to provide data showing blocked working capital, reduced revenue, profit losses, and effects on farmers in the value chain. “Accurate data gives policymakers a stronger basis for adjustment,” she noted.

From a macro perspective, Mr. Tran Quoc Khanh from the Prime Minister’s Policy Advisory Council acknowledged that while Law No. 48 improves system standardization, curbs circular trade, and encourages formal exports, four major issues remain. First, a disparity exists between domestic and imported agricultural products. Second, VAT refund rules are impractical. Third, issuing Decree No. 181/2025/ND-CP on the law’s effective date (July 1, 2025) left businesses unprepared. Finally, the law’s timing coincided with a difficult domestic export period amid high growth targets, adding pressure on exporters. He recommended postponing implementation to January 1, 2027, allowing industry associations and the MoF more time to adjust. ■



Broader cooperative scope

Mr. Ko Tae Yeon, Chairman of the Korean Chamber of Commerce in Vietnam (KOCHAM), spoke with Vietnam Economic Times / VnEconomy's Tu Anh about promoting Vietnam - South Korea investment cooperation in the new era.

■ In the context of global volatility, what will KOCHAM do to support and promote investment flows from South Korean businesses into Vietnam?

Looking back over the past year, the growth in trade between Vietnam and South Korea has been a major achievement. However, since the beginning of 2025, with the global economy declining and geopolitical instability rising, our companies have faced increasingly tangible difficulties. It is precisely in this period that KOCHAM's role becomes even more important.

KOCHAM is proactively submitting recommendations to relevant authorities regarding obstacles faced by businesses in the administrative, tax, and logistics areas, aiming to help our members maintain stable production and business operations. At the same time, even amid challenges, we continue seeking new opportunities in areas such as digital transformation and the green economy to support businesses in achieving breakthroughs.

Recently, on September 30, during a tax and customs dialogue with the Ministry

of Finance, we directly conveyed the urgent issues faced by South Korean businesses and worked with authorities to seek practical solutions. Additionally, KOCHAM has collaborated with the Embassy of the Republic of Korea and the Korea Trade-Investment Promotion Agency (KOTRA) to organize meetings in various cities and provinces, including seminars on labor and customs, to hear directly from local businesses.

Moreover, we are strengthening the activities of sector-specific subcommittees to gather diverse feedback from members and, based on that, submit recommendations that are realistically implementable.

Going forward, KOCHAM will continue to work closely with the government and local authorities to promote practical improvements, making Vietnam's investment environment more transparent, stable, and business-friendly. KOCHAM will continue expanding these activities, serving as solid support for member companies to develop sustainably, without being shaken by any fluctuations in the global economic environment.

■ What are the biggest challenges facing South Korean businesses in Vietnam, and how is KOCHAM addressing them?

Though the Vietnamese Government has been striving to improve the investment environment, businesses still encounter considerable difficulties due to delays in procedures or differences in interpretation and application of administrative regulations.

Many South Korean companies also see high logistics costs and a shortage of skilled workers as the biggest barriers. In particular, through recent local seminars, the labor issue has been identified as the most serious challenge. The problem is not only a shortage in numbers, as maintaining a stable supply of skilled workers is becoming increasingly difficult, directly affecting productivity and the competitiveness of businesses.

To minimize these obstacles, KOCHAM maintains close dialogue channels not only with local government and localities, particularly those that have recently undergone administrative mergers.

Additionally, through KOCHAM's Problem-Solving Department, we are compiling feedback from businesses on practical challenges, while local KOCHAM chapters proactively talk directly with companies to identify feasible solutions. In some areas, the option of building dormitories to stabilize the labor supply is also under consideration.

KOCHAM will continue to systematize these proposals into policy recommendations to promote tangible improvements that businesses can clearly feel in their production and operations.

■ **Vietnam is moving towards green and sustainable development with large-scale infrastructure projects. What is your advice for South Korean businesses considering investment in this sector?**

Vietnam is promoting a green growth strategy and ESG (environmental, social, and governance) policies, which bring both opportunities and challenges for businesses. Policy standards are increasingly stringent, but in practice many companies remain unclear about how to respond effectively.

In this context, businesses that proactively take the lead often gain long-term competitive advantages. In particular, areas such as improving energy efficiency, reducing carbon emissions, and environmentally-friendly logistics offer significant potential.

KOCHAM supports its members by systematically sharing up-to-date information, helping businesses develop strategies aligned with both domestic policies and international regulations. At the

“Though the Vietnamese Government has been striving to improve the investment environment, businesses still encounter considerable difficulties due to delays in procedures or differences in interpretation and application of administrative regulations.”

Mr. Ko Tae Yeon

Chairman of the Korean Chamber of Commerce in Vietnam (KOCHAM)

same time, we strive to ensure that our members' voices are reflected in the policymaking process.

■ **The merger of cities and provinces in Vietnam is enhancing cooperation over FDI. The northern port city of Hai Phong, for example, hosts many South Korean businesses. How does KOCHAM plan to connect South Korean companies in high-tech sectors with Hai Phong's innovation-driven strategy?**

Hai Phong has long been one of the most dynamic hubs for South Korean businesses, with strong advantages in sea-ports, logistics, and high-tech manufacturing sectors. Recent administrative changes are helping to elevate the city's position, though during the institutional refinement process, some temporary uncertainties may arise.

To turn this transitional period into an opportunity, KOCHAM is strengthening coordination with the local government. We support member companies in accessing and participating in the development plans of economic zones and the expansion of logistics infrastructure promoted by Hai Phong authorities, while quickly providing essential information to each business.

Of course, KOCHAM will continue to serve as an even stronger bridge, helping Hai Phong become an even greater launchpad for the growth of South Korean businesses in Vietnam.

■ **Vietnam is entering a new era, with 2030 marking a milestone in the period. What are your expectations for Vietnam-South Korea cooperation over the next five years?**

Cooperation between Vietnam and South Korea will enter a new phase of development in the next five years. The scope of collaboration is expanding not only in manufacturing but also into high technology, services, and the green economy. Though the global economic environment remains challenging, we observe that it is precisely the companies that know how to find opportunities in difficulties that record outstanding results.

KOCHAM is committed to supporting its members in taking the lead and seizing these opportunities. Through close coordination with the Vietnamese Government, we will continue to assist South Korean businesses in becoming the most reliable partners along Vietnam's sustainable





Fusion of technology & finance

Preparations are well underway for Vietnam to open International Financial Centers and become a regional and global financial hub.

HUYEN THUONG

Vietnam is moving forward with plans to establish International Financial Centers (IFCs) in Ho Chi Minh City and central Da Nang city, with the ambition of putting the country firmly on the global financial map. Under Resolution No. 222/2025/QH15, passed by the National Assembly, the establishment of IFCs officially came into effect on September 1, 2025, with hopes of drawing international capital, creating a more favorable investment climate, and boosting Vietnam's economic competitiveness.

The Steering Committee for Vietnam's IFCs recently rolled out Decision No. 114/QD-BCDTTTC, outlining an ambitious action plan to be achieved by the end of 2025. Mr. Ngo Dang Loc, Associate and Deputy Head of Banking & Finance, Capital Markets, at Indochine Counsel, told Vietnam Economic Times / VnEconomy that Vietnam's IFCs are not designed to be traditional

clusters of financial institutions but ecosystems rooted in digital assets and fintech services, powered by AI and big data.

Technology as the backbone

According to Mr. Loc, an IFC cannot thrive or meet its goals without a backbone of cutting-edge technology to support digital finance and emerging markets. He added that strong technology infrastructure is also a magnet for global investors, who are looking for new hubs that can rival the likes of Singapore and Hong Kong (China), where digital financial services are already highly advanced.

At a recent forum hosted by IDG Vietnam, Mr. Vo Hoang Hai, Deputy CEO of Nam A Bank, emphasized that Vietnam's IFCs must be built on modern standards

aligned with international practices. Core components, he said, range from banking, securities, and insurance to fintech, digital currencies, and digital assets. "Infrastructure is indispensable to the development of a financial center, both physical and technological," he stressed.

Dr. Le Quoc Cuong, Deputy Head of the Saigon High-Tech Park (SHTP) Management Board, who has more than 25 years of experience in information technology (IT) training and research, underlined the defining role of technology in the era of Industry 4.0. "When everything is driven by digital breakthroughs and fintech, the fusion of technology and finance becomes the foundation of a modern financial hub," he said.

Technologies such as AI, blockchain, cryptocurrencies, cloud computing, big data, mobile platforms, and, above all, cybersecurity, he continued, will be decisive

in shaping fintech and IFC development.

Mr. Loc also noted that IFC technology infrastructure goes far beyond fast internet connections or modern data centers. It also requires digital payment systems, blockchain platforms, robust cybersecurity, and sandbox mechanisms for piloting new technologies. “It’s about combining hard infrastructure, like telecoms and data centers, with soft infrastructure such as legal frameworks, human capital, and innovation capacity,” he explained.

Facing regional giants

Overall, Vietnam’s technology infrastructure has advanced rapidly. The country ranks among the regional leaders in internet and smartphone usage, and its telecommunications network is highly developed, with nationwide 4G coverage and 5G now being rolled out in major cities. Data centers and cloud platforms are also receiving growing investment from major telecom and technology groups such as VNPT, Viettel, and FPT.

Under the Information and Communications Infrastructure Master Plan for 2021-2030, with a Vision to 2050, Vietnam’s telecommunications infrastructure is expected to achieve significant milestones by 2030, providing a solid foundation for the growth of the digital economy and digital society.

According to Mr. Loc, Vietnam’s IFCs will possess strengths in fast-paced technological development, a dynamic market, and a young workforce that is quick to adapt to new technologies. However, compared with leading IFCs such as Singapore and Hong Kong (China), “we still face a considerable gap.”

Regional IFCs have much longer histories and are now firmly established as Asia’s leading hubs. “When compared with Singapore, Hong Kong (China), and Shanghai, Vietnam’s fintech infrastructure remains modest, especially in terms of large-scale data centers and cross-border payment systems,” he added.

Still, he argued that Vietnam enjoys a “latecomer advantage”, meaning it can leapfrog by adopting cutting-edge technologies such as blockchain, AI, and cloud computing without being burdened by outdated legacy systems, provided there is regulatory support through flexible sandbox mechanisms.

“The challenge is that Vietnam needs major financial investment to bring its IFCs up to international standards, ensuring cybersecurity and, above all, building a robust legal framework to guarantee safe and transparent digital finance that



can handle complex cross-border transactions,” he emphasized. “In other words, the foundation is already strong, but for Vietnam’s IFC to truly take off, we need a comprehensive strategy that combines infrastructure investment with legal frameworks and a high-quality talent pool.”

Where tech meets law

For an IFC to operate effectively, many pieces of technology must come together. According to Mr. Loc, “the most critical link in building investor confidence lies in cybersecurity and data protection infrastructure. This is the foundation that allows all digital financial transactions, from AI and blockchain to data centers, to function transparently, securely, and with manageable risk.”

Dr. Cuong added that to become a modern and sustainable financial hub, both physical and digital spaces must be developed in tandem. This means not only building high-rise towers but also creating a technological and institutional ecosystem that attracts not just major bank headquarters but also channels of creativity and intellectual capital from across Vietnam and around the world. More importantly, he said, a financial center must build trust to become a true destination for capital flows, whether physical or digital.

In particular, for fintech, digital infrastructure matters more than physical infrastructure. Financial activities no longer need to be tied to a geographic location; they can be carried out globally through digital networks. “That’s why the development of transport infrastructure must go hand-in-hand with digital infrastructure, ensuring that financial centers can operate efficiently and differentiate themselves

National Assembly Resolution No. 222/2025/QH15 sets bold targets: by 2035, Vietnam’s International Financial Centers are to rank among the world’s Top 75 financial hubs; and by 2045 are expected to break into the Top 20.

from traditional hubs with the support of technology,” he explained.

Vietnam already has a Law on Cyber Information Security, a Law on Cybersecurity, and a Law on Personal Data Protection, and is drafting additional regulations. But, as Mr. Loc pointed out, “the key lies in implementation: striking a balance between international compliance and creating a flexible environment for innovation. If Vietnam can build legal and technical trust around data, it will gain an edge over other IFCs in the region.”

Beyond technology, Vietnam’s competitive advantages over the next 5-10 years will also come from a clear, flexible legal framework and attractive investment incentives. Long-term policies on tax, land, and labor are expected to create significant cost advantages and appeal for international investors.

A transparent legal framework that establishes ownership rights for digital assets, enforces anti-money laundering rules, protects personal data, regulates cross-border data transfers, ensures cybersecurity, and provides flexible dispute resolution will give investors confidence in their rights and obligations when investing and operating in the IFC. “Technology can be a competitive advantage, but it must be paired with and supported by other factors, particularly legal frameworks,” Mr. Loc said. ■

Foreign friends

A number of Vietnamese localities, most visibly Da Nang and Ho Chi Minh City, have found success in establishing cooperative relations with cities and regions overseas

BAO TRAM



In a bid to drive investment cooperation and foster the development of key economic sectors, many localities around Vietnam have recently intensified their investment promotion activities with cities and provinces in foreign countries. Among those actively strengthening international partnerships, central Da Nang city and Ho Chi Minh City stand out as leading examples, continually expanding their investment cooperation with foreign partners through a series of initiatives.

Leveraging international partnerships

In early October, a working delegation from Da Nang conducted an investment promotion visit to Amsterdam in the Netherlands, focusing on science and technology development, innovation, digital transformation, and smart city building.

Mr. Nguyen Duc Dung, Chairman of the Da Nang City People's Council, said the city is currently focusing its develop-

ment orientation on key areas such as science and technology, innovation, digital transformation, and infrastructure, with particular emphasis on building a smart city model. Therefore, strengthening cooperation with foreign cities that have successfully developed such models is of great importance. "Da Nang hopes to continue learning from Amsterdam's valuable experience, expertise, and advice in investment, management, and planning, as it strives to build a modern, distinctive, and livable smart city," he said.

During the visit, Ms. Dagmar Keim, Director of the Amsterdam Smart City Project Management Agency, shared insights into the city's journey from concept to the implementation of innovative smart city projects designed to address pressing urban challenges such as housing, energy, flooding, and climate change. She also discussed Amsterdam's experience in public-private partnerships and public sector capacity building, offering useful lessons that could help Da Nang effectively apply smart city models in the near future.

Shortly after, Da Nang further advanced its international cooperation by signing an MoU with Le Havre in France to establish a cooperative and friendly relationship between the two coastal cities. Under the agreement, the two will strengthen collaboration in several key economic sectors, including urban planning and development, seaport management, information technology, human resources training, tourism, culture, and the arts.

In the context of Vietnam and France recently upgrading their bilateral relations to a Comprehensive Strategic Partnership, the establishment of a local-level cooperative relationship between Da Nang and Le Havre carries special significance, representing a concrete step in translating the Partnership into practical cooperation at the local level.

Beyond strengthening ties with foreign localities, Da Nang has also been actively calling for investment from businesses and partners in Amsterdam and Le Havre in key sectors such as maritime industries, logistics, and education and training,

encouraging them to expand their investments in the city.

Da Nang stands out as one of the fastest-growing localities in Vietnam's central region and nationwide. It is witnessing the implementation of numerous major infrastructure projects, a continuously improving business and investment environment, and strong transformation in tourism, high-tech industries, and modern services. These developments are helping Da Nang affirm its position as a new driving force of Vietnam's economic growth.

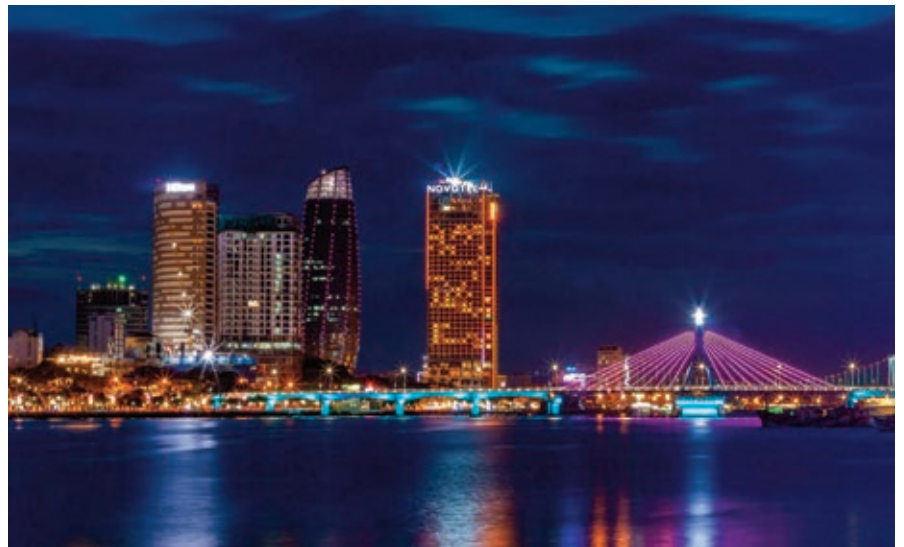
Ho Chi Minh City has also been actively strengthening cooperation and learning from international partners. In particular, the city has recently deepened its collaboration with Singapore, focusing on sharing experiences in urban development, innovation, and governance. According to Mr. Tran Luu Quang, Secretary of the Ho Chi Minh City Party Committee, the recent administrative expansion, through the merger of Binh Duong and Ba Ria-Vung Tau provinces into the southern city, has created more diverse opportunities for cooperation across various sectors. However, it has also brought greater pressure, requiring the city to accelerate its development even more rapidly.

Other Vietnamese localities have also been proactively engaging in international cooperation to promote economic development. For instance, earlier this year, northern Hung Yen province initiated cooperation activities with the Chinese capital Beijing, marking a significant step towards strengthening subnational economic ties between the two sides. During their discussions, the two parties identified several key areas for future collaboration, including promoting sustainable trade exchanges, expanding cooperation in production capacity, and deepening cultural and educational partnerships.

By strengthening partnerships with foreign cities and regions, localities across Vietnam are making tangible contributions to consolidating and elevating the comprehensive strategic partnerships between Vietnam and its global partners, turning diplomatic visions into concrete local actions that drive shared prosperity and sustainable growth.

Local potential in global eyes

The strengthening of cooperation between Vietnamese localities and international partners is a two-way process. It not only demonstrates Vietnam's proactive efforts towards deeper integration but also reflects the growing recognition and confidence of foreign partners in the development poten-



tial, investment environment, and governance capacity of Vietnamese localities.

In recent years, many cities and provinces from countries such as Japan, South Korea, China, Singapore, Germany, and the US have regarded Vietnam in general and Vietnamese localities in particular as strategic partners, not only in traditional fields like manufacturing, trade, and logistics but also in emerging sectors such as the green economy, digital transformation, education, and smart urban development. This underscores Vietnam's increasingly solid position within both regional and global cooperation networks.

H.E. Jaya Ratnam, Ambassador of Singapore to Vietnam, emphasized that the Singapore-Vietnam Strategic Partnership has been developing strongly, with ample space for the two sides to further expand cooperation in the future. Among the key examples of this fruitful collaboration is Vietnam-Singapore Industrial Park (VSIP) - a hallmark of sustainable and effective economic partnership between the two countries - which is now evolving towards the "VSIP 2.0 model", featuring greener, smarter, and more sustainable industrial parks.

In particular, joint projects in green energy, such as Singapore's offshore wind power developments in Ho Chi Minh City, have become flagship initiatives in bilateral cooperation. "The city continues to play a major and pivotal role in the partnership between the two countries," Ambassador Ratnam stressed.

At the same time, thanks to a shared vision for economic development, cooperation between Vietnamese localities and international partners has been expanding in both breadth and depth. For instance, Mr. Jung Jang Seon, Mayor of Pyeongtaek city in South Korea, noted that Da Nang and his city share many similarities in their development strategies, particularly in semiconductor industries, high-tech

The strengthening of cooperation between Vietnamese localities and international partners is a two-way process. It not only demonstrates Vietnam's proactive efforts towards deeper integration but also reflects the growing recognition and confidence of foreign partners in the development potential, investment environment, and governance capacity of Vietnamese localities.

manufacturing, port logistics, and smart urban planning.

Pyeongtaek is recognized as one of South Korea's leading semiconductor and industrial hubs, home to major global technology corporations. Meanwhile, Da Nang is emerging as a center for innovation and high-tech industries in central Vietnam, with a strong focus on attracting investment in semiconductors, information technology, and smart manufacturing. "These similarities are opening up opportunities for practical and long-term cooperation between the two localities, helping to strengthen industrial links and promote technology transfer between Vietnam and South Korea," Mr. Seon highlighted.

Experts believe that if Vietnam can fully leverage the unique potential and advantages of each locality, cooperation between Vietnam and its partners, both at the national and local level, will continue to expand more substantively and effectively in the years ahead. At the same time, this trend is expected to generate a new wave of foreign investment, as international investors increasingly recognize Vietnam's dynamism, openness, and sustainable growth potential in an era of deepening global integration and intensifying competition. ■

Smart entry & exit

Airport designers and planners must better take the passenger experience into consideration as Vietnam's aviation industry moves towards the future.

THANH THUY & HUYNH DUNG

When Terminal T3 at Ho Chi Minh City's Tan Son Nhat International Airport went into operation it was expected to open a new chapter in Vietnam's aviation industry, marking a major step towards modernizing infrastructure and enhancing the passenger experience. Built at a cost of nearly VND11 trillion (\$423 million) and designed to handle 20 million passengers a year, Terminal T3 is among the most advanced aviation projects in Vietnam.

Even during trial operations, the terminal embraced cutting-edge technologies, positioning itself in the "smart airport" model now shaping airports worldwide. But alongside that progress, the question of on-site connectivity - the true measure

of an airport's value - is driving higher expectations for planning, technology, and integrated development.

Rough connections

At the heart of this transformation is Airports Corporation of Vietnam (ACV)'s Self Services system, which allows passengers to take control of nearly every step of their journey. Passengers can now use chip-based ID cards, or the VNeID digital ID app, to complete an entirely automated flight process, from check-in and baggage drop to security screening and boarding. The process is fully digi-

talized, significantly reducing check-in times and easing congestion at check-in counters. Advanced biometric and AI systems further streamline identification, boost security, and deliver a smoother, more seamless travel experience.

Many travelers describe Terminal T3 as spacious, modern, and comfortable. Check-in counters, security checkpoints, and lounges are efficiently arranged, creating a sense of openness and ease.

But despite its advantages in design and technology, several bottlenecks in connectivity infrastructure are affecting the terminal's overall efficiency. The separation between Terminals T1, T2, and T3 has created challenges for passengers, especially international visitors or those

arriving in Ho Chi Minh City for the first time. While the airport offers a free shuttle bus between terminals, passengers still need to find the stops, carry their luggage, and wait for transfers, making the process far from seamless.

T3's layout is also a concern. The third floor serves departures, the second handles private vehicles, and the first accommodates buses, taxis, and ride-hailing cars. Though clear in theory, this setup often leads to congestion in practice.

Ms. Linh Giang is a frequent traveler on the Da Nang - Ho Chi Minh City route. "After waiting for my luggage, I had to queue for a long time to reach the first floor," she explained. "Down there, taxis, buses, and ride-hailing cars all crowd into one narrow lane. It's common to see 15 to 20 vehicles lined up during busy periods." Many passengers at Tan Son Nhat share similar frustrations.

Drivers face their own difficulties. Mr. Gia Quy, a ride-hailing driver, said the first floor has become too crowded. "Public buses, contract cars, taxis, and ride-hailing vehicles all use the same lane, creating traffic jams and long pick-up times," he said.

Such issues underscore that the value of a modern airport isn't defined by size or architecture alone, but by the seamlessness of the passenger journey, either arriving or departing. A well-organized, technology-driven internal transport system is key to smoother operations, reduced congestion, and a stronger image for Tan Son Nhat in the eyes of international travelers.

Global models

Across the world, many countries are taking the lead in developing airport infrastructure with a focus on seamless connectivity. Major aviation hubs such as Changi (Singapore), KLIA (Malaysia), and Chiang Mai (Thailand) have become models of integrated planning, where every

element is designed to optimize passenger flow and overall efficiency.

Singapore's Changi International Airport stands as a benchmark for smart planning and efficient operation. With multiple terminals and the Jewel Changi complex - a fusion of retail, landscape, and transport - the airport operates an Automated People Mover (APM) system that links terminals at high frequency, allowing passengers to move quickly within secure areas without passing through security again. Its internal Skytrain lines run parallel to service corridors, easing congestion and offering a smoother transit experience.

Kuala Lumpur International Airport (KLIA) is another clear example of how technology is transforming airport mobility. Its Innovia R APM, supplied by Alstom, runs fully automatically using Communication-Based Train Control (CBTC) technology and can carry up to 270 passengers per trip. The system cuts transfer time between the main and satellite terminals and saves energy through regenerative braking. KLIA considers this a core part of its operational strategy to ensure seamless movement, lower emissions, and maintain long-term efficiency.

Beyond internal transit, countries like China, Japan, and South Korea are expanding connectivity far beyond the airport perimeter. Projects such as Beijing Daxing and Incheon are integrated with high-speed rail and urban metro systems, allowing passengers to reach airport check-in areas from city centers in just minutes. This approach creates a truly interconnected transport network, positioning airports not only as infrastructure hubs but as powerful engines of regional growth.

Digital transformation is also redefining how airports operate. At Changi, passengers can track wait times, routes, and shuttle locations on a mobile app, while indoor navigation using wi-fi and iBeacon provides real-time guidance. Hong Kong International Airport applies big data and AI to forecast passenger flows and automatically

adjust APM and shuttle frequencies, and Incheon and Delhi airports have both introduced the Airport Collaborative Decision Making (A-CDM) system to synchronize passenger, baggage, and vehicle flows, improving on-time performance and reducing energy use.

Together, these examples show that modern airports are no longer just places where planes take off and land - they are integrated mobility ecosystems where data, technology, and people move in sync: fast, efficient, and sustainable.

Towards inclusive development

The development of next-generation airports requires a vision that goes beyond technical capacity or scale. The focus must shift from "expansion" to "connectivity optimization". An airport's true value lies not in the number of runways or the size of its terminals, but in its ability to deliver a seamless, safe, and convenient journey for passengers.

In modern transport systems, airports serve as the central nodes of regional and national connectivity. Internal and urban transport links must be designed in sync from the start, not treated as separate elements. When metro lines, high-speed rail, roads, and parking facilities are planned as one cohesive system, airports can operate smoothly, reduce urban congestion, and maximize efficiency.

Beyond infrastructure, digital transformation and sustainability are shaping the future of aviation. Leading airports are using big data and AI to manage passenger flows, predict congestion, and cut waiting times. Green standards such as renewable energy use, optimized natural lighting, carbon reduction, and wastewater recycling have also become mandatory in every expansion project.

In the long term, airport development must be aligned with regional and urban growth strategies. When planned in harmony, airports become engines of economic spillover - driving logistics, services, tourism, and trade, while enhancing national competitiveness within the global aviation value chain.

An efficient airport is one where the flow of people, goods, and data operates in perfect rhythm - a reflection not only of technical sophistication but of planning foresight, policy vision, and governance capacity. From global lessons, the journey of connectivity, from Tan Son Nhat today to Long Thanh International Airport in the future, is not merely about transportation but about unlocking a new era for Vietnam's aviation infrastructure. ■





Market at risk

US tariffs on wood and seafood imports from Vietnam will significantly dent the competitiveness of Vietnamese exports.

CHU KHOI

The Ministry of Agriculture and Environment (MAE) has reported that agriculture, forestry, and fisheries export turnover stood at \$6.35 billion in September, lifting the sector's total export turnover in the first nine months of 2025 to \$52.31 billion, up 14 per cent year-on-year. The US remained Vietnam's largest market, with \$10.6 billion, accounting for 20.6 per cent of total exports.

Despite strong export growth overall, Vietnam's wood and seafood industries are bracing for a rocky road ahead in the US. On September 25, the US Government announced that kitchen cabinets, bathroom vanities, and upholstered furniture are subject to a 25 per cent tariff starting from October 14, which will then rise to 50 per cent for kitchen cabinets and vanities from January 1, 2026, and around 30 per cent for upholstered furniture. At the same time, several categories of Vietnamese seafood

could face import suspensions, raising concerns that one of the country's most lucrative markets may soon tighten its grip.

Mounting uncertainty

Wood and seafood are two sectors heavily dependent on the US market. According to the MAE, Vietnam's wood and wooden product exports reached \$12.52 billion in the first nine months of the year, up 7.1 per cent year-on-year. The US remained the largest market, accounting for 55.8 per cent of Vietnam's total wood export value, followed by Japan (12.6 per cent) and China (11.1 per cent). Compared to the same period last year, exports to the US rose 7.7 per cent and to Japan 24.1 per cent, while those to China fell 11.4 per cent.

Notably, Vietnam's wood exports to the

US in the first nine months totaled \$6.98 billion, marking the first time Vietnam had surpassed China and become the largest furniture exporter to the US market. This milestone highlighted the growing competitiveness of Vietnamese companies in the global furniture supply chain.

With the new tariffs in place, Mr. Nguyen Chanh Phuong, Vice Chairman of the AA Corporation, said many US customers had cut or canceled orders, with some sofa exporters losing up to 30 per cent of their contracts. The new tariffs will directly and heavily impact the upholstered furniture segment, which depends almost entirely on the US market.

Mr. Ngo Sy Hoai, Vice Chairman and Secretary General of the Vietnam Timber and Forest Products Association, also voiced concern that more than \$9 billion worth of Vietnam's wood and furniture exports could fall into the 25 per cent

tariff category in the remaining months of the year. If rates rise to 30-50 per cent from early 2026, he warned, "Vietnam's furniture exports will face severe challenges," as finding alternative markets in the short term is almost impossible. He also explained that products subject to Section 232 tariffs will no longer be affected by countervailing duties.

Mr. Joseph Mayen, a trade advisor to the Embassy of Vietnam in the US, noted that while the US Supreme Court is reviewing the legality of countervailing duties, the Trump administration could still resort to Section 232 tariffs if those duties are overturned. "Vietnam needs to act quickly - gathering data and preparing persuasive arguments for negotiations with the US," he recommended. "Time is running out, as the new tariffs will take effect in just a few weeks."

Seafood facing difficulties

MAE figures show that Vietnam's seafood exports in the first nine months stood at \$8.12 billion, up 12.3 per cent year-on-year. China, the US, and Japan were its three largest markets, accounting for 19.8 per cent, 17.3 per cent, and 15.2 per cent of the total, respectively. Compared with the same period last year, export value to China surged 39.9 per cent, to Japan 11.1 per cent, and to the US 6.2 per cent.

In early September, the US National Oceanic and Atmospheric Administration (NOAA) under the Department of Commerce (DOC) sent a notice to the MAE announcing the rejection of equivalency recognition for 12 Vietnamese marine fishing practices under the US Marine Mam-

In response to the US announcement of Section 232 tariffs on furniture, the Embassy of Vietnam in the US identified three key priorities. First, policy dialogue and advocacy - to fully convey Vietnam's concerns and recommendations. Second, association-business cooperation - to maintain supply chains and seek balanced solutions. Third, affirming Vietnam's commitment - to ensure compliance with regulations and promote the sustainable development of the wood industry.

We hope that relevant ministries, particularly the Ministry of Industry and Trade and the Ministry of Agriculture and Environment, will continue to stand alongside the Embassy in negotiations with the US to seek tariff reductions for Vietnamese wooden products.

During negotiations, it is essential to demonstrate that Vietnam's wood supply chain is transparent, legal, and beneficial to both US businesses and con-

sumers. There is no transshipment from China; many products are semi-finished and completed in the US; and Vietnam also imports raw timber from the US, ensuring a balanced trade relationship.

In the long term, we should encourage Vietnamese enterprises to invest in small-scale production facilities in the US; symbolic projects that can create local jobs and strengthen our bilateral economic ties. ■



Mr. Do Ngoc Hung
Trade Counselor and Head of the Vietnam Trade Office in the US

mal Protection Act (MMPA). As a result, seafood caught under these fishing methods will be banned from import into the US starting January 1, 2026. This means many of Vietnam's key marine exports - tuna, swordfish, grouper, mackerel, mullet, crab, squid, and scad (horse mackerel) - will lose access to the US market.

The Vietnam Association of Seafood Exporters and Producers (VASEP) has stated that "Vietnam's marine fisheries sector has consistently complied with international frameworks in recent years, such as IUU (Illegal, Unreported, and Unregulated Fishing), SIMP (the Seafood Import Monitoring Program for the US), and FIP

(the Fishery Improvement Project) for crab and tuna. It has also implemented 'Dolphin Safe' certification for tuna export supply chains, alongside various legal and conservation programs for marine mammals. Yet it remains unclear why NOAA denied equivalency recognition for Vietnam's crab fisheries - even after they achieved an 'A' rating under FIP - and decided to ban exports to the US starting January 1, 2026."

In response, Minister of Industry and Trade Nguyen Hong Dien sent a letter to US Secretary of Commerce Howard Lutnick urging the DOC and NOAA to reconsider their decision to prevent serious disruptions to bilateral trade and protect the livelihoods of hundreds of thousands of Vietnamese fishermen and workers. He also emphasized that these decisions affect not only Vietnamese producers, exporters, farmers, and fishermen, but also US importers, workers, and consumers.

"The US is a very important market for Vietnam's seafood exports," said Mr. Nguyen Hoai Nam, General Secretary of VASEP. "To protect the interests of domestic seafood exploitation and aquaculture enterprises, VASEP recommends urgent short-term and long-term coordination measures from the government and relevant ministries and branches, supporting and accompanying the seafood exploitation industry to overcome, remove obstacles, and open up the US market for exploited seafood products, to minimize the impact or avoid the risk of having exports stopped from January 1, 2026." ■





At the heart of progress

Vietnam is leveraging education and international partnerships to equip its young people with knowledge, skills, and values for climate action and sustainable development.

▲ LINH NGOC

Education plays a crucial role in addressing climate change, by raising awareness, fostering sustainable thinking, and encouraging positive action within the community. At the Gaia Green Future Talk, held by the United Nations International School (UNIS) Hanoi, the Center for Natural Resources and Environment Communication - Ministry of Agriculture & Environment and the Vietnam's Eco-Friendly Products Manufacturer Association on October 16, experts and educators emphasized that through education - especially experiential learning and the integration of environmental content into curricula - students are given the knowledge, skills, and attitudes necessary to respond to climate challenges.

Education as a catalyst

According to the United Nations (UN), if current patterns of resource-intensive production and consumption continue, humanity will need the equivalent of three Earths

by 2050 to meet its living requirements.

Previously, at the launch of the Gaia SDG Experience, an interactive showcase demonstrating how a school integrates the Sustainable Development Goals (SDGs) into its teaching and community life, Deputy Minister of Foreign Affairs Dang Hoang Giang noted that the UN and the international community today face a range of unprecedented challenges. Conflicts, poverty, inequality, climate change, natural disasters, and other emerging crises continue to threaten collective efforts to achieve the SDGs. "These challenges call for strengthened commitment to multilateralism, cooperation, and bold action," he said. "In this context, the role of education has never been more critical. It is through education that we nurture empathy, wisdom, and a sense of shared responsibility in the next generation."

Ms. Pauline Tamesis, UN Resident Coordinator in Vietnam, said the UN was born 80 years ago to safeguard peace, defend human rights, and foster international cooperation. During that time, Viet-

nam took its journey towards independence, restoring peace while rebuilding the country. "Since then, the UN has accompanied Vietnam through its 'Doi Moi' (Economic Renewal) reforms," she said. "Fast forward to 2025, and Vietnam is a thriving country, demonstrating how investing in peace delivers development for its people."

From the perspective of an international educational organization, Dr. Elizabeth M. Gale, Head of School at UNIS Hanoi, said the role of education is to be the primary incubator for the UN's SDGs. This is achieved not by simply adding the goals to the curriculum but by weaving them into the fabric of daily learning. "Our responsibility as educators is threefold: first, to help students connect their classroom learning with real global issues; second, to encourage them to ask courageous questions about the future; and third, to empower them to take meaningful action, from local service projects to global advocacy," she added. "When we succeed, we are developing citizens who don't just know about the goals, but are equipped and inspired to achieve them."

“The future depends on today’s generation of students,” according to Associate Professor Nguyen Dinh Tho, Deputy Director of the Institute of Strategy and Policy on Agriculture and Environment (ISPAAE). The Law on Environmental Protection 2020, he said, mandates enhancing education efforts to raise public awareness, while also integrating climate change response training programs into the education system from preschool to university level.

Benefits from global collaboration

In Vietnam, global partnerships and collaborations with educational institutions are contributing to a more sustainable future for the younger generation. As one of only two UN international schools in the world, UNIS Hanoi has, since its founding, championed the shared values of inclusiveness, diversity, friendship, and mutual understanding. “For more than three decades, UNIS Hanoi has been a shining example of the strong partnership between Vietnam and the UN,” Deputy Minister Giang told the gathering. “Here I see future leaders - young Vietnamese and international students learning side-by-side, building friendships and embodying the very spirit of the UN. You are the ambassadors of solidarity, creativity, and hope that our world needs.”

Ms. Silvia Danailov, UNICEF Representative in Vietnam, said it is very important for UNICEF (the United Nations Children’s Fund) and the UN to work with educational institutions in Vietnam - schools at the primary, secondary, and higher education levels - so that together, in partnership not only with the government but also

with communities and people around the world, we can pursue the SDGs.

Partnerships, as reflected in SDG 17, are at the heart of progress towards peace, justice, and human rights, she continued, and educational institutions are central to the change we want to see in this world. It is remarkable to see how much Vietnam has invested in education to advance national and global goals. “Every child - every girl and every boy - deserves access to inclusive and quality education,” she said. “Educational institutions in Vietnam and around the world play a vital role in nurturing young generations, equipping them with the knowledge and values to build a future grounded in peace, human rights, and justice.”

In fact, compared to other countries in the region, Vietnam has both advantages and challenges in advancing sustainable development through education and international partnerships.

Ms. Tara O’Connell, UNICEF Chief of Education in Vietnam, said Vietnam’s economic development has been well documented, showing tremendous growth over the past three decades. One of its key strengths lies in the government’s consistent commitment to inclusive and forward-looking development, drawing on lessons and innovations from other countries while maintaining a global outlook.

However, she also pointed out that the main challenge ahead will be ensuring that this growth remains inclusive - that all people in Vietnam benefit from the country’s progress. In education, this means continuing efforts toward inclusive education, ensuring that children with disabilities, girls in mountainous areas, ethnic minority groups, and other vulnerable children are fully included and able to benefit from



“In this context, the role of education has never been more critical. It is through education that we nurture empathy, wisdom, and a sense of shared responsibility in the next generation.”

Mr. Dang Hoang Giang

Deputy Minister of Foreign Affairs

educational advancements. “This commitment to inclusion will be crucial as Vietnam continues to move forward with its economic and social development, ensuring that no one is left behind,” she noted.

A new survey released in July by Manpower Vietnam showed that 91 per cent of businesses do not have enough “green” human resources to achieve sustainability goals, with the supply shortage forecast to last until 2030. Meanwhile, it is notable that “limited green and community-based job opportunities” are emerging as the top challenge preventing workers in Vietnam from transitioning to more meaningful work.

Increasing the supply of green human resources, Manpower Vietnam believes, requires the consensus of the government, schools, and enterprises. In the current context, when all industrial sectors are moving towards green transformation, equipping students with this knowledge is absolutely necessary. Organizing extracurricular activities, competitions, and initiatives is essential to help students practice sustainable development thinking, while also applying professional knowledge and skills to solve practical problems.

On the school side, Dr. Gale affirmed that the challenges the SDGs address are not siloed, they are deeply interconnected, and so our solutions must be as well. Therefore, Vietnam should prioritize creating an educational framework that champions interdisciplinary learning, where students see the connections between science, economics, and society. Secondly, there must be a focus on action-oriented learning. “We must connect knowledge to impact, encouraging students to apply what they learn to real-world projects in their own communities,” she said. ■





Targeted approach

Vietnam has adopted an Emission Trading System (ETS) strategy to guarantee sustainable emission reductions into the future.

 **NHI ANH**



In line with global trends, Vietnam has adopted an Emissions Trading System (ETS) to help it meet its commitments under the Nationally Determined Contributions (NDC) and its target of net-zero emissions by 2050. It has been building a legal foundation for establishing and operating an ETS for greenhouse gas (GHG) quotas and trading international carbon credits. To effectively implement and operate these mechanisms, it is necessary to study management options and assess their impact to ensure approaches are selected that maximize benefits while minimizing any negative effects.

ETS roadmap

At a recent workshop presenting the results of impact assessment research on Vietnam's

ETS and carbon credit system, experts said the study identified management options for the pilot phase of the ETS. These include defining the scope, establishing total quotas, allocating quotas to each facility, and using carbon credits for offsetting.

Ms. Nguyen Hong Loan, Director of the Green Climate Innovation Co., Ltd., said the impact assessment scenarios were based on international experience and Vietnam's direction, focusing on three pilot sectors: thermal power, steel, and cement. "These sectors account for nearly 43 per cent of the national greenhouse gas inventory," she explained. "This is relatively high coverage compared to ETS systems worldwide."

The study developed and assessed scenarios for the ETS pilot phase, linked to Vietnam's NDC greenhouse gas reduction targets. These include unconditional national targets (NDC without conditions), conditional NDC (targets achievable with international support), and targets achievable with international support combined with the goals in the Just Energy Transition Partnership (JETP) political declaration.

For each scenario, the study evaluated impacts to determine how businesses and economic sectors could meet these targets both without ETS and with ETS, assuming offset credit usage rates of 10 per cent, 20 per cent, and 30 per cent. Without ETS, companies must fully invest in emission reduction measures to meet NDC targets. With an ETS, they can choose the best option: purchase quotas, use credits, or invest directly in emission reduction measures.

Analysis shows that an ETS plays a crucial role in reallocating the burden of GHG reductions, giving companies more flexibility between technology investment and financial instruments, particularly in the thermal power sector.

Mr. Ho Cong Hoa from the Academy of Policy and Development reported that under the ETS scenario linked to the unconditional NDC, total compliance costs fall from \$420.5 million without ETS to \$68.9 million with ETS, at a 30 per cent offset rate. Under the conditional NDC scenario, costs fall from \$1.297 billion to \$879.8 million.

An ETS can also cut GDP losses, lessen any impact on consumption, and ease inflationary pressure. Under the conditional NDC scenario, an ETS with a 30 per cent offset rate further reduces the GDP impact by approximately 0.0124 percentage points during the 2025-2030 period, improves the impact on consumption by 0.0186 per cent, and lowers consumer price increases by 0.0049 per cent compared to a scenario without an ETS.



"General trends show that ETS and other carbon pricing tools, such as carbon taxes, are becoming increasingly popular, effective, and powerful policy instruments. They help countries reduce greenhouse gas emissions and contribute to achieving the climate goals in the Paris Agreement."

Mr. Nguyen Tuan Quang

Deputy Director of the Department of Climate Change at the Ministry of Agriculture and Environment

Market demand for carbon credits at a 30 per cent maximum offset rate is projected at 56-62 million credits a year, while the market's maximum absorption capacity is only 15.8-16.3 million credits a year. In all scenarios, coal-fired power remains the main purchaser of credits, accounting for 85-90 per cent of total market transactions.

The study concludes that scenarios aligned with conditional NDC and the JETP achieve the best environmental and social outcomes but come with higher compliance costs, whereas scenarios based on unconditional NDC are more economically feasible.

This indicates that selecting ETS management options must balance ambitious emission reduction targets, social equity, and economic feasibility to support Vietnam in achieving sustainable emission reduction goals.

Managing risks and rewards

Regarding management options for trading carbon credits on the international market, the study developed and assessed approaches based on two factors: the list of activities eligible for international transfer approval and the proportion of mitigation results retained to ensure national NDC targets.

The research team proposed two options for impact assessments of international carbon credit transfers.



Option 1 (S20) only allows the transfer of credits from 20 measures that fully contribute to the conditional NDC, with a transfer rate of 90 per cent and a 10 per cent reserve retained.

Analyzing this option, Ms. Loan noted that international experience shows that although measures can be identified as highly additional, this may change over time as the NDC is updated. Additionally, a certain reserve must be kept to ensure that national unconditional NDC targets are met.

Option 2 (S56) allows 56 measures to trade international carbon credits, including 20 measures fully contributing to the conditional NDC and 36 measures contributing to both conditional and unconditional NDC. This option carries a risk of overselling: if too high a transfer rate is allowed, companies may sell all credits, leaving none for the unconditional NDC or the

According to the World Bank's annual report, the number of ETS systems has steadily increased, from 25 in 2020 to 37 in 2025. Correspondingly, the proportion of global greenhouse gas emissions covered by these tools has risen from 8 per cent to 23 per cent. Global revenue from ETS systems increased from \$25 billion in 2020 to \$69.1 billion in 2024.

domestic carbon market. Therefore, the study proposed two maximum transfer rates: 50 per cent and 70 per cent.

Analysis shows that participation in the international carbon market provides significant financial and foreign exchange benefits for Vietnam. Mr. Hoa said annual revenue ranges from \$59 million to \$522 million under S20 and from \$468.2 million

to \$1.9 billion under S56.

A transaction fee of 2 per cent of revenue could contribute \$1.2 to \$10.4 million to the State budget. GDP growth will range from 0.013 per cent to 0.082 per cent under S20 and 0.068 per cent to 0.32 per cent under S56, depending on price scenarios.

Experts believe that expanding measures for international credit trading under S56 yields greater economic benefits than S20. The industrial, energy, and waste management sectors benefit most due to lower GHG mitigation costs. In contrast, agriculture and forestry measures are costlier and face financial risks if credit trading is limited to a low rate, of 50 per cent or less.

However, a high transfer rate of 70 per cent under S56 may risk overselling and fail to achieve unconditional NDC targets. Experts emphasize that managing carbon credit trading requires balancing economic benefits with Vietnam's emission reduction goals.

The results of simulations show that S20 contributes only marginally to the domestic carbon market and NDC targets, while S56 shows significant potential to support NDC targets, especially with a 50 per cent retention rate, which ensures unconditional NDC goals and leaves room for conditional NDC. Naturally, this comes with trade-offs in economic benefits due to price differences between domestic and international carbon credit markets.

Strategic path

To ensure the domestic carbon market meets demand and to leverage benefits from international carbon credit trading, the study proposes an integrated management roadmap in three phases.

Phase 1 (2025-2028): In this initial stage, Vietnam should prioritize market stability and economic feasibility. Companies may offset up to 30 per cent of their emission reduction obligations using carbon credits. For international transactions, Vietnam will retain 50 per cent of total credits to serve national goals. This approach provides the flexibility needed to build market confidence while protecting unconditional NDC targets.

Phase 2 (after 2028): Once Monitoring, Reporting, and Verification (MRV) systems and market institutions are fully developed, regulations will tighten. Domestic offset limits will gradually fall to 20 per cent, and emission caps will be adjusted to align with more ambitious climate targets (conditional NDC). International carbon credit trading will still retain at least 50 per cent of credits to ensure consistency between domestic and international markets.



Phase 3 (2030 onwards): The carbon market will align with Vietnam's most ambitious climate targets (conditional NDC and JETP). Offset limits will fall to 10 per cent, incentivizing companies to reduce emissions directly at the production level.

Additionally, the retention rate for international credit trading will fall to 30 per cent, increasing environmental ambitions while ensuring sufficient credits to meet national targets. Revenue from credit transfers will be strategically reinvested in sectors with high emission reduction costs and to support a just transition.

Dr. Robert Ritz from Cambridge University, an expert in global carbon pricing, predicted that global carbon prices could double in the next 4-5 years due to new ETS and expanded sector coverage with higher carbon prices and additional mech-

anisms like the EU's Carbon Border Adjustment Mechanism (CBAM). "This is an opportunity for countries to cooperate and learn from each other," he said. He also raised several issues regarding the pilot ETS system: MRV efficiency, changes in corporate behavior toward cleaner production, price volatility, risk management by participants, and impacts on competitiveness and profits across sectors such as cement and steel within supply chains.

Regarding carbon market design, he highlighted the importance of predictable carbon pricing and a clearly defined price range. He also noted that timing and approach for expanding sector coverage in the future, as well as the strategic use of future auction revenues to support green transition, are critical considerations. To adapt to CBAM, he questioned whether

Vietnam should design its own "domestic CBAM" mechanism to generate revenue and improve the trade balance.

Ms. Marianne Tan, Associate Director, Policy and Strategy, at Swiss carbon finance consultants South Pole, emphasized that host countries must carry out key tasks to participate effectively in Article 6 of the Paris Agreement and build confidence for buyers and project developers. This includes establishing organizational and institutional mechanisms to meet participation requirements in the United Nations Framework Convention on Climate Change (UNFCCC) and demonstrate readiness to monitor projects and implement corresponding adjustments. National priorities should also be defined, for example by sector, along with permitted international trading volumes and retention rates to meet targets.

At a recent consultation workshop on international GHG mitigation results and carbon credits, the Department of Climate Change at the Ministry of Agriculture and Environment (MAE) noted that international trading must ensure Vietnam's compliance with NDC commitments while maintaining domestic market stability.

To further improve policies for the effective operation of the carbon market, the government has tasked the MAE to lead the drafting of a decree on the international exchange of GHG mitigation results and carbon credits, while the Ministry of Finance is responsible for drafting a decree on the domestic carbon exchange. ■

To realize these commitments and build a carbon market, Vietnam has developed and enacted an important legal framework.

- ▶ The Law on Environmental Protection 2020, for the first time, regulates the "Organization and Development of the Carbon Market", in Article 139.
- ▶ The government issued Decree No. 06/2022/ND-CP and Decree No. 119/2025/ND-CP, the latter of which amends and supplements Decree No. 06/2022/ND-CP, establishing a specific roadmap for carbon market development: a pilot phase from now to the end of 2028 and official operations starting in 2029, with a target to pilot a carbon exchange as early as 2025.





Uncertainties persist

Vietnam remains a rising manufacturing hub but continues to grapple with a host of issues, according to a recent Roland Berger report.

NGOC LAN

The latest report from strategy consultants Roland Berger, “Go East! - Asia’s Rise as the World’s Supply Chain Hub”, noted that supply chains are shifting from West to East. “Southeast Asia is benefiting from trade realignment and cost advantages, building a more autonomous network, setting the stage for a multi-polar landscape,” the authors wrote. Vietnam, along with countries such as Malaysia and Thailand, has indeed emerged as a key destination for supply chains, offering lower operating costs and favorable policy incentives.

Rising manufacturing hub

Vietnam ranks at the top in the Southeast Asian region, with 6.6 per cent manufacturing GDP growth from 2019 to 2023, and now derives roughly one-quarter of its GDP from manufacturing and continues to expand, with \$38 billion in foreign capital last year going towards building the country’s first

chip fabs (fabrication plants) and scaling VinFast’s electric vehicle (EV) ambitions.

Notably, sector-by-sector, the map is also being redrawn. Manufacturing and processing FDI climbed from \$20 billion in 2020 to \$38 billion in 2024, with more than 60 per cent targeting semiconductors and electronics. This capital is projected to lift Vietnam’s chip assembly, testing, and packaging (ATP) share to 8.5 per cent by 2032. In parallel, VinFast plans to triple battery electric vehicle (BEV) output from 300,000 units in 2025 to 1 million units in the longer term.

Vietnam has also revised its Law on Investment to encourage tech transfer, attracting foreign investment in crucial sectors. Government roadmaps call for expanding semiconductor capacity from one manufacturing facility in 2024 to three by 2040, alongside 300 design houses and 20 packaging plants. “This signals Vietnam’s intent to move beyond assembly towards full value chain participation in chips, EVs, and smart electronics,” the report noted. “Together, these trends underscore

Vietnam’s strategy of pairing high-tech manufacturing scale with EV localization and becoming a critical node in Asia’s reconfigured supply chains.”

In addition, Vietnam imports most non-energy raw inputs such as cotton, synthetic fiber, and silicon wafers. These are converted into processed fabric, printed circuit boards (PCBs), and finished goods for export, making the country ASEAN’s largest textile importer and a top exporter to the US, which accounted for 37 per cent of Vietnam’s textile exports in 2023. The country also benefits from broad access to imported textile and chip inputs, tariff-cutting trade pacts such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the EU-Vietnam Free Trade Agreement (EUVFTA), and the Regional Comprehensive Economic Partnership (RCEP), and a cost-competitive assembly base that attracts major electronics players and fuels high-tech FDI.

Regional integration under RCEP amplifies these flows: components shuttle

from Batam in Indonesia to Binh Duong province in Vietnam, then to Penang in Malaysia for final testing and packaging before a single export declaration is filed. "At the same time, global enterprises are adopting China Plus One strategies to reduce dependency and mitigate China-related risks, making Southeast Asia a central operational hub," the report stated.

Challenges exist

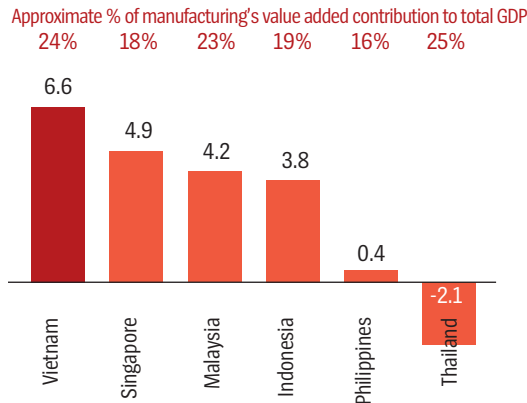
According to the report, Vietnam is already a global Top 3 apparel exporter and is carving out an EV niche through VinFast. Yet it remains heavily reliant on imported cotton and semiconductor materials, lacks large-scale textile finishing and wafer fabrication, and faces talent shortages in robotics and advanced engineering - all of which could be exacerbated by tighter ESG (environmental, social, and governance) rules and tariff shifts.

The report also pointed out that AI exports grew at a 6.5 per cent compound annual growth rate (CAGR) between 2021 and 2024 but remain highly concentrated. The US accounts for about 30 per cent and China about 17 per cent, leaving Vietnam exposed to external shocks. Though its Logistics Performance Index ranking improved, to 43rd in 2023 from 53rd in 2012, volatility over the years reveals lingering infrastructure and process gaps that must be closed to safeguard supply chain resilience.

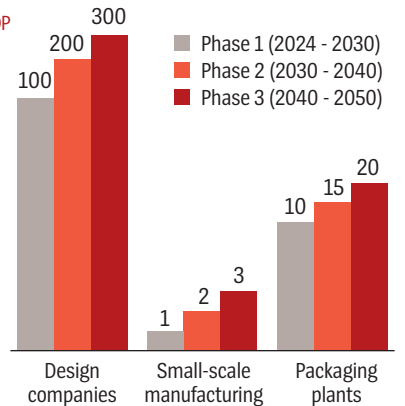
In fact, intermediate goods are mainly shipped to Asian countries - including Vietnam, Singapore, China, the Philippines, and India - where they are processed or

Vietnam's role in Asia's supply chain reconfiguration

Manufacturing's contribution to GDP growth (2019-2023) and share of GDP (2023) in ASEAN countries



Vietnam's semiconductor development plan, 2024-2040 (unit numbers)



Source: Euromonitor, World Bank, ASEAN Stats, ASEAN Briefing, Roland Berger

assembled. Finished goods, by contrast, target advanced markets with strong purchasing power, notably the US, Canada, Germany, Japan, China, and the UK. The presence of the US and China in both categories highlights their dual role as manufacturing centers and consumer markets.

Tariffs are also a major challenge. The report mentioned that rising US duties on Vietnamese and Thai exports - now four to five-times higher than a year ago - have pushed multinationals to fracture previously neat footprints, spreading lines across lower-tariff neighbors, stalling projects in exposed markets, and redesigning stock-keeping units (SKUs) to comply with preferential trade rules.

Vietnam is on a strong development path and is likely to become a high-income country before 2045. According to a World Bank (WB) forecast, it will officially surpass

the lower middle-income level in fiscal year 2026 and join the upper middle-income group. To achieve the goal of becoming a high-income country by 2045, the country needs to maintain an average GDP growth rate of at least 5 per cent a year during the 2025-2044 period.

Given the challenges, the Roland Berger report also suggests that sustaining momentum will hinge on easing logistics bottlenecks and reducing dependence on a US-China export split that leaves earnings vulnerable to tariff shocks.

For example, Vietnam is reinforcing its appeal through three pillars. The first is an amended Law on Investment offering tax breaks, land rental reductions, and streamlined approvals. The second is an aggressive build-out of industrial parks and economic regions that supply turnkey facilities and fiscal perks. The third is a 2021-2030 infrastructure master plan expanding expressways, high-speed rail, deep-water ports, and airports.

Average US duties on Vietnamese goods have also surged, squeezing margins and placing electronics, textiles, footwear, and agriculture at greatest risk. Manufacturers will need to invest in technology upgrades to offset cost inflation, while ASEAN buyers could divert sourcing if tariffs persist.

For corporate strategists, the lesson is clear: supply chain resilience needs to be built in advance through the dual sourcing of critical parts.

Mr. Denis Depoux, Global Managing Director at Roland Berger, said regionalized value chains are harder to manage but provide the resilience global companies need in a fragmented, uncertain world. Meanwhile, Mr. John Low, Managing Partner at Roland Berger Southeast Asia, believes competitiveness now depends on agility within a diverse, multipolar environment. ■

Southeast Asia is transforming into a \$3 trillion multi-hub supply chain platform for production and trade, powered by China Plus One strategies and the Regional Comprehensive Economic Partnership (RCEP) free-trade zone, with:

- ▶ Low-cost manufacturing advantages;
- ▶ Resource-rich countries;
- ▶ Emerging logistic hubs beyond Singapore;
- ▶ Tariff resiliency.



Unlocking this potential, however, requires navigating uneven infrastructure, talent shortages, stricter sustainability rules, and geopolitical uncertainties.

Infrastructure gaps in ports, logistics, and power grids continue to constrain efficiency, while fragmented regulations slow integration across ASEAN markets. Talent shortages are emerging as a critical barrier to scaling automation and capturing mid-tier technology opportunities. At the same time, policy uncertainty persists as the region navigates a delicate balance between US or China-led supply chain blocs.

To sustain momentum, the strategic imperatives are clear. Building infrastructure resilience - from logistics corridors to power networks - will be vital to support regional competitiveness. Investment in upskilling and digital adoption is essential to shift into higher-value manufacturing. Equally important is regional standardization under ASEAN, which can unlock scale efficiencies and reduce trade friction.

Finally, companies must position for dual supply chain blocs while leveraging the RCEP to secure growth.

Source: Roland Berger



Shaping sustainable consumption

Foreign and local retailers in Vietnam are embracing circular economy models and driving sustainable consumption amid growing awareness about green issues.

▲ NGOC LAN

As its e-commerce landscape continues to boom, Vietnam's retail sector is undergoing a major transformation that requires businesses to swiftly adapt by innovating their business models. One of the most prominent trends today is the adoption of the circular economy model, an approach that not only optimizes resource use but also enhances competitiveness and meets the growing demand for sustainable consumption.

Many foreign retailers operating in Vietnam have proactively integrated circular economy principles into their value chains, but several challenges remain that must be addressed to maximize the effectiveness of the model.

At the heart of circular change

Mr. Shin JuBack, General Director of Lotte Mart Vietnam, affirmed that the circular economy has become an inexorable trend to address resource crises, environmental pollution, and climate change. Vietnam has made strong commitments in this transition, and the retail sector plays a vital role. As a direct bridge between producers and consumers, retailers hold a unique position in shaping sustainable consumption habits, minimizing single-use plastics, and promoting reuse and recycling.

Specifically, through supermarket systems, retailers can implement practical

initiatives such as encouraging the use of eco-friendly bags, providing electronic receipts, and establishing collection points for packaging and recyclable materials.

More importantly, thanks to their scale and wide-reaching influence, retailers can also spread the message of green living and turn circular economy principles into everyday consumer habits. "In this sense, retail is not only an important link but also a driving force that makes the circular economy more practical and sustainable in Vietnam," Mr. JuBack emphasized.

Meanwhile, Ms. Nguyen Thi Ngoc Hue, Senior General Manager People & Brand Strategy, Corporate & Supplier Quality Management at AEON Vietnam, noted

that consumers are becoming increasingly aware of choosing green and environmentally-friendly products when shopping. As a result, they are willing to pay a slightly higher price for green products.

Mr. Chalermchai Pornsiriapiyakool, Head of International Corp Affairs and CSR at Central Retail Vietnam, added that many young families and students are becoming more conscious of environmental issues and seek to choose sustainable products. This generation, he said, is more open to new habits, whether reusing shopping bags or opting for local products with eco-friendly packaging.

With a population of over 100 million, Vietnam is one of the largest and most promising consumer markets in the region and the world. Figures from the National Statistics Office at the Ministry of Finance put total retail sales of goods in the first nine months of 2025 at an estimated VND3,947.9 trillion (\$155 billion), up 8.3 per cent year-on-year. Several localities recorded impressive growth: Da Nang 9.4 per cent, Can Tho 8.8 per cent, Hanoi 8.4 per cent, and Ho Chi Minh City and Hai Phong both 8.3 per cent.

Retailers agree that Vietnam's large, urbanized, and tech-savvy population, which is increasingly open to sustainable lifestyles, represents a significant opportunity to advance circular economy models. "Their openness motivates retailers like us to scale up circular economy practices," said Mr. Pornsiriapiyakool.

Foreign retailers also see opportunities within domestic supply chains. "Vietnam's strong manufacturing base, with many local enterprises ready to join green supply chains and develop eco-friendly packaging, offers us great advantages," shared Mr. Shin.

Retailers agree that Vietnam's large, urbanized, and tech-savvy population, which is increasingly open to sustainable lifestyles, represents a significant opportunity to advance circular economy models.

Beyond market potential, proactive government efforts also play a crucial role. According to Ms. Nguyen Thi My Hung, Head of Corporate Development at MM Mega Market Vietnam, clear national strategies on sustainable development and the circular economy have created a strong policy framework. Furthermore, Vietnam's participation in next-generation free trade agreements, which contain commitments to environmental and climate action, will accelerate the transition towards a circular economy.

Challenges to confront

During the digital and green transition, the first challenge AEON Vietnam faced was the high initial investment cost. Ms. Hue explained that such a transformation requires significant investment in technology, infrastructure, and human resources, which substantially increases short-term operational costs. The key question is therefore how to balance short-term efficiency with long-term goals. "To overcome this, we need a comprehensive strategy that ensures alignment in understanding, imple-

mentation, and integration of sustainability practices across all departments," she said.

When working with suppliers, Ms. Hung noted that the biggest challenges businesses face are high costs and unstable supply. "We believe the key to making green packaging a mainstream trend lies in raising consumer awareness," she said. "Once customers fully understand the value of environmentally-friendly products, the market will naturally drive growth, reduce costs, and expand supply."

For Central Retail Vietnam, the high cost of biodegradable packaging compared with traditional plastic forces retailers to carefully assess customers' purchasing power. "Sustainable products remain limited in Vietnam, making prices higher due to the lack of scale," Mr. Pornsiriapiyakool said.

Beyond cost, consumer behavior also poses a challenge for retailers in promoting the circular economy, as a segment of consumers remain reluctant to change traditional shopping habits. Many customers are also still accustomed to the convenience of single-use products like plastic bags and straws. Thus, changing these habits requires time, patience, and continuous awareness campaigns.

Other difficulties identified by retailers include a shortage of skilled workers, underdeveloped recycling and collection infrastructure, and a lack of clear standards and certifications for green packaging, making it difficult for businesses to assess and choose the most suitable solutions.

To address these challenges, retailers agreed that close and coordinated collaboration between multiple stakeholders is essential. According to Ms. Hue, promoting sustainability across the supply chain requires consistency and close cooperation from all parties, especially suppliers and manufacturers - the largest group involved.

"While several large enterprises have adopted comprehensive sustainability programs, 97 per cent of Vietnamese businesses are still small and medium-sized, which calls for the larger enterprises to accompany and support their smaller counterparts to spread and raise sustainability standards across the entire supply chain," she said.

Mr. Pornsiriapiyakool also emphasized that there is no quick solution to this issue, and believes success depends on collaboration between four key pillars: retailers, suppliers, the government, and the community. "Retailers like us can offer sustainable alternatives and conduct awareness campaigns, while manufacturers should invest in more eco-friendly products," he explained. "The government plays a crucial role by establishing clear policies, communication, and incentives. Finally, the community transforms awareness into concrete actions. When all four pillars work together, change becomes not only possible but also sustainable." ■



A complete capital

Hanoi's urban planning aims to turn the capital into a smart, modern, green, clean, and safe city marked by sustainable development.

NAM HUYEN



Along its journey towards modern urban development, Hanoi has been gradually transforming in a bid to become a green, smart city with a strong local identity. During this process, the Hanoi Party Committee's Program No. 05-CTr/TU for 2021-2025 is seen as a "guiding compass", in which Hanoi's Capital Planning for 2021-2030 with a vision to 2050 and the Adjustment of the General Capital Plan to 2045 with a vision to 2065 are key priorities for the city this term. Approved plans have already shaped new development spaces, and Hanoi is now driving their implementation through targeted programs and action plans.

At a press briefing on October 8, ahead of the city's 18th Party Congress (2025-2030 term), Permanent Deputy Secretary of the Hanoi Party Committee Nguyen

Van Phong highlighted the significance of this "planning duo", with Program plans creating new spaces, drivers, and values to transform Hanoi into a smart, modern, green, clean, and safe city and foster rapid, sustainable development.

Green and smart vision

Hanoi aims to be a modern city by 2030, a regional connectivity hub, a national center for integrated services, and an attractive international economic and cultural destination. By 2045, it is envisioned as a cultural and smart ecological capital, a center for finance, services, science, technology, and human resources development, as well as a venue for major political, eco-

nomie, and cultural events in Asia and beyond. Looking ahead to 2065, Hanoi is expected to drive development across the Red River Delta and Northern Key Economic Region, become globally connected, and achieve a high standard of living with comprehensive, distinctive, and harmonious social, economic, and cultural growth.

Hanoi will remain the country's political-administrative center and a hub of culture, education, science, and innovation. It will be a smart, modern, green, safe, and livable city, with strong regional influence, serving as an economic, trade, tourism, and commercial center in Southeast Asia and the Asia-Pacific region.

The city's development will follow a polycentric, multi-nodal structure with five urban regions and five major spatial axes: the Red River and Duong River, as

central green and cultural spaces; Ho Tay - Ba Vi and Ho Tay - Co Loa, linking heritage sites, traditional villages, and western districts; Nhat Tan - Noi Bai, supporting smart urban and economic development and connecting with northern provinces; and southern Hanoi, linking cultural corridors, new urban areas, and transport networks, including national highways and expressways.

Infrastructure development will focus on industrial clusters, commercial and tourism services, offices, education, health-care, culture, and sports. Land will be reserved for expansion, satellite towns, and ecological townships, to create new functional centers, attract international investment, and support phased socio-economic growth.

In the central urban area, Hanoi plans to develop high-standard commercial-service zones, modern commercial streets, pedestrian areas, and night-time economy initiatives linked to tourism. Support services, trade fair and exhibition facilities, shopping centers, and high-quality entertainment zones will also be developed, alongside wholesale markets and logistics hubs. Tourism corridors will be established along the Red and Duong Rivers, the Day and Tich Rivers, and the To Lich and Nhue Rivers, integrating tourism infrastructure, amusement and themed parks, tourism-production models, and accommodation facilities.

Hanoi also aims to become a national medical hub, with world-class healthcare services linked to medical tourism and wellness. Around 650-700 ha will be allocated for hospitals and high-quality research, training, and treatment facilities.

Planning the future

To implement Hanoi's urban plans, on April 15, 2025, the city issued Decision No. 2059/QĐ-UBND on the Hanoi Capital Planning for 2021-2030 with a vision to 2050. The plan

sets 20 key indicators, 70 priority and breakthrough task groups, 227 work items, and 201 priority projects and tasks. The Hanoi People's Committee required departments, agencies, local authorities, and relevant units to review, draft, and adjust urban, rural, and technical plans to ensure alignment with the Capital Planning.

On August 13, 2025, Hanoi issued Decision No. 4202/QĐ-UBND to implement the first phase of the adjustment of the General Capital Plan to 2045 with a vision to 2065. The decision requires reviewing and updating underground space plans, technical infrastructure sectoral plans, general commune plans, urban sub-zone plans, and functional sub-zone plans to ensure comprehensive coverage. Suitable elements from existing plans are retained while minimizing conflicts with ongoing investment projects. Plans are also aligned with the new two-tier local government structure.

The Hanoi Authority for Urban Planning and Architecture is currently reviewing, drafting, and adjusting 50 general commune plans, urban sub-zone and functional plans, and technical infrastructure plans. For plans covering areas of two or more communes, the city government has authority over drafting and approval. Guidance has also been issued to commune authorities to prepare, evaluate, and approve plans independently, including budget and contractor selection.

According to the draft report for Hanoi's 18th Party Congress on October 15-17, the city has approved all 83 urban plans, 13 construction tasks, and four major planning projects, issuing key regulatory documents on architectural and planning management. Coverage of general and sub-zone plans has reached 100 per cent, with quality improving alongside tighter control over adjustments. Transportation infrastructure has been prioritized, with key inner-city projects completed to reduce congestion. Investment procedures and construction have



also accelerated for ring roads, national highways, and major bridges over the Red River.

Nonetheless, city leaders note that planning, infrastructure development, construction, and urban management still fall short of the requirements of a modern, civilized capital. Issues include scattered and unfocused urban development, incomplete underground and regional transport infrastructure, and delayed major projects.

Looking ahead, it will focus on cementing, updating, and adjusting both the 2021-2030 Capital Planning and the 2045 General Capital Plan, emphasizing actionable solutions, timelines, standards, and project lists to attract domestic and foreign investment. Special attention will be given to underground spatial planning and the development of a smart, green, and sustainable urban ecosystem.

The capital will continue adding modern infrastructure,

developing smart urban clusters connected to the city center and northern and western urban areas, and integrating digital infrastructure, smart transport, urban data, green energy, and digital governance. Urban development will follow a Transit-Oriented Development (TOD) model, including synchronized urban areas, old apartment renovations, social housing, greening historic inner-city areas, and gradual relocation of polluting facilities, universities, and hospitals away from the center. Technology will be applied to housing, land, construction, transport, waste management, and urban civility.

By 2030, Hanoi aims to become a "Cultured, Civilized, and Modern" city - a central driver for the Red River Delta, Northern Key Economic Region, and national development, leading Vietnam into a new era of prosperity and contributing decisively to national development goals through 2030 and the vision towards 2045. ■

seamaster paint

Halal Certified Paint

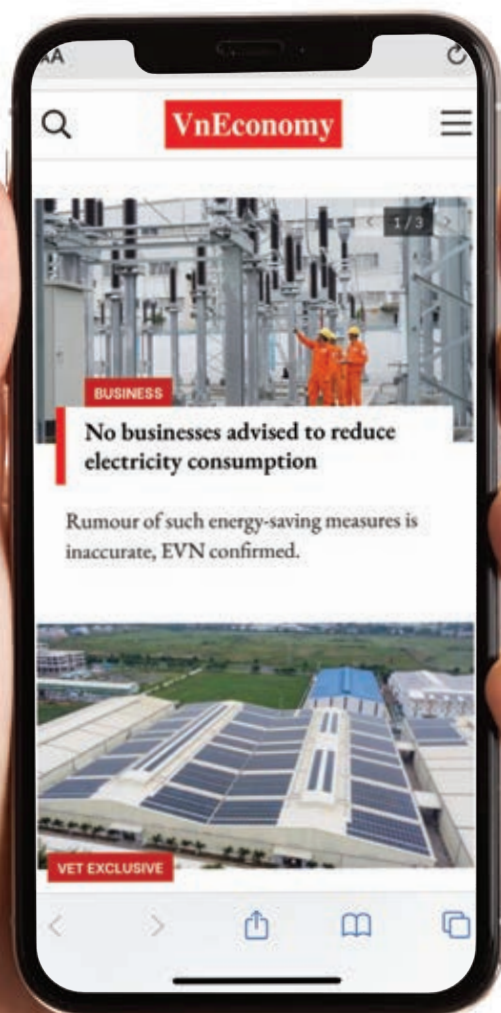
No.001.70082620517

BEST PAINT BRAND IN SINGAPORE




VnEconomy

Connected to Business Success

En.vneconomy.vn - English-language news site of VnEconomy
A trusted resource for economic information on business insights and success



- Most updated, comprehensive economic news about Vietnam and the world
- Reliable news source for foreign business leaders and the expat community in Vietnam
- User-friendly and free access

-  <https://www.linkedin.com/company/vneconomy-vn/>
-  <https://www.facebook.com/vneconomy.vn>
-  <https://www.youtube.com/@vneconomymedia5190>



SCAN TO READ

HDBank
Committed to your best returns



Experience your ultimate
dream life

*Why
hesitate?!*

HDBank Vietjet Credit Card Special Privileges

FREE 100%

annual fee
on 1st year

discount
up to **50%**

shopping, Golf
& travel services

CASH BACK

& earn loyalty point*
From buying airline
ticket






SCAN
&
APPLY NOW

*for information, please visit: www.hdbank.com.vn



► **Key Features of HDBank Debit Cards**

-  **FREE cash withdrawal** at more than 300 HDBank ATM
-  **24/7 payment process** at more than millions merchants
-  **Earn interest** on account balance




Vietcombank



**Joint Stock Commercial Bank for
Foreign Trade of Vietnam**

**Together
for the future**

Website: www.vietcombank.com.vn; Hotline: 1900 54 54 13