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CHINA BRIEF NOTES:

Experts Reminded of Central Mission at Summer Retreat

By Arran Hope

Cai Qi Visits Experts on Beidaihe Summer Vacation. (Source: Xinhua)

Executive Summary:

- This August, 62 experts from the fields of science and technology, philosophy and social sciences, and basic research were invited to take a vacation and meet with senior officials in Beidaihe as part of an annual tradition that dates back to at least 2001.
- Cultivating talents in strategic sectors is seen as essential to achieving the Party's ambitions of becoming the world's preeminent power. Many appear to have bought in to the mission. One of this years attendees talks of an "AI competition to seize the commanding heights of future development" and building a group of "strategic scientists."
- Every year, the meetings are attended by the head of the Organization Department, along with at least one other senior official. This department is the central body responsible for personnel matters, and is involved in talent-related work. Prior to Xi's third term, the vice premier also attended the meetings.
- As the only annual meeting in Beidaihe to receive coverage in official media, this gathering of experts remains a useful window onto the Party's strategic priorities, even if the high political drama of late twentieth century Beidaihe is largely absent.

The Chinese Communist Party (CCP) cares deeply about talent and experts. This has not always been the case, but as the Party has taken seriously its desire to become the world's preeminent power, the importance of those who excel in specific fields of endeavor has risen.

When, on August 3, Politburo Standing Committee member and secretary of the CCP's Secretariat Cai Qi (蔡奇) visited some of the nation's top talents at the coastal resort of Beidaihe, he was engaging in an annual tradition to honor these individuals, express gratitude for their work, and—most importantly—learn from their expertise (Xinhua, August 3). The coverage of this meeting is the only official acknowledgement that cadres from the highest echelons of the Party decamp in the summer to Beidaihe, a place of waning, but historical, significance for the Party. In the Xi era, but for the interruption of the pandemic in 2020–2022, the meeting has taken place on an annual basis in the first or second week of August.

This tradition, which is always referred to as "an important institutional arrangement" (一项重要制度性安排) of the Party and the nation, dates back to roughly the beginning of the 21st century. That year, the Party raised issue of talent to the "level of national strategy" (国家战略层面), and talent work has become a more common focus of the its work ever since (The Paper, August 6, 2015). In 2017, in his report to the 19th Party Congress, Xi called for "upholding the principle of the Party managing talent work" (坚持党管人才原则) (Guangming Daily, April 16, 2018). Finally, in 2021, this principle was enshrined in the 2021 "Regulations on the Organization Work of the CCP" (中国共产党组织工作条例) (Qiushi, October 1, 2021).

Organization Department Head Among Official Attendees

Typically, the readouts from these meetings start out by noting that a senior official has been "entrusted by General Secretary Xi Jinping" (受习近平总书记委托) to visit the experts and talents (专家人才) on behalf of the Party Center and the State Council. The bottom of the readout lists other official attendees. Since at least 2013 (Xi Jinping's first year in charge), these have included the head of the organization department (Zhao Leji (赵乐际), Chen Xi (陈希), Li Ganjie (李干杰), and Shi Taifeng (石泰峰)). The organization's primary role, as one of the Central Committee's functional departments, is to oversee personnel and staffing matters within the Party. Its remit also extends beyond the Party, however, to include other groups seen as significant to its overall strategic direction. This includes experts.

A third official is usually present too. For the last three summers, this has been Shen Yiqin (谌贻琴). One of the few female members of the central committee, Shen is also the state councilor in charge of human resource affairs, social affairs, civil affairs, women and children affairs and ethnic affairs, and serves as the president of the All-China Women's Federation. Previously, it was also common for a vice premier to attend. For instance, Ma Kai (马凯) participated from 2013–2017, in 2018 Hu Chunhua (胡春华) was there, and in 2019 Sun Chunlan (孙春兰)—another rare female figure at the top of the Party—took part. This is a tradition that predates Xi's rise to power but one that he has jettisoned in his third term. In the Xi era, there has been one occasion in which a fourth official has taken part. That was in 2023, when Jiang Xinzhi (姜信治), vice chairman of the Chinese People's Political Consultative Conference (CPPCC) was present. His appearance makes sense: the CPPCC is involved in bringing together Party representatives and with those on the outside, including

influential experts and professionals who are not Party members. What is not clear, however, is why an official of Jiang's position was present in 2023 but not in other years.

Each year's meetings take place under a specific theme (主题). This year's was the rather generic "building for the new era" (建功新时代), and followed "patriotism and struggle" (爱国奋斗) in 2024, and, in 2023, "aiming for high-level scientific and technological self-reliance and self-improvement, engaging in the great practice of Chinese-style modernization" (矢志高水平科技自立自强，投身中国式现代化伟大实践) (Xinhua, August 8, 2023, August 3, 2024, August 3). In fact, the only time a theme was mentioned prior to 2023 was in 2012, which took place under the banner "everyone can become a talent" (人人皆可成才) (The Paper, August 6, 2015).

Beidaihe's Waning Historical Significance

That year (2012) was the last time Xi Jinping appeared in official reporting on Beidaihe. He attended the meetings, as he had in 2010, in his capacity as vice premier. His connections to Beidaihe go back much further though, with some reports recalling his love of playing football (soccer) there as a child along with the children of other central committee cadres (Hunan Government, August 19, 2016).

Back then, Beidaihe was steadily becoming an important hub for high-level politicking. In 1952, for the first time, central organs were allowed one week in the summers to rest there. The following year, the Party officially implemented its "summer office system" (避暑和办公制度), whereby the leadership would head out east to the villas and sanatoria along the coast to carry on working away from the heat of the city. Several important decisions emerged during these stints. Most notably, in 1958, the leadership articulated the policies for what would become the disastrous Great Leap Forward, as well as ordering the bombardment of Kinmen, kicking off the Second Taiwan Straits Crisis (The Paper, August 6, 2015).

The "summer office system" was interrupted in the latter part of Mao's rule, but was reinstituted by Deng Xiaoping in 1984. It was still in play when *China Brief* first covered it in 2001, reporting that 200-odd cadres attended (China Brief, July 24, 2001). But it was discontinued in 2003. That July, the People's Daily Online released a message, saying that "the central government decided that the five leadership teams—the CCP Central Committee, the State Council, the NPC, the National Committee of the CPPCC, and the CMC—this summer will not go to Beidaihe" (中央决定，中共中央、国务院、全国人大、全国政协、中央军委五大领导班子今年夏季将不到北戴河办公) (Global People, August 26, 2012). This was likely a response to the SARS outbreak, but is something that has persisted ever since. According to reporting from Xi's first summer in charge, "leaders do not always go to Beidaihe during the summer months, and the timing is not uniform" (如今的暑期，领导人并不一定都到北戴河，时间也不统一。新华社消息显示) (Xinjing News, August 12, 2013).

The practice of inviting experts first occurred in July 1987, when the leadership invited 14 experts and their families from the national science and technology sector to vacation in Beidaihe, where they met with Deng Xiaoping and others (The Paper, August 6, 2015). This began to be institutionalized in 1998, though most reporting only refers to these meetings dating back to 2001 (Xinhua, August 8, 2023).

Table 1: Xi Era Experts Hosted at Beidaihe

Year	Hosts	Experts' Fields	# of Experts	Theme	Offered Advice
2025	Cai Qi Shi Taifeng Shen Yiqin	young talents; S&T, philosophy and social sciences, basic research	62 (from picture)	"building for the new era" (建功新时代)	No
2024	Cai Qi Li Ganjie Shen Yiqin	natural sciences, engineering technology, philosophy and social sciences, arts and culture	61 (from picture)	"patriotic striving" (爱国奋斗)	Yes
2023 [1] [2]	Cai Qi Li Ganjie Shen Yiqin Jiang Xinzhi	Artificial intelligence, life and health, aerospace technology	57	"Aiming for high-level scientific and technological self-reliance and self-improvement, engaging in the great practice of Chinese-style modernization" (矢志高水平科技自立自强，投身中国式现代化伟大实践).	No
2022	N/A	N/A	N/A	N/A	N/A
2021	N/A	N/A	N/A	N/A	N/A
2020	N/A	N/A	N/A	N/A	N/A
2019	Chen Xi Sun Chunlan	materials science, quantum optics, energy engineering, genetic breeding [GMO], oil and gas field development	58	N/A BUT references an annual expert lecture on health. This year's topic was cardiovascular disease prevention and treatment.	No
2018	Chen Xi Hu Chunhua	S&T research and production (科研生产), prizewinners, space heroes, philosophy and social sciences, arts and culture, model teachers, highly skilled talents, rural experts, returnee innovators and entrepreneurs	62	N/A	Yes
2017 [1]	Liu Yunshan Ma Kai Zhao Leji	N/A	57	N/A	N/A
2016 [1] [2]	Liu Yunshan Ma Kai Zhao Leji	"10,000 Talents Plan" **[a]**	56	N/A	No
2015 [1] [2]	Liu Yunshan Zhao Leji	natural sciences, engineering and technology, social sciences, health care, agricultural technology	54 **[b]**	N/A	Yes
2014 [1] [2]	Liu Yunshan Ma Kai	Physics (superconductors) Mechanics	50+	N/A	Yes

	Zhao Leji	Hydrocarbon extraction Economics (Justin Yifu Lin) Philosophy Electrical engineering **[c]**			
2013 [1] [2]	Liu Yunshan Ma Kai Zhao Leji	chief designers/leaders of: major national scientific and technological special projects, key national defense S&T projects, key national engineering and construction projects. These include manned spaceflight, manned deep submarines, high-speed rail, and supercomputers.	60		
2012 [1]	Xi Jinping	N/A	62	"everyone can become a talent" (人人皆可成才)	

[a] The available information from 2016 does not list individual experts' fields, but it does note that two meetings were held: the National Conference on Science and Technology Innovation and the Symposium on Philosophy and Social Science Work.

[b] An article in the People's Daily says that the 2015 batch of experts were "recommended by 31 provinces, autonomous regions and municipalities, the relevant ministries and commissions of the Central Government and the General Political Department of the People's Liberation Army" (由 31 个省区市、中央有关部委和解放军总政治部推荐). It goes on to provide a breakdown of the group, which included 9 academicians of both academies, 3 female experts, 3 democratic parties, 4 non-partisan, and 1 ethnic minority. Most of these were front-line young and middle-aged innovative talents, with an average age of 53.7 years old, 89.1 percent below 60 years old, and the youngest expert is 37 years old. Among them, are 78 major awards such as National Natural Science Award, National Science and Technology Progress Award, National Technology Invention Award, and the Ho Liang He Li Award (People's Daily, August 11, 2015).

[c] Liu Yunshan referred to these experts as the "dream team" (梦之队) (People's Daily, August 7, 2014)

Frontier Researchers and Model Workers Treated to a Work Holiday

Over the last 13 summers, more than 50 but never more than 62 experts have been invited to Beidaihe. It is not known what the precise rationale is behind the selection, but according to an account from 2015, the invitees are "recommended by 31 provinces, autonomous regions and municipalities, the relevant ministries and commissions of the Central Government and the General Political Department of the People's Liberation Army (由 31 个省区市、中央有关部委和解放军总政治部推荐) (People's Daily, August 11, 2015).

Their precise schedule is not reported. Part of their time is spent on holiday with their families, lounging by the sea or—in emulation of their leaders dating back to Mao Zedong—swimming in it. The rest of their time is spent in a series of meetings with high-level officials. These could include, as in 2016, a national conference on science and technology innovation (全国科技创新大会) and a symposium on philosophy and social science work (哲学社会科学工作座谈会) (Xinhua, August 5, 2016). A roundtable discussion also appears to be

part of the proceedings, at least in some years (Xinhua, August 6, 2015). Around half of the readouts note that the experts shared their "opinions and suggestions" (意见建议). The phrase does not appear in this year's coverage, but that is not to say that advice was not given or that it will not return in next year's readout. Finally, according to the 2019 readout, every year the experts have some "compulsory exercise" (规定动作) in the form of a health lecture (健康知识讲座) (People's Daily, August 8, 2019).

The makeup of the experts also varies year to year. Sometimes reporting includes just the fields of study that experts were drawn from. On other occasions, the names of their institutions are listed. On even rarer occasions, we learn the identities of a number of the individuals. One readout in the People's Daily in 2015 gave a very specific breakdown. It noted that the invitees included 9 academicians, 3 female experts, 3 from democratic parties, 4 non-partisan experts, and 1 ethnic minority. Most were front-line young and middle-aged innovative talents, with an average age of 53.7 years old (the youngest was 37). Between them they had received 78 major awards (People's Daily, August 11, 2015). Most years make sure to include experts in philosophy and the social sciences, but the vast majority work on cutting edge science and technology (see Table 1 above). These range from individuals who have led key national defense projects and aerospace technology, to those involved with fossil fuel extraction and oil and gas field development, to experts in materials science, quantum optics, and artificial intelligence.

This year's attendees come from the fields of science and technology, philosophy and social sciences, and basic research. Some were profiled or interviewed by media, including The Paper and Xinhua. These include Qian Chengdan (钱乘旦), a professor at Peking University and expert on the rise and fall of great powers; Pan Jingwei (潘建伟), a leading quantum technology researcher at the Chinese Academy of Sciences; and Yan Ning (颜宁), president of the Shenzhen Academy of Medical Science (China News Weekly, August 9). One, Zhou Bowen (周伯文), who is the director and chief scientist of Shanghai Artificial Intelligence Laboratory, is quoted discussing the "AI competition." He describes is as "a competition to seize the commanding heights of future development" (抢占未来发展制高点的竞争), one that has created "an urgent need to discover, select, and cultivate a group of strategic scientists through major organizational model innovation" (亟需通过重大组织模式创新，发现、选拔，并培育出一批战略科学家) (China News Weekly, August 9). As part of this year's emphasis on younger talent, eight attendees were under 40 years old, with the youngest only 33.

Conclusion

As Cai Qi noted to the assembled experts, it is the Party's job to ensure that "talents emerge in large numbers, people make the most of their talents, and that their talents are fully utilized (人才辈出、人尽其才、才尽其用) … "to make new and great contributions" (作出新的更大贡献) to the Party and the nation (Xinhua, August 3). As the Party doubles down on technical expertise in cutting edge fields, the roster of attendees at the Beidaihe retreat is populated by more and more AI researchers and those working in other emerging fields. Less attention is given to traditional model workers, such as the agricultural technicians valorized in the past. This is a trend that has been developing for almost the entire time the Party has been inviting experts to summer with its senior officials. Back in 2001, a high-level cadre grumbled that Jiang Zemin wanted to "take away the hammer and sickle from the Party flag—and put in their place a computer and satellite" (China Brief, July 24,

2001). While it is clear that the hammer and sickle are here to stay, the emphasis on technological salvation has only become more laser-focused in the years since.

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Smart Device Empire, Part 2: Policy Underpins PRC's Global IoT Ambitions

By Matthew Johnson

Digital glass houses: a smart security camera shown in PRC state media coverage warning of espionage risks from foreign-made connected devices. (Source: Xinhua)

Executive Summary:

- Beijing views control over the platforms, standards, and data flows of the Internet of Things (IoT) era as a source of lasting structural leverage, and has spent more than a decade positioning itself at the center of this emerging system.
- The PRC's share of global smart home device shipments is projected to reach 20–30 percent by 2028, driven by a domestic environment of sustained policy support, coordinated investment, and state-managed access to capital.
- Massive state-led investment in broadband, 5G, and next-generation network infrastructure—deployed by major state-owned telecom operators—has given PRC firms a decisive first-mover advantage in developing, refining, and exporting advanced IoT technologies.
- Beijing's active role in shaping international standards signals that its ambitions extend beyond manufacturing scale, aiming to embed Chinese technical protocols, governance norms, and data practices into the global connected-device ecosystem.
- Looking ahead, the spread of PRC IoT platforms points toward a fully integrated digital environment in which everyday devices are linked to AI, cloud, and edge systems under Chinese influence—raising long-term risks of technological dependence, data capture, and reduced autonomy for foreign governments and industries.

Beijing is positioning the full spectrum of state policy tools behind its Internet of Things (IoT) ambitions—aligning telecom infrastructure, protected domestic markets, and tightly managed technical standards to consolidate its influence at home and extend it abroad. This expansion goes beyond selling connected devices: by dominating core components like cellular IoT modules and driving global rule-making through initiatives such as China Standards 2035, the People's Republic of China (PRC) is creating long-term supply chain dependencies and reshaping the rules of digital interoperability (China Brief, July 25).

PRC security services openly concede that connected devices can be turned into tools of surveillance or disruption. On July 21, the Ministry of State Security (MSS) warned citizens to "beware of 'electronic spies'" (警惕"电子间谍"), claiming that some foreign-made chips, smart devices, and software contain "backdoors" (后门) that allow remote control or covert data collection. The MSS urged consumers to buy domestically produced (国产) systems to avoid these risks, underscoring that smart device security is a matter not just of personal privacy, but of national security (WeChat/MSS, July 21). This logic appeared to gather momentum as microchips became a sharper point of contention between Beijing and Washington: on July 31, the PRC's cyberspace regulator summoned Nvidia over alleged "backdoor" risks in its H20 AI chips, signaling that the MSS warning was part of a wider campaign to spotlight and curb perceived vulnerabilities in foreign technology (CAC, July 31).

The warnings capture a central paradox: the same risks that Beijing sees in foreign IoT products—unpatched vulnerabilities, legally mandated data access, and potential use in cyber operations—also travel with Chinese-made devices as they spread worldwide. Backed by Digital Silk Road diplomacy, subsidized financing, and turnkey deployments from smart-city platforms to home appliance ecosystems, these exports are building a global network of PRC-linked hardware and standards. According to 2024 estimates, the PRC will account for roughly 20–30 percent of all global smart home device shipments by 2028, while becoming the largest single market by unit volume (Omdia, November 18, 2024). Control over these systems offers not only commercial advantage— by dominating the platforms, standards, and infrastructure of the "IoT era", the PRC seeks not only market share, but enduring structural leverage over the networks that will define 21st-century life.

State-Owned Telecom Networks as the Backbone of Beijing's IoT Leverage

By the early 2010s, Beijing had designated the Internet of Things (IoT) as a strategic industry, embedding it into national development plans as a pillar of digital infrastructure and industrial transformation. Successive top-level blueprints—including the 13th and 14th Five-Year Plans and national informatization strategies—framed "connecting everything" as essential to future competitiveness, channeling state funding into 5G networks, smart cities, and IoT build-outs (Xinhua, March 17, 2016, March 13, 2021). Local governments followed suit, establishing special funds and subsidies to accelerate smart sensor manufacturing, home automation platforms, and AI-enabled appliances.

From 2014 onward, Premier Li Keqiang's (李克强) push for "mass entrepreneurship and innovation" (大众创业、万众创新) opened the way for a wave of startups in home robotics, IoT chips, and smart home security devices, backed by government contracts, dedicated incubators, and access to public procurement channels (PRC Government, December 26, 2014; MERICS, June 24, 2021). Together, these national and local

measures created a tightly guided ecosystem for scaling domestic IoT and smart home technologies across both industry and everyday life.

Made in China 2025—unveiled in 2015—set targets for high domestic content in these areas, backed by a toolbox of tax breaks, research and development (R&D) subsidies, and procurement mandates to nurture local champions (Avnet Silica, June 13, 2019). Targeted funding and incentives continue to bolster the sector, with authorities establishing IoT industrial parks, innovation zones, and pilot demonstration projects to concentrate research and commercialization (Rhodium Group, May 5). Companies in the IoT space benefit from research grants, state-guided venture capital, and preferential policy support. The strategy urged public institutions and state-owned enterprises to adopt IoT solutions aggressively, using the PRC's own smart technologies, as a pathway to scale up the industry and position Chinese firms as global players.

Unlike Western markets, the PRC's smart home sector has a unique structure: telecom and service providers (often state-linked) play a leading role in sales and distribution (IoT Now, August 2, 2021). For example, telecom operators and utilities offer smart home bundles (such as internet plus home security kits), and property developers embed smart systems in new apartments, often in partnership with tech firms (Omdia, November 18, 2024). This model is encouraged by government smart-city programs and creates a channel for rapid deployment of devices at scale (e.g. citywide rollouts of smart meters or community surveillance cameras).

As a result, a generation of PRC smart home manufacturers—from appliance giants to tech startups—has risen in a policy-sheltered, capital-rich environment, steered by central ministries and local bureaus.

That industrial base is reinforced by massive state-led infrastructure investments: the domestic rollout of broadband and 5G networks has been heavily funded and guided by the government, with China Mobile, China Unicom, and China Telecom as the primary operators. By mid-2021, officials reported installing over 800,000 5G base stations (about 70 percent of the world's total), supported by over $200 billion in planned telecom investment from 2020–2025 (MERICS, June 24, 2021). This is projected to reach over 4.5 million 5G base stations in 2025 (RCR Wireless, January 2). In addition to the 5G rollout, China is also actively deploying 5G-Advanced (5G-A) in 300 cities, focusing on AI sensing and smart infrastructure (RCR Wireless, June 27). This vast, state-funded network buildout gives PRC firms a powerful first-mover advantage in developing, testing, and exporting next-generation smart home and IoT technologies.

Building a Domestic Launchpad for Smart Home Dominance

The PRC's home market is being used as a strategic springboard for global expansion in smart home tech. Domestic tech platforms benefit from an asymmetric advantage: they can scale up in a "protected, insulated, and government-bolstered" national market with minimal international rivalry, then deploy that scale overseas (NBR, March 2022). Beijing is using this playbook to nurture national tech champions in IoT and smart infrastructure. Companies like Huawei, Alibaba, and Tencent benefit from state-backed infrastructure and policy environments that enable wide deployment of their technologies across cities and sectors.

Protected access to national markets allows firms to test and refine IoT platforms. State-owned China Mobile, for example, has co-developed with Huawei the world's largest IoT service support platform—capable of managing 1.4 billion users and enabling clients to handle tens of millions of connected devices with advanced

features such as IoT card management and intelligent security controls (Informa, October 30, 2024). Alibaba's City Brain has transformed Hangzhou into a national model for smart urban governance, while Tencent is advancing digital infrastructure concepts like Shenzhen's "Net City" (网络城市) (Shenzhen Government, April 27). With strong home-field validation, these firms now shape international norms—Huawei in 5G-IoT ecosystems, Alibaba in cross-border smart city adoption (e.g., Kuala Lumpur), and Tencent in urban-scale digital integration projects.

This combination of state-backed infrastructure, protected market access, and surging domestic demand from urban consumers and an expanding middle class gives Chinese manufacturers powerful economies of scale and continuous data feedback loops. These advantages allow firms to refine products, dominate emerging standards, and enter foreign markets with mature, cost-competitive platforms—positioning them to shape not just the technology, but the operating norms of connected systems worldwide.

Technical Rulemaking for Domestic and Global Integration

Standardization is one of Beijing's most powerful tools for consolidating and exporting its IoT advantage. The PRC government closely manages tech standards for IoT and smart devices through bodies under the Ministry of Industry and Information Technology (MIIT) and the Standardization Administration of China (SAC) (Global Taiwan Institute [GTI], February 5). The goal is twofold: first, to streamline the multitude of domestic standards; and second, to push Chinese standards internationally. Within the PRC, authorities encourage interoperability among smart home products and alignment of standards (e.g. common protocols for device connectivity, IoT data formats) to ensure a unified national market.

To elevate its global standing in IoT and digital industries, the PRC is turning standard-setting into a central pillar of state power. IoT firms gain first-mover advantage by operating in a tightly regulated domestic market with unified technical benchmarks, accelerating commercialization and reducing interoperability friction. International expansion is bolstered by a push to align national and global standards, giving firms like Huawei, Xiaomi, and Tuya an easier pathway into emerging markets that adopt PRC-aligned rules. Standards now move in lockstep with innovation, as Beijing integrates standardization into R&D pipelines to create exportable technical influence across sectors like smart homes, artificial intelligence (AI), and industrial automation. This stems from the 2021 "National Standardization Development Outline" (国家标准化发展纲要), a top-level Party policy blueprint that ties the country's technological rise to comprehensive state-led control over domestic and international standards (Xinhua, October 10, 2021).

The 2024 "IoT Standard System Guidelines" (物联网标准体系建设指南 [2024 版]) mark another major step in Beijing's drive to shape the global IoT landscape (MIIT, August 27, 2024). These guidelines create a comprehensive national blueprint, formalizing a full-spectrum framework for IoT standardization, spanning perception tech, data processing, operating systems, and smart applications in sectors like industry, agriculture, and smart homes. They also call for publishing over 30 new national and industry IoT standards by 2025 and participating in crafting at least 10 international standards—an effort explicitly tied to a broader "New Industry Standardization Pilot Project (2023–2035)" (新产业标准化领航工程实施方案 (2023–2035)) to give Chinese solutions greater international traction (MIIT, August 22, 2023). Finally, the guidelines frame standardization as a tool of scale and integration by promoting end-to-end ecosystem coordination and

requiring stronger integration of technical R&D, industrial deployment, and regulatory oversight. Local governments are encouraged to support pilot zones and Chinese firms are expected to lead in international forums, reinforcing Beijing's strategic vision of "collaborative advancement and open cooperation" (协同推进，开放合作) that aligns global norms with Chinese industrial priorities.

Exporting Influence via Trade Support

State policies explicitly treat the home market as a "training ground" for global success. Made in China 2025, for instance, not only set targets for domestic market share of Chinese tech products but also encouraged firms to "go out" (走出去) and capture international market share once they are strong at home (Avnet Silica, June 13, 2019). In practice, this means the government often supports companies in exporting their smart home solutions. One avenue is via the Digital Silk Road, the technology component of the One Belt One Road initiative. "National Informatization Strategy" calls on the country's internet and tech firms to support "the creation of a Digital Silk Road" (打造网上丝绸之路)—essentially exporting Chinese digital infrastructure and services abroad in tandem with OBOR investments (Xinhua, July 27, 2016; Brookings, November 19, 2020).

In smart home terms, this could involve telecom carriers bundling smart community platforms into overseas real estate projects, or appliance makers setting up "smart living" showrooms in OBOR partner countries. Huawei and other telecom giants have already delivered smart city and safe-city systems—including IoT cameras, streetlight sensors, and urban control hubs—to parts of Asia, Africa, and the Middle East. Many of these exports are backed by preferential financing from PRC state banks, giving Chinese vendors a competitive edge in foreign procurement decisions.

Beyond leveraging diplomatic, commercial, and financial tools to open doors abroad, Beijing also helps its smart technology firms gain footholds globally by shaping trade conditions to favor Chinese tech expansion. In trade negotiations, Beijing routinely pushes for market access for its digital products, even as it limits foreign competitors at home. As a result, Chinese smart devices often enter global markets with fewer barriers than foreign brands face in the PRC. This includes the European and U.S. markets, which remain largely open to a flood of smart TVs, cameras, and IoT devices from the PRC, whose take-up is buoyed by cost advantages driven by scale, state support, and favorable financing.

One PRC firm, Hisense, has become a top global smart TV seller by offering lower-cost, high-quality products backed by government support, mixed-ownership structures, and the country's vast manufacturing base (NBR, March 2022). Once scaled, firms like Hisense aggressively target overseas consumers—embedding platforms like Roku and collecting user data that, in Hisense's case, may be stored on servers in the PRC (Hisense, December 1, 2017, February 1, 2019).

This approach uses domestic scale to validate products and springboard them into global markets. The broader goal is to make Chinese platforms and components foundational to next-generation smart homes worldwide. Critics warn this could create new vectors for data access, surveillance, or disruption (The Cyber Wire, August 8, 2023). From Beijing's perspective, this strategy is a strategic hedge, allowing for expanded exports while reducing dependency on foreign tech ecosystems.

Table 1: Architecture of the PRC's IoT Expansion Strategy

	Benefit to PRC industry and firms	Strategic significance	Implications & expected changes
Policy-driven incubation and scaling	Beijing treats IoT as a strategic industry, using top-down planning and generous subsidies to build a smart home ecosystem.	Reinforces China's model of techno-industrial governance led by state funding, local government coordination, and SOE integration.	National champions gain scale at home before expanding abroad; foreign firms face rising barriers and competitive pressure in global markets.
Infrastructure investment	The state has funded a vast 5G and broadband rollout, creating an ideal testbed for smart devices and platforms.	Infrastructure becomes a foundation for data accumulation, device deployment, and domestic platform control.	PRC firms enjoy a home-field advantage and first-mover status in future IoT standards and applications.
Protected domestic launchpad	Chinese tech firms scale in a protected market, refine products with government support, and then push globally.	Creates asymmetric advantages: firms like Huawei and Alibaba face less competition at home while using state-aligned growth to shape global ecosystems.	More PRC platforms will be exported with local refinements – expect continued spread of Chinese-built smart cities and connected appliances.
Standards and rulemaking	China is institutionalizing control over technical standards for IoT through national blueprints and global engagement.	Standardization is becoming a geopolitical tool – China seeks to lock in PRC-origin norms at home and push them abroad.	Foreign companies may be forced to adopt PRC protocols in third markets; China's standards could become default in the Global South.
Export and "go out" Strategy	Policies encourage PRC firms to bundle smart home and surveillance tech into Belt and Road and other diplomatic deals.	Beijing leverages trade, diplomacy, and finance to drive adoption of its digital platforms – especially where governance standards are lower.	PRC IoT systems will proliferate in Global South cities and real estate; expect growing scrutiny over data, security, and platform dependence.
Trade Leverage and Market Asymmetry	China shields its market while securing open access abroad, creating tilted competition in global smart device sales.	The imbalance in trade openness helps PRC firms win market share globally while foreign competitors struggle in China.	PRC brands (e.g. Hisense) will keep undercutting rivals on price and scale; concerns about embedded software and cross-border data flows will intensify.

Strategic Gains and Global Risks: The Endgame of China's IoT Expansion

Beijing's push for global IoT dominance is a strategic bet on shaping the rules, markets, and vulnerabilities of the digital era. If successful, Beijing will not only secure a major share of global tech value chains but also accumulate structural power through standard-setting, surveillance capabilities, and systemic dependencies.

Economic Resilience and Technological Autonomy

The country stands to capture a significant share of the $1.2 trillion global IoT industry, forecasted to grow over 10 percent annually through 2030 (Statista, accessed July 23). Domestic firms will secure value across the chain, from chips and software to data platforms and connected appliances, helping move the PRC up the tech ladder and avoid the middle-income trap. By embedding its preferred standards and influencing ISO/IEC protocols, Beijing aims to achieve long-term technological sovereignty and lock foreign users into Chinese-designed ecosystems (Exovera, August 2022; IoT Insider, December 7, 2023; GTI, February 5).

Data-driven Spillovers and Domestic Control

IoT dominance also unlocks strategic data flows. Connected devices generate vast quantities of behavioral and environmental data, reinforcing the PRC's lead in AI development—an area where Beijing aims for global primacy by 2030 (RAND, June 26). Domestically, smart home tech integrates into the PRC's urban governance and surveillance systems, feeding city-level monitoring platforms and public security operations in real time.

Geopolitical Leverage and Global Embeddedness

Beijing's expanding control over global IoT supply chains increases its leverage over foreign economies. Its bid for cellular IoT module (CIM) dominance threatens the supply security of rivals, especially amid tensions. In the United States, PRC-made devices remain deeply embedded in healthcare and industrial systems despite bans, surging from 185,000 to 300,000 units in under two years (Forescout, April 2, 2024). These exports also advance the country's Digital Silk Road strategy, exporting surveillance and smart infrastructure to over 80 countries, while giving Beijing influence in global data governance debates.

Espionage and data exfiltration

The domestic IoT ecosystem forms the backbone of Beijing's global data-gathering apparatus. Under the PRC's Data Security Law and National Intelligence Law, firms must hand over user data upon request, turning consumer electronics into intelligence collection platforms (NPC, June 27, 2017; Xinhua, June 11, 2021; Carnegie Endowment, January 30). In early 2024, over 300,000 PRC-made IP cameras, routers, and medical devices were active in U.S. enterprise networks, posing risks for health, location, and operational data exfiltration (Forescout, April 2, 2024). Devices such as drones and connected vehicles equipped with PRC LiDAR or modules can passively map infrastructure for future targeting (FDD, December 2, 2024).

Table 2: Key Security Risks from the PRC's Global IoT Expansion

Risk category	Vector / mechanism	Severity rating (1–5)
Cyber pre-positioning for disruption	Exploitable backdoors in PRC-made IoT devices; malware like Volt Typhoon enabling sabotage of critical infrastructure	5
Strategic data exfiltration	IoT devices (e.g. cameras, routers, wearables) transmitting sensitive personal and operational data back to PRC networks	5
Standards-based lock-in	Chinese-led global tech standards create systemic dependencies and reduce foreign firms' market power	4
Supply chain coercion	PRC monopoly on cellular IoT modules (CIMs) creates leverage for retaliation in crises or trade disputes	4
Intelligence mapping via sensors	PRC-manufactured LiDAR, drones, and vehicles collecting detailed geographic and infrastructure data abroad	4
Influence via Digital Silk Road	Export of PRC smart systems with built-in surveillance functions to over 80 countries; expansion of authoritarian norms	3
Regulatory and normative pressure	Use of international forums to push PRC-aligned data governance, weakening Western-led models for privacy and cybersecurity	3
Consumer privacy breaches	Smart TVs, appliances, and apps collecting behavioral data without adequate consent or oversight	2

Cyber pre-positioning and infrastructure threats

This dominance in IoT hardware has created systemic cybersecurity risks. As of mid-2025, over 70 percent of the world's cellular IoT modules come from the PRC (Carnegie Endowment, January 30). Many of these devices run outdated firmware—60 percent with critical vulnerabilities—and can be repurposed for botnets, sabotage, or persistent access operations (Council on Geostrategy, March 19, 2024). Recent breaches include:

- **Mirai botnet variant (2024–2025):** PRC-linked malware compromised small-office IoT devices, used for DDoS and espionage (The Hacker News, November 27).
- **Volt Typhoon (2024):** PRC hackers infiltrated U.S. infrastructure via IoT routers, laying groundwork for disruption (CISA, February 7, 2024).
- **Industrial IoT attacks:** Up 75 percent since 2024, targeting smart factories and utilities via PRC-made endpoints (Industrial Cyber, April 10).

These trends represent more than isolated threats – they form the architecture of a future in which Beijing controls critical components of the world's connected systems. Without decisive defensive action, the United

States and its allies risk strategic subordination enabled by the very infrastructure underpinning 21st-century power.

Conclusion

Beijing is poised to deepen and integrate the full spectrum of policy instruments that have driven its IoT rise—combining state-owned telecom infrastructure, protected domestic market access, and coordinated standard-setting to strengthen its position at home and abroad. Industrial parks, pilot zones, and targeted subsidies will continue to incubate new platforms, while 5G-Advanced deployments and state-guided venture funding accelerate the shift toward AI-enabled, interoperable device ecosystems. At the same time, PRC agencies will intensify their push in global standards bodies and trade negotiations to lock in protocols, compliance regimes, and market terms that embed Chinese technical and governance norms across emerging markets and beyond.

These efforts will be reinforced by diplomatic and financial channels—from Digital Silk Road infrastructure packages to preferential export credit—that tie IoT adoption to broader economic partnerships. As more cities, utilities, and consumers abroad integrate PRC-made connected systems, Beijing will gain greater ability to set the terms of data access, device compatibility, and network security. Over time, this convergence of industrial policy, standards diplomacy, and global market saturation could shift the balance of digital governance, giving the PRC structural leverage over how data is exchanged, networks are secured, and connected systems operate worldwide.

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Inroads in Algeria: The Promise and Perils of Beijing's Localization Strategy

By Aaron Glasserman and Jessie (Jiexi) Lin

Officials from the PRC and Algeria at a symposium on carrying forward their revolutionary history. (Source: People's Daily Online)

Executive Summary:

- The One Belt One Road initiative is evolving, with Chinese enterprises beginning to localize. In Algeria, this has led to increased exposure to the corruption and mismanagement that continue to plague the country's economy.
- This is leading to tensions with Beijing's pragmatic commitment to non-interference in other countries' "internal affairs." As a result of its localization strategy, Algeria's "internal affairs" are increasingly the PRC's problem too.
- The shift is especially evident in the digital domain. An agreement with Huawei to build Algeria's first national-level data center would give Huawei, and by extension Beijing, a key role in the technological infrastructure underpinning Algerian public services. As Huawei shapes Algeria's digital governance, the PRC gains not just economic access but increased influence over the state's administrative and accountability mechanisms.

In June, the Algerian government confirmed it had abandoned its stalled partnership with the People's Republic of China (PRC) to develop a deep-water port in El Hamdania, once envisioned as the second-largest shipping hub in Africa. Reports indicate that Algiers is instead soliciting additional investment for port modernization from the French shipping giant CMA CGM (L'Opinion, June 4; Arab Weekly, June 14; Radarr Africa, June 16). At first glance, the El Hamdania story has the hallmarks of a classic Belt-and-Road drama: a strategically located port and allegations of onerous financing conditions imposed by powerful state-owned enterprises (SOEs) against the backdrop of mounting competition between the PRC and Europe in the Mediterranean. But there is more to this story than geopolitical rivalry.

Beijing had its own reasons to be concerned about the project. Rampant corruption, poor management, and political interference by Algerian interest groups allegedly had hampered its development since Chinese SOEs took on the project in 2016, even as Beijing highlighted the port as an example of bilateral cooperation (Arabian Gulf Business Insight, March 19; PRC Ministry of Foreign Affairs [MFA], July 20, 2021). These concerns reflect the evolving nature of both Beijing's relationship with Algeria and its approach to global engagement more broadly.

An emerging trend in PRC-Algeria relations in recent years has been the "localization" (属地化, 本地化) of Chinese enterprises, including the reduced reliance on a Chinese workforce and the establishment of subsidiary companies in the target country. Chinese localization in Algeria is still in its nascent phase and faces obstacles, but several factors are driving it forward, on both the Chinese and the Algerian side. While non-interference and a pragmatic willingness to work with the powers that be in Algeria have facilitated Chinese engagement in the past, one consequence of localization is increased exposure to domestic political risk and a greater stake in Algeria's internal affairs. As Chinese enterprises become more intertwined with Algeria's economy, their interests in improving governance and curbing corruption in Algeria will continue to grow, potentially straining the bilateral relationship.

From Comrades to Customers

PRC-Algeria relations have a layered history. The ruling parties in both countries—the National Liberation Front (FLN) and the Chinese Communist Party (CCP)—today claim a legacy of anticolonial struggle even as economic development has eclipsed their revolutionary ideologies. The PRC was the first non-Arab country to recognize the FLN's provisional government during the war of independence against French colonial rule and provided arms, funds, and aviation training to support the new regime's consolidation of power into the 1960s. In the 1970s, Beijing dispatched teams of doctors to aid Algeria's nascent medical system. At the height of Beijing's international isolation during the Maoist period, Algeria was one of the few countries that maintained close ties with Beijing. Algeria was one of the "two A's" (两阿), along with Albania, who introduced a United Nations resolution to recognize Beijing as the government of China in 1971. Current foreign minister Wang Yi (王毅) has spoken of the need to "give new connotations to the two countries' traditional friendship" (赋予两国传统友谊新内涵), affirming the enduring significance of this history while perhaps also hinting at the challenge of establishing a smooth economic relationship (MFA, 2021).

When the One Belt One Road (OBOR) initiative was launched in 2013, Algeria was a promising if remote prospective partner: strategically located at the nexus of European and African trade and supply chains, rich in

hydrocarbons, and hungry for exports from the PRC, which had just surpassed France as the country's largest trading partner (Middle East Institute, January 26, 2021). Since 2000, the PRC has primarily relied on Algeria as a source of energy, with oil and oil-related products consistently representing more than 90 percent of total imports (OEC, accessed August 6). Chinese exports to Algeria, meanwhile, skyrocketed over the early-to-mid 2000s and continued to surge into the 2010s (CEIC, accessed August 6). In 2014, Algeria became the first Arab state to enter into a "comprehensive strategic partnership" (全面战略合作) with the PRC, followed shortly thereafter by Egypt (MFA, June 7, 2014). Algeria was also the destination for a rapidly growing number of Chinese workers, whose presence peaked at around 90,000 in 2016, more than twice the next-largest in Africa (Angola) and dwarfing the rest of the continent (China-Africa Research Initiative [CARI], accessed August 6). That same year, the PRC and Algeria signed a framework agreement for cooperation across manufacturing, energy exploitation, iron, steel, and infrastructure (MFA, October 16, 2016). Chinese companies were managing some of Algeria's largest and most iconic construction projects, including the Great Mosque of Algiers and the East-West Highway (Chatham House, December 3, 2020).

The Hirak Hiccup

2019 was a watershed in Algerian politics and the PRC-Algeria relationship. Beijing had previously regarded the Algerian regime as relatively sturdy, especially in comparison to its North African neighbors and several other Arab countries. Chinese analysts even dubbed Algeria an "eye of the storm" (风暴之眼) and an "island of stability" (稳定岛) amid the tumult of the Arab Spring "color revolutions" dreaded by Beijing (Global Times, December 8, 2014; Ci Zhigang, "Structural Analysis of Algeria's Political Stability" [阿尔及利亚政治稳定结构分析], *Arab World Studies* [阿拉伯世界研究] no. 2, 2019: 19–33). However, a decline in oil prices in the 2010s led to diminished oil and gas revenues with which the regime could buy social peace. Corruption and nepotism plagued the political system; power remained concentrated in a nexus of military-political elites known colloquially as "Le Pouvoir;" and rising unemployment and poor public services fueled discontent. In February 2019, when the long-serving, 81-year-old president Abdelaziz Bouteflika announced he would seek a fifth term, peaceful demonstrations broke out and spread throughout the country (Ghanem, "A Protest Made in Algeria," 2019).

Over the first year of the so-called "Hirak" ("movement") protests, Algerian politics and society were thrown into chaos. Mass demonstrations took place in major cities on a regular basis, demanding the removal of the ruling elite, while Algerian authorities struggled to maintain legitimacy. The government responded with a mix of selective concessions and heavy-handed repression, including the imprisonment of hundreds of peaceful protesters and the use of tear gas, rubber bullets, and other weapons to disperse crowds (International Crisis Group, April 16, 2019; Human Rights Watch, February 21, 2022).

PRC-Algeria relations were not immune to this upheaval. The Algerian government suspended work on the El Hamdania project in early 2019 (International Trade Administration, March 29, 2020). Even as Algeria formalized its entry into OBOR in July of that year, the future of the relationship was clouded by political uncertainty (Xinhua, July 10, 2019). With its longtime partners in the FLN under pressure and no clear successor network in place, the PRC scaled back its engagement, signaling a risk-averse posture as the seemingly independent leadership consolidated power under newly elected president Abdelmadjid Tebboune. Exports to Algeria declined by 33 percent over 2018–2020, and the Chinese labor presence dropped sharply

in 2020 and again in 2021, no doubt compounded by the COVID-19 pandemic (CEIC; CARI, accessed August 6). Financial flows to Algeria collapsed, from $34 million in 2017 to zero by 2019 (AidData, accessed August 6). The PRC also faced growing risk from its association with the Bouteflika presidency and its costly and allegedly corrupt projects, including the Grand Mosque of Algiers. Data from the Arab Barometer indicates that Algerian public opinion toward the PRC grew increasingly unfavorable after the onset of the Hirak protests (Arab Barometer, March–April, 2021). **[1]**

Algeria's political-military elite ultimately managed to re-consolidate power, and the bilateral relationship with the PRC likewise restabilized. Beijing's success in this respect was at least in part due to its avowed commitment to "non-interference" (不干涉) in what it considers other countries' "internal affairs" (内部事务) and its willingness to quickly restore ties with the targets of pro-democracy demonstrators once it became clear that "Le Pouvoir" was, in effect, still in charge. At the height of the political unrest, Beijing had distinguished itself from other powers by backing the Algerian government, while France and the United States both implicitly leant their support to the demonstrators (U.S. State Department, December 13, 2019; Le Point, March 4, 2019). Its ability to maintain continuity stemmed not only from its diplomatic restraint but also from its pragmatic approach to economic engagement. The PRC remained an essential partner in infrastructure and technology to Algeria, giving Beijing an easy re-entry point once the dust had settled (Ministry of Commerce, December 12, 2024; MFA, October 21, 2020).

Toward Localization

The PRC's post-Hirak engagement with Algeria has been marked by a combination of continuity and change. The country continues to pursue its energy and economic interests, importing Algerian hydrocarbons and exporting an increasing quantity of manufactured goods (CEIC, accessed August 6). In 2022, the PRC and Algeria signed a second five-year agreement under the framework of their comprehensive strategic partnership, which aims at strengthening cooperation across trade, energy, agriculture, science and technology, space, health, people-to-people exchanges, and culture, and to enhance coordination between the two countries' development strategies (MFA, November 8, 2022). Investments in Algeria since have surged and are now estimated at nearly $4.5 billion, approaching the scale of its interests in Egypt ($9 billion) and Morocco ($10 billion) (The New York Times, May 7; Aljazeera, May 20).

The nature of the economic relationship is changing, however, by becoming more localized—part of a broader trend in the PRC's economic engagement overseas. In the early stage of OBOR, most Chinese SOEs followed a familiar playbook of "going out" (走出去) to different countries: they secured contracts through international bidding, deployed Chinese work teams, and operated through their parent companies based in the PRC. This approach effectively transplanted domestic business practices to foreign markets with minimal adaptation. However, as OBOR engagement deepened, this model began to show its limits. Rising labor costs in the PRC and tightening visa regulations, coupled with labor protections abroad, made it increasingly difficult to rely on Chinese expatriate workforces. SOEs continued applying internal management practices that worked with the Chinese regulatory environment but often clashed with evolving local laws. For example, certain firms required employees to comply immediately with overtime notices, a practice that violated labor protections in some partner countries (International Engineering and Labor Magazine, January 30, 2023).

The term "localization" has been a part of OBOR rhetoric since the mid-2010s but has become more prominent in recent years (Xinhua, March 29, 2015). Chinese companies increasingly talk in terms of not just "going out" into the world but "going into" (走进去) other countries. This shift is in part a reflection of widespread concerns that OBOR is exploitative. Official sources cast localization as an example of how OBOR projects "strengthen implementation of environmental, social, and governance (ESG) principles, actively integrate into local society, realize self-sustainable development, and jointly build win-win cooperation for all parties" (践行环境、社会、公司治理（ESG）理念，积极融入当地社会，实现自身可持续发展，与共建各方合作共赢) (Xinhua National High-End Think Tank, "'Belt and Road' Development Studies: Exploring the Theory and Practice of Global Common Development" ["一带一路"发展学——全球共同发展的实践和理论探索], October 19, 2023).

Localization is more than a public relations exercise aimed at countering foreign allegations of "debt-trap diplomacy" and "Chinese neocolonialism" (Clark, "The Rise and Fall of the BRI," April 6, 2023; Ping and Odota, "Will China Directly Intervene to Protect Its Investments in Africa," October 25, 2024). Country-specific investment guides published annually by the PRC Ministry of Commerce offer insight into how the government encourages firms to seek out opportunities overseas. **[2]** Guides for Algeria published between 2018 and 2024 consistently call on SOEs to adapt to local market conditions and establish on-the-ground subbranches. In the 2018 guide, China State Construction Engineering Corporation (CSCEC; 中国建筑集团) was the sole featured example of a Chinese SOE executing localization by training and employing local workforce. By 2021, these practices were much more common.

As localization efforts deepen, Beijing's commitment to "non-interference" and its long-held aversion to engaging in countries' "internal affairs" have begun to blur. Corruption, bureaucratic opacity, and regulatory unpredictability are now issues that can directly impact the profitability and viability of Chinese enterprises. The 2023 investment guide for Algeria openly acknowledges these problems, pointing to opaque policies as one of the main obstacles that hinder SOEs' commercial operations. It also includes frank assessments of the deleterious effects of increased corruption and social unrest (Ministry of Commerce, March 14, 2023). Evaluations from Chinese advisory firms also offer candid reporting on Algeria's rigid political system, limited transparency, and lack of institutional reform as barriers to effective cooperation (GoalFore Advisory, November 1, 2019; Cuiquanqiu, May 27, 2024; Tiandiren Law Firm, June 13, 2024).

These official and private assessments suggest that the PRC is no longer indifferent to how Algeria is governed. The shift is especially evident in the digital domain. In April 2024, the Algerian High Committee for Digitalization signed an agreement with Huawei to build the country's first national-level data center (Ministry of Commerce, May 8, 2024). The project, which is set to connect ministries and support a unified government cloud platform, would give Huawei, and by extension Beijing, a key role in the technological infrastructure underpinning Algerian public services. One month later, the head of the committee, Meriam Ben Mouloud, visited Beijing to deepen cooperation (Algerian Ministry of Foreign Affairs, May 16, 2024). Though presented as technical assistance, the initiative they signed quietly binds the PRC more closely to the inner workings of the Algerian state. As Huawei shapes Algeria's digital governance, the PRC gains not just economic access but increased influence over the state's administrative and accountability mechanisms. In effect, the more localization advances, the more Algeria's internal governance becomes the PRC's business, whether Beijing admits it or not.

Conclusion

The OBOR initiative is widely understood to be a pillar of the PRC's grand strategy and is often analyzed from a geopolitical perspective as a result. The trajectory of PRC-Algeria relations instead indicates the need to examine not just the reach of Chinese influence but also the nature of that influence within OBOR partner countries. The strengthening economic relationship in the 2010s, which has picked up again after the Hirak upheaval in 2019–2020, are testaments to the advantages of Beijing's pragmatic commitment to non-interference in other countries' "internal affairs." Yet, as Chinese enterprises have begun to localize in Algeria in the 2020s, they have increased their exposure to the corruption and mismanagement that continue to plague Algeria's economy. Algeria's "internal affairs" are increasingly the PRC's problem too.

The dynamics of localization hint at an overlooked factor driving the PRC's interest in digital governance and promotion of various "global governance" (全球治理) mechanisms. These efforts enhance the PRC's status on the world stage and promise direct influence over the shaping and codification of new global norms. At the same time, its growing economic stake in efficient, predictable, well-run institutions in other countries is leading to new concerns about governance overseas. Beijing is not on a path toward conditioning aid and development assistance on political reform and promotion of liberal values, but not everything that a regime may consider its "internal affairs" is a matter of repression. Even if one takes freedom of expression and other rights out of the equation, Chinese enterprises may find themselves increasingly frustrated with the way Algeria is governed and increasingly tempted to ask Beijing to take action and intervene on their behalf.

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Notes

[1] Respondents ranked China lowest in terms of perceived project quality and showed declining support for awarding infrastructure contracts to Chinese firms—a notable shift from the results from 2018–19, when many Algerians viewed China more favorably than other powers, including the United States and Russia, and expressed greater interest in deepening economic ties with Beijing. The question concerning contracted project quality by country appeared on Arab barometer Wave 6 Part 3 as Question 727. In terms of project quality,

Germany, US, and Turkey are viewed with the highest quality. China only has 11.5 percent of respondents think it has the best quality. However, when it comes to lowest quality, China has the most votes with 39.4 percent of respondents thinking it is the worst, followed by Germany (13.9 percent) and the United States (11.8 percent) (Arab Barometer, March–April, 2021)

[2] First published in 2009, these guides were initially limited to few countries with strong trade ties to China (Chinese State Council Information Office, October 22, 2014). However, as OBOR took off in 2013, state-endorsed investment guidance became an important component to China's foreign policy. Concurrently, the scope of the country-specific investment guide also expanded significantly to include more OBOR signatories. As of 2024, the guides cover 180 countries and regions. While the guides started much earlier, they are currently published under the OBOR section of the Chinese Ministry of Commerce's website, implying an institutional signal that Beijing sees them as part of the broader toolkit for pushing Chinese firms outward under state guidance under the greater scheme of OBOR (Chinese Ministry of Commerce, December 12, 2024). While the guides are broadly quoted by other governmental agencies and external organizations for analysis, the target audience of the guides are Chinese companies seeking to export, invest, or secure construction contracts abroad, referencing the guides as an official overview of the political and commercial circumstances they are entering (China International Development Cooperation Agency, May 21).

Embodied Intelligence: The PRC's Whole-of-Nation Push into Robotics

By Sunny Cheung

Illustration depicting the PRC's burgeoning robotics sector.(Source: AI-generated image)

Executive Summary:

- Since 2015, Beijing has pursued a whole-of-nation strategy to dominate intelligent robotics, combining vertical integration, policy coordination, rapid deployment, and local experimentation. This approach has already achieved several of its core objectives.
- Policy documents articulate an official focus on core trends and technologies like humanoid robotics, sensors, actuators, and motion control. Local governments are also diversifying applications into fields ranging from eldercare to logistics and manufacturing.
- Massive state subsidies and loans underwrite these programs, with provinces and cities engaging in a de facto "subsidy race," each vying to foster the next national robotics champion within their jurisdiction.
- "Industrial migration" is another emerging trend, in which a growing number of electric vehicle and tech giants are entering the humanoid robotics sector due to technological and supply chain overlaps. Their scale, engineering capacity, and vertical integration allow them to lower costs, accelerate R&D, and compete aggressively in a nascent industry.

Editor's note: This article is the first in a series analyzing the trajectory of the PRC's robotics industry, from ecosystem formation to supply chain control to military implications. This first instalment maps previously undisclosed trends, drawing on recent policy papers, investment announcements, and discussions among industry players to decode the Beijing's approach to this increasingly important sector.

Beijing is mounting a coordinated campaign to get ahead in next-generation artificial intelligence (AI) hardware through a nationwide surge in robotics. While companies in the West like Tesla and Boston Dynamics introduced physical AI to global audiences years ago, the People's Republic of China (PRC) is now rapidly assembling an impressive array of competitors, marshalling industrial, academic, and financial resources to scale up its new national champions. The race is well underway.

At the 2025 World Artificial Intelligence Conference (世界人工智能大会) in Shanghai, the "National and Local Co-built Embodied Artificial Intelligence Robotics Innovation Center" ("HUMANOID"; 国家地方共建人形机器人创新中心) unveiled a new initiative to accelerate the development of humanoid robotics. It introduced fresh funding channels, training platforms, and national research hubs, all with the backing of central ministries and provincial governments (CCTV, July 28).

Across the country, similar announcements have proliferated in recent months. Since January, the central government has launched an $8.2 billion National AI Industry Investment Fund (国家级人工智能基金) to steer capital into frontier technologies, including the integration of AI into physical world. Meanwhile, local governments in Beijing, Shenzhen, and other regions have unveiled plans specifically targeting humanoid robotics (Baijiahao/Neutral Carbon Corporation Company, April 17).

First Steps: PRC's Path to Robotics Dominance

Back in 2013, the PRC lagged behind global leaders such as Korea, Japan and Germany in robot density, even if it had become the world's largest market for industrial robotics. Having assessed that robotics would be a key strategic industry in the future, the government began to lay the groundwork to engineer its industrial catch up.

Robotics was grouped alongside high-end computer numerical control (CNC) machine tools as one of 10 sectors highlighted in the Made in China 2025 policy, a landmark industrial strategy launched in 2015 to achieve global leadership in key emerging technologies. This policy, which anticipated many of the embodied AI ambitions now driving current PRC policy, divided robotics into three domains: industrial robots for manufacturing, service robots for human-centric environments, and special-purpose robots for hazardous or military use. (MIIT Equipment Industry Development Center, May 12, 2016). To execute the goals set in the Made in China 2025 plan, the National Development and Reform Commission (NDRC) published the Robot Industry Development Plan (2016–2020) (机器人产业发展规划 2016-2020 年). This plan highlighted structural weaknesses, such as reliance on foreign core components like servo motors and control systems, and advocated for greater self-sufficiency in response (NDRC, April 27, 2016). Importantly, these calls predated the United States's imposition of export controls during the first Trump administration.

In 2021, the 14th Five-Year Plan and its related sub-strategies further prioritized robotics, outlining specific goals in intelligent manufacturing, smart mobile robots, and cleanroom automation (using robotics within

controlled environments to minimize human intervention). At the end of that year, the government released the 14th Five-Year Robotics Industry Plan ("十四五"机器人产业发展规划), which set an additional goal of becoming a global robotics leader by 2025, with an annual industry growth rate exceeding 20 percent (MIIT, December 28, 2021).

Policy momentum accelerated in 2023 with the launch of a "robotics +" action plan ("机器人+"应用行动实施方案), which promoted widespread robot adoption in manufacturing, healthcare, logistics, and education (MIIT, January 18, 2023). This was followed soon after by a set of opinions to guide innovation and development of humanoid robotics (人形机器人创新发展指导意见). These targeted humanoid systems specifically, identifying key technological bottlenecks and prioritizing breakthroughs in motion planning, cognitive AI, bionic sensing, and dexterous control systems (see Table 1) (MIIT, October 20, 2023).

Table 1: Critical Technological Bottlenecks

Category	Focus
Robot "Brain"	Unified AI architecture for perception-decision control; large models; human-environment interaction.
Robot "Cerebellum"	Full-body coordination; terrain adaptation; motion planning; online learning and behavior modeling.
Robot Limbs	Biomechanics; high-speed, high-precision movement; bionic limb structures and control systems.
Robot Body	Structural optimization; lightweight materials; integrated energy-sensing-structure design.
Functional Robots	Low-cost and high-precision variants for interaction, fine motor tasks, and impact protection.
Sensors	Vision, auditory, tactile sensors; high-resolution and bionic sensing systems.
Actuators	High-power density joints; electric and hydraulic drives; compact transmission systems.
Controllers	Real-time motion control chips; AI decision and planning support.
Power Systems	High-energy batteries; power management and integration for endurance and adaptability.

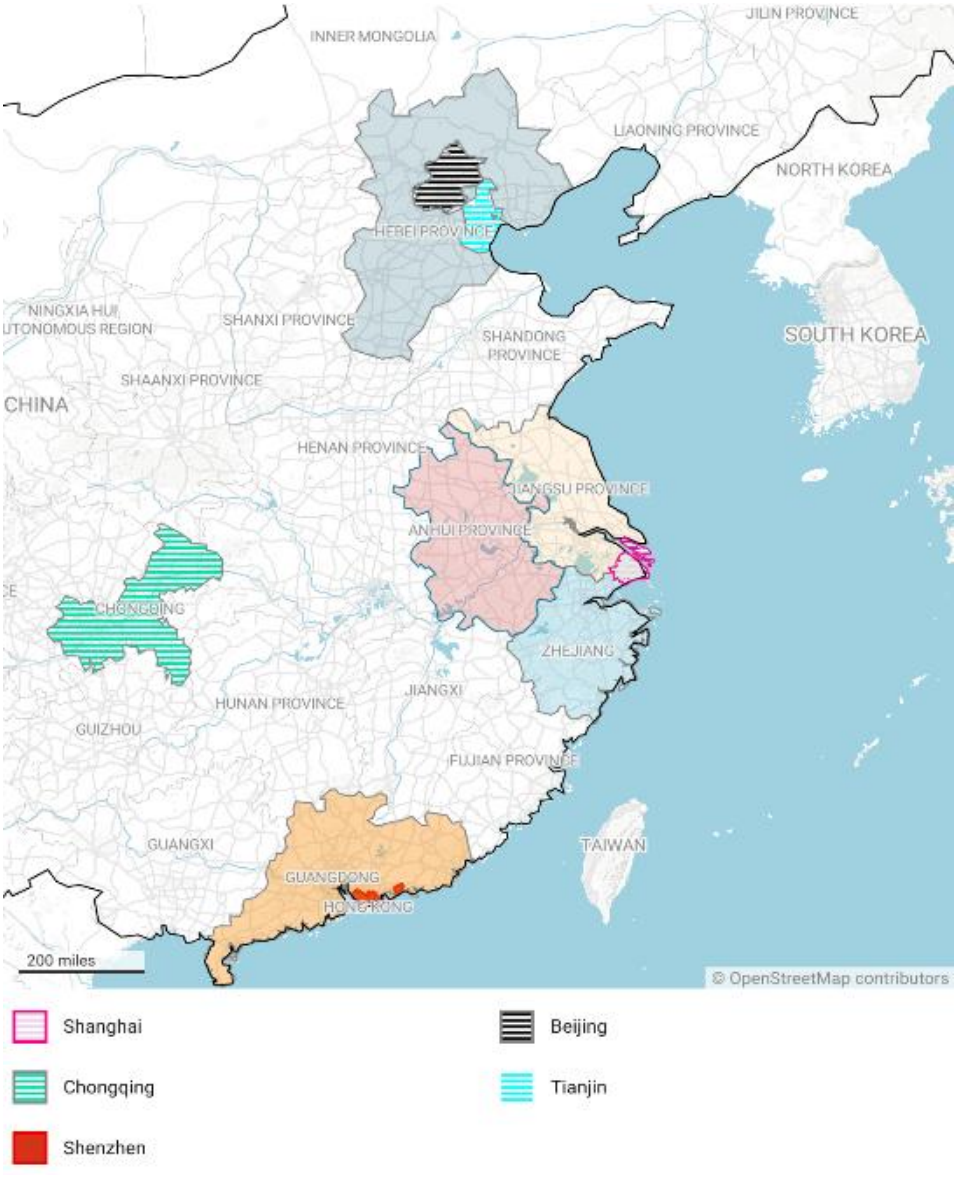
(Source: MIIT)

Mapping Priorities: What Policy Language Reveals About the PRC's Robotics Drive

As the number of policy documents and action plans have multiply, it has become clear that the PRC is executing a full-spectrum, whole-of-nation push for global leadership in humanoid robotics. Provinces such as Zhejiang, a longstanding manufacturing powerhouse, led early by publishing PRC's first "robotics+" policy in 2017 (Xinhua Daily Telegraph, March 17). Others quickly followed. This study has found that key provinces such as Guangdong, Jiangsu, Hebei, Anhui, and all four direct-administered municipalities (Beijing, Shanghai, Tianjin, and Chongqing) have since issued their own robotics blueprints, reflecting both national alignment and local priorities (Tianjin Net, August 15, 2017; Hebei Government, June 7, 2023; Jiangsu Equipment and Industry

Department, April 19, 2024; Beijing Development and Reform Commission, July 18, 2024; Guangdong Government, March 10; Anhui Department of Industry and Information Technology, May 30). Emerging tech centers like Hangzhou, where the "Six Dragons" locate, and Shenzhen have also introduced robotics-specific guidance, reinforcing the PRC's multi-nodal model of tech diffusion, from the Yellow River basin to the Yangtze Delta and the Greater Bay Area.

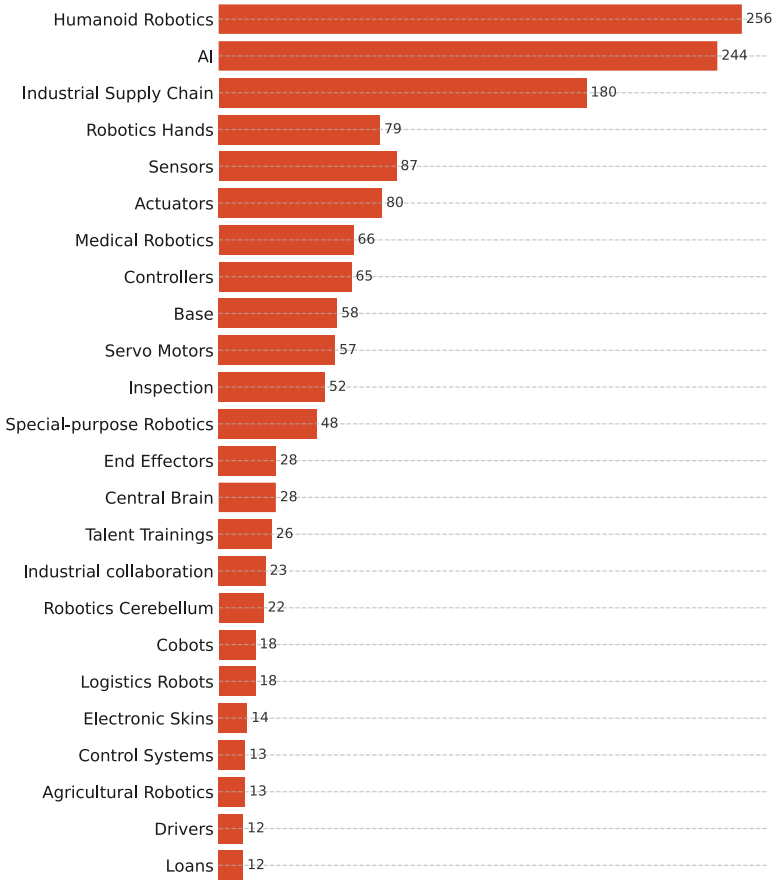
Figure 1: Key Robotics Hubs in the PRC



(Source: Created by the author using Datawrapper)

A survey of 30 national, provincial, and municipal-level policy documents based on the abovementioned areas published between 2015 and May 2025 offers a revealing window into the state's evolving priorities. Across this dataset, "humanoid robotics" (人形机器人) and "Artificial Intelligence" (人工智能) top the list of keywords, with 256 mentions and 244 mentions, respectively (see Figure 2 below). This underscores a national pivot toward embodied intelligence systems that integrate machine capabilities and human-like functions. The emphasis reflects recent efforts from central ministries to integrate cognitive AI with physical platforms across both industrial and social domains. This explains why Beijing humanoid robotics industry revenue has grown nearly 40% in the first half of this year, accounting for about one-third of the national total (Cailian, August 8). Also, prominent across the policy documents is the phrase "industrial supply chain" (工业供应链) (180 mentions). This signals concerns over upstream resilience and import substitution, particularly in core robotics components long dominated by foreign suppliers. Frequent mention of terms like sensors, actuators, controllers, and servo motors similarly reflects ongoing efforts to localize critical hardware ecosystems and escape long-standing bottlenecks identified in the Made in China 2025 strategy.

Figure 2: Mentions of Keywords Across 30 PRC Robotics Policies, 2015–2025



(Source: Created by the author using Datawrapper)

Local policies reveal considerable variation from topline central directives. Specialized domains are increasingly mentioned, such as Medical Robotics (66), Special-purpose Robotics (48), and even Electronic Skins (18), and often reflect deliberate local prioritization. For example, Shanghai was among the first localities to release a white paper exclusively focused on medical robotics—a decision shaped by its advanced healthcare infrastructure and robust biomedical innovation base (Shanghai Government, October 31, 2023). The Beijing authority also issued an exclusive notice on promoting intelligent eldercare robots (养老机器人) (Beijing Bureau of Economy and Information Technology, June 12). The policy reflects efforts to integrate advanced technologies into daily life, accelerating the expansion of application scenarios and driving widespread adoption at an unprecedented scale. This indicates that technical emphasis is distributed across the country to minimize intra-provincial competition while accelerating collective progress. Local governments are increasingly seeking to carve out distinct roles within the national robotics architecture, tailoring their strategies to local industrial composition, startup ecosystems, and access to talent and capital.

The PRC's use of state-backed financing to drive the industry is apparent in the frequent mentions of "funds" (58) and "loans" (12) across these policy documents. Government guidance funds help robotics startups and designated strategic companies scale key technologies, while loans offer support for R&D commercialization. Jiangsu has offered up to RMB 30 million ($4.2 million) in subsidies for robotics manufacturing innovation centers (Jiangsu Equipment and Industry Department, April 19, 2024). Guangdong prioritizes funding for innovation platforms, offering RMB 50 million ($7 million) in fiscal support for robotics centers and up to RMB 100 million ($14 million) for approved special projects (Shenzhen Government, April 28, 2023; South Plus, April 1). Meanwhile, Zhejiang integrates robotics into consumption-boosting policies, offering 15 percent subsidies—up to RMB 2,000 ($280) per unit—for smart home robots through its appliance trade-in program (Baidu/JRJ.com, May 20). At the city level, Suzhou provides up to RMB 200 million ($28 million) for robotics research institutions, particularly those aiming to become national labs (Suzhou Legal Bureau, June 9). These examples underscores the PRC's sustained reliance on subsidies and credit instruments to steer and accelerate priority tech sectors through early-stage uncertainty and financial volatility. As a result, provinces and cities are engaged in a de facto "subsidy race," each vying to foster the next national robotics champion within their jurisdiction.

From Patent Race to Factory Floor: PRC's Two-Track Robotics Surge

The PRC's robotics campaign currently is advancing along two tightly coordinated fronts: scaling physical deployment and securing dominance in future innovation domains. In 2023, the country made over 276,000 industrial robot installations, nearly six times that of Japan and far surpassing the United States, South Korea, and Germany, and indicating the fruition of several years of policy support (see Figure 3 below). The current installation figures indicate that they country successfully met annual production targets set by the NDRC in 2016 for 2020 (NDRC, April 27, 2016).

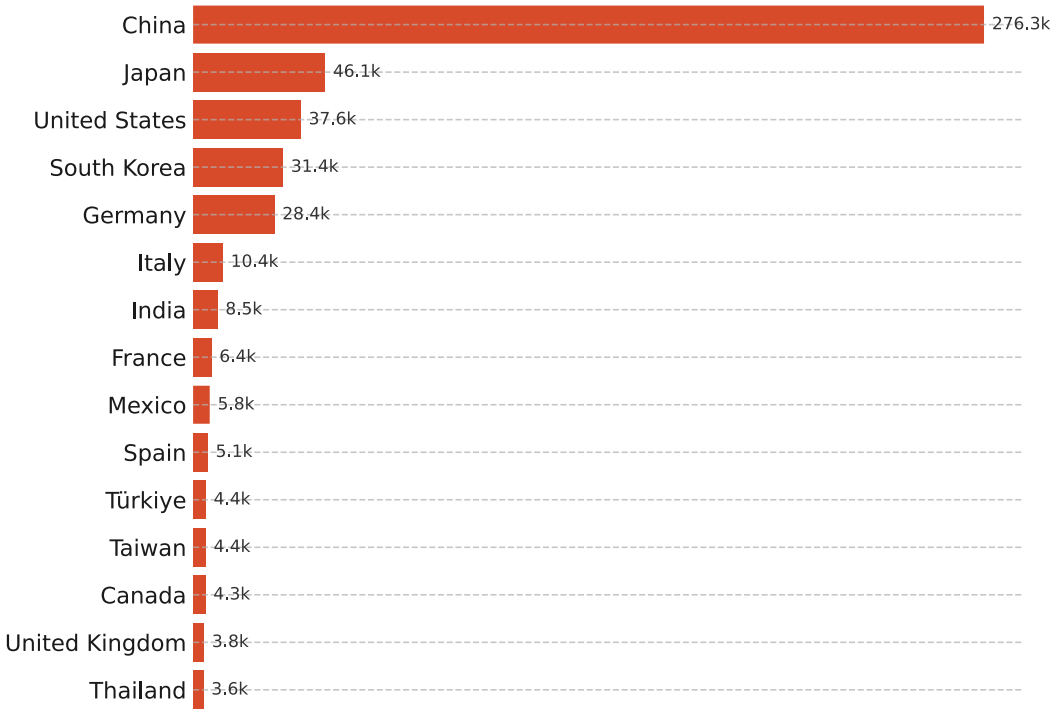
In terms of intellectual property, however, Chinese firms continued to lag long-established Japanese and Korean players (see Figure 4 below). While 2023 data shows PRC firm UBTECH (优必选) leading in global patent filings—with growing contributions from institutions like Tsinghua University, Beijing University of Technology, and the Chinese Academy of Sciences—long-established Japanese and Korean players still dominated the intellectual property space. though the gap is shrinking. As of 2025, the PRC accounts for nearly

60 percent of global AI-driven robotics patent filings, signaling not only dominance in output, but also growing influence over the future trajectory of embodied AI (PatentPC, July 31).

A similar trend emerges in robotics-related research. Between 2015 and 2022, the PRC recorded a 545 percent increase in first-author robotics publications, and a 256 percent rise in the number of institutions conducting robotics research. The PRC overtook the United States in total publication volume in 2022 (The China Academy, October 24, 2023). The result is a rapidly expanding ecosystem in which academic, industrial, and state-driven innovation are increasingly synchronized.

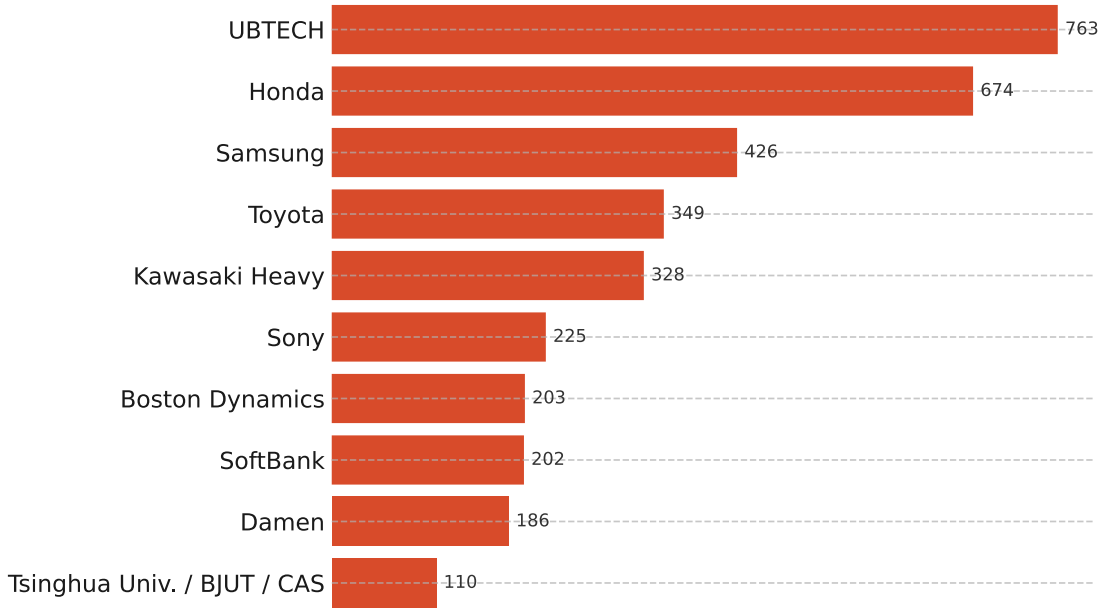
Here it is necessary to emphasize the distinction between industrial and humanoid robots. While the PRC is already delivering measurable outcomes in the former, in the latter it remains in its early incubation stage, with production only recently beginning. This production is driven largely by university labs, intellectual property competitions, and long-cycle capital. However, as policy attention and investment increasingly converge on embodied AI, this gap also is likely to narrow. According to the China Academy of Information and Communications Technology , the PRC's humanoid robotics industry reached a market size of nearly RMB 2.8 billion ($380 million) in 2024 and is projected to grow into a RMB 100 billion market by 2030 (CCTV, September 12, 2024).

Figure 3: Installations of Industrial Robots by Country 2023



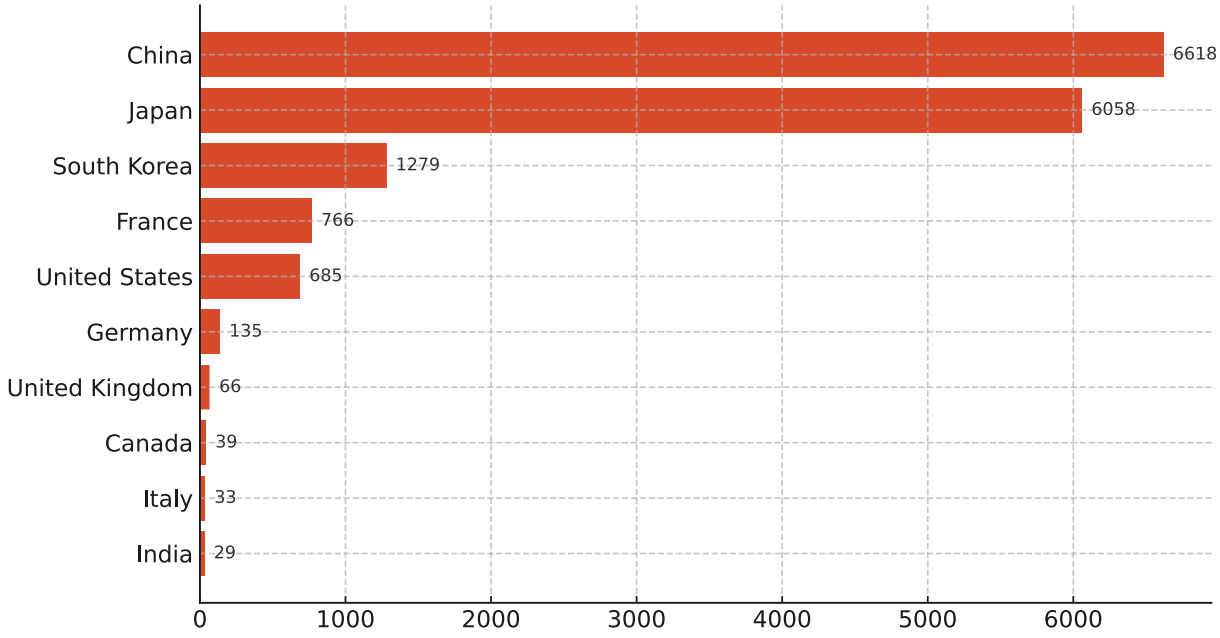
(Source: International Federation of Robotics)

Figure 4: Number of Valid Humanoid Robotics Patents by Organization (2023)



(Source: Created by the author based on data from CNIPA and WIPO)

Figure 5: Number of Cumulative Humanoid Robotics Patent Applications by Country (2015–2022)



(Source: Created by the author based on data from CNIPA and WIPO)

EV and Tech Sectors Fuel Humanoid Robotics

"Industrial migration" is an emerging trend shaping the PRC's robotics industry, whereby the country is increasingly leveraging its mature electric vehicle (EV) ecosystem to support its nascent robotics sector. Leading EV companies like XPeng (小鹏汽车), BYD (比亚迪), GAC (广州汽车集团), and Li Auto (理想汽车) are repurposing EV technologies for robotics, capitalizing on shared system architectures. Both EVs and humanoid robots operate on a "perception–decision–execution" loop, using sensors to perceive their environment, processing information in real time, and autonomously taking actions in response (Sina Finance, May 23).

On the perception side, technologies developed for autonomous driving—such as LiDAR (Light Detection and Ranging), cameras, ultrasonic sensors, radar, and inertial measurement units (IMUs)—are now being widely adopted in humanoid robot navigation and vision systems (Nvidia, April 15, 2019). These sensors feed into sensor fusion algorithms and SLAM (simultaneous localization and mapping) systems, which are standard in self-driving vehicles and now widely adopted in humanoid robot navigation and vision. The same AI processors originally developed for automotive autonomy—including neural processing units (NPUs), graphics processing units (GPUs), and CPU/system-on-chip (SoC) architectures—also are being repurposed in humanoid robots to support environment modeling, motion planning, and real-time decision-making (South Plus, April 11).

The execution layer shows similar alignment. EVs rely on high-torque electric motors, precision servo drives, and battery management systems (BMS), all of which are essential for powering a robot's limbs, joints, and core systems. Thermal and energy management systems originally designed for EVs platforms, including advanced cooling solutions, can also be applied to robots, which face comparable challenges in heat dissipation and endurance. Even vehicle chassis control systems, like drive-by-wire and braking logic, conceptually align with robotic joint control and limb coordination (Auto Business Review, June 3).

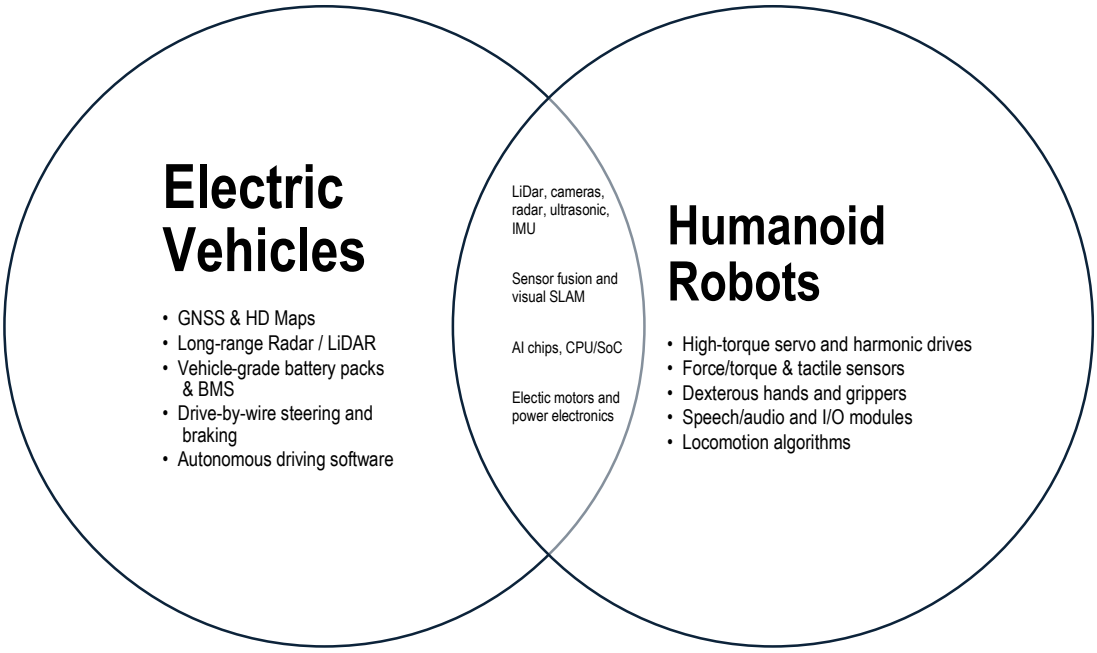
As a result, Chinese EV makers are not entering humanoid robotics space as complete outsiders but as well-positioned incumbents, accelerating the commercialization of humanoid platforms with existing R&D, talent, and infrastructure.

As this ecosystem evolves, major players are emerging as both investors and system architects. EV manufacturers such as XPeng, BYD, GAC, Li Auto, Changan (长安汽车), and Geely (吉利) are building in-house robotics teams, and also collaborating with or investing in top robotics companies like UBTECH, Unitree (宇树科技) and Leju (乐聚机器人). These partnerships allow carmakers to directly apply their competences to developing humanoid robot performance. For example, XPeng's "Iron" robot uses the same autonomous driving system and in-cabin AI from its EVs to enable 720° visual perception and voice interaction. Meanwhile, BYD uses its vertically integrated supply chain to self-produce 80 percent of core components like harmonic reducers and torque sensors at scale, achieving a 30–40 percent cost reduction (Weibo/Zhineng, December 29, 2024; QQ/Zhixin Lele, April 17). The company plans to deploy 2,000 robotics at its production lines this year.

EV firms also bring manufacturing muscles, deploying their factories—that are already optimized for modular, high-precision assembly—to scale robotics production. NIO (蔚来汽车) and Geely have partnered with

Unitree and other leading robotics companies to transform their factories into testbeds for robotics startups, providing real-world environments to fine-tune robotic navigation, manipulation, and coordination (Late Post, June 11; Xinjing News, July 29). GAC's GoMate robot integrates a force control system adapted from its EV drive platform. By transplanting torque control algorithms, it reportedly achieved a 50 percent improvement in single-leg balance response time and accelerated force control system development by nine months ahead of the industry average (Jiemian, December 25, 2024).

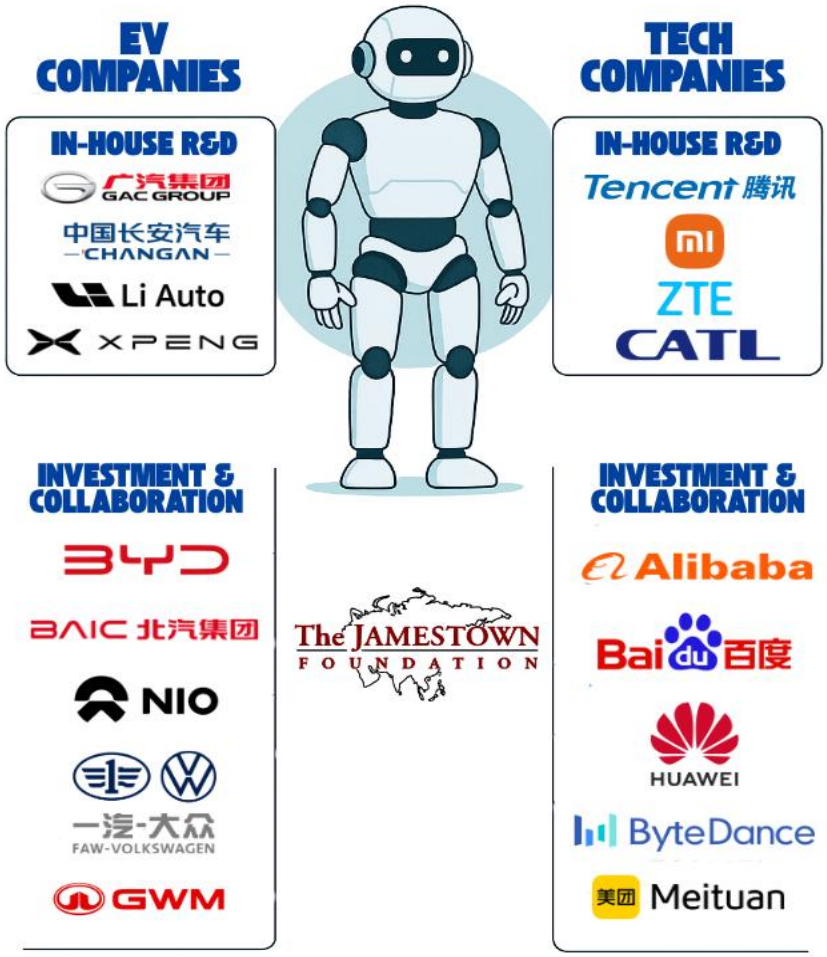
Figure 6: Venn Diagram of Technologies Shared by Electric Vehicles and Humanoid Robots



(Source: Created by the author)

On the tech front, Meituan's founder Wang Xing (王兴) has emerged as the PRC's most prominent investor in embodied AI, supporting over 30 robotics-related startups and building a full-stack "robot army" spanning hardware, AI brains, and real-world scenarios (TMT Post, July 25). ByteDance has exceeded 1,000 units in robot production, deploying them across logistics and retail sectors (Late Post, July 2). Tencent and Alibaba have funded key players like AgiBot (智元机器人) and Galaxea AI (星海图), focusing on modular perception, bionic cognition, and general-purpose AI brains (Cailianshe, July 21). Xiaomi combines to integrate end-to-end hardware R&D with ecosystem investment across actuators, chips, and algorithms to reinforce its CyberOne platform (Haokan Video, March 8). Finally, U.S.-sanctioned battery giant CATL (宁德时代) has also entered robotics realm, leading the largest single funding round in the country's embodied intelligence sector through its investment in Galbot (银河通用), a rising general-purpose robotics company (Xinhua, June 23). In the first half of 2025, total financing in the humanoid robotics sector has already reached a record high, exceeding 10 billion RMB ($1.4 billion) (CCTV, July 27).

Figure 7: The Tech Sector Backgrounds of Leading Robotics Firms



(Source: Created by the author)

Huawei also is emerging as a key player. In 2024, it launched an Embodied AI Industry Innovation Center (全球具身智能产业创新中心) in Shenzhen, partnering with the municipal government alongside 16 companies, including Leju Robotics and Hechuan Technology (禾川人形机器人) (The Paper, May 16). Huawei also signed a strategic agreement with UBTECH to co-develop humanoid technologies. In collaboration with China Mobile and Leju, Huawei unveiled the industry's first 5G-A humanoid robot, addressing complex challenges like multi-agent coordination and real-time decision-making (Sina Finance, June 20). This wave reflects more than enthusiasm—it marks a structural shift, with EV and tech giants treating humanoid robotics not as speculative ventures but as strategic extensions of their core AI and smart hardware ambitions.

Conclusion

The rise of the PRC's robotics industry represents a tightly coordinated, whole-of-nation campaign driven by national strategy, regional policy alignment, and deep industrial integration. At its core is a convergence of capabilities—spanning electric vehicles, AI platforms, sensors, and advanced manufacturing—that enables rapid transition from concept to commercialization. This emerging model of vertical integration and cross-sector

collaboration is reshaping global supply chains and production paradigms. If successful, it may redefine global standards for intelligent machines. Policymakers and industry leaders alike should closely examine how the PRC is systematically aligning state planning with industrial execution to accelerate technological dominance and secure long-term strategic advantage.

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Hong Kong's Crypto Bet Is Starting To Pay Off

By Matthew Fulco

The Hong Kong Monetary Authority office building entrance. (Source: Wikipedia)

Executive Summary:

- Hong Kong launched a new stablecoin regime on August 1, continuing its cautious embrace of emerging financial products nearly three years after declaring its intention to become a digital assets hub.
- In anticipation of the new regime, July saw a flurry of fundraising activity by listed fintech companies, indicating that the city's repressive political environment is unlikely to stifle the growth of the digital assets sector.
- The eventual success of Hong Kong's current experiment will depend on both Beijing's permissiveness and on global competition. The Monetary Authority of Singapore is also promoting similar digital token and stablecoin regimes, while the U.S. government is keen to establish its own leadership in the sector.

Hong Kong's stablecoin regime came into effect on August 1, the latest in a series of regulatory moves that support its ambitious goal of becoming Asia's premier digital assets hub (Hong Kong Monetary Authority [HKMA], July 29; Xinhua, August 1). Stablecoins (cryptocurrencies backed by fiat currencies or commodities to reduce volatility) have more than doubled in market capitalization since the beginning of 2024 to reach nearly $270 billion (DeFiLlama, August 3). While they are mostly used for trading crypto assets, stablecoins also are increasingly used for cross-border payments and corporate treasuries.

The Hong Kong Monetary Authority (HKMA) noted in a June statement that the former British Crown Colony is among the first jurisdictions to put in place a regulatory framework for stablecoin issuers following its rollout of a regulatory sandbox in March 2024. "Considering the novelty and potential risks of stablecoins, the need for user protection, market capacity and long-term development, we expect to set a high bar for licensing. It is envisaged that only a handful of licenses will be granted initially," said HKMA chief executive Eddie Yue (余偉文) (HKMA, June 23).

That caution characterizes Hong Kong's overall approach to digital assets. The city has been strict about its issuance of licenses for crypto exchanges, too, causing a number of applicants to withdraw from the process. Yet there is no question that its efforts are bearing fruit. In the year to September 2024, Hong Kong was the fastest growing digital assets market in East Asia, expanding more than 85 percent annually (Chainalysis, September 11, 2024). More recently, there has been a flurry of equity fundraising in anticipation of the new stablecoin regime.

While some of the recent momentum is linked to broader market exuberance as the United States takes a pro-crypto turn in the second term of President Donald Trump, Hong Kong nonetheless looks prescient nearly three years after it declared its intention to become a digital asset hub (The White House, January 23).

Crypto Fundraising Boom

In anticipation of Hong Kong's stablecoin regime coming into effect, there was a flurry of fundraising activity in July by listed fintech companies in the city. A Reuters calculation based on exchange filings found that at least 10 Hong Kong-listed companies raised more than $1.5 billion from share placements in July to be invested in areas including stablecoins, digital assets, and blockchain-based payments. They include digital asset platform OSL Group, the People's Republic of China's (PRC) leading retail solution cloud provider DMall, and artificial intelligence giant SenseTime Group.

OSL Group's $300 million equity raise in July was the largest public fundraising in Asia's digital asset sector to date. "The funding will accelerate our global buildout—particularly in regulated payment infrastructure and access points" (這筆資金將加速我們的全球布局—尤其在合規支付基礎設施和網絡建設領域) CEO Ivan Wong (黃冠文) said in a statement (Hong Kong Commercial Daily, July 25).

DMall announced to investors on July 3 that it planned to apply for a stablecoin license together with HashKey, Hong Kong's largest licensed virtual asset exchange (China Brief, June 7, 2024). DMall and HashKey plan to explore stablecoin use in retail payments and "jointly promote the issuance and popularization of stablecoins, to help Hong Kong become an important hub for the development of the global digital asset ecosystem," according to the announcement (Hong Kong Exchanges and Clearing, July 3).

SenseTime announced on July 31 that it had completed a capital raise of HK$2.5 billion ($320) million and received funding from strategic investment firm Infini Capital, which is dual headquartered in Hong Kong and Abu Dhabi (Sina Finance, August 1). The company confirmed that 20 percent of the net proceeds, around HK$500 million ($64 million) would be allocated to blockchain, stablecoins, real-world assets, and embodied intelligent robotics (Coinfomania, July 24).

A Rejuvenated Financial Center

The fast-growing digital assets market in Hong Kong, though nascent, suggests that the city is successfully reinventing itself as a financial center, albeit more PRC-oriented than in the past. The sweeping crackdown that began in 2020 with Beijing's imposition of national security legislation has squelched Hong Kong's once-thriving media and NGO sectors as well as effectively eliminated organized political opposition to the ruling Chinese Communist Party (CCP), but it has not affected the city's financial freedom—at least not yet.

Indeed, whether by design or coincidence, Hong Kong's transition into a hub for digital assets illustrates that the logic of "One Country, Two Systems" persists when it comes to the financial sector. The use of cryptocurrency is still tightly controlled on the mainland, with certain activities deemed illegal, but Hong Kong has been permitted to develop its digital assets sector with minimal interference from Beijing.

The increasing involvement of mainland firms in the crypto sector via Hong Kong suggests that the city could become a testbed for cryptocurrency use cases that could later be transferred to the mainland. To that end, Guotai Junan Securities in June became the first mainland brokerage to win approval to provide digital-asset trading services including Bitcoin, Ethereum, and stablecoins (Guotai Junan International, June 25).

Conclusion

These are early days for Hong Kong as a digital asset hub, but it is making rapid progress thanks to a clear regulatory vision, support from Beijing manifested in the central government's hands-off approach, and strong investor demand. While the city's political environment more closely resembles the mainland, that is unlikely to stifle the growth of the digital assets sector, especially when the biggest investors are from the PRC mainland themselves.

Hong Kong is likely to face tough competition from Singapore, however, which also has aspirations to be a digital asset hub and is seen as more globally oriented. The Monetary Authority of Singapore (MAS) has similarly made announcements in recent months on the progress of its digital token service providers regime and of "Project Guardian," a collaboration with industry to support "trials involving multiple currencies and across various financial products, including tokenized funds, bonds, stablecoins, and bank liabilities" (MAS, June 6, August 4). If Hong Kong's plans are to succeed, it will need to focus on ensuring the right balance of regulatory oversight and policies that are conducive to market growth.

Matthew Fulco is a journalist and geopolitical analyst who worked in Taipei from 2014–2022 and Shanghai from 2009–2014, and is now based in the United States. He formerly served as a Taiwan Contributor for the Economist Intelligence Unit and his writing has frequently appeared in The Japan Times and AmCham Taiwan's Taiwan Business Topics magazine.

Straits Forum Institutionalizes Cross-Strait 'Integration' as Strategic Posturing

By Emerson Tsui

Wang Huning meets Ma Ying-Jeou at the 17th Straits Forum, held in Xiamen, Fujian Province. (Source: Xinhua)

Executive Summary:

- Beijing is operationalizing its cross-Strait unification strategy through bureaucratic embedding and military-civil fusion, with Fujian Province as the central staging ground.
- The 17th Straits Forum in June served as a propaganda instrument to showcase apparent Taiwanese grassroots support, while parallel PLA developments contradict Beijing's peace narrative.
- The absence of official engagement by Taipei and low support for unification in Taiwan highlight the enduring disconnect between Beijing's unification goals and Taiwan's political and societal realities.

Two meetings took place in Fujian Province across May and June that indicate the growing importance of its role in cross-Strait relations and shed light on the Chinese Communist Party's (CCP) current views of Taiwan's security. Despite a high-profile appearance by a former president of Taiwan, a lack of engagement with Taiwan's incumbent administration affirmed that unification remains a unilateral policy position. Developments in the region by the People's Liberation Army (PLA), meanwhile, belie Beijing's peaceful overtures.

Dual Sessions Push Integration Message

On May 8, the Central Taiwan Work Office and Taiwan Affairs Office (TAO) convened a high-level inter-ministerial meeting in Fuzhou along with the National Development and Reform Commission (NDRC) and Fujian's provincial government (Fujian Government, May 9). The meeting, which 48 other central and provincial departments also attended, was held to evaluate the implementation of Beijing's 2023 directive on constructing a "Cross-Strait Integrated Development Demonstration Zone" (两岸融合发展示范区). It also underscored the Party-state's resolve to embed integration into the bureaucratic apparatus of governance, while simultaneously preparing for a military operation (Xinhua, May 8). The directive, which was jointly issued by the CCP Central Committee and the State Council, included incentives to attract "Taiwan compatriots" (台湾同胞) to relocate to Fujian Province. These incentives spanned residence registration, housing, education and school registration, legal services, employment, and civic engagement (Xinhua, September 12, 2023).

In his remarks at the meeting, Taiwan Affairs Office Director Song Tao (宋涛) invoked CCP General Secretary Xi Jinping's "important instructions" (重要指示) on integration and reunification. These framed the initiative as a step toward peaceful unification and a model for deepening cross-Strait integration (为全面深化两岸融合发展做好示范), as well as a means of laying the groundwork for the ultimate reunification of the motherland (为推进祖国统一大业积累条件) (People's Daily, May 9).

The following month, the 17th Straits Forum (第十七届海峡论坛), an annual dialogue with representatives from the People's Republic of China (PRC) and Taiwan, took place in Xiamen. Former Taiwan president Ma Ying-jeou's (馬英九) attendance was the most notable feature of the event, which also focused on deepening integration across the spectrum, from economic to cultural ties (Fujian Daily, June 14; CCTV, June 25). Over 7,000 Taiwanese participants from various industries attended the forum—the most since 2019, which saw a peak of 10,000 Taiwanese attend (TAO, June 26, 2019). PRC state media framed it as "a carnival for communication" (交流的盛会) and "a forum of common folks" (百姓的论坛), while also asserting that independence forces are "doomed to fail" (注定失败) (TAO, June 11; Xinhua, June 17).

Wang Huning (王沪宁), a politburo standing committee member and chair of the National Committee of the Chinese People's Political Consultative Conference (CPPCC), addressed the convention (CPPCC, June 23). He said that "no force can block the historical momentum toward national unification" (谁也不能阻挡祖国统一的历史大势) and called on both sides to "forge a strong sense of community for the Chinese nation" (铸牢中华民族共同体意识). Invoking patriotic memory and shared heritage, Wang referenced the 80th anniversaries of both the end of World War II and Taiwan's "liberation" (光复) from Japanese occupation, positioning unification as a necessary condition for national rejuvenation and security. Wang also focused on

Taiwanese youth, of whom over 300 were in attendance. He called on them to strengthen the pride and resolve that comes from "being Chinese" (做中国人) and to "write a new glorious [chapter]" (续写 … 新辉煌) of China's national history (Xinhua, June 15).

Table 1: Critical Participants in the 17th Straits Forum

Name/Title	Role
Wang Huning	Politburo Standing Committee Member, CPPCC Chair. As chief ideological architect behind many of Xi's narratives (e.g., "China Dream"), Wang's presence signals unification as a top-level ideological priority.
Ma Ying-jeou	Former Taiwanese President (KMT). Ma's participation and call for deepening cross-strait exchanges under the "1992 Consensus" reinforces Beijing's preferred "non-independence" political line from Taiwan's moderate camp.
Zhao Long (赵龙)	Governor of Fujian. As the key province for cross-strait integration, Fujian is Beijing's "experimental zone" for integration and peaceful unification frameworks. His speech reflects policy execution on the ground.
Zhou Zuyi (周祖翼)	Party Secretary of Fujian. His comments on economic and social fusion outcomes underline local commitment to the national unification policy.
Song Tao (宋涛)	Director of the Taiwan Affairs Office (TAO). Leading cross-Strait policy implementer. His role in hosting and moderating indicates institutional centrality.
Other Attendees (PRC side)	Zhang Zhijun (张志军), president of Association for Relations Across the Taiwan Straits and former TAO director; Liu Cigui (刘赐贵), director of Committee for Liaison with Hong Kong, Macao, Taiwan and Overseas Chinese, and leaders from national women's organizations, all signal unified elite front across CCP bodies.
Taiwan Representatives	Sean Lien (連勝文), vice chairman, KMT; Wu Cheng-tien (吳成典), chairman, New Party; Lin Pin-kuan (林炳坤), Non-Partisan Solidarity Union. These are marginal, pro-unification political voices in Taiwan, utilized by Beijing to show "Taiwanese support" for the forum.

(Source: Sohu, June 15; Meihua Media, June 15)

The forum signaled two key messages. First, that the PRC possesses both capacity and confidence in leveraging Taiwanese political actors and segments of public opinion to steer cross-Strait relations in its favor; and second, that Taiwan's public—and its youth in particular—welcome integration and unification. In this sense, Ma's comments, as well as those from "grassroots" (基层) participants, helped to reinforce the CCP narrative of unification as an "inevitable historical trend," and not simply something the CCP unilaterally advocates.

Parallel Military Preparations Deter Take-up in Taiwan

The absence of government representatives from Taiwan at either forum indicates that Beijing's persistent assertions that there is "one family on either side of the Strait" (兩岸一家人) are largely intended to shore up domestic support (China Brief, August 18, 2023). An independent Taiwanese identity hinders any significant embrace of the "one family" concept (as of this year, 63 percent of those surveyed by Taiwan's National Chengchi University identify as solely Taiwanese), and the pro-unification population in Taiwan remains a minority. "Unification as soon as possible" has remained the least favored course of action in Taiwan for the past 31 years (NCCU, June 2025).

The Mainland Affairs Council of Taiwan (大陸委員會, MAC), a committee under the Executive Yuan, criticized Ma Ying-Jeou's mainland visit in a now-deleted post on its website. It called the visit an "attempt to deny the sovereign status of our nation" (企圖抹煞我國家主權地位). In a separate post that remains online, however, the MAC described the forum as a "CCP united front platform" (中共對台統戰平台) and expressed "deep regret" (深感遺憾) at Ma's "cooperation with the CCP's political manipulation" (配合中共政治操作) (MAC, June 11).

Rejection of Beijing's proposals for unification from both Taiwan's government and public opinion thus reflects an impasse, though Beijing remains undeterred and is committed to unification "by any means necessary" (一切必要措施). This includes the use of force (Xinhua, October 25, 2022, March 10). Fujian's centrality here is best exemplified by the unveiling in 2022 of the PRC's third aircraft carrier, which was likely named to signal the province's role in a potential military contingency over Taiwan (Fujian Bureau of Veterans Affairs, June 20, 2022). **[1]** The carrier has been undergoing sea trials ever since and may be commissioned soon (Xinhua, May 26; The War Zone, August 1). It is also apparent in the extent of the PLA's presence in Fujian.

Fujian Province is also home to several other important military installations. These include at least seven known air bases. From the most recently established, the Shuimen Air Base (水门空军基地), the PLA Air Force's fifth-generation J-20 (歼二零) fighters can reach Taipei in approximately five minutes and fifty-one seconds (Author calculations, July 2025). **[2]** Fuzhou, meanwhile, has hosted the headquarters of the Eastern Theater Command's ground forces since 2016; and Xiamen, the closest city to Taiwan, hosts the PLA Navy's East Sea Fleet and potentially a submarine force unit (Department of Defense, December 18, 2024; China Daily, February 2, 2016; Author research, July 2025). Meanwhile, the provincial government's recent announcement of "Measures for Guaranteeing Militia Rights and Interests" is another reminder of ongoing efforts to professionalize the province's maritime and land-based militia forces, and to align its civilian governance with military mobilization objectives (China Brief, March 15).

Conclusion

The ministerial meeting in Fuzhou and the 17th Straits Forum in Xiamen signaled that Beijing is embedding its Taiwan policy into provincial governance and military-civil fusion machinery. As Fujian becomes both a testbed and launchpad for future action, any alignment or divergence between rhetoric supporting integration and hardening actions in the military domain could proffer clues about Beijing's timetable for unification.

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Notes

[1] Other theories claim that PLA carriers are named after famous battles. The Fujian carrier, according to this view, may be named after the 1884 Battle of Fuzhou (馬江海戰) that triggered the Sino-French War. CCTV noted in its coverage of the carrier's unveiling that it was launched on the 17th of the month, which is the same day that the Treaty of Shimonoseki was signed in 1894. This treaty forced the Qing to cede Taiwan to Meiji Japan (CCTV, June 17, 2022).

[2] Author's calculation is based on the J-20's top speed of Mach 2 (approximately 2,648 km/h or 1,430 knots), and the measured distance between Shuimen Airbase (26.941389°N, 120.07694°E) and Taipei City (25.0330°N, 121.5654°E), which is approximately 258 km or 139.3 nautical miles. At this velocity, the estimated flight time is approximately 5 minutes and 51 seconds under ideal conditions. Distance was calculated using Geographic Calculator, applying WGS 84 (EPSG:4326) geodetic data (Blue Marble Geographics, July 2025). The methodology aligns with spatial analysis standards recommended by the Center for Geographic Analysis at Harvard University (Harvard University, accessed July 2025).

The PLA Navy's Evolving Posture Beyond the First Island Chain

By Ying Yu Lin and Zack Liao

クズネツォフ級空母「遼寧」（艦番号「１６」）

クズネツォフ級空母「山東」（艦番号「１７」）

PLAN "Shandong" and "Liaoning" Simultaneously in Operation near First and Second Island Chain in Mid-June (Japan Joint Staff, June 20).

Executive Summary:

- The concurrent deployment of the Liaoning and Shandong aircraft carriers beyond the First Island Chain represents a significant strategic milestone, highlighting the People's Liberation Army's (PLA) improved capability to coordinate complex naval operations and signaling a shift towards more sophisticated Anti-Access/Area-Denial (A2/AD) operations between the first and second island chains.
- Formation of an operational dual-carrier fleet requires extensive coordination beyond numerical strength, involving integration of escort ships, logistical support, submarines, and carrier-based aviation. The PLA Navy's recent dual-carrier operations demonstrate a capability previously only fully realized by the United States, positioning the PLAN as a more assertive challenger to U.S. naval dominance.
- Operational differences between the PLAN's two active carriers reveal distinct strategic roles. The Liaoning, constrained by its limited fighter jet capacity and reliance on substantial escort support, is strategically optimized for surface and ground attack missions. In contrast, the Shandong's superior fighter jet capacity allows for greater flexibility and sortie frequency, underscoring an evolving naval doctrine toward a model combining Soviet-era missile-cruiser strike tactics with modern carrier air operations.

A dual-carrier drill conducted by the People's Liberation Army Navy (PLAN) in June, likely part of mid-year long-distance maritime training, showcased the Chinese military's growing maritime power. It also signaled a direct challenge to U.S. naval supremacy (PLA Daily, July 1; China Brief, July 25). While not explicitly targeted at Taiwan, this maneuver may have aimed at initial force concentration through distant naval patrols, simulating anti-access/area-denial (A2/AD) operations against potential U.S. interventions.

The deployment, which breached the First Island Chain—traditionally considered a defensive barrier established by the United States and regional allies—bears a strong resemblance to the unnamed exercise conducted by PLA in December 2024 (Reuters, December 9, 2024; China Brief, December 20, 2024). During that exercise, the PLAN formed carrier strike groups from diverse naval fleets, deploying them in a dispersed manner before coordinating concentrated attacks.

The simultaneous operation of two carrier battle groups nevertheless lacked clear evidence of a cross-service joint operational mechanism or notable cooperation with the PLA Air Force. This suggests its primary focus lay on long-range maritime navigation and breaching island-chain defenses through single-service efforts, and that the projection of power into distant waters still remains predominantly reliant on the PLAN.

Operational Milestone: Formation of a Dual-Carrier Fleet

The PLAN's dual-carrier operations indicate a significant advancement in fleet coordination capabilities. Possessing a fully operational dual-carrier fleet (双航母编队) is distinct form merely owning two separate carrier fleets (两支航母编队) that act independently and with distinct areas of responsibility. **[1]** The U.S. Navy alone currently possesses proven expertise in operating such large-scale integrated dual-carrier fleets.

Dual-carrier fleets demand extensive coordination among escort vessels, logistical support ships, submarines, and carrier-based aircraft, ensuring sufficient manpower and resources for integrated operations. Crucially, they require the seamless merging of two carrier strike groups into a cohesive unit operating in close proximity, involving comprehensive adjustments in escort vessel positioning and substantial improvements in joint carrier-aircraft operations. This enables the simultaneous deployment of several dozen—and potentially nearly a hundred—carrier-based aircraft to conduct coordinated actions within a defined operational area. It also enhances operational resilience and flexibility, for instance by allowing aircraft from one carrier to land on another in emergencies.

Carrier Force Evolving as Blue-Water Operations Escalate

The PLAN's expanding blue-water capabilities serve broad strategic purposes. Primarily, they are aimed at disrupting or deterring potential U.S. military support to Taiwan in any future conflict scenario. Beijing's military activities from February through April—ranging from naval deployments in the Western and Southern Pacific to intensified joint combat patrols around Taiwan—represent a calculated, stepwise escalation in both intensity and operational complexity (China Brief, March 11, April 11).

As the PLA's strategic objectives have expanded beyond routine naval and aerial drills in distant sea areas to encompass anti-aircraft/area denial (A2/AD) operations between the first and second island chains, the differentiated capabilities of its carriers has become clear.

The Liaoning, the PLAN's first carrier, is increasingly unsuited to modern combat requirements. Its design limits its fighter capacity and it relies on an older ski-jump takeoff system. As such, the aircraft it carries are not the

latest J-15T models but rather the older variants (The War Zone, June 10). Moreover, according to multiple close-range surveillance observations by Japan's Self-Defense Forces, the Liaoning's peak aircraft launch and recovery rate in recent operations has not shown significant improvement over the last year (Japan Joint Staff, May 28). It can accommodate approximately 24 J-15 fighters, but while its peak operational tempo averages one aircraft flying two sorties per day, one sortie per aircraft per day is more typical.

As the Liaoning often operates within the strike radius of U.S. and Japanese naval assets—compared to which it is operationally inferior—it may be pivoting to align more closely with Soviet-era doctrine. Under this doctrine, missile cruisers and submarines, rather than carriers, constitute the principal offensive assets against surface and land targets. Soviet aircraft carriers primarily served to carry carrier-based aircraft for basic fleet air defense, while the task of striking enemy fleets is delegated to warships equipped with over-the-horizon anti-ship missiles or to submarines that may adopt this approach to penetrate U.S. defenses. This demands a robust escort and logistical formation, which is observable in the Liaoning group's operations, where advanced vessels such as the Type 055 destroyer, renowned for its sophisticated integrated combat systems and potent anti-ship warfare capabilities, are accompanied by Type 901 and Type 903 replenishment vessels.

The Shandong, by contrast, has additional capacity for approximately 10 fighter aircraft and benefits from enhanced operational flexibility and higher sortie rates. This makes it more suitable for a broad range of mission profiles. These differences suggest that the PLA is assigning separate roles to its two carriers, with the Liaoning focusing on fleet air defense while the Shandong takes on primary roles in surface and land strike missions.

The PLAN's third carrier, the Fujian, completed another sea trial shortly after the dual-carrier exercise in June. Observations of skid marks on its flight deck suggest that fighter launch tests may have been conducted. Other carriers are in the pipeline, too. Recent reports speculate that a fourth is under construction, and experts have argued that a five- or six-carrier force could be possible in the future (IISS, June 3, 2018; South China Morning Post, February 6, 2019; TWZ, February 13). This would make sense from a tactical perspective. With at least four carriers, one could be deployed in the south to isolate specific areas in the South China Sea; another could be positioned in the Western Pacific to engage potential U.S. intervention in an armed conflict over the Taiwan Strait; and the remaining carriers—presumably two—could be used as training platforms for carrier-based aircraft pilots, perhaps one at a time while the other undergoes regular maintenance. The Liaoning, increasingly inadequate for future combat missions, may transition into such a training role, potentially making the prospective Type 004 carrier the definitive aircraft carrier model for the PLAN.

Conclusion

The PLA's recent dual-carrier deployment is significant, even if it did not pose a direct invasion threat to Taiwan. As the primary strategic function of PLA carrier deployments in the Western Pacific is explicitly to deter potential U.S. military intervention, it has clear implications for the United States.

Along with Japan and the Philippines, the United States is increasingly likely to emphasize maritime interdiction, strait blockades, and enhanced surveillance within the First Island Chain, potentially including the deployment of land-based anti-ship missile systems as part of strategic maritime containment efforts.

For Taiwan, proactive integration into a cohesive regional joint defense network, incorporating advanced reconnaissance, targeting, and fire-control systems, will likely become paramount considerations influencing future U.S. arms sales. The PLA's expanding maritime operations thus herald a necessary evolution of regional security dynamics.

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Notes

[1] Common practice among nations possessing multiple carriers, such as the United Kingdom, India, and Italy, is to operate one carrier actively while reserving the other for training or maintenance. Despite their naval power, these countries seldom form dual-carrier fleets

Evolving Blue Economy Propels PRC Maritime Ambitions

By Owen Au

A still from the documentary "Walking to the Sea." (Source: CCTV)

Executive Summary:

- Beijing's maritime strategy hinges on expanding what it calls the "blue economy," which is increasingly integrated with broader strategic ambitions under the rubric of becoming a "strong sea power."
- Central government policies and five-years plans call for deeper cross-regional integration to support the blue economy, which in 2024 accounted for nearly 8 percent of GDP. Recent initiatives include vast canals projects and creating a "National Maritime Economic Development Demonstrative Zone."
- Beijing sees the waters it claims—including disputed waters—as its "blue territory," ripe for aquaculture, deep-sea mining, energy projects, and other technologically-advanced resource extraction.

In June, a China Central Television (CCTV) documentary series titled "Walking to the Sea" (向海而行) highlighted developments in the economic aspects of the country's maritime strategy. Jointly produced with the Ministry of Natural Resources, the series focuses on the "blue economy" (蓝色经济), and aims to make the country's dream of becoming a "strong sea power" (海洋强国) tangible to ordinary people (Xinhua, November 17, 2012; CCTV, January 21; CCTV, June 8). But this framing also foregrounds an increasingly securitized approach to the maritime domain, which suggests tensions with neighboring states is set to continue to rise.

Canalizing the Country to Support the Blue Economy

Interest in the blue economy has been evident for over a decade. In 2011, the State Council announced the establishment of the "Shandong Peninsula Blue Economic Zone" (山东半岛蓝色经济区), aimed at building a world-class maritime economic development zone (NDRC, January 12, 2011). Later that year, the 12th Five-Year Plan identified the zone as a national development priority (Xinhua, March 16, 2011). By 2018, the Ministry of Natural Resources and the National Development and Reform Commission expanded the concept by designating 14 coastal areas as "Maritime Economic Development Demonstrative Zones" (海洋经济发展示范区), each with tailored industrial focuses (Ministry of Natural Resources [MNR], December 10, 2018).

In 2021, PRC's 14th Five-Year Plan included a chapter titled "Actively Expanding the Space for Maritime Economic Development" (积极拓展海洋经济发展空间). It reaffirmed plans to deepen integration between maritime industries, promote technological innovation, and enhance governance mechanisms (Xinhua, March 13, 2021). By 2024, the PRC's maritime economy had reached a value of renminbi (RMB) 10.5 trillion ($1.5 trillion), accounting for 7.8 percent of GDP and spanning sectors such as tourism, transport, fisheries, energy, pharmaceuticals, construction, chemical production, manufacturing, and education (MNR, February 24).

The government has even begun promoting blue economy expansion in inland regions. General Secretary Xi Jinping has called for deepening industrial coordination across the country, as has Premier Li Qiang (李强), whose 2025 government work report called for establishing a unified "National Maritime Economic Development Demonstrative Zone" (全国海洋经济发展示范区) (Xinhua, December 12, 2024, March 5).

A surge in canal construction projects now supports this integration drive. Since 2023, at least six major canal initiatives have been launched across Guangxi, Hunan, Jiangxi, Zhejiang, Guangdong, and Hubei, with investments totaling approximately RMB 850 billion (around $120 billion) (CNA, August 30, 2024). In "Walking to the Sea," the director of Guangxi's Oceanic Administration highlights the Pinglu Canal project as a key example of fostering a "new pattern of land-sea coordinated development" (陆海协同发展新格局) (CCTV, June 12). This closely aligns with Xi Jinping's repeated emphasis on "land-sea synergy, mountain-sea coordination, and resource integration" (坚持陆海统筹、山海联动、资源融通) (Xinhua, December 17, 2024).

The Meaning of the Blues

The growth of the PRC's blue economy has fostered a parallel narrative centered on the concept of "blue territory" (蓝色国土), a phrase first referenced in 2010 in China's Ocean Development Report (中国海洋发

展报告). **[1]** A 2016 state media article expanding on the topic claimed 3 million square kilometers of ocean as the PRC's "blue territory," equating it in importance to the country's land territory (Xinhua, September 28, 2016). Since then, the idea of blue territory has expanded in scope through PRC's emphasis on advancing into the "deep and far sea" (深远海).

Part of this concept includes a growing interest in harnessing the ocean's resources. As a result, promoting deep-sea technologies are now a strategic priority and vast swathes of the Pacific and Indian Oceans are identified for deep-sea exploration and—potentially—mining critical minerals (China Brief, January 31). Meanwhile, the country intends to expand its offshore wind farms further afield, in 2023 launching its first "deep- and far-sea floating wind power platform" (深远海浮式风电平台) (the PRC is already responsible for more than half of global offshore wind capacity) (National Energy Administration, June 1, 2022; Qizhi, February 22, 2024; Global Energy Monitor, July 2025).

Aquaculture, including offshore fish farming, is another sector to receive top-level focus. Xi Jinping has urged turning the ocean into a "blue granary" (蓝色粮仓) (Xinhua, June 6, 2024). In 2019, the PRC launched "Penghu" (澎湖号), a "semi-submersible wave-energy aquaculture platform" (半潜式波浪能养殖平台). The facility can generate its own power via wave and solar energy, allowing it to remain in the far seas for extended periods (CCTV, June 10). Simultaneously, its distant-water fishing fleet continues to expand, encompassing operations as far away as Argentina's territorial waters (European Parliament, May 2023; Fundación Andrés Bello, March 14).

Expanding Interests Cause Tensions, Securitization

In the PRC conception that tightly fuses security and development, the blue economy is a crucial pillar supporting the construction of the nation as a strong sea power (CCTV, July 11). Since 2013, the People's Liberation Army (PLA) has been tasked with advancing this goal; and in 2017, the State Council formally called for greater military-civil integration in maritime domains (Xinhua, April 16, 2013; State Council, December 4, 2017). Most recently, a white paper titled "China's National Security in the New Era" called for "adhering to land-sea synergy and the integration of safeguarding sovereignty, security, and development interests" (坚持陆海统筹，坚持维护国家主权、安全、发展利益相统一) (State Council, May 12).

This integration has direct implications for PRC's behavior in disputed maritime zones. The country's rhetoric around "maritime rights and interests" (海洋权益) frames such regions both as strategic frontiers and as essential to the livelihoods of PRC citizens. This dual framing complicates diplomatic tensions, especially as the PRC expands its economic footprint in contested waters.

For years, the PRC has conducted oil and gas exploration in disputed parts of the East and South China Seas (South China Morning Post, April 9, 2021; Asia Maritime Transparency Initiative, September 29, 2022). In April, it was discovered constructing offshore aquaculture facilities in waters contested with South Korea in the Yellow Sea (Financial Times, April 22). Meanwhile, fishing activities in the South China Sea have grown more intensive and are increasingly supported by institutionalized maritime law enforcement operations (People's Daily, November 21, 2014).

Conclusion

As the PRC's blue economy expands, its maritime sector is expected to increase in strategic and economic significance, and integration across regions and industrial sectors will deepen. The Party views this growth as complementary to its broader maritime ambitions. By fusing development, security, and territorial claims, the PRC is steadily advancing along its "path to maritime strength with Chinese characteristics" (具有中国特色的向海图强之路) (Xinhua, July 1).

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Notes

[1] 蓝色国土 is also sometimes translated literally as "blue national soil."