ASIA-PACIFIC

CHINA

Private firms hiking R&D spending

Government officials and industry experts say China's top private enterprises are ramping up their research and development expenditures, reflecting a shift toward innovation to become more competitive on the global stage.

As per a report released by the All-China Federation of Industry and Commerce on Monday, total 2023 R&D expenditures for the top 1,000 private firms reached 1.39 trillion yuan ($197.5 billion), up 4.78 percent year-on-year. They accounted for 41.88 percent of the nation's overall R&D spending.

The manufacturing sector emerged as a major contributor, with total R&D expenditures surpassing 1 trillion yuan last year. The highest R&D investments were observed in the computer and electronics sector, which invested 318.47 billion yuan with an impressive average R&D intensity of 8.34 percent. It was closely followed by the internet and related services sector at 245.07 billion yuan and the automotive industry at 142.56 billion yuan.

Notably, China's R&D efforts are increasingly narrowing the gap with other leading economies. Some 217 of the global top 1,000 R&D-invested firms are from China, with total R&D investments amounting to 1.27 trillion yuan. The year-on-year growth rate of R&D expenditures for these top 1,000 private enterprises last year was 12.78 percent, surpassing the growth of 6.54 percent for the global top 1,000 and 7.68 percent for the European Union. The average R&D intensity for the top 1,000 private enterprises was 3.58 percent, 0.31 percentage points higher than that of the top 1,000 firms in the EU.

China will scale up R&D expenditures by more than 7 percent annually during the 14th Five-Year Plan (2021-25) period. Consultancy McKinsey & Co said in a report that such a growth target will make China the world's largest R&D spender.

https://www.chinadaily.com.cn

R&D tax deductions

More than 629,000 companies across China have benefited from a total of 3.45 trillion yuan ($489 billion) in R&D expense tax deductions last year, said the country's top tax authority in a recent press conference. Huang Yun, spokesperson of the State Taxation Administration, said that last year, around 405,000 high-tech companies enjoyed R&D tax deductions totalling 2.83 trillion yuan, marking a 15.1 percent year-on-year increase. "On average, the deduction amount per high-tech enterprise was 2.5 times that of non-high-tech companies," he emphasized.

The R&D tax deduction is a preferential tax policy that allows companies to save more by way of a certain percentage of their R&D expenditure. Huang said that such a policy also effectively supported private enterprises in their innovation endeavors. Last year, private companies benefited from a total of 2.59 trillion yuan from deductions, up 12.5 percent year-on-year. It also accounted for 75 percent of all enterprise tax deductions during the period, he said.

According to Huang Yun, the spokesperson and director of the General Office of the State Taxation Administration, data from the 2023 annual corporate income tax settlement, which concluded in the first half of this year, revealed that approximately 629,000 enterprises across China benefited from R&D expense deductions totalling 3.45 trillion yuan. This policy has injected significant momentum into accelerating the development of new productivity.

On one hand, the policy strongly supported the innovation and development of high-tech enterprises. In 2023, around 405,000 high-tech companies enjoyed R&D tax deductions amounting to 2.83 trillion yuan, marking a 15.1 percent year-on-year increase. On average, the deduction amount per high-tech enterprise was 2.5 times that of non-high-tech companies. On the other hand, the policy also effectively supported private enterprises in their innovation endeavors, with private companies benefiting from deductions totalling 2.59 trillion yuan in 2023, a 12.5 percent increase year-on-year, accounting for 75 percent of all enterprise deductions.

"Moving forward, the tax authorities will fully implement the guiding principles of the 20th Central Committee's Third Plenum, further enhancing R&D expense deductions and other policies that support technological innovation, to fully support the innovative development of various enterprises and better cultivate and expand new productivity," Huang Yun emphasized.

https://www.chinadaily.com.cn

The added value of patent-intensive industries

The added value of China's patent-intensive industries in 2022 reached 15.32 trillion yuan (about 2.15 trillion U.S. dollars), contributing 12.7 percent to its GDP, according to a report released by the country's top intellectual property regulator.

The latest data shows that China's patent-intensive industries exhibit strong innovation capabilities and development potential, supporting the country's commitment to pursuing new quality productive forces and high-quality development, the China Intellectual Property Administration noted in a recent monitoring report. The report highlights that from 2018 to 2022, the added value of China's patent-intensive industries saw an average annual growth rate of 9.36 percent, surpassing the average annual GDP growth rate by 2.37 percentage points during the same period.

The information and communications technology (ICT) service and ICT manufacturing, as representatives of emerging industries, achieved double-digit growth in added value with annual growth rates of 14.86 percent and 10.23 percent, respectively. Other patent-intensive industries include the manufacturing of new equipment and materials, medicine and the medical industry, as well as the environmental protection industry.

High investment in research and development is an important factor driving growth. According to the report, the internal R&D expenditure for patent-intensive industries in China reached 1.14 trillion yuan in 2022, marking an increase of 11.28 percent compared to the previous year and totaling 2.23 times that of non-patent-intensive industries. In 2022, more than 49 million people were employed in China's patent-intensive industries, accounting for approximately 6.7 percent of overall employment within the entire society.

However, the report noted a gap between China and Western patent-leading countries. It cited the latest report from the United States and Europe, revealing that patent-intensive industries contributed 24 percent to the U.S. GDP, with employment accounting for 13 percent. Additionally, the EU's figures that year stood at 17.4 percent and 11 percent, respectively, "significantly surpassing China's levels."

The patent-intensive industries in China still have immense growth potential, and greater efforts should be made to support the development of these industries, the report said. China has set a target for patent-intensive industries to contribute 13 percent of GDP by 2025.

http://www.china.org.cn

INDIA

Enterprise ICT market

The enterprise information and Communication Technology (ICT) market in India is set to increase at a sound compound annual growth rate (CAGR) of 17.1 percent, increasing from $161.3 billion in 2023 to $354.6 billion in 2028, a report showed. The revenue opportunity is driven by the ongoing digital transformation initiatives taken up by businesses and government, forecasts GlobalData, a leading data and analytics company. This is in line with the positive ICT investment sentiment seen among the enterprises in the country. Among the three IT infrastructure segments — hardware, software, and services — the latter will see the highest cumulative revenue increase over the forecast period.

Revenue growth in the IT services segment will primarily come from the high enterprise adoption of cloud computing services, which is set to see its revenue grow at a CAGR of 25.3 cent percent over the forecast period, the report noted.

The BFSI sector to be the largest end-use vertical segment for the ICT market in India, in terms of revenue contribution, and will remain so over the forecast period. The segment is set to account for an 11.3 percent share of the total cumulative revenue forecasted for 2023-2028.

A recent GlobalData survey revealed that a majority 87.9 percent of respondents, who are key ICT decision makers in their respective enterprises, have confirmed that there has been an increase in their enterprise ICT budgets in 2024 as compared to the previous year. India's ICT market is expected to grow steadily in the coming years, supported by government policies like tax incentives and digital infrastructure improvements, which aim to enhance SME competitiveness, the report noted.

https://www.smetimes.in

INDONESIA

Solar outlook for 2025

The Indonesia Institute for Essential Services Reform (IESR) recently released its "*2025 Indonesia Solar Outlook*" report, revealing that as of August, the country's installed photovoltaic capacity reached 717.71 MW. IESR Executive Director Fabby Tumiwa emphasized that following a downturn in the solar industry over the past two years, Indonesia needs to "catch up" with global solar trends. He further stated that this trend is reversing, and the future of Indonesia's photovoltaic industry looks promising. According to IESR, Indonesia's state electricity company, PLN, plans to increase renewable energy generation by adding 7.9 GW of solar capacity by 2033. Additionally, policy changes from the Ministry of Energy and Mineral Resources are expected to add over 5 GW of rooftop solar capacity within five years.

The report indicates that as of August 2024, there are 16.92 GW of announced solar projects in preparation nationwide, with an anticipated addition of 350 GW to 550 GW of solar capacity by 2050. It also noted that Indonesia's solar-related investments nearly doubled, increasing from $68 million in 2021 to approximately $135 million in 2023. By August 2024, announced solar investments reached around $112 million.

Tumiwa urged the Indonesian government to set more ambitious solar deployment targets, explaining that the current plans' capacity is insufficient to meet the goals of the Paris Agreement. IESR asserts that to achieve these goals, Indonesia needs to add 77 GW of solar generation before 2030, equivalent to an annual increase of 9 GW to 15 GW in photovoltaic capacity.

Tumiwa stated, "The photovoltaic industry indeed faces several intermittent challenges, but limiting development because of these issues is unreasonable. Many countries have solar penetration rates exceeding 10% of total generation capacity without facing power supply issues or blackouts. Intermittency can be addressed by integrating energy storage systems into the grid."

https://www.solarbeglobal.com

MALAYSIA

National cloud policy, AI regulations planned

Malaysia plans to create a national cloud policy and introduce regulations to encourage the ethical use of artificial intelligence (AI), Prime Minister Anwar Ibrahim said. The announcement comes amid a wave of investments by global tech firms in Malaysia over the past year, as they seek to build critical infrastructure to cater to growing demand for their cloud and AI services.

Anwar said Malaysia's national cloud policy will focus on four core areas, namely public service innovation and efficiency, economic competitiveness, and growth, strengthening user trust and data security, and empowering citizens through digital inclusivity. The government would also set up a national AI office to coordinate initiatives, including completing a five-year technology action plan as well as a regulatory framework to increase the adoption of ethical and sustainable AI within the next 12 months, he said.

"We aim to position Malaysia as a hub for generative artificial intelligence and investments from tech partners will be critical in building a robust and secure digital infrastructure," Anwar said at a ground-breaking ceremony for Google's (GOOGL.O), opens new tab new $2 billion data centre and cloud region in the country.

Google, which announced a multi-year partnership with a local tech firm to provide sovereign cloud services, said its investments in Malaysia would create 26,500 jobs and contribute more than $3 billion to its economy by 2030.

Digital investments have helped propel Malaysia's economy this year, with growth beating market expectations in the last two quarters and the ringgit currency becoming one of Asia's top performers. Google's moves are a part of a wider expansion by global tech companies into Southeast Asia, as they vie for a greater presence in a region with a young tech-savvy population of 670 million.

https://www.reuters.com

PHILIPPINES

Strategic IP development initiative

The Intellectual Property Office of the Philippines (IPOPHL) has launched its Intellectual Property Regional Development Plan (IPRDP) for the Cagayan Valley, a strategic initiative aimed at positioning the region as a pivotal East Asian gateway for investment. This ambitious plan has garnered support from stakeholders, including various regional government agencies, the private sector, and educational institutions.

From the regional government, the new partners to the IPRDP include the Commission of Higher Education (CHED), Department of Agriculture (DA), Department of Education (DepEd), Department of the Interior and Local Government (DILG), Department of Science and Technology (DOST), Department of Trade and Industry (DTI) and the National Economic and Development Authority (Neda).

From the private sector, the Philippine Chamber of Commerce and Industry (PCCI) from the region joined hands to support the IPRDP. From academe, the Batanes State College (BSC), Cagayan State University (CSU), Isabela State University (ISU), Nueva Vizcaya State University (NVSU) and Quirino State University (QSU) joined.

On October 9, these partners formalized their commitment by signing a memorandum of understanding (MOU), which outlines their shared vision to create and implement a cohesive framework to safeguard and commercialize intellectual property in the region. Located in the northeastern part of mainland Luzon, Cagayan Valley stands as the second-largest region in the country. In 2023, the Cagayan Valley's economy grew by 6.2 percent to P447.07 billion, making it the seventh fastest-growing economy out of 17 regions in the country.

https://businessmirror.com.ph

Digital payments headway

The Philippines is making significant strides in the digital payment landscape across Southeast Asia as the use of buy now pay later (BNPL) and point-of-sale (POS) among Filipinos showed significant growth, as of July this year, according to financial technology firm UnaCash. Based on the latest report from UnaCash, BNPL adoption in the Philippines has grown over the past few years as the share of users rose to 24.7 percent as of July, expanding by 9.6 times since 2018. This placed the Philippines among the top three countries in Southeast Asia in terms of BNPL adoption. The stable share of users also reflected a strong consumer shift toward flexible payment solutions. UnaCash also recorded a monthly increase of 3.3 percent for BNPL users aged fifteen and above, from September 2018 until July 2024. Erwin Ocampo, head of product for UnaCash, said there is a growing appetite for BNPL services in the Philippines, driven by increased e-commerce and a rising preference for convenient financial options.

Singapore led the region with BNPL users at 75.4 percent as its user base rose by 7.1 times as of July, with a modest average monthly growth rate of 2.8 percent since 2018. Vietnam also saw a penetration rate of 24.9 percent, with a 2.8 percent monthly increase. Other Southeast Asian markets such as Malaysia (10.2 percent), Thailand (six percent), Brunei (4.2 percent), and Cambodia (3.6 percent) had a lower share of BNPL users.

Meanwhile, the Philippines recorded a 33.1 percent share of POS users among adults aged 15 and older as of July. This marks a significant increase from just 3.2 percent in September 2018.

"POS adoption reflects the country's increasing digitalization and the widespread use of mobile payment solutions. The development of self-service kiosks and enhanced e-commerce platforms have further contributed to this significant rise," Ocampo said. A POS is a location or system where a retail transaction occurs. It typically involves the place where a customer makes a payment for goods or services, such as a cash register or a digital system that processes card and mobile payments.

While the Philippines has made impressive gains, Indonesia continues to lead the region with a 67.5 percent share of POS users, driven by the widespread adoption of cloud technologies, thriving e-commerce, and successful integration of digital payments. In contrast, neighboring Southeast Asian countries are still in the earlier stages of POS market development. Vietnam reports a modest 4.5 percent share of POS users, while Malaysia and Singapore lag further behind with 2.8 percent and 1.6 percent, respectively

https://www.philstar.com

Guidelines to accelerate renewable energy projects

The Philippines' Department of Energy (DOE) has introduced new monitoring protocols and guidelines aimed at accelerating the development of renewable energy projects. These updates will streamline administrative processes, reduce delays, and enhance accountability amongst developers.

In June, the DOE released revised omnibus guidelines for awarding and managing renewable energy contracts. These help identify non-serious developers, allowing legitimate developers to advance projects more effectively. Currently, 105 renewable energy projects are facing termination due to non-compliance with timelines, with most contracts awarded in 2017 and 2019. The primary causes for delays include issues with securing possessory rights and challenges with system impact studies (SIS). Of the stalled projects, 88 are significantly delayed, comprising 53 solar, 17 hydropower, 10 wind, 5 geothermal, and 3 biomass projects.

To combat delays, the department is implementing a contract termination process. Developers of solar energy contracts must complete the pre-development phase within two years. Failure to submit a declaration of completion or demonstrate reasonable efforts will result in a show-cause order, with potential termination recommendations to the Secretary of Energy if reasons for delays are deemed insufficient.

The revised guidelines also require developers to obtain a certificate of authority (COA) before signing contracts. This COA allows developers to secure permits and conduct essential surveys ahead of the official project start, enhancing preparedness and efficiency. Additionally, the guidelines simplify the process for obtaining incentives. Developers can now receive a certificate of registration (COR) after confirming project viability, and for biomass and solar projects, the COR can be obtained upon financing closure. The DOE is also enhancing its Energy Virtual One-Stop Shop (EVOSS) System to streamline permitting processes, aiming to reduce bureaucratic hurdles.

https://www.msn.com

REPUBLIC OF KOREA

Private-led cloud computing industry

The Republic of Korea will expand its private-led cloud computing industry to strengthen its competitiveness in the global artificial intelligence (AI) era, the science ministry said. The Ministry of Science and ICT announced the vision to boost local cloud companies by forming strategic partnerships with global entities, aiming to double the domestic cloud market's size to 10 trillion won (US$7.3 billion) by 2027 from 2022.

The Republic of Korea's cloud technology is more than a year behind global leaders, and AI cloud infrastructure remains underdeveloped, according to the ministry. To better foster the industry, the government plans to devise measures to adopt private cloud systems across education, finance, defense, and other public sectors, including easing network separation regulations and expanding tax benefits for AI and cloud companies. It will also work to develop a homegrown AI chip to be used for data centers and establish a national AI computing center with a capacity of more than 1 Exaflop, which means having a supercomputer that can calculate at least one quintillion floating point operations per second.

An AI innovation fund will also be created to support the transition to a private cloud ecosystem, with the government investing 45 billion won next year while inducing further investment from the private sector. Meanwhile, the country also plans to open an AI safety research institute under the Electronics and Telecommunications Research Institute to support the "safe" development and application of AI technologies and the global expansion of local AI companies, according to the ministry.

The envisioned launch of the institute comes as a follow-up measure to the global AI safety summit held in Seoul earlier this year, where leaders of major countries, including South Korea, Britain, and the United States, adopted a joint declaration on promoting safe, innovative and inclusive AI.

https://www.msn.com

Investment in the semiconductor industry

The Republic of Korean government will inject 8.8 trillion won ($6.45 billion) next year to advance the country's semiconductor ecosystem through low-interest loans while accelerating infrastructure construction and nurturing talent. Finance Minister Choi Sang-mok announced a slew of plans for comprehensive support for the chip industry while presiding over a ministerial meeting Wednesday, with firms in the sector clamoring for more concrete measures to catch up to global rivals. "We will provide solid support to secure global leadership, including providing 8.8 trillion won in support to the semiconductor industry by next year," Choi said.

This is a detailed follow-up to the 26 trillion won package to support the chip industry unveiled by President Yoon Suk Yeol in May, which was mainly designed to provide cheaper borrowing costs with more generous terms than market loans.

According to an announcement, the government will complete the offering of low-interest loans with a total value of 4.7 trillion won next year. In detail, the plan is to invest 250 billion won of capital in the state-run Korea Development Bank next year to secure low-interest loans of 4.25 trillion won. Since the launch of the loan program on July 1, a total of 824.8 billion won in facility investment funds has been loaned to 17 semiconductor companies, according to the Finance Ministry. Interest rates on borrowings will be further trimmed. The KDB has been providing rates 1.4 percentage points lower than its typical loan products.

Ministers decided to create a new semiconductor ecosystem fund of up to 800 billion won by 2027 and consider further expansion depending on future corporate demand. The government plans to raise 420 billion won by creating a new fund of 120 billion won through an investment of 30 billion won next year.

The first company to benefit from the fund was CoAsia SEMI, a foundry design service provider that secured 20 billion won in investment to recruit more workers and expand overseas sales. Efforts to offer tax breaks to chipmakers and other firms in the sector will be continued.

In the 2024 tax revision bill drawn up by the government in July, it was proposed to extend the applicable period for research and development tax credits and integrated investment tax credits for national strategic technologies, including chipmaking, by 3 years until the end of 2027.

The government will support the tax code amendment bill to clear the last parliamentary hurdle and revise the ordinance and rules in March next year, including expanding the scope of application of tax credits for national strategic technologies and R&D. Some 2.4 trillion won will be allocated to build the infrastructure needed for an envisioned semiconductor cluster in Yongin, Gyeonggi Province. Preparations for constructing a highway that will pass through the Yongin Cluster, which will be built on a site of 4.15 million square meters, are underway to open the roads in 2030. Regarding power supply, detailed measures for power supply and cost-sharing will be prepared within the year amid growing concerns that Korean chipmakers face power shortages.

In the Yongin semiconductor cluster, 16 semiconductor production facilities, led by Samsung Electronics and SK hynix, will be built by 2047. Although a vast amount of electricity must be provided, detailed measures for cluster operation for mid-to long-term electricity supply have not yet been prepared.

https://www.koreaherald.com

Companies monetizing patents

In recent years, the Republic of Korean conglomerates have conducted several noteworthy transactions in monetizing their intellectual property (IP), including patents, according to Burford Capital, a global legal finance firm based in London. Their reasons may vary, it said, from reducing the financial burden of holding IP to gaining leverage in business negotiations. But regardless of the intention, monetizing patents has helped them unlock financial liquidity.

The Korea Times exclusively secured a report, on Wednesday, co-authored by Katharine Wolanyk, managing director at Burford Capital, and Chris Freeman, director with responsibility for assessing and underwriting legal risk at its patent group. It is set to be published in Burford Quarterly on Thursday (Korea time). The authors pointed out that already in 2024, there have been sizeable patent transactions involving sophisticated IP owners, including SK hynix. This year, the semiconductor giant sold over 1,500 patents to an affiliate of Korean patent aggregator Ideahub.

In November 2023, LG Electronics sold 48 standard essential patents related to codec technology to Chinese smartphone maker Oppo. The company no longer needed some of these patents after exiting the smartphone market in 2021. “This sale is part of LG’s strategy to profit from its extensive portfolio of around 24,000 patents, particularly in 4G, 5G, and Wi-Fi technologies, as other Chinese smartphone makers like Oppo and Vivo have faced litigation over patent deficiencies,” the report wrote.

LG Energy Solutions, another LG Group subsidiary, has announced that it “will spearhead efforts to create a patent licensing pool for electric vehicle batteries, an area where it has a world-leading patent portfolio.” Samsung has also emerged as a key player in the IP landscape, leveraging its extensive patent portfolio for innovations in telecommunications, consumer electronics, and semiconductors.

“In 2023, Samsung entered multiple licensing agreements that generated immediate revenue and established long-term partnerships with other tech giants. These efforts highlight Samsung’s strategic focus on robust IP management as a driver of profitability and innovation,” the report said. These moves suggest Korean companies’ growing recognition of patents as valuable financial assets, though the reasons behind monetization decisions vary by company, according to the report.

One reason is that owning IP is costly by itself. The R&D investment to develop technologies can run into millions of dollars or more, followed by significant legal expenses to obtain and maintain the related patent assets. Also, by affirmatively recovering money from their legal assets, companies can benefit from new revenue sources to supplement declining sales or shrinking profit margins. This reason particularly applies to companies that are long-established or operate in highly competitive industries. In other cases, companies like LG Electronics have exited a line of business and no longer see the need to retain IP that is no longer core to their operations. IP can also be leveraged to advance corporate objectives, such as gaining an advantage in business negotiations.

“In an uncertain economy, companies will need to be careful in their capital management and innovative in their pursuit of value. For many patent owners, financed divestitures may be the optimal solution. For little to no risk, with minimal operational burden, companies can reduce costs and generate new revenues by leveraging their IP assets,” it said.

https://www.koreatimes.co.kr

VIET NAM

National blockchain strategy

The Ministry of Information and Communications (MIC) announced the strategy on October 23, outlining several key objectives to develop the country’s blockchain capabilities. It aims to develop blockchain technology, establish relevant legal frameworks, and promote innovation in what it calls “the Fourth Industrial Revolution.”

The strategy outlines five key areas, overseen by government agencies, including the MIC and the Vietnam Blockchain Association.

According to the official announcement, the five proposed actions include:

“(1) Perfecting the legal environment; (2) Developing infrastructure, forming a blockchain industrial ecosystem; (3) Developing human resources for the Blockchain field; (4) Promoting Blockchain development and application; (5) Promoting research, innovation, and international cooperation."

Developing Viet Nam's blockchain ecosystem is a central goal of the strategy. The government plans to build 20 blockchain brands for platforms, products, and services. Additionally, the National Blockchain Strategy aims to also establish at least three testing centers in major cities to create a national blockchain network. These centers will play a crucial role in developing and deploying blockchain applications, ensuring security, and promoting innovation in the industry.

An important factor raised in the strategy announcement is the legal recognition of digital assets, as the country aims to formalize regulation around them: "The legalization of the definition of Digital Assets is one of the actions to realize the Vietnamese Government's commitment to preventing and combating money laundering, terrorist financing, and financing of proliferation of weapons of mass destruction." By aligning with international standards and recognizing digital assets as protected under civil law, Viet Nam is setting ambitious targets to strengthen its blockchain industry.

https://www.msn.com

Excess rooftop solar power to the national grid

Viet Nam has issued a new decree that allows excess rooftop solar power to be sold at up to 20 cent percent of the installed capacity to the state-owned utility Vietnam Electricity (EVN). The new rule is to promote the development of self-produced and self-consumed solar energy in the Southeast Asian country, which aims to cover half of government and residential buildings with this renewable energy source by 2030. However, despite Viet Nam's rooftop solar energy potential of 963 gigawatts (GW), such installations have barely increased since 2021 due to the lack of government incentives after the expiration of a feed-in tariff scheme.

"The 20 percent offtake will shorten the payback period for investors and accelerate self-use rooftop solar power installations at a moderate level while avoiding policy abuse and overdevelopment," said Do Quang Thinh, chief executive of The Sunergy, a Viet Nam-based energy consultancy.

Under the latest mechanism, the electricity purchase price will be set at the average market electricity price from the preceding year, as announced by the power system operator and the electricity market. Self-use rooftop solar power not connected to the national grid or with a capacity of than 100 kilowatts (kW) can be developed without limit and exempted from the need for electricity operation licenses.

Meanwhile, self-use systems with an installed capacity of 1,000 kW or more and which sell surplus electricity to the national power system must comply with registration requirements and the approved power planning, which stipulates that the total capacity increase of this source can be no more than 2,600 megawatts by 2030.

According to EVN, as at end-2023, over 103,000 rooftop solar projects with a combined installed capacity of more than 9.5 GW had entered power purchase contracts with the state-owned utility. Last year, the amount of this energy fed into the national grid – mainly in southern and central regions of Viet Nam – accounted for less than 4 cent percent of the country's total electricity output.

https://www.businesstimes.com.sg