



Chinese Cities of Opportunity 2025

Unlocking urban opportunities through
New Quality Productive Forces



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Exploring China's multi-tiered value investment ecosystem

The global economic landscape is undergoing profound adjustments, with slowing growth, intensified industrial chain restructuring, and accelerated technological iteration. As a result, investors worldwide are facing new challenges. China, driven by its New Quality Productive Forces, is rapidly transitioning its core strengths from scale-based advantages to innovation-driven advantages. When we overlay industrial maps with capital flow, it becomes evident that the different development paths of Chinese cities are not only reshaping China's role in global industrial chains but also creating a multi-tiered system of investment opportunities.

Chinese cities are adopting different strategies to generate investment value from the industrial chain. Whilst some are leading the way in high end manufacturing, unlocking innovation to develop breakthroughs across multiple fronts, others are developing “super laboratories” to incubate new technology and build the systems of the future. It's not just technology—cities with unique climate conditions are becoming “green computing power foundations” developing energy sectors that will power the future as well as provide a platform for cloud computing and AI.

The real opportunity in China arises from the fact that these strategies are not happening in isolation. They're the combined effect of the scale advantages and diverse development strategies, which have enabled the forming of what is essentially a “regional collaborative community” and a balanced ecological network. Each city plays a vital role in the industrial chain, and each holds unique opportunities for the future. For example, when tech companies face disruptions from rapid

technological advancements, green computing assets may command premiums due to increasing energy constraints. Similarly, when the consumer electronics sector faces inventory challenges, cities that specialise in cultural exports may achieve growth amid the global revival of cultural tourism. For global investors, such an interconnected network provides a strategic advantage, unlocking co-existing opportunities.

We are honoured to provide our clients and global investors with an objective perspective—using quantitative indicators—to better understand China’s urban development and investment prospects. The *Chinese Cities of Opportunity 2025* report, centred on the reconfiguration driven by New Quality Productive Forces, examines ten key observation dimensions, including Economic Strength, Technological Innovation, Consumer Vitality, and others, offering an in-depth analysis of the distinct development characteristics of various cities from a perspective tailored to their local conditions. The report highlights that numerous Chinese cities have forged differentiated development pathways: Hefei focuses on breakthroughs in technological innovation, Changsha activates consumer vitality in its market, Guiyang strengthens digital-intelligence empowerment, Nanning deepens open development through cooperation, Chengdu reinforces the foundation of urban resilience, and Xining advances its green and low-carbon transition.

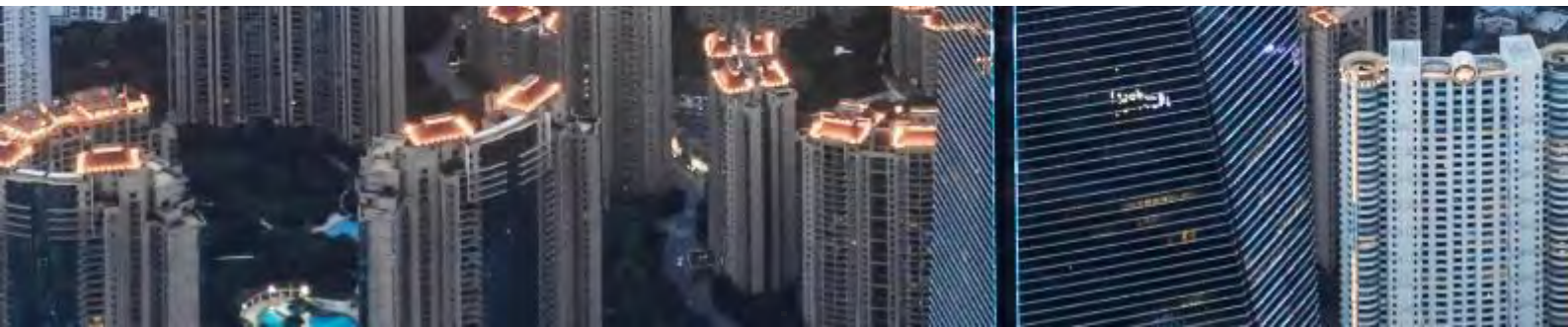
It is through the diverse growth of these cities that China is continuously bolstering its New Quality Productive Forces, creating fresh markets and investment opportunities for both Chinese and global investors. For investors who can tap into this opportunity, it represents not only a window to capture growth but also a historic chance to reshape the global economic map. In this investment landscape, with the complementary strategies across regions, every city holds a key to unlocking future opportunities.

I hope you enjoy reading the report.

Hemione Hudson
PwC China Chair and CEO

01

Executive summary



Over the two years since the term New Quality Productive Forces was introduced, the Chinese government and businesses have worked together to deepen the fusion of technological and industrial innovation. This collaboration has accelerated the shift towards high-end, intelligent, and green industries, forging a distinctive evolutionary path through enhanced productive factors, transformed business models, and the intelligent restructuring of industrial chains. In turn, this progress has unlocked fresh opportunities for the global business community.

Regarding production factors, a unified national market has dismantled barriers to factor mobility. Concurrently, the “technology middle platform” business model, widely embraced by Chinese companies, has amplified the scale effect of STEM talent, new technologies, and digital factors, while markedly improving resource allocation efficiency, thereby fostering highly competitive business performance.

At the industrial level, China is leveraging its robust digital infrastructure to accelerate the deep and swift integration of artificial intelligence (AI) technology across every segment of the industrial chain. This has fostered a comprehensive empowerment landscape encompassing production, consumption, and innovation. Such technological enablement not only significantly boosts production efficiency but also equips businesses with strong adaptability to navigate change. According to PwC’s *28th Annual Global CEO Survey China Report*, Chinese companies surveyed have achieved notably higher returns from Generative

AI (GenAI) compared to their global counterparts.

In the consumer market, China has become the preferred region for global brands to explore user preferences. The dynamic feedback loop of “demand sensing—supply chain collaboration—intelligent production” converts consumer preferences into real-time product innovation directives. Meanwhile, the “pop-up store” model is transforming retail into a more immersive and holistic experience. Together, these elements create a powerful force that shapes consumer decision-making.

In the realm of innovation, China’s abundance of application scenarios is drawing global innovators. The “develop—validate—promote” innovation pathway has significantly reduced the time from laboratory to market. This market-to-R&D feedback loop has propelled China from a technology follower to a rule-maker in the innovation value chain, establishing a comprehensive advantage that spans scenario testing, technology iteration, and standard-setting.

With New Quality Productive Forces at the heart of its development momentum, the Chinese economy has demonstrated remarkable resilience amid change, while carving out a distinctive economic development model and new commercial advantages through the coordinated enhancement of production factors, industries, consumption, and innovation. If this new advantage is widely adopted across borders, it will not only propel global economic growth over the next decade but also spearhead a profound transformation in the global economic growth paradigm.

I. Re-evaluating observational dimensions based on New Quality Productive Forces

Building on the distinctive ways Chinese cities have developed New Quality Productive Forces tailored to local conditions, and anticipating shifts in global business investment priorities, we have refined and enhanced the report's indicator system this year. This can be broadly encapsulated as “three additions, three integrations”.

Firstly, we have incorporated a consumer-driven perspective. Consumption remains a pivotal force in economic growth. In 2024, China's domestic demand contributed 69.7% to economic growth, with final consumption expenditure accounting for 44.5%. Meanwhile, consumer demands and preferences provide essential guidance for corporate product development and innovation. Notably, the consumption structure of Chinese residents has shifted from subsistence-level to development-oriented consumption, propelling industries towards a future defined by high-end, intelligent, and green advancements.

Secondly, we have introduced a digital-intelligence empowerment perspective. From the precise operations of intelligent robots in manufacturing workshops to the real-time responses of smart customer service addressing consumer needs in the service sector, and the rapid

innovation and iteration of AI algorithms in research and development (R&D), digital and intelligent technologies are being deployed at a remarkable pace across all domains. The widespread adoption of digital technology has emerged as a vital foundation for cities to move beyond traditional economic growth models and serves as a key catalyst in nurturing and advancing New Quality Productive Forces.

Thirdly, we have incorporated an open development perspective. High-level openness has significantly propelled China's economic growth while profoundly shaping the development trajectories of both the nation and the global community. China continues to draw numerous multinational corporations to expand investments or establish new production and R&D bases, spurred by policies such as a streamlined negative list, the full opening of the manufacturing sector, and more extensive visa-free transit arrangements. The ongoing expansion of initiatives, including piloting cross-border data flows, establishing pilot free trade zones, and broadening service sector opening programmes, have endowed certain cities with fresh momentum and competitive advantages.

Alongside the new dimensions, the report has consolidated several existing ones. Firstly, we merged the original “intellectual capital” and “technology and innovation” dimensions into the “technological innovation” dimension. A hallmark of New Quality Productive Forces is innovation, which manifests in varied forms and characteristics across different eras, enabling certain cities to surpass others. Secondly, we combined the original “major regional cities” and “transportation and urban planning” dimensions into the “regional synergy” dimension. China’s strategy for coordinated regional development and city cluster development has significantly spurred cross-regional industrial collaboration and factor mobility, redefining locational advantages. Thirdly, we integrated the original “cost” dimension into the “market environment” dimension. As China’s demographic dividend evolves into a talent dividend, low costs are no longer the primary driver of corporate location decisions.

Ultimately, this year’s refinements have led to ten core observational dimensions: economic strength, technological innovation, consumer vitality, digital-intelligence empowerment, open development, regional synergy, urban resilience, green and low-carbon, market environment, culture and quality of life.

II. Gaining insights into city strengths through a locally-tailored approach

China's vast expanse encompasses cities with distinct resource endowments and developmental foundations. Guided by the national overarching development strategy, major cities have harnessed their unique strengths to pursue locally-tailored development pathways, uncovering new drivers of sustainable growth.

The 60 cities featured in the *Chinese Cities of Opportunity 2025* report are: Beijing, Shanghai, Wuxi, Suzhou, Shenzhen, Changzhou, Nanjing, Ningbo, Zhuhai, Hangzhou, Yangzhou, Fuzhou, Guangzhou, Xiamen, Qingdao, Nantong, Yichang, Shaoxing, Yantai, Wuhan, Quanzhou, Changsha, Jinan, Foshan, Hefei, Jiaxing, Tianjin, Tangshan, Weihai, Dalian, Nanchang,

Dongguan, Yancheng, Hohhot, Zhengzhou, Chengdu, Urumqi, Xuzhou, Xi'an, Yinchuan, Chongqing, Huizhou, Wenzhou, Taizhou, Taiyuan, Shenyang, Kunming, Zhongshan, Guiyang, Weifang, Jiangmen, Lanzhou, Changchun, Haikou, Xining, Shijiazhuang, Zhaoqing, Nanning, Harbin, and Baoding, ranked by per capita GDP in 2024.

From the perspective of economic scale, the 60 cities collectively contribute 56% to China's national GDP. They also account for 72% of the country's technology contract transaction volume, 64% of the total deposit balance held by financial institutions nationwide, and 56% of the national retail sales of consumer goods.





Shaped by factors such as geographical location, resource endowments, and historical development, each city follows a distinct trajectory and inherits a unique legacy. Through locally-tailored strategies adapted to changing conditions, these cities contribute their individual strengths to the sustained prosperity of the Chinese economy. This year, we have introduced “Specialised City Observations” within each dimension to explore diverse, multi-layered development opportunities and distil urban practices into replicable models of success. Specifically, these encompass 12 observation cities—Guangzhou, Yantai, Hefei, Changsha, Harbin, Guiyang, Fuzhou, Nanning, Chengdu, Changzhou, Hangzhou, and Weihai—alongside three representative cities (Hong Kong SAR, Macao SAR, Huzhou) and one region (the Yangtze River Delta), totalling 16 specialised case studies.

Furthermore, the investment potential of rural China is steadily increasing. Since the launch of the Rural Revitalisation Strategy, China’s rural areas have flourished with unprecedented market vitality. From the widespread deployment of 5G base stations in rural regions to the transformation of traditional farming through digital agriculture technologies, the rapid enhancement of these infrastructures has sparked significant demand for production resources such as smart agricultural equipment and eco-friendly agricultural materials. This progress has also nurtured integrated projects, including the deep processing of agricultural products and rural tourism, creating a promising and value-rich landscape for a diverse array of investors.

III. Capturing the urban pulse with micro-level perception indicators

As Chinese cities undergo rapid transformation, our observation framework has evolved to align with emerging development trends. The value of this report lies not in ordering cities, but in a multifaceted exploration of their developmental achievements and potential opportunities.

We employ a multi-faceted approach to encompass diverse aspects of urban development, supported by a carefully curated set of quantitative indicators. Across the ten observation dimensions, five variables are assigned to each dimension. In selecting these indicators, we strike a balance between total scale and development efficiency, market vitality and proactive government action, while also considering both current development outcomes and future potential. For instance, per capita GDP serves as both a measure of development efficiency and a reflection of development outcomes. The government's proactive role is captured through its fiscal investment in environmental protection, while the market's embrace of green development is gauged by the number of green factories. Additionally, high-tech enterprises act as both an indicator of market innovation vitality and a critical foundation for future innovation and development potential.

This report employs a ranking-based scoring method to provide a detailed understanding of varying trends. The

methodology facilitates the identification of variables as either “shortcomings” or “advantages”, enabling a precise capture of subtle differences between indicators, in line with a micro-perception approach. No weighting is applied to any indicator or dimension. Each indicator is scored based on the ranking of the 60 cities, with the top-ranked city awarded 60 points and the last receiving 1, and tied rankings assigned identical scores. When two data points are collected for a single variable (e.g., GDP scale and GDP growth rate), their scores are combined to determine the final ranking value. A city's ranking within a dimension is calculated by summing the scores of all variables within that dimension. The overall ranking is then determined by the total sum of variable scores across all dimensions.

Data sources are impartial and enable horizontal comparisons within the same timeframe. The data in this report strictly adheres to principles of objectivity, fairness, rigour, and applicability. It is primarily drawn from the National Bureau of Statistics, statistical yearbooks and communiqués from various cities, public information from government departments, and official media reports, supplemented by publicly available third-party content. Unless otherwise specified, all other data results from PwC’s own research and analysis. The data primarily reflects 2024 annual figures, with some information current as of June 2025. In instances where data disclosure for certain cities was insufficient, we conducted supplementary calculations using provincial data or equivalent-calibre data to ensure comparability. For detailed data sources for all variables, please refer to the “Variables and Indicators” section of the report. It should be noted that, due to

adjustments in observation dimensions and changes in specific indicators, the city rankings in this report are not comparable with those of previous years’ reports; they constitute an independent set of observations.

Admittedly, the intricate and multifaceted nature of real societies and cities—embracing their historical legacy, cultural landscape, and development strategies—cannot be fully captured through simple data models. The evaluation results are also constrained by the limitations of statistical and computational methods. This report aims to provide a data-driven analytical perspective on China’s urban development. We eagerly anticipate engaging in discussions and receiving feedback from colleagues and readers across various sectors to more accurately discern the underlying logic and future opportunities of urban development.



IV. Assessing overall development outcomes from diverse perspectives

The overall results for the 60 cities in the *Chinese Cities of Opportunity 2025* report, evaluated across ten dimensions, are as follows:

Based on overall scores, the cities are divided into three tiers. Shanghai, Beijing, and Shenzhen constitute the first tier, each surpassing 2,400 points. The second tier comprises Hangzhou, Guangzhou, Suzhou, Chengdu, Nanjing, Wuhan, and Changsha, with scores ranging from 2,000 to 2,400. The third tier includes 17 cities—Qingdao, Chongqing, Wuxi, Tianjin, Hefei, Ningbo, Zhengzhou, Jinan, Xi'an, Xiamen, Fuzhou, Changzhou, Kunming, Shenyang, Dongguan, Foshan, and Nantong—with scores between 1,500 and 2,000.

Examining the relationships between dimensions, the volatility (standard deviation) across the 60 cities is notably high for the Digital-Intelligence Empowerment and Technological Innovation dimensions. This indicates significant disparities in the effectiveness of digital transformation, investment in technological R&D, and the commercialisation of research outcomes. In contrast, the Market

Environment dimension exhibits the lowest volatility, suggesting that, irrespective of a city's size or economic development level, China has consistently implemented measures to enhance the business environment. From the perspective of dimensional correlation, Digital-Intelligence Empowerment exhibits the strongest connection with Regional Synergy. Digital technology, with its distinctive network effect, transcends geographical barriers and facilitates efficient cross-regional resource integration and coordinated collaboration, serving as a vital link in fostering deeper inter-regional cooperation. Additionally, the correlation between Technological Innovation and Digital-Intelligence Empowerment is notably significant. In the context of the digital era, technological innovation heavily depends on intelligent technologies such as AI, which provide efficient tools and solutions for research activities. Conversely, forward-looking research planning drives the development and enhancement of digital infrastructure, creating a virtuous cycle of mutual reinforcement between the two dimensions.

Examining the cities themselves, the top ten ranked cities display a relatively even distribution of scores across all dimensions, as measured by standard deviation, with both Shanghai and Hangzhou achieving top-10 scores in all ten dimensions. In contrast, the score distribution for five cities—Nanjing, Tianjin, Dalian, Quanzhou, and Yangzhou—shows marked imbalance, placing them among the top five for standard deviation. Yangzhou, Yancheng, Weihai, Xuzhou, and Yinchuan exhibited a distinct relative strength in the Culture and Quality of Life dimension, significantly boosting their overall scores. Meanwhile, Yichang, Tangshan, and Taizhou demonstrated a notable advantage in the Green and Low-Carbon dimension,

while Haikou and Dalian showed relative strengths in Open Development. The analysis also revealed that certain cities have clear areas for improvement.

Through a thorough horizontal comparison across the ten dimensions, each city reveals its unique strengths and areas for improvement. This offers a valuable perspective for shaping their future development and governance strategies.

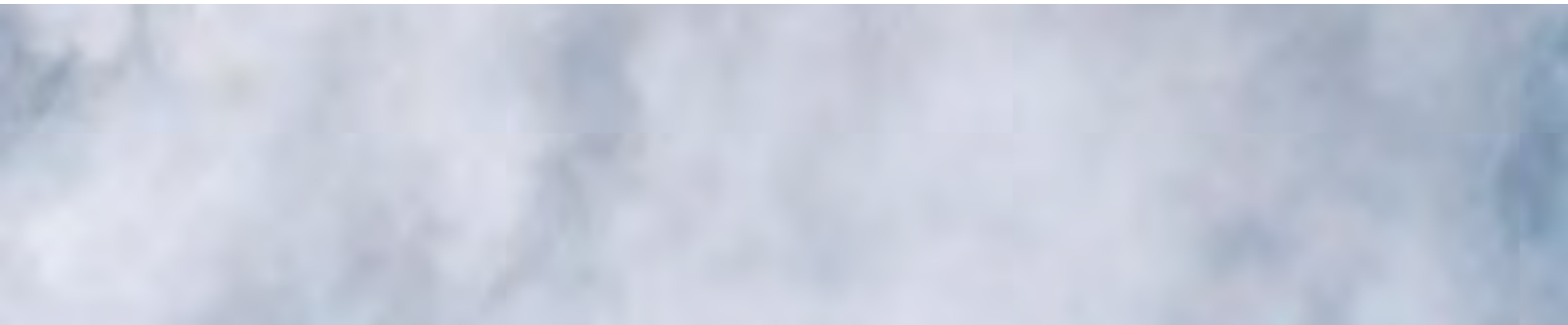


Overall Scoring Table

Rank	City	Economic strength	Technological innovation	Consumer vitality	Digital-intelligence empowerment	Open development	Regional synergy	Urban resilience	Green and low-carbon	Market environment	Culture and quality of life	Overall score
1	Shanghai	271	284	206	275	279	298	209	210	210	204	2446
2	Beijing	261	300	198	290	219	289	226	204	214	234	2435
3	Shenzhen	286	264	201	261	257	271	225	260	223	172	2420
4	Hangzhou	249	269	211	265	219	258	237	198	231	235	2372
5	Guangzhou	223	261	200	279	225	276	209	210	183	184	2250
6	Suzhou	252	247	241	255	243	209	226	155	191	216	2235
7	Chengdu	209	245	189	242	245	254	252	225	195	126	2182
8	Nanjing	241	267	199	255	201	266	220	74	187	257	2167
9	Wuhan	165	274	207	247	180	241	196	189	200	187	2086
10	Changsha	193	235	221	228	209	160	178	228	182	243	2077
11	Qingdao	195	197	208	233	200	240	182	171	170	194	1990
12	Chongqing	150	174	200	244	206	236	187	236	156	179	1968
13	Wuxi	223	205	207	188	202	164	207	129	200	226	1951
14	Tianjin	163	232	141	260	265	233	183	152	114	163	1906
15	Ningbo	222	194	194	210	197	195	189	161	187	154	1903
15	Hefei	215	249	166	221	185	167	162	176	185	177	1903
17	Zhengzhou	182	182	178	224	185	199	228	163	178	130	1849
18	Jinan	183	209	147	241	149	232	213	143	152	141	1810
19	Xi'an	146	263	166	181	173	234	186	186	137	130	1802
20	Xiamen	165	171	158	172	218	212	142	193	191	131	1753
21	Fuzhou	215	131	162	175	131	170	176	196	182	123	1661
22	Changzhou	193	199	176	138	98	136	134	194	183	208	1659
23	Kunming	129	104	199	168	200	176	162	183	155	153	1629
24	Shenyang	123	184	182	174	164	209	167	144	118	122	1587
25	Dongguan	146	170	169	152	164	101	123	165	200	192	1582
25	Foshan	168	113	171	173	97	119	145	226	206	164	1582
27	Nantong	175	159	135	127	130	126	135	162	188	213	1550
28	Wenzhou	153	144	209	137	101	152	135	119	158	181	1489
29	Dalian	114	170	124	153	251	201	103	78	104	177	1475
30	Jiaxing	152	162	187	113	139	108	153	158	161	131	1464
31	Shaoxing	175	143	194	105	88	107	168	109	195	150	1434
32	Nanchang	140	137	159	135	138	112	128	211	109	162	1431
33	Shijiazhuang	140	132	136	113	130	142	197	162	141	107	1400
34	Yantai	168	135	172	86	154	134	134	122	154	130	1389
35	Zhuhai	159	194	111	141	156	110	106	112	93	179	1361
35	Guiyang	120	122	156	175	103	138	178	128	102	139	1361
37	Changchun	90	133	129	150	146	134	176	176	96	125	1355
38	Quanzhou	170	60	200	134	75	116	117	137	187	119	1315
39	Harbin	91	134	122	102	163	139	175	145	122	117	1310
40	Xuzhou	150	123	147	95	79	115	136	108	148	194	1295
41	Taiyuan	135	142	88	133	145	147	145	113	144	99	1291
42	Taizhou	131	99	158	80	82	131	130	184	152	132	1279
43	Nanning	115	79	101	136	180	125	131	139	139	106	1251
44	Yangzhou	151	122	127	94	100	103	63	152	96	222	1230
45	Yichang	159	90	102	106	69	74	105	194	152	161	1212
46	Huizhou	122	96	125	121	132	69	91	132	127	139	1154
47	Weifang	98	106	157	103	126	119	116	66	138	122	1151
48	Haikou	93	65	61	141	181	120	94	104	162	95	1116
49	Yancheng	97	80	103	98	98	73	111	161	110	168	1099
50	Hohhot	133	62	136	88	89	112	88	80	159	135	1082
51	Zhongshan	103	99	143	63	74	50	126	114	178	116	1066
52	Baoding	115	113	134	56	78	58	173	126	114	97	1064
53	Tangshan	102	68	135	61	116	71	98	167	88	145	1051
54	Lanzhou	86	105	70	121	112	131	116	104	97	73	1015
55	Urumqi	131	37	84	81	121	133	103	135	131	55	1011
56	Weihai	87	87	131	45	111	85	114	79	106	156	1001
57	Yinchuan	113	53	106	56	62	91	95	145	102	150	973
58	Jiangmen	71	49	62	26	58	30	85	124	134	96	735
59	Xining	99	29	26	30	57	92	139	137	75	37	721
60	Zhaoqing	20	19	74	30	63	28	54	109	97	119	613

Dimension insights

02



Economic strength

Global economic growth is entering a complex and volatile phase, marked by a dynamic interplay of resilience, divergence, and uncertainty. In the short term, amid escalating geopolitical risks and increasing trade protectionism, economic growth is diverging markedly across regions. Over the medium to long term, advancements in green energy, AI, and services trade will reshape the economic landscape. Nevertheless, international cooperation is essential to address deep-rooted challenges such as protectionism, the climate crisis, and wealth inequality, paving the way for an inclusive and sustainable global economic recovery. Precisely identifying growth opportunities and risk factors holds immense importance for both policymakers and market participants.

In 2024, China's GDP reached RMB 134.9 trillion, a year-on-year increase of 5%, contributing nearly one-third of global economic growth. China has continued to strengthen its macro-control efforts and made every effort to develop New Quality Productive Forces, guiding resources towards emerging fields such as semiconductors and AI. China has demonstrated strong growth momentum in areas including the improvement of total factor productivity, the transformation of

business models, and the intelligent development of industrial chains. In the first half of 2025, the value-added of China's high-tech industries increased by 9.5% year-on-year, indicating that new growth drivers are accumulating despite facing challenges such as tariff barriers and climate change.

The steady advancement and high-quality development of the Chinese economy are inseparable from the collaborative efforts and innovative breakthroughs of its cities. To assess the current state of urban economic development, one must not only look at the foundation of its economic aggregate but also consider its ability to allocate and manage key resources such as capital and brand companies, as well as its capacity to prevent debt risks. Specifically, we use the variable Economic Aggregate Potential to measure the foundation and potential of economic development; Per Capita Economic Output to measure output efficiency; Deposit and Loan Density to measure the ability of regional financial capital to support the economy; Number of Brand Companies¹ to measure a city's brand resources by the number of *Fortune China* 500 companies it has; and Government Debt Burden to measure the degree of risk control in economic development via the government debt ratio.

In the Economic Strength dimension, mega-cities like Shenzhen, Shanghai, and Beijing are at the forefront, while cities such as Yangzhou, Yantai, Urumqi, Nantong, and Fuzhou also demonstrate relative strengths. Each city is adapting to local conditions to develop New Quality Productive Forces and find new growth drivers; some are leveraging their own innovation resources to take the lead in developing emerging technologies such as AI, robotics, and biotechnology, and are accelerating their strategic planning for the digital economy and future industries. Some cities have integrated into the broader collaborative atmosphere of city clusters, accommodating the transfer of high-tech industries and seeking opportunities for innovative breakthroughs in niche sectors. Other cities are leveraging international cooperation, such as the Belt and Road Initiative and ASEAN cooperation, to optimise their locational advantages and explore more favourable international trade partnerships.

Shanghai: the city with a 5-trillion-yuan GDP. In 2024, Shanghai's GDP reached RMB 5.39 trillion, maintaining its position as the top city in China and the third globally. Among this, the output value of the three leading industries—integrated circuits, biomedicine, and AI—grew by 20.8%, 3.3%, and 7.1% year-on-year, respectively, with their industrial scale expected to exceed RMB 2 trillion. Furthermore, Shanghai is accelerating the cultivation of strategic emerging and future industries, including the low-altitude economy, large aircraft, new energy vehicles (NEVs), intelligent terminals, marine equipment, space information, and robotics, as it continues to forge new engines for economic growth.



Fuzhou: the city of accelerated GDP ascent. From 2019 to 2024, Fuzhou's GDP compound annual growth rate (CAGR) reached 8%, with its total GDP ranking among Chinese cities rising from 22nd to 17th. Under the guidance of the "Digital Fujian" strategy, Fuzhou was a pioneer in planning for the digital economy. Over the past five years, the average annual growth rate of its digital economy has exceeded 20%, accounting for 55% of its GDP. Concurrently, the city has leveraged new technologies such as 5G, the Industrial Internet, and AI visual recognition and detection to drive upgrades in traditional industries like textiles, glass, and chemical materials in terms of intelligent transformation, digital transformation, and networked connectivity, enabling multiple products to achieve a globally leading position.

In terms of Economic Aggregate Potential, Suzhou, Shenzhen, Quanzhou, Fuzhou, and Hefei scored highly. China already has 27 trillion-yuan GDP cities, which, with only 3% of the country's land area, contribute approximately 40% of the total economic output, making them the core support for China's economic growth. Among these, Quanzhou, renowned for the vitality of its private sector, led the trillion-yuan cities in 2024 with a GDP growth rate of 6.5%. In 2024, five

cities—Nantong, Yantai, Fuzhou, Hefei, and Changzhou—all saw their GDP growth rates exceed 6%, a performance that demonstrates the "large base, high growth" characteristic. Meanwhile, Wenzhou, Xuzhou, Dalian, and Shenyang are on track to become the next group of trillion-yuan cities.

In terms of Per Capita Economic Output, Beijing, Shanghai, Wuxi, Suzhou, and Shenzhen have all scored highly. Although China's per capita GDP is still at a middle-income level, among the 60 cities we observed, 22 already have a per capita GDP exceeding the USD 20,000 threshold for developed economies², of which Beijing, Shanghai, and Wuxi have exceeded USD 30,000. Benefiting from seizing opportunities in the development of high-tech industries such as the Internet of Things and integrated circuits, Wuxi ranked first in per capita GDP among non-resource-based cities from 2019 to 2022. Suzhou, in turn, is a prime example of the "strongest prefecture-level city" legend. The value-added growth of its emerging industries, such as nanotechnology and biomedicine, has exceeded 20% for three consecutive years, pioneering a path for the cultivation of high-end industries. Guiyang, despite a permanent resident population increase of nearly 200,000, saw its per capita GDP increase by 8.7% in 2024.

In terms of Deposit and Loan Density, Taiyuan, Beijing, Lanzhou, Hangzhou, and Guiyang performed well in the deposit and loan-to-GDP ratio indicator. Finance is the lifeblood of the real economy, and China's approach to financial support for it is shifting from traditional "quantitative expansion" to "structural optimisation". On the one hand, China increases its support for major strategies, plans, and projects, while on the other hand, China guides capital into key sectors and weak links of the national economy, such as advanced manufacturing, small and micro enterprises, technology companies, and green development. As traditional industrial cities in China, Taiyuan and Lanzhou, among others, have a large demand for capital due to factors such as technological upgrades and a low turnover rate for industrial enterprises. The Chinese government has provided them with a large amount of loan support. Besides deposit and loan funds, financing through public listings and issuing bonds has also become important channels for enterprises to obtain financial support.

In terms of Number of Brand Companies, Beijing, Shanghai, Shenzhen, Hangzhou, and Guangzhou scored highly. China already has 143 companies on the *Fortune Global 500* list, and this number has remained the world's highest for two consecutive years (2023–2024). To enhance comparability between cities, this report selects the city distribution of *Fortune China 500* companies as an observation indicator: Beijing leads with a significant advantage, with Shanghai and Shenzhen forming a second tier, and Hangzhou and Guangzhou following closely behind. These five cities are home to 223 *Fortune China 500* companies, accounting for 45% of the total. Notably, other eastern and coastal cities such as Suzhou, Nanjing, Tianjin, Qingdao, and Jinan each have more than five *Fortune China 500* companies rooted there, which fully demonstrates the diverse vitality and balanced development of Chinese cities in cultivating brand companies.





In terms of Government Debt Burden, Shenzhen, Suzhou, Wuxi, Dongguan, and Shanghai performed well. Currently, global debt risks are high, but China's government debt scale is within a reasonable range, commensurate with its level of economic development and fiscal capacity. Local governments are taking measures such as overall control, debt swaps, and asset revitalisation to reduce debt risks. Among the 60 cities observed, Shenzhen's local government debt balance-to-GDP ratio is only 9.3%, while ten cities, including Suzhou, Wuxi, and Dongguan, are below 20%.

PwC's *28th Annual Global CEO Survey China Report* shows that 72% of CEOs from Chinese mainland remain optimistic about their business growth prospects over the next three years,

reflecting their positive expectations for long-term development. China holds immense investment potential in the areas of consumption upgrades, integrated industrial innovation, and green transition. In particular, the country's strong digital industrial foundation and abundant R&D talent pool are creating a wealth of new opportunities for technology migration and application across different industries. For example, according to the forecast by the Civil Aviation Administration of China, with the commercialisation of technologies such as AI flight control systems and the optimisation of China's airspace management reform, the market size of China's low-altitude economy is projected to reach RMB 2 trillion by 2030.

Economic Strength Scoring Table

Rank	City	Economic aggregate potential	Per capita economic output	Deposit and loan density	Number of brand companies	Government debt burden	Total score
1	Shenzhen	59	56	53	58	60	286
2	Shanghai	43	59	54	59	56	271
3	Beijing	45	60	59	60	37	261
4	Suzhou	60	57	22	54	59	252
5	Hangzhou	36	51	57	57	48	249
6	Nanjing	31	54	52	53	51	241
7	Wuxi	52	58	10	45	58	223
7	Guangzhou	26	48	46	56	47	223
9	Ningbo	42	53	28	55	44	222
10	Fuzhou	57	49	16	39	54	215
10	Hefei	56	36	29	45	49	215
12	Chengdu	54	25	43	53	34	209
13	Qingdao	47	46	18	48	36	195
14	Changsha	33	39	27	48	46	193
14	Changzhou	51	55	14	30	43	193
16	Jinan	39	38	31	48	27	183
17	Zhengzhou	45	26	36	45	30	182
18	Nantong	53	45	12	20	45	175
18	Shaoxing	47	43	23	30	32	175
20	Quanzhou	59	40	1	20	50	170
21	Yantai	51	42	3	30	42	168
21	Foshan	17	37	20	53	41	168
23	Xiamen	30	47	26	39	23	165
23	Wuhan	41	41	25	45	13	165
25	Tianjin	37	34	41	50	1	163
26	Yichang	40	44	2	20	53	159
26	Zhuhai	7	52	42	39	19	159
28	Wenzhou	51	18	33	39	12	153
29	Jiaxing	20	35	30	45	22	152
30	Yangzhou	38	50	7	1	55	151
31	Xuzhou	51	23	4	20	52	150
31	Chongqing	56	20	17	50	7	150
33	Dongguan	19	29	21	20	57	146
33	Xi'an	22	22	47	39	16	146
35	Nanchang	16	30	35	20	39	140
35	Shijiazhuang	28	5	44	39	24	140
37	Taiyuan	4	16	60	20	35	135
38	Hohhot	28	27	40	27	11	133
39	Taizhou	33	17	39	27	15	131
39	Urumqi	15	24	49	39	4	131
41	Kunming	13	14	45	39	18	129
42	Shenyang	23	15	34	20	31	123
43	Huizhou	11	19	13	39	40	122
44	Guiyang	30	12	56	20	2	120
45	Nanning	8	3	55	20	29	115
45	Baoding	26	1	37	45	6	115
47	Dalian	24	31	19	20	20	114
48	Yinchuan	12	21	32	20	28	113
49	Zhongshan	6	13	24	27	33	103
50	Tangshan	36	33	6	1	26	102
51	Xining	2	6	50	27	14	99
52	Weifang	34	11	9	27	17	98
53	Yancheng	22	28	8	1	38	97
54	Haikou	3	7	51	27	5	93
55	Harbin	11	2	48	27	3	91
56	Changchun	14	8	38	20	10	90
57	Weihai	18	32	15	1	21	87
58	Lanzhou	9	9	58	1	9	86
59	Jiangmen	5	10	11	20	25	71
60	Zhaoqing	2	4	5	1	8	20

Guangzhou: Low-altitude economy soaring to new heights

Guangzhou, as the capital of Guangdong Province, serves as the political, economic, cultural, educational, and healthcare hub of the province, as well as an international centre for commerce and trade and a global integrated transportation hub. By virtue of its profound economic endowments and powerful international influence, Guangzhou commands a pivotal position in the domestic and global economic landscape. In recent years, Guangzhou has actively embraced emerging

industries, among which the “low-altitude economy” has emerged as a new focus in urban development, becoming a crucial engine propelling Guangzhou’s high-quality development. Spanning cutting-edge fields such as drones, flying cars, and electric vertical take-off and landing (eVTOL) aircraft, the low-altitude economy not only embodies the future trajectory of transportation and logistics but also epitomises urban technological innovation and industrial upgrading.



Sci-tech innovation as an unfailing engine

Guangzhou boasts a multitude of higher education institutions and research institutions, providing the low-altitude economy with abundant scientific research resources and innovative drivers for development. These institutions conduct cutting-edge research in areas such as low-altitude aircraft manufacturing, intelligent control and navigation systems. Through industry-academia-research collaboration, they facilitate the transformation and application of sci-tech achievements and advance technological innovation in the low-altitude economy. The Hong Kong University of Science and Technology (Guangzhou) has established several research centres dedicated to the low-altitude economy, focusing on the development of flying cars, drones and other key technologies. Their achievements not only offer technical support to local enterprises but also attract numerous research institutions and businesses at home and abroad for collaboration.

A whole-chain ecosystem built on robust industrial strength

Guangzhou has laid a solid industrial foundation in the low-altitude economy, with a cohort of leading enterprises at the industry's forefront, spanning the entire industrial chain

from research and development to manufacturing and application. According to the *Research Report on the Development of China's Low-Altitude Economy (2024)*, as of February 2024, Guangzhou ranks among the top in China in terms of the number of enterprises related to the low-altitude economy industrial chain, underscoring the city's potent cluster effect in the industry. The low-altitude economy industrial chain in Guangzhou embraces both large enterprises and small- and medium-sized enterprises (SMEs), forming a diversified industrial ecosystem. Some renowned corporate champions clinch the top spots in the research, development and manufacturing of drones and flying cars. These include the world's first enterprise to secure all three certifications required for production to commercial operation. Its self-developed passenger-carrying autonomous aerial vehicle has undergone multiple test flights and commercial-application trials worldwide. Another enterprise has unveiled the world's first modular flying car. Its intelligent manufacturing base for flying cars already has been put into operation. Meanwhile, SMEs play a crucial role in areas such as component fabrication, software development, and application services, lending robust support to the refinement of the industrial chain.

Supportive policies for the low-altitude economy

In 2024, the People's Government of Guangdong Province released the *Guangdong Province Action Plan for Promoting High-Quality Development of the Low-Altitude Economy (2024–2026)*, which explicitly commits to nurturing and expanding entities in the low-altitude economy, building low-altitude infrastructure, and fostering integrated development between the low-altitude economy and allied industries. Building on this, Guangzhou issued the *Implementation Plan for the Development of Guangzhou's Low-Altitude Economy*, providing the industry with precise policy guidance and backing. These policies not only clarify the development goals and priorities of the low-altitude economy but also outline concrete incentives, such as financial subsidies, tax concessions, and land supply. Through these policies, Guangzhou has attracted a significant cluster of enterprises in the low-altitude economy, fostering a thriving industrial ecosystem.

A blueprint with broad prospects laid out

Confident in the rise of the low-altitude economy, Guangzhou has set a clear development goal: the low-altitude economy industry is expected to reach RMB 210 billion by 2027 and RMB 650 billion by 2035. To achieve this, Guangzhou will focus on cultivating and expanding key segments such as flying cars and drones, fostering large-scale, clustered development of the

low-altitude economy. Through policy support and market guidance, Guangzhou aims to attract more domestic and international enterprises and research institutions to engage in the low-altitude economy. With these endeavours, Guangzhou will forge a complete industrial chain and an innovative ecosystem.

Broader application scenarios for deeper industrial integration

Guangzhou encourages and supports enterprises in pioneering innovative applications of the low-altitude economy, expanding the application scope to include logistics and transportation, emergency response, cultural tourism, and beyond. By broadening these application scenarios, Guangzhou aims to foster deep integration between the low-altitude economy and the real economy, injecting fresh momentum into urban development. For instance, in logistics and transportation, the city will promote the widespread adoption of drone delivery to enhance efficiency and reduce operating costs. In emergency response, Guangzhou will harness the rapid response capabilities of flying cars and drones to improve rescue efficiency and protect life and property. In cultural tourism, the city will develop low-altitude tourism offerings, such as flying-car sightseeing tours and drone-based aerial photography, to provide visitors with novel experiences.

Elevated international standing as a trailblazer of the low-altitude economy

As a pioneer and vanguard in China's low-altitude economy development, Guangzhou leverages its leading industrial scale and enterprise cluster advantages to continually set new heights in the global low-altitude economy arena. It has achieved groundbreaking breakthroughs at internationally advanced levels across multiple key sectors, establishing itself as a globally recognised hub for low-altitude economy innovation. Moreover, the city has contributed to the world's first *Urban Air Mobility Operations Guidelines* and spearheaded seven international standards for drones, significantly enhancing its global clout in this field. As one of the Civil Aviation Administration of China's first batch of pilot cities for low-altitude airspace management reform, Guangzhou has progressively opened some urban low-

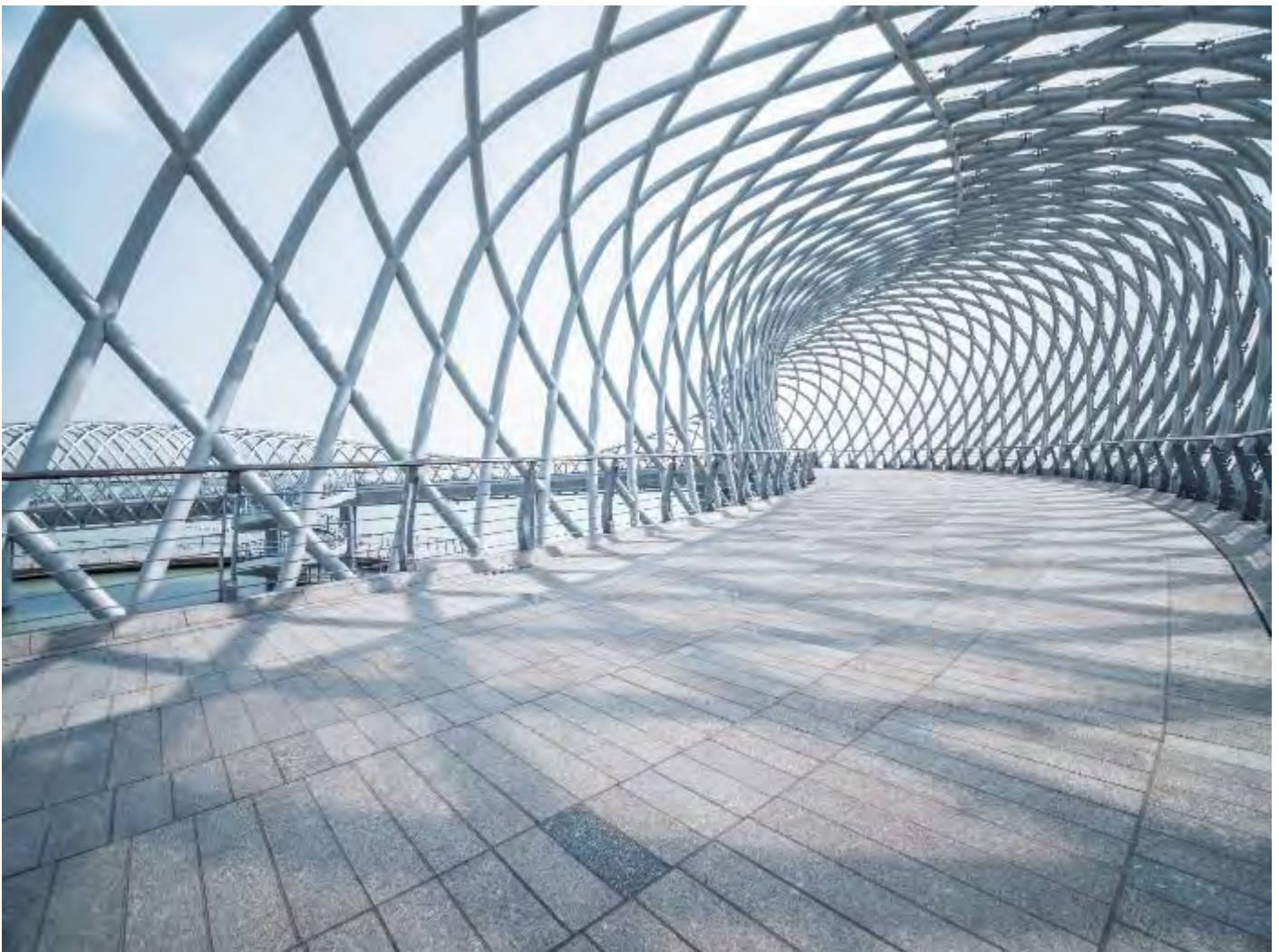
altitude air routes since 2024, positioning China as the first country globally to incorporate passenger-carrying autonomous eVTOL aircraft into its civil aviation regulatory system, providing the "Chinese solution" for the standardised development of global low-altitude transportation. In promoting the integrated application of the low-altitude economy across different industries, a renowned Guangzhou-based enterprise has developed smart agriculture solutions, which have served more than one million farmers in 70 countries and regions worldwide, facilitating global agricultural modernisation. Additionally, the same enterprise has conducted numerous test flights and commercial-application trials globally for its self-developed passenger-carrying autonomous aerial vehicle, continually attracting foreign capital to expand its presence in Guangzhou.



Yantai: A fresh surge of industrial momentum

Yantai is one of the most promising cities for investment in the Bohai Rim region. As a central city on the Shandong Peninsula, a key port city in the Bohai Rim region, and a nationally renowned historical and cultural city, it also stands as one of the three core cities driving Shandong's transformation from old to new drivers of economic development, as well as a pivotal city within the China (Shandong) Pilot Free Trade Zone. Facing a new era and a new landscape,

Yantai fully leverages its geographical advantages and industrial strengths, positioning green petrochemicals, the marine economy, and clean energy as its pillars of economic development. The city is pursuing high-quality development through twin drivers—namely, industrial chain innovation and an open economy. Thus, a trillion-yuan-scale city, propelled by the synergistic advancement of diverse industries, is rapidly emerging.



Building a trillion-yuan GDP city

Yantai demonstrates formidable economic strength and serves as a vital pillar of regional development. In 2023, its GDP reached RMB 1,016.25 billion, up 6.6%, marking Yantai's official entry into the trillion-yuan GDP club. In 2024, its GDP rose to RMB 1,078.28 billion, up 6.1%, reflecting robust resilience and vitality.

Concurrently, Yantai's industrial structure has been constantly optimised and upgraded, showcasing a balanced and synergistic development trend. In 2024, Yantai's economic structure across the primary, secondary, and tertiary sectors was proportioned at 6.3:42.6:51.1. The city has established two industrial clusters on a 200-billion-yuan scale in green petrochemicals and non-ferrous and precious metals; four clusters on a 100-billion-yuan scale in automobiles, high-end equipment, electronic information, and refined food processing; and three clusters on a 10-billion-yuan scale in biomedicine, clean energy, and aerospace. The emergence of these industrial clusters has not only amplified economies of scale and collaborative innovation capabilities but also provided investors with diverse opportunities and broad development prospects.

Forging a green petrochemical industry hub

Yantai, a key industrial city in China, boasts a rich historical foundation in the petrochemical and industrial sectors, with its development history dating back to the 1970s. The city has undergone a rapid transformation and upgrading process, shifting from traditional chemical industries to high-end, green, and clustered industrial development. In 2023, Yantai strategically planned the construction of three 100-billion-yuan-tier parks—namely Yantai Chemical Industrial Park, Wanhua New Material Low-Carbon Industrial Park, and Yulong Petrochemical Industrial Park—with the goal of establishing a trillion-yuan-output green petrochemical industrial base. Among these, Phase I of the Yulong Island Refining-Chemical Integration Project commenced operations in 2024, with an estimated annual revenue of RMB 110 billion, establishing it as a model project for Shandong-based independent refineries. The Yantai Chemical Industrial Park has been designated a national-level green industrial park, serving as a benchmark for the city's green industrial development.

Developing a model city for new energy

In pursuit of the national “carbon peaking and carbon neutrality” goals, Yantai has proactively undertaken industrial restructuring, establishing itself as a national leader in clean energy resources and ranking among the top performers in both Shandong Province and across China in clean power generation. An urban ecosystem featuring a “harmonious blend of blue and green spaces” is taking shape. Yantai is committed to developing a new energy system and industrial chain that integrates the synergistic development of nuclear, wind, solar, hydrogen, energy storage, and LNG. In 2024, Yantai’s installed clean energy capacity surpassed 17 million kilowatts, accounting for over 60% of the total power capacity, while its offshore wind power capacity reached 2.22 million kilowatts, both ranking first in Shandong. The robust growth of the new energy industry not only provides clean and efficient energy support for Yantai’s economic and social development but also offers investors significant market opportunities. Yantai presents promising prospects in the manufacturing of new energy equipment, investment and operation of new energy projects, and deployment of energy storage facilities.

Pioneering innovation across the entire marine economy chain

Yantai, endowed with abundant marine resources, has positioned the marine economy as a formidable engine driving its high-quality economic development. Focusing on four principal areas—ships and marine engineering equipment, marine fishery equipment, marine new energy equipment, and offshore construction machinery—Yantai is vigorously implementing five major initiatives, including the “chain master” enterprises initiative. In doing so, the city is striving to develop into a globally leading R&D and manufacturing base for marine engineering equipment. In 2023, the total output of the marine economy registered RMB 250 billion, accounting for over 25% of Yantai’s GDP and contributing more than 15% to the total output of Shandong Province’s marine economy.

Yantai boasts a robust industrial foundation and innovation capacity in marine engineering equipment manufacturing, with a comprehensive industry chain encompassing high-end marine equipment production, technology R&D, supporting equipment, and marine engineering services. In 2024, the total output value of Yantai’s marine industrial chain surpassed RMB 48 billion, and the Qingdao-Yantai-Weihai shipbuilding and marine engineering equipment cluster was recognised as a national advanced manufacturing cluster.

Dual drive: Cross-border trade and high-technology

In terms of foreign trade and economic cooperation, Yantai has achieved comprehensive expansion, where traditional and emerging markets are developing in a coordinated way and new business forms such as cross-border e-commerce are performing remarkably. In 2024, Yantai's total foreign trade import and export value reached a historic high of RMB 472.34 billion. In 2024, Yantai's trade with "Belt and Road" countries amounted to

RMB 133.39 billion; exports to ASEAN surged by 49.9%, significantly outpacing the provincial growth rate by 30.6 percentage points; trade with BRICS countries also rose by 27.1%, ranking first in Shandong Province.

In 2024, Yantai attracted USD 1.58 billion in foreign investment, with 192 new foreign-invested projects established. Of this, USD 550 million was allocated to high-technology industries, reflecting a shift in foreign enterprise investments towards high-tech sectors in Yantai.



Technological innovation

Global technological innovation is demonstrating a trend of breakthroughs across multiple domains, from quantum computing and biotechnology to space exploration and green energy. These innovations are not only reshaping industrial structures through enhanced efficiency but also spawning new business models, such as space tourism and customized synthetic biology. However, escalating competition among major global economies in key technology sectors—combined with technological barriers, resource conflicts, and a growing digital divide—is exerting pressure on the global technology ecosystem. In the medium to long term, tackling these global challenges will demand open collaboration, fair competition, and the creation of shared rules to ensure that technological innovation stays true to its fundamental purpose of serving human well-being.

Chinese technological innovation has firmly established itself at the core of the global innovation landscape. In 2024, China's R&D expenditure intensity reached 2.68%, approaching the average level of OECD countries,

while its PCT international patent applications have ranked first globally for four consecutive years. Research and applications in fields such as quantum information, biotechnology, and AI are at the forefront of global technological advancements. Besides, disruptive innovation is directly reshaping the way production factors are combined in the country, with China's 9.4 million software developers driving the rapid cross-industry application of new technologies, breaking down barriers between sectors. Concurrently, China's vast market provides a comprehensive testing ground for technological innovation. A PwC survey of executives from multinational companies operating in China indicates that the majority (57%) believe China's innovation ecosystem has significantly enhanced their companies' global competitiveness, with 12% of respondents describing the impact as highly significant³. Looking ahead, China is poised to transition from a hub for technology application to a global source of technological innovation.

A dialectical relationship, defined by a core impetus fostering transformative advancement, exists between technological innovation and New Quality Productive Forces, manifested across multiple dimensions, including revolutionary technological breakthroughs, reconfiguration of production factors, and transformation of industrial ecosystems. Chinese cities are now fostering innovation ecosystems through diverse pathways, unleashing technological momentum. This dimension incorporates five variables: R&D Investment Intensity serves as a critical pillar for the development of innovation systems; Innovative Talent Pool⁴ is measured by the number of students in higher education and the proportion of the regional population with a bachelor's degree or higher, reflecting innovative human capital; Innovative Enterprises⁵ acts as a key indicator of the vibrancy of a city's innovation ecosystem; Invention Patent Density reflects the quality and efficiency of a city's technological innovation output; and Technology Transaction Scale, represented by the value of technology contract transactions, indicates the level of market-oriented operations in technological innovation.

In the dimension of Technological Innovation, Beijing and Shanghai demonstrate clear dominance; Wuhan, Hangzhou, Nanjing, Shenzhen, Xi'an, and Guangzhou rank highly in terms of scores; cities such as Zhuhai, Xi'an, Baoding, Hefei, Lanzhou, and Taiyuan perform strongly in this dimension, significantly boosting their overall scores. Universities and research institutions form the foundation of urban innovation, with cities pursuing distinct upgrading pathways: some build ecosystems centred on leading enterprises, others promote collaboration between industry, academia, research, and application around dominant industries, or focus on fostering environments for technology-driven SMEs.

Beijing, leveraging its robust research foundation and talent advantages, serves as the core of national strategic technological capabilities; Shanghai has cultivated an internationalised innovation ecosystem, attracting over 600 foreign R&D centres, establishing itself as China's hub for open innovation; Wuhan, with its rich scientific and educational resources, leads globally in high-end technology R&D for the optoelectronic information industry; Hangzhou has pioneered technological innovation and application in cloud computing, big data, and e-commerce, fostering globally leading IT and e-commerce innovation models; Shenzhen, driven by leading enterprises in telecommunications, software, and NEVs, and combined with high-intensity R&D investment and an open collaborative ecosystem, has established a technological innovation system led by enterprises and guided by market principles; Guangzhou, driven by significant applications in deep-sea and low-altitude technologies, has spurred exponential growth in technology SMEs, while the Guangdong-Hong Kong-Macao Greater Bay Area International Technological Innovation Centre is developing an end-to-end innovation ecosystem that encompasses basic research, technological breakthroughs, outcome transformation, technology finance, and talent support; Nanjing is focused on fostering collaborative R&D centres

among universities, research institutes, and enterprises, achieving notable success in patent output and outcome transformation, with its invention patents per 10,000 people ranking fourth in 2024; Xi'an has made remarkable achievements in aircraft design and manufacturing, aero-engine R&D, and satellite technology, demonstrating robust strengths in aerospace and military technology sectors.

In terms of R&D Investment Intensity, Beijing, Shenzhen, Xi'an, Shanghai, and Suzhou exhibit outstanding performance. China has consistently maintained its position as the world's second-largest investor in R&D for several years. Both Beijing and Shenzhen have achieved R&D intensities exceeding 6%, establishing themselves as China's "dual highlands" of technology investment. In Xi'an, major R&D projects led by research institutes continue to spawn emerging industries, with technologies such as photonics manufacturing, photonics information, and photonics sensing expanding existing industry boundaries. In Suzhou, R&D investment from enterprises accounts for 85% of the total, significantly surpassing the national average, with notable achievements in biomedicine, where fields like cell therapy, gene editing, and biochips have developed world-class competitiveness.

In terms of Innovative Talent Pool, Beijing, Wuhan, Nanjing, Zhengzhou, and Xi'an rank highly. Talent is the cornerstone of regional innovation, with nearly 20% of China's population (over 1.4 billion) holding a university-level education or higher. Each year, China produces more than 5 million graduates in science, technology, engineering, and mathematics (STEM) fields. Currently, China's demographic dividend is rapidly transforming into a talent advantage. Chinese cities are employing diverse measures to attract innovative talent, including providing talent apartments, offering settlement incentives, allocating R&D funding for high-calibre talent, and providing start-up capital support, aiming to convert innovation vitality into economic growth momentum, transform talent advantages into drivers of industrial upgrading, and ultimately foster a mutually reinforcing and cohesive relationship between talent attraction and urban development.

In terms of Innovative Enterprises, cities such as Beijing, Shanghai, Shenzhen, Hangzhou, and Guangzhou perform best in this variable. China's innovation capacity building consistently emphasises enterprises as the core driver. Beijing has maintained the top national

ranking for three consecutive years in nurturing national-level specialised, refined, distinctive, and innovative "little giant" enterprises, fostering 61 global unicorn enterprises⁶. Shanghai focuses on cutting-edge technologies, supporting the growth of innovative enterprises through full-chain incubators such as Mosu Space⁷. Shenzhen has cultivated an innovation ecosystem where large enterprises succeed through their scale and small enterprises prosper through their abundance, achieving the highest entrepreneurial density in the country. Hangzhou promotes R&D collaboration between universities and enterprises, while providing small and micro technology enterprises with low-cost, high-quality office spaces and Computing Power Vouchers (also known as AI Vouchers). Wuhan and Hefei, leveraging cooperation with research institutes and technology transfer, have incubated a number of technology-leading enterprises in fields such as photonics, electronic information, and quantum computing. Suzhou, Nanjing, and Chengdu, through coordinating enterprise efforts for technological breakthroughs and providing application scenarios, attract technological commercialisation, fostering specialised clusters of innovative enterprises.

In terms of Invention Patent Density, Beijing, Shenzhen, Zhuhai, Nanjing, and Hangzhou rank among the top; cities such as Zhuhai, Wuxi, Changzhou, Qingdao, Shaoxing, and Nantong exhibit significantly higher effective invention patent densities than their peers. The key factor behind the leadership of Zhuhai, Qingdao, and Changzhou is the sustained R&D investment and resulting outputs from leading enterprises in the manufacturing sector. Leveraging its manufacturing foundation and innovation-driven strategy, Shaoxing has achieved an annual growth rate of over 20% in the number of high-value invention patents for three consecutive years. By prioritising R&D and innovation, these cities have not only strengthened their technological competitiveness but also provided critical support for regional economic transformation and upgrading, reflecting the vibrant dynamism of Chinese cities in the realm of technological innovation.

In terms of Technology Transaction Scale, Beijing, Shanghai, Xi'an, Wuhan, and Tianjin rank among the top; Chengdu, Ningbo, and Zhengzhou outperform their overall scores in this variable. China actively supports the development of the technology services industry, with the transaction value of technology contracts maintaining double-digit

growth for eight consecutive years. Beijing's annual technology contract transaction value approaches RMB 1 trillion, while 13 cities exceeding RMB 100 billion annually; cities such as Nanchang, Kunming, Wenzhou, Hohhot, and Hefei recorded year-on-year growth rates exceeding 30% in 2024.

According to the World Intellectual Property Organisation, China's innovation index ranking has risen from 34th in 2012 to 11th in 2024, with the country hosting 26 of the world's top 100 science and technology innovation clusters, maintaining its position as the global leader. China has established an efficient innovation system driven by R&D investment, talent support, and outcome transformation, while accelerating towards systematisation, scale, and internationalisation. Looking ahead, as emerging technologies such as AI and quantum information accelerate industrialisation, China will continue to reshape global innovation and value chains. For investors, seizing key junctures such as breakthroughs in original innovation, the incubation of high-technology enterprises, and the industrialisation of technological outcomes enables precise capture of structural opportunities arising from emerging technologies, achieving synergy between innovation dividends and economic growth.

Technological Innovation Scoring Table

Rank	City	R&D investment intensity	Innovative talent pool	Innovative enterprises	Invention patent density	Technology transaction scale	Total score
1	Beijing	60	60	60	60	60	300
2	Shanghai	57	55	59	54	59	284
3	Wuhan	50	60	54	53	57	274
4	Hangzhou	53	51	57	56	52	269
5	Nanjing	51	58	53	57	48	267
6	Shenzhen	59	35	58	59	53	264
7	Xi'an	58	56	43	48	58	263
8	Guangzhou	45	54	56	52	54	261
9	Hefei	54	49	51	49	46	249
10	Suzhou	56	32	55	55	49	247
11	Chengdu	49	51	52	38	55	245
12	Changsha	40	52	47	45	51	235
13	Tianjin	48	47	44	37	56	232
14	Jinan	35	44	39	46	45	209
15	Wuxi	43	24	49	51	38	205
16	Changzhou	44	28	46	50	31	199
17	Qingdao	29	38	42	47	41	197
18	Ningbo	36	25	41	42	50	194
18	Zhuhai	55	24	45	58	12	194
20	Shenyang	34	47	30	30	43	184
21	Zhengzhou	26	58	31	23	44	182
22	Chongqing	25	39	50	13	47	174
23	Xiamen	42	33	37	40	19	171
24	Dalian	37	34	29	33	37	170
24	Dongguan	52	12	48	44	14	170
26	Jiaxing	46	8	36	39	33	162
27	Nantong	33	13	28	43	42	159
28	Wenzhou	28	12	40	24	40	144
29	Shaoxing	39	12	21	36	35	143
30	Taiyuan	18	53	15	34	22	142
31	Nanchang	12	48	13	25	39	137
32	Yantai	16	26	35	22	36	135
33	Harbin	32	40	23	26	13	134
34	Changchun	21	38	25	28	21	133
35	Shijiazhuang	30	43	26	10	23	132
36	Fuzhou	17	30	38	31	15	131
37	Xuzhou	13	20	33	32	25	123
38	Yangzhou	25	14	19	35	29	122
38	Guiyang	15	38	34	15	20	122
40	Baoding	47	17	12	2	35	113
40	Foshan	14	17	32	41	9	113
42	Weifang	22	22	16	16	30	106
43	Lanzhou	20	45	6	18	16	105
44	Kunming	8	41	17	20	18	104
45	Taizhou	27	1	20	27	24	99
45	Zhongshan	41	4	22	29	3	99
47	Huizhou	38	3	27	17	11	96
48	Yichang	31	7	9	11	32	90
49	Weihai	23	18	10	19	17	87
50	Yancheng	20	3	8	21	28	80
51	Nanning	2	30	14	6	27	79
52	Tangshan	10	17	11	4	26	68
53	Haikou	6	32	5	12	10	65
54	Hohhot	3	42	3	9	5	62
55	Quanzhou	9	9	24	14	4	60
56	Yinchuan	7	28	2	8	8	53
57	Jiangmen	11	6	18	7	7	49
58	Urumqi	1	21	4	5	6	37
59	Xining	4	19	1	3	2	29
60	Zhaoqing	5	5	7	1	1	19

Hefei: A quantum technology high ground

Hefei stands as a key city in the urban agglomeration of the Yangtze River Delta region. As the capital of Anhui Province, it serves not only as the province's political, economic, and cultural centre but also as a city renowned for sci-tech innovation, playing a pivotal role in the sci-tech innovation landscape of the Yangtze River Delta. In recent years, equipped with robust research capabilities, a conducive innovation environment, and a series of effective policy measures, Hefei has earned worldwide recognition for its sci-tech innovation achievements and is rapidly emerging as a globally influential sci-tech innovation hub.

Pooling scientific research resources to build innovation platforms

Hefei boasts a top-tier sci-tech innovation environment and outstanding achievements. Its sci-tech innovation capability ranks among the top ten in China. Globally, it holds the 13th position among scientific research cities and the 36th among technology clusters, rising by three and four places, respectively, compared to the previous year. In 2017, Hefei became the second city after Shanghai to be approved for

the development of a comprehensive national science centre. The initiative is now progressing rapidly, with six research institutes focused on energy, AI, healthcare, the environment, and other areas already operational. In addition, the city hosts 13 large-scale scientific facilities, which are either completed, under construction, or in the pre-research stage, representing the highest concentration of such facilities nationwide. Notably, 34 achievements have received National Science and Technology Awards, and 26 have been selected for the annual Top 10 News Stories of Scientific and Technological Progress. By the end of 2024, Hefei was home to 18 national key laboratories and 201 provincial key laboratories, and had established four national large-scale scientific facilities, namely the Experimental Advanced Superconducting Tokamak (EAST), the Steady High Magnetic Field Facility (SHMFF), the Synchrotron Radiation Light Source, and the China Environment for Network Innovation (CENI) (Hefei Branch). These platforms provide robust hardware support for sci-tech innovation.

Ramping up presence in future-oriented industries

Thanks to its proactive efforts, Hefei has made significant strides in future-oriented industries such as quantum technology, commercial aerospace, and AI. Driven by sci-tech innovation, the agglomeration effect of the quantum information industry is intensifying, while intelligent transformation is gaining momentum. The Provincial Future Industry Pilot Zone of Hefei Quantum Technology has concentrated over 80% of enterprises in the quantum technology sector within Anhui Province and nurtured several national-level front-runners. In commercial aerospace, Hefei focuses on satellite R&D and manufacturing, satellite operations, and aerospace data applications, aiming to build a commercial aerospace industry platform encompassing satellite manufacturing, satellite launch and operations, and data applications. In artificial intelligence, the Provincial Future Industry Pilot Zone of Hefei Artificial General Intelligence designates iFlytek Town as its core hub, and pools resources from the Shushan Economic and Technological Development Zone and the USTC Campus in Hefei High-tech Zone to create a sci-tech innovation hub.

Harvesting quantum breakthroughs

Hefei has emerged as a global pacesetter in both quantum information research and industrialisation, achieving systematic breakthroughs across quantum communication, quantum computing, and quantum precision measurement. In quantum communication, Hefei has successfully established the world's first thousand-kilometre-level quantum-secure communication line, the "Beijing-Shanghai Trunk Line", and accomplished intercontinental quantum key distribution using the Micius satellite for quantum science experiments. In quantum computing, Hefei has developed internationally leading quantum computers such as "Zuchongzhi-2" and "Jiuzhang-2". The "Wukong" superconducting quantum computer, developed by Origin Quantum, has entered commercial operation. In quantum precision measurement, self-developed quantum magnetometers and other instruments have reached world-class level. By establishing a national laboratory for quantum information sciences, Hefei has forged a full-chain innovation system spanning basic research, technological development, and engineering application, while nurturing a cohort of leading enterprises. This has resulted in a fully-fledged industrial chain covering core components, equipment manufacturing, and system integration.

Enabling efficient transformation of sci-tech achievements through full-chain empowerment

Hefei emphasises fostering an innovation ecosystem for the quantum technology industry, strengthening industry-academia-research collaboration, and promoting synergistic innovation among enterprises. The USTC has partnered with companies to establish joint laboratories and develop an institute-company cooperation model, advancing breakthroughs in key technologies and the domestic production of major equipment. Additionally, Hefei has inaugurated China's first urban Scenario Innovation Promotion Centre, providing robust application scenarios for cutting-edge technologies such as quantum computing. In terms of financial support, the Hefei municipal financial departments has cumulatively invested nearly RMB 10 billion and established a dedicated quantum industry fund that spans the entire cycle of quantum research, achievement transformation, enterprise development, and scenario application. At the same time, risk tolerance has been increased for angel and seed funds, while innovative financial products such as the Spark Loan and USTC Alumni Entrepreneurship Loan have been introduced, providing strong support for industrial growth.

Strengthening international exchange and cooperation in the quantum domain

The advancement of quantum technology relies not only on independent efforts by individual

nations but also on extensive international exchange and deep collaboration.

In 2022, Hefei launched China's first global quantum computing developer platform. It has since served as an open and shared platform for researchers and developers worldwide to share quantum computing resources, exchange cutting-edge research findings, and collectively drive innovation and development in quantum computing technology. In September 2023, the CAS Centre for Excellence in Quantum Information and Quantum Physics successfully convened the International Conference on Emerging Quantum Technology. The event brought together more than 600 renowned experts and scholars in quantum information technology from over 10 countries, including the United States, Germany, Austria, and Switzerland. The conference covered a wide range of themes, from the fundamentals of quantum physics to quantum communication, quantum computing, and other frontier areas, propelling the synergistic development of quantum computing technology worldwide. Looking ahead, as quantum computing and its commercialisation advance, Hefei is poised to assume an even more critical position in the global quantum technology landscape.

As of August 2025, China's independently developed third-generation superconducting quantum computer, "Origin Wukong", has provided computing power services to 139 countries and regions worldwide, successfully completing over 540,000 quantum computing tasks.

Consumer vitality

Consumption, as the ultimate driver of the global economic cycle, is playing an increasingly vital foundational role in today's complex economic landscape. Currently, dominant trends in digital, green, and personalised consumption are fuelling the emergence of new industries and the upgrading of traditional ones. According to World Bank data, global final consumption expenditure has consistently accounted for over 60% of GDP growth, with an even higher proportion during economic recovery phases, serving as a stabiliser that enables countries to mitigate external shocks and achieve sustainable development.

As the world's second-largest consumer market, China's consumption transformation is profoundly reshaping industrial ecosystems and global resource allocation. The underlying driver stems from the rise of the post-90s and post-00s generations, shifting consumption patterns from merely having products to seeking high-quality products, thereby accelerating the development of industries such as smart homes and NEVs. Besides, China has emerged as a significant growth engine for global high-end medical equipment and luxury goods consumption. Currently, consumption scenarios characterised by deep digital penetration and rapid format iteration, along with patterns of online product recommendation, offline experiences, and instant consumption, have become

defining features of the Chinese market. Retail formats pioneered in China, such as live-streaming e-commerce and social commerce, are expanding globally through cross-border platforms. China not only absorbs high-quality global goods and services but also accelerates innovation by aligning consumption demand with order-driven production, promoting the global expansion of domestic brands. This consumption-driven transformation is enabling the country to shift from a manufacturing powerhouse to a global leader in consumption, highlighting its pivotal role in the world economy.

The five variables selected for the Consumer Vitality dimension are as follows: Total Consumption Potential, measured by the total retail sales of consumer goods and their growth rate to assess the vibrancy of a city's consumption market; Per Capita Consumption Expenditure, which evaluates the living standards and quality of life of city residents; Commercial Prosperity Index⁸, which uses the degree of commercial prosperity to gauge the activity level of existing businesses in a city; Rent Coverage Ratio⁹, measured by the ratio of per capita disposable income to housing rent to assess the extent of consumption pressure; Tourism Revenue Contribution, measured by tourism revenue to evaluate the scale of a city's tourism market.

In the Consumer Vitality dimension, Suzhou, Changsha, Hangzhou, Wenzhou, and Qingdao rank highly in overall scores. First-tier cities and regional hub cities remain the primary drivers of consumption, but their sustained growth potential and consumer willingness are constrained by the pressure of housing expenditure. Additionally, cities such as Wenzhou, Quanzhou, Shaoxing, and Jiaxing have significantly boosted their overall scores through strong performance in this dimension. These non-provincial capital cities, by developing unique strengths and promoting regional industrial collaboration, are overcoming administrative-level constraints to emerge as new drivers of consumption growth.

The surge in consumer vitality has amplified the distinct identities of cities. Unique practices—such as Beijing’s cultural consumption, Shanghai’s international consumption, Chongqing’s scenario-based consumption, Wuhan’s sports-event consumption, Changsha’s youth-oriented consumption, and Harbin’s ice-and-snow tourism—not only enrich the diverse ecosystem of China’s consumer market but also catalyze supply chain restructuring and service industry advancements through a ripple effect, fostering a virtuous cycle of thriving consumption, business investment, industrial progress, and economic growth. From the pioneering efforts of major cities to the advancements of smaller ones, from catering to the consumption needs of the elderly to engaging the spending power of Generation Z, each city creates a distinctive consumption profile through targeted strategies and focused efforts.

In terms of Total Consumption Potential, Wuhan, Suzhou, Xuzhou, Quanzhou, and Fuzhou rank highly. Shanghai, Chongqing, and Beijing, as leading cities, consistently maintain top-tier positions in total retail sales of consumer goods, together with four other cities forming the “trillion-yuan consumption city” group, providing the primary foundation for consumption scale. As the first prefecture-level city in China to surpass RMB 1 trillion in total retail sales of consumer goods, Suzhou demonstrates robust consumption resilience, driven by the explosive growth of goods consumption combined with service consumption spurred by “performing arts+” and “events+” initiatives. Eight cities, including Shaoxing, Weifang, Yangzhou, Xuzhou, and Baoding, lead with year-on-year growth rates exceeding 6%, alongside Wuhan, Quanzhou, and others, forming a dynamic group that propels consumption growth and consistently boosts the national consumption volume. Shanghai’s consumption of sports and entertainment goods surged by 31.3% year-on-year, while Beijing’s overall service consumption rose by 6.1%, highlighting a swift transition in both cities from material satisfaction to experiential fulfilment.

In terms of Per Capita Consumption Expenditure, Hangzhou, Wenzhou, Shanghai, Ningbo, and Beijing rank among the top. Hangzhou, supported by its strong digital economy and integrated online-offline consumption models, continues to increase the city's per capita consumption expenditure. Supported by its robust small commodity trade foundation, Wenzhou's residents channel their optimistic and proactive lifestyles into strong consumption momentum. Shanghai and Beijing, driven by high-income groups, exhibit a mixed characteristic of high-end service consumption and innovative product consumption. In cities such as Changchun, Kunming, Shenyang, Guiyang, and Haikou, residents' consumption expenditure accounts for over 70% of disposable income, and this high consumption conversion rate is rapidly narrowing the gap with cities in developed countries. In recent years, consumption trends reveal that the elderly pursue high-quality health and leisure lifestyles, while Generation Z, often labelled as the "moonlight clan", seeks experiential and trend-driven consumption. These two consumption patterns have created a unique synergy, becoming a core pillar of consumption growth.

In terms of Commercial Prosperity Index, Guangzhou, Shenzhen, Shanghai, Chongqing, and Chengdu rank highly. China has become one of the world's most dynamic markets for consumption scenarios, with the per-square-metre efficiency of premium shopping malls in leading cities approaching that of major malls on New York's Fifth Avenue and Tokyo's Ginza. Guangzhou has developed a consumption network with mutual empowerment between professional markets and retail

districts, fostering commercial resilience through integrated production and sales. Shenzhen's sports-oriented shopping malls incorporate basketball courts and indoor surfing facilities. Beijing's Sanlitun features pop-up stores with a turnover cycle as short as 15 days, continuously generating fresh consumption appeal. Chengdu's Kuanzhai Alley has developed a distinctive ecosystem through its cultural and creative-themed commerce. These innovative approaches not only make commercial prosperity a barometer of urban vitality but also enable each city to craft its own consumption narrative through the evolution of commercial scenarios.

In terms of Rent Coverage Ratio, major cities such as Beijing, Shenzhen, Shanghai, and Hangzhou face significant pressure. China's rental burden ranks at a moderately high level globally, with housing expenditure accounting for approximately 25% of total consumption expenditure, and up to 40% in first-tier cities. In stark contrast, smaller cities such as Jiaxing (20.8%), Tangshan, Weihai, Shaoxing, and Weifang demonstrate a growing advantage in lower rental costs, serving as a pressure valve to unlock consumption potential. The financial leeway from low rents directly enhances residents' sense of well-being. While high rental costs constrain consumption potential in first-tier cities, smaller cities leverage their cost advantages to unlock an alternative path for consumption upgrades. This disparity not only underscores the complexity of China's consumer market but also offers valuable insights for optimising urban resource allocation and unleashing consumption potential nationwide.

In terms of Tourism Revenue Contribution, Beijing, Shanghai, Chongqing, Kunming, and Wuhan rank among the top. Chinese tourism has evolved beyond the traditional patterns of food, accommodation, transport, sightseeing, shopping, and entertainment. It now serves as a core engine for boosting domestic demand while shaping cities' dynamic identities through differentiated resource development. Beijing builds a cultural heritage and modern tourism ecosystem with the Forbidden City and the Great Wall; Shanghai integrates the Bund with high-end commerce and art exhibitions; Chongqing showcases its mountain city charm through internet-famous landmarks like Hongya Cave and Liziba Light Rail Station; Kunming leverages its "Spring City" ecology and western Yunnan resources to create an advantage in ecological sightseeing and cross-border tourism; Wuhan has developed a tourism ecosystem combining top-tier events and mass participation; Changchun and Harbin capitalise on their unique experiential advantages in the ice-and-snow economy; Suzhou, through the deep integration of sports, tourism, and

cultural creativity, contributes to the "Su Super League"¹⁰ brand, highlighting the city's brand value. This dynamic, where tourism drives prosperity and highlights distinct city characteristics, infuses consumption with warmth and endows cities with a unique identity, creating vibrant economic and cultural narratives through the interaction between people and cities.

Precisely grasping consumer preferences, dynamics, and trends is essential for corporate strategic decision-making. The *2025 National People's Congress Government Work Report* prioritises boosting consumption. With enhanced support in healthcare and education, China's consumer confidence is expected to grow, unlocking significant potential across diverse consumption segments—China is poised to become a leader in global commercial decision-making. In the future, digital consumption networks, comprehensive commercial innovation, and shifting consumption trends will be critical factors for multinational enterprises investing in China.



Consumer Vitality Scoring Table

Rank	City	Total consumption potential	Per capita consumption expenditure	Commercial prosperity index	Rent coverage ratio	Tourism revenue contribution	Total score
1	Suzhou	59	54	51	36	41	241
2	Changsha	46	46	49	32	48	221
3	Hangzhou	43	60	52	4	52	211
4	Wenzhou	48	59	33	48	21	209
5	Qingdao	49	37	41	37	44	208
6	Wuxi	42	50	31	49	35	207
6	Wuhan	60	39	47	5	56	207
8	Shanghai	28	58	58	3	59	206
9	Shenzhen	38	53	59	2	49	201
10	Guangzhou	30	51	60	6	53	200
10	Quanzhou	57	33	40	43	27	200
10	Chongqing	53	15	57	17	58	200
13	Kunming	18	44	46	34	57	199
13	Nanjing	55	47	43	9	45	199
15	Beijing	27	56	54	1	60	198
16	Ningbo	30	57	39	35	33	194
16	Shaoxing	53	55	12	59	15	194
18	Chengdu	47	25	56	7	54	189
19	Jiaxing	41	52	19	56	19	187
20	Shenyang	40	41	35	27	39	182
21	Zhengzhou	51	17	44	26	40	178
22	Changzhou	23	42	26	53	32	176
23	Yantai	51	28	14	55	24	172
24	Foshan	18	45	53	44	11	171
25	Dongguan	20	40	55	42	12	169
26	Hefei	45	23	32	24	42	166
26	Xi'an	34	13	50	14	55	166
28	Fuzhou	56	38	30	12	26	162
29	Nanchang	26	27	24	39	43	159
30	Xiamen	26	48	36	11	37	158
30	Taizhou	38	49	17	46	8	158
32	Weifang	55	9	15	60	18	157
33	Guiyang	13	30	38	29	46	156
34	Jinan	21	34	29	33	30	147
34	Xuzhou	59	4	20	47	17	147
36	Zhongshan	6	36	45	54	2	143
37	Tianjin	10	31	42	8	50	141
38	Hohhot	22	32	3	50	29	136
38	Shijiazhuang	39	7	28	28	34	136
40	Nantong	20	35	13	51	16	135
40	Tangshan	32	19	5	57	22	135
42	Baoding	34	8	16	45	31	134
43	Weihai	32	24	4	58	13	131
44	Changchun	15	26	22	15	51	129
45	Yangzhou	38	22	6	41	20	127
46	Huizhou	12	18	48	40	7	125
47	Dalian	16	29	27	16	36	124
48	Harbin	15	16	25	19	47	122
49	Zhuhai	3	43	37	18	10	111
50	Yinchuan	26	12	10	52	6	106
51	Yancheng	44	3	9	38	9	103
52	Yichang	35	10	1	31	25	102
53	Nanning	7	1	34	21	38	101
54	Taiyuan	9	5	21	30	23	88
55	Urumqi	4	20	8	23	29	84
56	Zhaoqing	8	36	7	22	1	74
57	Lanzhou	11	14	11	20	14	70
58	Jiangmen	5	11	18	25	3	62
59	Haikou	2	21	23	10	5	61
60	Xining	1	6	2	13	4	26

Changsha: Unlocking the code of the new consumption ecosystem

Changsha, a renowned city steeped in Chu-Han culture with a 3,000-year history, lies at the heart of the urban agglomeration in the middle reaches of the Yangtze River. Celebrated for its cultural heritage as the “Home of Qu Yuan (great patriotic poet) and Jia Yi (famous politician and litterateur)” and the “Xiao Xiang Zhu Si (City of Scholars’ Gatherings)”, Changsha is a key city in this region. It serves not only as a vital transportation hub in central and southern China but also as a leading consumer market and a

dynamic city among China’s new first-tier cities. In 2024, the tertiary industry accounted for 61.1% of its economy, reflecting strong development momentum driven primarily by the modern service sector. On this vibrant land, the queues of people waiting for a table at Wenheyu shine under the lights of the Xiangjiang New Area Science and Technology Innovation Park, creating a commercial landscape where tradition and innovation intertwine.



The 100 billion-yuan-tier consumer market is brimming with surging momentum

In 2024, Changsha's total retail sales of consumer goods reached RMB 552.49 billion. Building on a robust foundation of traditional trade, new business formats are emerging and expanding rapidly. During the five-day May Day holiday in 2025, the core business district recorded a cumulative footfall of 4.37 million people, with key areas seeing a real-time peak footfall of 241,000, a 34.38% increase compared to the previous year. Total consumption during this period reached RMB 9.99 billion, up 16.04% year-on-year. Sales of communication equipment and automobiles surged, rising by 110.14% and 42.73% respectively year-on-year, while monitored catering enterprises saw revenue growth of 17.84% year-on-year. Changsha is also experiencing a rapid increase in tourist arrivals. In 2023, the city welcomed 190 million tourists, a 43.99% year-on-year increase, generating total tourism revenue of RMB 219.31 billion, up 51.21% year-on-year. Foreign exchange earnings from inbound tourism reached USD 106 million, soaring by 480.46% year-on-year. This upward trend continued in 2024, with tourist arrivals reaching 215 million, earning Changsha a place on the "World's Top 100 City Destinations 2024" and "2024 Annual Dynamic Cities" lists. Through its diverse consumption ecosystem, Changsha demonstrates robust domestic demand vitality and innovative appeal.

The holistic consumption ecosystem forms robust growth ladders

Changsha has developed an intricate community business network, comprising 72 "15-minute convenient living circles", while also establishing city-level commercial landmarks in business districts such as Wuyi Square. Over 20 large shopping centres are concentrated within a 3-kilometre radius, attracting an average daily footfall of more than 500,000 people. The density of businesses here rivals that of Tokyo's Shinjuku, showcasing an exceptionally strong commercial agglomeration effect and consumption appeal. Since 2019, Changsha has implemented the *Implementation Opinions on Accelerating the Development of the Night Economy*. As a result, the city's night economy has surged forward, ranking among the top three in the country, with approximately one million people employed in night-time economic activities. In recent years, Changsha's night economy has accounted for over 60% of the city's total retail sales of consumer goods, with its commercial appeal steadily increasing. Notable commercial landmarks, such as Hunan's first Aeon Mall and first MixC, have been established. The first-store economy of leading brands has experienced explosive growth, with more than 500 first stores, flagship stores, and innovative concept stores introduced between 2019 and 2024. This has created a multi-tiered, differentiated commercial ecosystem, continuously enhancing the city's consumption capacity.

The technology, culture, and social interaction model fosters new consumption patterns

Changsha's new consumption patterns have transcended traditional buying and selling transactions, focusing instead on immersive and social experiences. As a cradle of innovation for numerous new consumer brands, Changsha has given rise to original IPs with nationwide influence, such as Wenheyou and Chayan Yuese. Through cultural empowerment and innovative models, these brands have not only sparked a phenomenal consumption craze in the domestic market but also embarked on international expansion. In the 2023-2024 Forbes China list of the Top 50 Enterprises for New Retail Potential, local brands such as Chayan Yuese and Hey Hey Black were included, underscoring Changsha's dynamic innovation in the new consumption sector.

The core secret to Changsha's success lies in precisely capturing the emotional needs of young people and enhancing brand value through the business logic of emotional resonance, immersive experience, and social virality. For instance, Wenheyou recreates 1980s Changsha in shopping malls, reviving memories discarded during urban renewal, enabling consumers to not only enjoy a meal but also experience an immersive "homecoming". Internationally renowned media describe this blend of catering, cultural, and creative businesses as a new species of Chinese consumption. Essentially, it transforms nostalgia into a marketable scenario, turning cultural memories into a product that can be captured and cherished. By focusing on emotional value, Changsha ties its products to identity recognition, stress relief, and a sense of belonging across generations, thereby creating a new driving force for consumption.



Integrating technology, culture, and interactive elements to create immersive scenarios and enhance users' sense of engagement is another key to consumption innovation. In terms of innovating consumption scenarios, Changsha has taken a leading role in building an integrated ecosystem of cultural tourism and commerce. The 25-kilometre-long light art belt along both banks of the Xiangjiang River, combined with the drone show at Orange Isle and the food street at Fisherman's Wharf, forms a golden corridor for night tours, with an annual capacity to receive over 30 million visitors. As the core hub for the integrated development of culture and technology in Changsha, the Malanshan Video Cultural and Creative Industrial Park has become a nationally influential industrial agglomeration hub. Driven by this innovative ecosystem, new quality cultural business formats—such as animation and gaming, digital museums, intelligent publishing, and immersive cultural tourism—are emerging at an accelerated pace. Technological empowerment facilitates the digital transformation of traditional cultural industries. This will establish an innovative cycle where technology enhances cultural and creative content, and culture integrates into digital consumption, thereby fostering an industrial cluster of exemplary significance driven by the digital cultural economy.

In an era of rapid online dissemination and thriving streaming culture, Changsha has established a closed-loop traffic system encompassing check-in, sharing, and referral. This is driven by spontaneous social media sharing and the scarcity and topical appeal generated by the first-store economy and exclusive pop-ups. For example, Chayan Yuese crafts a cup of milk tea as a “city business card”, offering non-local consumers a sense of occasion that signals “I have arrived”. New consumer brands in Changsha keenly understand the principle that “taking photos drives sharing”. When consumers check in and post on social media, they transform personal experiences into social currency. The subsequent sharing, liking, and commenting serve as free advertising for brands while accumulating emotional dividends of a “trendy image” for the posters themselves. Changsha has transcended its role as a mere geographical location to become a shareable lifestyle IP. Cultural and social identities have created a consumption closed-loop in Changsha, where brands gain traffic and sales, and the city enhances its appeal and charm.

Harbin: Specialising in ice-and-snow consumption

Harbin, the provincial capital at China's northernmost tip, boasts a unique development history and geographical location that have shaped this exotic and captivating city. "Coming to Harbin, we truly feel that this world of ice and snow are invaluable assets" remarked Chinese President Xi Jinping in his speech at the welcoming banquet for the opening ceremony of the Ninth Asian Winter Games in Harbin. Leveraging its ice and snow economy as a catalyst, Harbin drives consumption upgrading. With its exceptional service capabilities and distinctive cultural charm, the city has forged a unique path for consumption revitalisation, characterised by ice and snow attractions, service enhancements, and global connectivity.

Policies drive the creation of a world-class ice and snow consumption hub

In the *Implementation Plan for Promoting the High-Quality Development of Northeast China's Ice and Snow Economy to Achieve New Breakthroughs in Comprehensive Revitalisation*, the government

emphasises the need for sustained efforts to build world-class ice and snow brands and tourist destinations. Specifically, leveraging Northeast China's natural endowment of snow and ice resources, cities in the region should seize opportunities and treat the ice and snow economy as a new growth driver to develop the entire industrial chain, encompassing ice and snow tourism, ice and snow sports, ice and snow culture, and ice and snow equipment. The *2022-2030 Ice and Snow Economic Development Plan of Heilongjiang Province* further outlines the goal of fully leveraging the region's ice and snow resources. By focusing on developing the ice and snow economy in cold regions and continuously capitalising on the industry's dividends, the province aims to transform "cold resources" into a "hot economy", ultimately contributing to comprehensive and all-round revitalisation. The city introduced the *Several Policy Measures of Harbin to Support the Development of the Ice and Snow Economy*, signalling a commitment to strengthening market entities, creating branded activities, and enhancing resource support.

The ice and snow economy ignites a new wave of cultural tourism consumption

Harbin, a globally renowned city for its ice and snow culture, boasts distinctive ice and snow resources, establishing a prominent “ice-and-snow consumption” profile. The expansion of its industrial chain creates new consumption scenarios. Harbin actively promotes “ice-and-snow + creativity” to attract visitors, introducing activities such as the Snow Maze at Ice-Snow World, ice and snow hot spring camps, ice cycling, and super ice slides. The 41st China Harbin International Ice and Snow Festival opened at Harbin Ice-Snow World on 5 January 2025, featuring popular branded events such as the Ice Lantern Art Garden Party, the Songhua River Ice and Snow Carnival, and international ice and snow sculpture competitions. During the 2024–2025 ice and snow season, Harbin welcomed 90.36 million tourists, generating total tourism expenditure of RMB 137.22 billion, up 9.7% and 16.6% year-on-year, respectively, with inbound tourist arrivals surging by 94.2%. The “Ice City” showcases an increasingly effective strategy for boosting consumption through its ice and snow culture and economy.

The people-pleasing market style invigorates the emotional consumption market

Harbin enhances tourists’ experiences through seamless offline and online interactions. “Offline” refers to Harbin’s tourism spaces, where the city captures the diverse needs of visitors—such as safety, social interaction, and respect—winning their empathy through thoughtful “doting” gestures. Details like frozen pears carefully cut and served on plates, sliced radishes, carpets laid across the Songhua River, heated restrooms built in public squares, and an artificial moon hung in Saint Sophia Cathedral are enthusiastically shared by tourists online. This creates an “emotional spread effect” in cyberspace. For instance, a ride-hailing driver’s thoughtful gesture of providing free pick-up and drop-off services for “Southern Little Potatoes” (a nickname for tourists from southern China) topped trending lists, enhancing visitors’ sense of being valued.

Brands focus on emotional consumption to ignite consumption vitality

Numerous local consumer brands in Harbin are making every effort to capitalise on the “Erbin Fever” dividend. During the three-day New Year’s Day period, Modern popsicles achieved sales of 100,000 units. The Wondersun “So Fresh” flagship store on Zhongyang Pedestrian Street was adorned with northeastern-style floral jackets to attract tourists for photos. Voolga crafted “Voolga Gift Box” and “Voolga Crystal Ball” themed ice sculptures at Harbin Ice-Snow World for brand promotion. By closely monitoring consumers’ increasingly differentiated, personalised, and individualistic preferences and seizing opportunities to enhance consumption quality, Harbin has been stimulating consumption vitality. Harbin has transformed northeast China’s distinctive characteristics into experiential consumption symbols—cakes shaped like Saint Sophia Cathedral, unique corn syrup coffee dubbed “sticky corn”, and foreign cuisine infused with northeast Chinese flavour—turning local elements into emotional carriers. The Russian-style architecture of Zhongyang Pedestrian Street and the century-old legacy of HUAMEIXICANTING (Hua Mei Western Restaurant) create a scene of exotic charm and nostalgia, fulfilling tourists’ romantic vision of an Oriental Moscow. Harbin, also renowned as the City of Russian-Style Cuisine, enjoys a strong reputation for imported Russian candies, seafood, alcoholic beverages, and dairy products.

Policy dividends combined with expanded access channels help attract more international tourists

At the end of 2024, the 240-hour visa-free transit policy was implemented in Harbin. Ctrip data from 2024 to 2025 indicates that inbound travel orders in that winter surged by 210%, highlighting the accelerated release of the Ice City’s charm. Concurrently, the resumption, expansion, and addition of international flights have significantly enhanced the vibrancy of Harbin’s ports. In the first half of this year, Harbin’s airports handled 294,000 international passengers, marking a 32.2% year-on-year increase. Certain travel agencies have already scheduled international group tour orders for “Erbin” through to the end of 2026. In February 2025, the Ninth Asian Winter Games were held with grandeur in Harbin, highlighting the city’s increasingly refined international service system. The meticulous and thoughtful services, both at the venues and beyond, not only ensured the event’s resounding success but also showcased Harbin’s image as a city of hospitality and professional service to the world.

Digital-intelligence empowerment

The rapid advancement of cutting-edge technologies such as AI, big data, cloud computing, and quantum computing is emerging as a pivotal force in reorganising global resources, reshaping economic structures, and transforming competitive landscapes worldwide. AI, in particular, is a focal point of global competition: with the continuous iteration and enhancement of large-scale models, its applications are expanding, demonstrating significant empowering capabilities in areas such as natural language processing, computer vision, intelligent agent, and intelligent decision-making.

Since the Digital China initiative was first proposed in 2015, China's digital economy has achieved remarkable growth. In 2024, the value added by core digital economy industries accounted for approximately 10% of GDP, with the scale of the digital

economy ranking second globally; of the 45,000 newly disclosed generative AI patents worldwide, China accounted for 61.5%. China's industrial internet has been integrated into all major industrial sectors, whether through digital transformation enabling unmanned operations in smart mines or leveraging meteorological and soil data for precision agriculture. "AI+ technology" is rapidly empowering various industries across China. The PwC's *28th Annual Global CEO Survey China Report* indicates that, 64% of surveyed Chinese mainland CEOs (56% globally) believe that digital technology applications have improved their employees' work efficiency, while 63% (34% globally) report enhanced corporate profitability. China's vast market and abundant data resources provide ample opportunities for pioneering innovation and application of digital technologies on a global scale.



Chinese cities are rapidly entering a new development phase driven by digital-intelligence technologies, with deep integration of digital infrastructure and smart application scenarios providing strong momentum for high-quality development. This dimension selects five variables: Digital Infrastructure, measured by the number of 5G base stations per 10,000 people to assess the penetration of a city's digital infrastructure; Information Network Services, measured by the total volume of telecommunications services to reflect a city's communication capacity and information flow activity; Number of Smart Factories¹¹, measured by the count of 5G factories and smart factories to reflect the adoption of intelligent transformation in industry; Data Element Market¹², measured by the Data Element Development Index to indicate a city's progress in building and operating systems for data resource aggregation and sharing; AI Industry Activity¹³, measured by the number of AI enterprises to demonstrate a city's vibrancy in AI industry development, technological innovation, and application implementation.

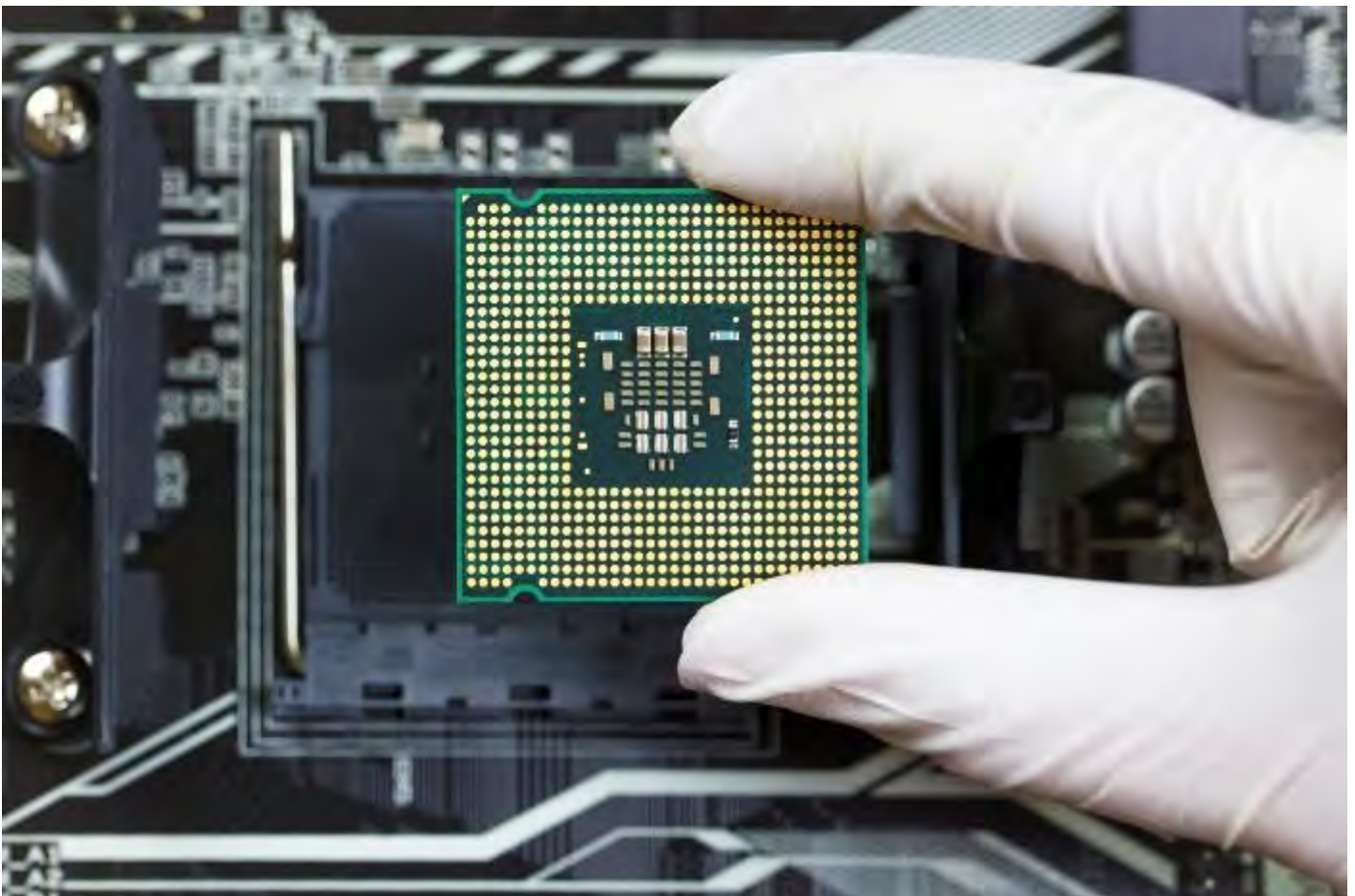
In the Digital-Intelligence Empowerment dimension, cities such as Beijing, Guangzhou, Shanghai, Hangzhou, Shenzhen, Tianjin, Nanjing, and Suzhou rank highly, demonstrating strong digital infrastructure levels and intelligent technology application

capabilities. Cities like Lanzhou, Haikou, Guiyang, Changchun, and Taiyuan show performances in this dimension that significantly contribute to elevating their overall scores.

Chinese cities, leveraging their unique resources, industrial foundations, and strategic positioning, have developed distinctive pathways in digital-intelligence development: cities like Beijing and Shenzhen, representing the technology infrastructure-driven model, rely on advanced technology reserves to strengthen new infrastructure such as 5G and intelligent computing, establishing a robust foundation for digital innovation; cities such as Shanghai, Hangzhou, and Guiyang, representing the data element-driven model, focus on the marketisation of the data element market, promoting data value realisation across industries by enhancing the entire chain of data collection, circulation, and governance; cities such as Suzhou, Guangzhou, and Chongqing, representing the industry intelligent application-driven model, leverage their manufacturing foundations to promote the deep integration of digital technologies with the real economy, accelerating industrial digital transformation. This diverse exploration not only enriches China's digital-intelligence transformation practices but also provides replicable models for other cities.

In terms of Digital Infrastructure, cities such as Hangzhou, Beijing, Zhuhai, Tianjin, and Jinan perform strongly. China leads globally in digital infrastructure, having built 4.486 million 5G base stations by May 2025, accounting for over 60% of the global total. Through the “Eastern Data, Western Computing” initiative, China has established a cross-regional computing power network, effectively utilising the unique resource advantages of different regions. Hangzhou has established the nation’s first urban smart brain operating system, enhancing city management. Beijing has developed an integrated intelligent system combining vehicles,

roads, cloud, networks, and graphics to support autonomous driving development. Qingdao has built the world’s first “hydrogen + 5G” fully automated container terminal, serving as a prime example of port development tailored to local conditions. Xining, with an average annual temperature of 3.9°C, leverages its natural cooling advantage to significantly reduce data centre cooling energy consumption, with newly built large-scale data centres achieving a PUE (power usage effectiveness) value below 1.2, making the city one of China’s most competitive green computing hubs¹⁴.



In terms of Information Network Services, cities such as Shanghai, Beijing, Guangzhou, Chongqing, and Shenzhen rank highly. In the first half of 2025, China's total telecommunications services volume grew by 9.3% year-on-year, with emerging services like 5G new calling, live-streaming short videos, and cloud gaming thriving, alongside the coordinated deployment of large-scale model apps and AI terminals. Chengdu became the nation's first "all-fibre optic network" city in 2015, and by the end of 2024, its AI computing power reached a scale of 6,889 PFlops, capable of supporting large-scale data processing applications such as the "Rongcheng Panda" animal feature recognition base model. Changchun has focused on advancing the digitalisation of industrial enterprises, with its total telecommunications services volume exceeding RMB 30 billion, leading the way in Northeast China. Zhuhai emphasises regional synergy, with the Guangdong-Macao in-depth cooperation zone in Hengqin achieving full-coverage 5G private network, and the Macao-Zhuhai cross-border 5G private network facilitating data interoperability for finance and healthcare.

In terms of Number of Smart Factories, cities such as Shanghai, Suzhou, Tianjin, Nanjing, and Chongqing rank among the top. China has established over 30,000 basic-level smart factories, covering more than 80% of major manufacturing industry categories, with 230 top-tier smart factories achieving an average reduction of 28.4% in product development cycles and an average increase of 22.3% in production

efficiency¹⁵. The 2024 World Economic Forum's "Lighthouse Factories" list indicates that China added 13 new enterprises, bringing the total to 74, accounting for 43% of the global share and maintaining its leading position. Suzhou accounts for one-tenth of China's 5G factories, while cities in the Yangtze River Delta such as Wuxi, Ningbo, and Nanjing rank among the top ten nationally for the number of 5G factories.

In terms of Data Element Market, cities such as Shanghai, Beijing, Shenzhen, Guangzhou, and Hangzhou rank among the top. China is advancing the transformation of data from resources to assets and capital by establishing a comprehensive operational system for data asset evaluation, financial statements inclusion, trading, and application, thereby enhancing total factor productivity. Since the establishment of the Guiyang Global Big Data Exchange in 2015, China has set up nearly 60 data trading institutions, with data transaction volumes continuing to grow. The Beijing International Data Exchange is exploring alignment with the rules of the Digital Economy Partnership Agreement (DEPA), attracting international data merchants to establish a global data asset trading network. The Shanghai Data Exchange launched the nation's first "international board"; the Guangzhou Data Exchange has developed data spaces for industries such as ceramics, automotive, and energy; Qingdao focuses on creating high-quality datasets for marine, rubber, and industrial sectors.

In terms of AI Industry Activity, Beijing, Shenzhen, Guangzhou, Shanghai, and Chengdu hold a clear lead. In recent years, China's AI sector has developed rapidly, with swift iterations across technology R&D, deepened application scenarios, and a robust industrial ecosystem, enabling domestically developed deep learning frameworks to rank among global leaders, with large-scale models exceeding 100 billion parameters and key performance approaching international advanced levels. AI technology R&D and large-scale model companies in cities such as Beijing, Shanghai, and Shenzhen are growing rapidly; cities like Xi'an and Chongqing have launched "AI + Manufacturing" initiatives to promote AI applications in real sectors; Haikou and Hangzhou are actively advancing innovative "AI + Government Services" applications. Each city is exploring distinctive pathways for AI applications through differentiated strategies.

PwC research indicates that AI could drive a 15% increase in global economic output over the next decade, adding an extra percentage point to the annual global economic growth rate¹⁶. Leveraging robust digital infrastructure and extensive manufacturing application scenarios, China has developed a new strength in providing resilient digital-intelligence solutions across the entire industry chain, creating significant growth opportunities for global emerging technology applications and investments. Global investors can focus on three key areas—AI applications, data assets, and green computing—employing strategies such as joint ventures, acquisitions, ecosystem collaboration, and policy alignment to seize opportunities in technological breakthroughs and application implementation.



Digital-Intelligence Empowerment Scoring Table

Rank	City	Digital infrastructure	Information network services	Number of smart factories	Data element market	AI industry activity	Total score
1	Beijing	59	59	53	59	60	290
2	Guangzhou	55	58	51	57	58	279
3	Shanghai	38	60	60	60	57	275
4	Hangzhou	60	52	42	56	55	265
5	Shenzhen	48	56	40	58	59	261
6	Tianjin	57	50	59	49	45	260
7	Nanjing	52	45	57	51	50	255
7	Suzhou	50	53	59	45	48	255
9	Wuhan	36	48	55	55	53	247
10	Chongqing	25	57	57	53	52	244
11	Chengdu	47	55	34	50	56	242
12	Jinan	56	43	50	46	46	241
13	Qingdao	46	39	53	54	41	233
14	Changsha	35	47	50	47	49	228
15	Zhengzhou	45	51	36	48	44	224
16	Hefei	44	41	47	42	47	221
17	Ningbo	33	44	54	43	36	210
18	Wuxi	42	40	34	40	32	188
19	Xi'an	6	46	36	39	54	181
20	Fuzhou	22	35	32	44	42	175
20	Guiyang	39	28	19	52	37	175
22	Shenyang	53	32	29	25	35	174
23	Foshan	20	38	44	37	34	173
24	Xiamen	31	14	46	38	43	172
25	Kunming	54	37	8	29	40	168
26	Dalian	37	19	32	41	24	153
27	Dongguan	28	49	3	33	39	152
28	Changchun	2	54	30	34	30	150
29	Haikou	34	12	8	36	51	141
29	Zhuhai	58	6	25	30	22	141
31	Changzhou	40	23	41	18	16	138
32	Wenzhou	17	42	21	28	29	137
33	Nanning	30	34	8	26	38	136
34	Nanchang	32	26	19	27	31	135
35	Quanzhou	27	30	48	2	27	134
36	Taiyuan	26	21	21	32	33	133
37	Nantong	16	33	46	15	17	127
38	Huizhou	29	24	25	20	23	121
38	Lanzhou	51	25	17	13	15	121
40	Jiaxing	41	22	28	9	13	113
40	Shijiazhuang	18	36	17	24	18	113
42	Yichang	49	1	28	21	7	106
43	Shaoxing	43	15	22	17	8	105
44	Weifang	1	17	44	16	25	103
45	Harbin	23	31	8	19	21	102
46	Yancheng	3	18	37	31	9	98
47	Xuzhou	5	29	28	5	28	95
48	Yangzhou	13	11	38	22	10	94
49	Hohhot	19	7	15	35	12	88
50	Yantai	21	13	9	23	20	86
51	Urumqi	15	20	8	12	26	81
52	Taizhou	24	27	13	10	6	80
53	Zhongshan	14	16	12	7	14	63
54	Tangshan	8	9	40	1	3	61
55	Baoding	7	10	12	8	19	56
55	Yinchuan	4	2	25	14	11	56
57	Weihai	12	3	15	11	4	45
58	Xining	11	5	3	6	5	30
58	Zhaoqing	9	4	12	4	1	30
60	Jiangmen	10	8	3	3	2	26

Guiyang: Pioneer in data trading

In recent years, Guiyang has actively pursued new pathways for industrial upgrading, driven by the dual forces of digital and intelligent empowerment and data trading, achieving significant milestones in its journey towards high-quality development. As the digital wave sweeps across the globe, data has emerged as a critical factor of production, and digital-intelligent technology has become a key driver of industrial upgrading. Astutely seizing this transformative opportunity, Guiyang has deeply integrated digital-intelligent capabilities with data trading to create a distinctive industrial development model. By establishing robust digital-intelligent infrastructure and optimising the data trading ecosystem, Guiyang has not only enhanced its industrial competitiveness but also provided valuable insights and benchmarks for the development of the digital economy at both national and global levels.

A frontrunner in data trading

Guiyang stands as a pioneer in data trading in China. As early as 2014, the city began exploring models and mechanisms for data circulation and trading. It took the lead in issuing the *Several Policy Opinions on Accelerating the Development and Application of the Big Data Industry*, which explicitly positioned data trading as the core of the digital economy. In 2015, the Guiyang Global Big Data Exchange (GBDEX) was officially established, becoming China's first big data exchange. In 2022, Guiyang released China's first set of rules for data trading. In 2023, it issued the country's first provincial-level *Regulations on Promoting Data Circulation and Trading*, clarifying the rules for data asset ownership. Through the dual-track service system of the Guizhou Data Circulation and Trading Service Centre and GBDEX, the city has provided valuable insights for the development of the national data trading market, particularly in policy and rule formulation, market entity registration, data ownership confirmation, and trading services.

Driving market-oriented reform of data elements

Guiyang has spearheaded the nation's reform of market-oriented data element allocation. Beyond implementing the first provincial regulation to promote data circulation and trading, Guiyang has established a Chief Data Officer system to enhance data resource management and utilisation through dedicated data management roles. In March 2024, Guiyang achieved the province's first case of incorporating data assets into financial statements, providing professional and replicable technical guidance and effective pathways for data governance, standardised data management, data asset valuation, trading, circulation, and formulating enterprise-specific data asset integration plans across Guizhou and nationwide. In December 2024, the Ministry of Finance issued a notice launching the *Pilot Program for Comprehensive Data Asset Management*, designating Guizhou as one of the pilot cities. To advance data sharing and openness, Guiyang actively facilitates access to government data. By establishing a unified data-sharing platform, Guiyang has made substantial government data resources publicly available, supporting enterprise innovation and development. Simultaneously, it encourages data sharing and collaboration among businesses, promoting efficient circulation and utilisation of data resources through a dedicated data-sharing mechanism.

Setting the benchmark for the data trading industry

Guiyang's leading position in data trading has established it as a key player and leader in the national—and even global—data element market. According to the *Assessment Report on the Development of the Data Element Market in Western China (2024)*, Guiyang ranked first with a comprehensive score of 84.51, accounting for 41% of the total data trading volume in Western China. This underscores its substantial influence and leadership in the field of data trading. The assessment data, on the one hand, highlights Guiyang's achievements in constructing data trading infrastructure, such as the establishment of the country's first blockchain data trading platform and the realisation of full-process digital management for data ownership confirmation and data trading. On the other hand, it also underscores the city's outstanding performance in cultivating the data trading market and advancing the industry. For instance, by establishing a fund for data element markets and introducing special support policies, over 30 leading enterprises have been drawn to settle in the city, forming a complete industrial chain that covers data collection, storage, analysis, and application.

Innovating and practicing the integrated application of digital-intelligent technology (DIT)

In the process of digital-intelligent empowerment and data trading, Guiyang has consistently prioritised the deep integration of technological innovation with practical applications. By issuing the *Administrative Measures for the Authorised Operation of Public Data*, Guiyang aligns government data with enterprise needs, supplying businesses with abundant data resources and application scenarios. Through the application of big data and AI in the field of meteorology, Guiyang advances the value-oriented use of meteorological data. This has improved the accuracy and timeliness of weather forecasts, while providing robust meteorological support for agricultural production, transportation, and other sectors. In addition, Guiyang has been actively advancing the development of City Brain Version 2.0, achieving intelligent and refined urban governance by integrating data resources from various city departments. In cultivating industrial large models, Guiyang has successfully developed several such models and achieved practical applications in fields such as tourism, meteorology, and mining. Through the deep integration of technological innovation and practical applications, Guiyang has not only enhanced the city's level of intelligence but also created ample opportunities for enterprise innovation and development.

A key hub of computing power

With 26 large-scale and above international enterprise cloud computing data (computing power) centres clustered in Gui'an New Area, Guiyang boasts a computing power exceeding 81 EFlops, of which over 98% is intelligent computing, positioning it as one of the regions with the largest domestic computing power and the strongest intelligent computing capacity in the country. Gui'an New Area has achieved an inter-provincial bandwidth of 51,100 Gbps and direct network connections to 40 cities, including Beijing, Shanghai, and Guangzhou. The one-way inter-provincial network delay fully meets the business requirements of the national computing network for synergising east and west. This collaborative model integrating computing power and trading has drawn a substantial volume of data processing demands to Guiyang. By 2024, Guiyang's computing power scale had reached 1,000 P, with intelligent computing comprising over 30%, and the revenue from the software and information technology services industry surpassing RMB 98 billion.



Building a global cooperation bridge with international influence

Since 2015, Guiyang has hosted the annual China International Big Data Industry Expo (Big Data Expo), establishing the well-known pattern where the East has the World Internet Conference Wuzhen Summit and the West has the Guiyang Big Data Expo. At the 2025 Big Data Expo, domestic and international participants focused on matching supply and demand in fields such as data industries, computing power industries, and AI, successfully planning 100 digital economy projects and attracting RMB 46.34 billion in investments. Through the Big Data Expo, Guiyang has forged extensive connections with the global big data industry, fostering international cooperation in data trading.

The Comprehensive Service Platform for Cross-Border Data Circulation, established by the Guiyang Comprehensive Bonded Zone, enables

the local processing of overseas data without requiring a prior customs declaration. This not only meets international customers' requirements for data privacy but also significantly simplifies the operational process. For instance, the trading of new energy data with Singapore took just 48 hours to complete the entire process, from data transmission to fund settlement. The Cross-Border Computing Power Centre of Guizhou International Data Port plans to offer low-cost computing power services to European and American customers during nighttime hours in Guizhou. Guiyang is actively connecting with the Guangdong-Hong Kong-Macao Greater Bay Area and the ASEAN market, while exploring innovative models such as exclaves of computing power. In the future, the Cross-Border Computing Power Centre of Guizhou International Data Port is expected to become a computing power hub oriented towards ASEAN, promoting the global dissemination of inclusive and green computing power.

Fuzhou: A model city for Digital China

Fuzhou, a major metropolis on China's southeast coast, is one of the country's first 14 coastal cities to open to the world. Beyond its status as a national historical and cultural city, Fuzhou serves as the political centre of Fujian Province, a key trading port on the southeast coast, a gateway to the Maritime Silk Road, and a significant cultural hub. At the Second World Internet Conference in 2015, Chinese President Xi Jinping called for the advancement of Digital China¹⁷. In 2018, the Digital China Summit was established in Fuzhou. The summit has been successfully held in the city for eight consecutive years, delivering profound and positive impacts across all aspects of Fuzhou's development. From the inaugural summit in 2018 to the seventh session in 2024, Fuzhou's digital economy grew from RMB 280 billion to RMB 790 billion.

Building advanced infrastructure

In terms of transport networks, the Taiwan Strait Express-1 and the Fuzhou National Internet Backbone Access Point are now operational. In 2025, Fuzhou is intensifying efforts on specialised 5G initiatives, including Signal Upgrading and Broadband Frontier. The city aims to achieve a breakthrough of over 40 5G base stations per 10,000 people, build 3,200 new 5G base stations, and ensure intensive 5G network coverage at 750 key locations. Regarding cloud platforms, the Digital Fujian Government Cloud and Business Cloud are in operation, supported by 11 data centres and over 22,000 standard frameworks in service. In terms of computing power, the Fujian Supercomputing Centre and the Fujian Artificial Intelligence Computing Centre have been completed in Fuzhou, serving China's southeast coastal region.



Advancing infrastructure for data circulation and utilisation

In 2025, Fuzhou launched a DSSN (Data Switching Service Network) pilot project the National Data Administration to enhance data circulation and utilisation among companies in the textile and manufacturing sectors, while fostering the creation of high-quality datasets. Fuzhou has upgraded its municipal-level data platforms by integrating them with the provincial public data system. This facilitates online applications for shared provincial data by municipal and county departments, streamlining data collection and circulation.

Empowering manufacturing upgrades with digital technologies

A company in Fuzhou has developed a large-scale pollution control system that monitors emission data around the clock and integrates with national and provincial platforms. The system provides real-time alerts for any anomalies or threshold exceedances, enabling prompt action. SMEs represent both a priority and a challenge in the digital transformation of the manufacturing sector. Leveraging its designation as one of the first national pilot cities for SME digital transformation, Fuzhou is driving this process by focusing on key industries such as cotton spinning, knitting, electronics, and auto parts. It mandates that pilot companies in these industries

regularly submit their data for storage. According to comprehensive post-transformation assessments of these pilot companies, the numerical control rate of key processes has increased by 16 percentage points to 79% compared to pre-transformation levels. The coverage rate of digital R&D tools for products has risen by 21 percentage points to 75%, and the capacity utilisation rate has improved by 8 percentage points to 86%.

Advancing digital transformation in the service industry

Fuzhou is advancing the digitalisation of services such as smart logistics and unmanned services. In 2025, Lianjiang County in Fuzhou launched the China Post Fujian Smart Logistics Project, which encompasses five centres for intelligent sorting, smart warehousing, data exchange, cross-border e-commerce, and emergency supply support. Upon completion, the project is expected to process six million parcels per day. Fuzhou is also actively promoting unmanned services. In March 2024, the unmanned taxi project in the Fuzhou New Area entered the application phase for demonstration, making it the first area in Fujian Province with a completed large-scale network of smart connected roads and an autonomous driving demonstration zone. Smart vehicles require smart roads. The Fuzhou New Area continues to advance the development of new infrastructure for smart connected transportation in Binhai New Town.

Practising digital governance for precision and efficiency

Fuzhou upholds its tradition of taking immediate action and delivering tangible results by digitising pilot initiatives such as efficiently handling each matter, data collection at most once, and proof-free city. These efforts continuously enhance the efficiency of the city's digital government services. Currently, 97% of approval-related matters in Fuzhou are processed online, and the city has once again ranked first nationally in the assessment of reforms to the approval system for engineering construction projects. Fuzhou is further strengthening its "City Brain" by developing a digital social governance platform and a digital twin system for urban water supply networks. This contributes to effective water resource conservation, an improved water ecosystem, and enhanced water security.

Digitising lifestyles for convenience and public benefit

The Digital China Summit has driven the adoption of digital application scenarios, leading to the implementation of innovative initiatives in Fuzhou, including smart healthcare, smart elderly care, digital cultural tourism, and digital ecosystems. For example, digital platforms such as Minzhengtong and eFuzhou now encompass various aspects of citizens' daily lives and affairs. Matsu residents can also apply online for the Fuma Tongchengtong card, enjoying benefits in housing, healthcare, education, and transportation comparable to those available to Fuzhou citizens. The city's over 1,300 kilometres of mountain and river pathways have been fully digitised, offering smart sports and leisure scenarios that enhance public fitness experiences and make the benefits of digital infrastructure more tangible and accessible.



Open development

Global trade volume reached a historic high of USD 33 trillion in 2024, with service trade growing at 6.8%, far exceeding the 2.9% growth in goods trade, and digital trade rising rapidly. Although global foreign direct investment has declined for several consecutive years, it grew by 84% in Africa in 2024, and the value of greenfield investments in the global telecommunications sector increased by 125% year-on-year¹⁸. In the future, the deep integration of digital technology and trade activities will reshape the paradigm of globalisation.

China is an active participant and promoter of globalisation. In 2023, China fully lifted foreign investment restrictions in the manufacturing sector, and by 2025, the number of pilot cities for broadening access to the service sector rose to 20. From the opening-up of goods trade to the flow of production factors, from policy guidance to institutional leadership, and from comprehensive bonded zones to free trade pilot zones, China is developing a new open economic system focused on higher-level rules, regulations, management, and standards. Moreover, in recent years, China has repeatedly ranked as the world's second-largest outbound investor, with Chinese enterprises' global expansion driving the greening

and digitalisation of global industrial chains. The GDP of countries co-building the Belt and Road Initiative accounts for over 40% of the global total, the Regional Comprehensive Economic Partnership (RCEP) Agreement has significantly reduced trade costs, and the China-Europe Railway Express has established a new investment channel linking land and sea. A series of multilateral cooperation mechanisms led or proposed by China have created extensive investment opportunities for international investors. China has become a strategic priority for multinational enterprises seeking to optimise global resource allocation and enhance production efficiency.

We have selected five variables for the Open Development dimension. Specifically, Foreign Trade Dependence measures the contribution of open development to the local economy; Trade Balance assesses whether the revenue and expenditure structure of foreign trade is balanced; Foreign Investment Attractiveness evaluates a city's appeal and effectiveness in attracting foreign investment; Tourism Activity uses tourism interpersonal exchanges to measure the degree of social and cultural openness; International Reputation¹⁹ gauges a city's international brand and prestige.

In the Open Development dimension, top-ranking cities are primarily eastern cities such as Shanghai, Tianjin, and Suzhou, alongside inland cities like Chengdu, Changsha, and Chongqing. The performance of Dalian, Urumqi, Weihai, and Haikou in this dimension significantly contributes to their overall scores. Overall, China's urban openness has developed into a diverse system led by coastal cities, interconnected with inland regions, and enhanced by the distinctive development of border areas. Eastern cities such as Shanghai, Shenzhen, and Guangzhou engage in global competition as hubs of openness; inland cities such as Chongqing, Chengdu, and Hefei, serving as land and port hubs, are reshaping the open development landscape; special zones like Hainan and Xiamen explore new pathways for institutional opening up; Hangzhou, leveraging its digital economy and cross-border e-commerce, emerges as a key participant in global e-commerce rule-making. This open development model, defined by gradual progression and multi-polar coordination, aligns with global restructuring trends, and provides a Chinese solution to address regional development disparities.

As the only inland city ranking among the top five, Chengdu serves as both the starting point of the southern Silk Road and a key node in the Belt and Road Initiative, establishing a comprehensive open network. With its leading China-Europe Railway Express and dual international airports, the city

has developed a land-and-air dual-hub structure, achieving significant efficiency in high-value cargo transport and international passenger flows. Currently, Chengdu hosts 315 *Fortune Global* 500 companies. In 2024, an average of two new foreign enterprises were established daily, particularly in electronic information and biomedicine, creating a seamless cycle where transport corridors drive logistics, logistics fuel trade, and trade spurs industry, showcasing strong attractiveness to global industrial chain resources.

As the core hub of the Hainan Free Trade Port, Haikou leverages policy and geographical advantages to become a new frontier for institutional openness. The city has taken the lead in piloting RCEP and CPTPP rules, facilitating alignment with ASEAN on digital trade regulations, and implementing the nation's first cross-customs zone "bonded leasing + bonded exhibition" transaction, as well as the import of remanufactured vehicle gearboxes. Haikou's implementation of three "zero-tariff lists" (covering self-use production equipment, raw materials, and transport vehicles for enterprises) and policies such as tax exemptions for overseas investments have accelerated the aggregation of capital and high-calibre talent. In the first half of 2025, Haikou's actual foreign capital utilisation grew by 65.8% year-on-year, highlighting the vibrant openness of the Free Trade Port.

In terms of Foreign Trade Dependence, the ratio of total import and export value to GDP exceeds 100% in Shenzhen, Dongguan, and Xiamen. Shenzhen has led mainland cities in export value for 32 consecutive years, with its cross-border e-commerce import and export volume ranking first nationally, and high-technology product exports accounting for over 40% of its total. In 2024, Dongguan's self-owned brand lithium battery exports grew by 125.2% year-on-year, while Xiamen's tungsten exports ranked first nationwide. The Pearl River Delta cities of Zhuhai, Zhongshan, and Huizhou, which focus on processing trade, continue to maintain their foreign trade advantages. Jiaxing has established a three-dimensional export network combining self-organised trade exhibitions, overseas direct sales centres, and cross-border e-commerce, swiftly responding to global order demands through a model of front-end exhibitions and back-end warehousing. As a coastal city, Weihai has pioneered cross-border transport integration with South Korea, leveraging multiple transport modes, while its fishing gear production accounts for over 60% of the global market and paddleboard production exceeds 50% globally.

In terms of Trade Balance, Nanning, Dalian, Tianjin, and Xiamen perform strongly. The global trade environment remains challenging, posing difficulties for export-oriented cities. Of the 60 cities of opportunity, 49 recorded a trade surplus: Shenzhen achieved a surplus of RMB 1.1 trillion; Baoding's exports were 18 times its imports, with 75% of exports being electromechanical products; Shaoxing's exports were 10 times its imports, and nearly one-quarter of the world's textile were traded here; Beijing, Shanghai, and Shenzhen's import volumes significantly exceed those of other cities, collectively representing approximately 40% of the total import value of mainland cities.

In terms of Foreign Investment Attractiveness, cities such as Changsha, Haikou, and Dalian rank highly. As China's role in global industrial chains evolves, multinational enterprises are adjusting their strategies in China, with the proportion of foreign investment in high-technology industries rising from 28.3% in 2019 to 38% in 2024. Cities are actively leveraging their industrial strengths, employing measures such as dissecting industrial chains, targeted investment promotion, and hosting global outreach events to attract foreign investment. In terms of scale, Shanghai demonstrates a strong leading edge; in terms of growth rate, Changsha and Urumqi show doubling increases; Dalian and Hefei also exhibit notable growth trends.

In terms of Tourism Activity, Chongqing, Shanghai, Wuhan, and Beijing perform strongly. In recent years, with the continuous advancement of China's unilateral openness policies, the optimisation of transit visa-free policies, and the growing popularity of new tourism models such as China Travel and Citywalk, an increasing number of foreigners are visiting China. Beyond major cities like Beijing, Shanghai, Guangzhou, and Shenzhen, cities such as Chongqing, Xi'an, and Chengdu, with their unique blend of modernity and traditional culture, have become popular destinations for tourists. Many cities are also leveraging technologies such as big data and AI to advance the cultural and tourism industries, developing smart tourism systems and immersive cultural-tourism projects to enhance visitor experiences and further stimulate interpersonal exchange vitality.





In terms of International Reputation, Beijing, Shanghai, and Guangzhou rank highly in city scores. The *World Cities 2024* published by the Globalization and World Cities (GaWC) research network lists 42 Chinese cities, with Beijing, Hong Kong, and Shanghai ranked among the eight global “Alpha+” cities. Chengdu, leveraging its dual international airports to attract visitors, and Tianjin, relying on its position as North China’s largest port and advanced manufacturing base, both rank as “Beta+” cities, demonstrating distinct internationalisation pathways for inland and coastal cities. Among “Beta-” cities, Qingdao drives its marine economy, fostering close economic and trade collaboration with Japan and South Korea; Changsha focuses on construction machinery, building a globally leading equipment manufacturing ecosystem through flagship enterprises. The distinctive strengths of each city continue to enrich the international image of Chinese cities.

China’s open development framework has progressed from policy experimentation to institutional innovation, shifting from passive integration to active leadership, clearly signalling to the world that investing in China is investing in the future. China not only grants 100% tariff-free treatment on all tariff items to products from least developed countries with diplomatic ties but also actively expands imports and shares its market. According to Xinhua News Agency, China’s cumulative imports from developing countries between 2025 and 2030 will exceed USD 8 trillion. As domestic demand expands and independent and unilateral openness progresses in an orderly fashion, China will collaborate with global investors to shape a new open global economic framework and share development opportunities.

Open Development Scoring Table

Rank	City	Foreign trade dependence	Trade balance	Foreign investment attractiveness	Tourism activity	International reputation	Total score
1	Shanghai	56	51	54	59	59	279
2	Tianjin	43	58	57	52	55	265
3	Shenzhen	60	44	49	47	57	257
4	Dalian	45	59	59	42	46	251
5	Chengdu	35	55	44	55	56	245
6	Suzhou	57	43	53	45	45	243
7	Guangzhou	36	45	33	53	58	225
8	Hangzhou	39	22	53	51	54	219
8	Beijing	54	7	41	57	60	219
10	Xiamen	58	57	20	33	50	218
11	Changsha	20	37	60	49	43	209
12	Chongqing	25	20	48	60	53	206
13	Wuxi	46	34	55	38	29	202
14	Nanjing	29	41	33	46	52	201
15	Qingdao	48	50	21	37	44	200
15	Kunming	18	38	47	56	41	200
17	Ningbo	55	31	46	29	36	197
18	Hefei	28	26	56	35	40	185
18	Zhengzhou	38	40	19	40	48	185
20	Haikou	34	47	58	5	37	181
21	Nanning	12	60	38	43	27	180
21	Wuhan	22	35	14	58	51	180
23	Xi'an	32	29	15	55	42	173
24	Dongguan	59	39	29	13	24	164
24	Shenyang	15	48	6	48	47	164
26	Harbin	5	56	23	44	35	163
27	Zhuhai	53	21	43	7	32	156
28	Yantai	42	49	41	21	1	154
29	Jinan	17	27	26	30	49	149
30	Changchun	16	19	37	41	33	146
31	Taiyuan	26	36	11	34	38	145
32	Jiaxing	50	16	53	19	1	139
33	Nanchang	10	32	12	50	34	138
34	Huizhou	51	53	19	8	1	132
35	Fuzhou	27	17	16	32	39	131
36	Nantong	33	33	46	17	1	130
36	Shijiazhuang	14	46	3	36	31	130
38	Weifang	41	23	41	20	1	126
39	Urumqi	19	8	33	31	30	121
40	Tangshan	11	25	35	23	22	116
41	Lanzhou	1	54	8	24	25	112
42	Weihai	49	12	34	15	1	111
43	Guiyang	7	24	5	39	28	103
44	Wenzhou	30	5	33	14	19	101
45	Yangzhou	13	9	50	27	1	100
46	Yancheng	24	42	19	12	1	98
46	Changzhou	31	13	28	25	1	98
48	Foshan	37	14	9	11	26	97
49	Hohhot	4	52	1	9	23	89
50	Shaoxing	47	2	22	16	1	88
51	Taizhou	40	3	28	10	1	82
52	Xuzhou	8	10	42	18	1	79
53	Baoding	21	1	7	29	20	78
54	Quanzhou	23	18	11	22	1	75
55	Zhongshan	52	4	13	4	1	74
56	Yichang	6	11	25	26	1	69
57	Zhaoqing	9	15	36	2	1	63
58	Yinchuan	3	30	2	6	21	62
59	Jiangmen	44	6	4	3	1	58
60	Xining	2	28	25	1	1	57

Hong Kong: A vibrant bridge for international exchange

As a bridge between Chinese mainland and global markets, Hong Kong Special Administrative Region drives its development through world-class infrastructure, a transparent common law system, and a dynamic business ecosystem.

In the first quarter of 2025, Hong Kong's economy grew by 3.1% year-on-year, supported by robust exports and steady investment growth. Full-year

GDP growth is projected to range between 2% and 3%, with fiscal reserves expected to reach HKD 639.8 billion, highlighting the city's economic stability. Findings from PwC's *28th Annual Global CEO Survey China Report* reflect this optimism, with 81% of Hong Kong CEOs expressing confidence in business growth over the next three years—a figure notably higher than the global average of 53%.





Showcasing financial strength as a global “super connector”

Hong Kong’s financial strength is globally recognised, securing third place in the 2025 Global Financial Centres Index. It excels in investment management, insurance, and finance, ranking third in banking and fourth in fintech, demonstrating a comprehensive and robust financial ecosystem.

Amid slowing global growth, competition for foreign direct investment (FDI) has intensified. Nevertheless, Hong Kong attracted USD 126 billion in FDI inflows in 2024, securing third place globally, thanks to its low-tax regime and business-friendly policies, according to InvestHK. The initial public offerings (IPO) market is set for a robust recovery. PwC forecasts 70 to 80 IPOs raising HKD 130 billion to HKD 160 billion in 2025, potentially positioning Hong Kong among the top three global IPO markets. The technology, media, and telecommunications (TMT) and AI sectors will drive this growth, attracting capital inflows from Europe, the United States, and the Middle East. The expansion of Stock Connect to

encompass a broader range of tradable securities further reinforces Hong Kong’s status as a premier Renminbi asset management centre.

Specifically, the Main Board *Chapter 18C of the Hong Kong Listing Rules* strengthens Hong Kong’s role as a “super connector”, linking specialist technology companies with global investors. The first successful listing under this regime marks a significant milestone, enhancing Hong Kong’s appeal to high-growth companies.

Leading financial institutions highlight Hong Kong’s pre-eminent position, with numerous multinational enterprises valued at billions operating in the city. The Hong Kong Stock Exchange oversees the city’s stock market, facilitating vital capital flows between China and the global market. Recent government statistics indicate that cross-border remittances under the Cross-Boundary Wealth Management Connect scheme surpassed RMB 118 billion in June 2025, further solidifying Hong Kong’s status as a global offshore Renminbi business centre.

Advancing AI and fintech development

Supported by strategic government initiatives and a thriving technology ecosystem, Hong Kong is rapidly establishing itself as a global leader in innovation and AI. The InnoHK initiative, a flagship project led by the Hong Kong Innovation and Technology Commission, has established 28 research laboratories in collaboration with global institutions. These laboratories focus on advancing AI, healthcare, and smart city technologies. The government's commitment to innovation is demonstrated through its HKD 150 billion investment in R&D and its plan to establish an AI supercomputing centre to enhance computing capacity. The 2025/2026 budget allocates HKD 2 billion to support the development of the InnoHK research cluster in the Lok Ma Chau Loop, fostering cutting-edge innovation.

Led by the Hong Kong Monetary Authority, the Fintech 2025 Strategy encourages banks to adopt AI and blockchain technologies in preparation for the integration of central bank digital currencies (CBDCs). With three CSRC-licensed virtual asset trading platforms and 15 pending applications, Hong Kong's rising prominence in digital asset markets is clear. Within the city's AI startup ecosystem, collaborations between Cyberport, Hong Kong Science and Technology Parks Corporation (HKSTP), and AI incubators in the Greater Bay Area further strengthen Hong Kong's position as a regional AI hub.

Regional cooperation drives new influence

Contributing over RMB 14 trillion to China's GDP in 2023, the Greater Bay Area serves as a cornerstone of Hong Kong's growth strategy. The development plan of the Greater Bay Area reinforces Hong Kong's role as an international financial hub and a green finance centre, fostering synergy with other cities in the region, such as Shenzhen and Macao. Over 50 strategic enterprises have established or expanded operations in Hong Kong, investing more than HKD 40 billion and creating over 13,000 jobs. The 2025/2026 budget allocates HKD 3.7 billion to develop the Hong Kong section of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone. This investment will accelerate the construction of infrastructure and public facilities, deepening integration within the Greater Bay Area.

Hong Kong is well-positioned to capitalise on new opportunities through regional cooperation beyond the Greater Bay Area. With a population exceeding 650 million, ASEAN (the Association of Southeast Asian Nations) represents a dynamic market with increasing demand for financial services, technology, and sustainable development solutions. The Regional Comprehensive Economic Partnership (RCEP), encompassing 15 Asia-Pacific countries, enhances Hong Kong's access to a market that accounts for 30% of global GDP. This facilitates trade and investment flows. Furthermore, Hong Kong is strengthening ties with the Middle East through green finance and innovation-driven initiatives. These efforts align with the Middle East's "Vision 2030", creating opportunities for collaboration in renewable energy, fintech, and infrastructure. Such partnerships position Hong Kong as a hub for global economic growth and enhance the Greater Bay Area's influence on international markets.

Creating new opportunities for green finance

Through its innovative platforms, international partnerships, strategic green finance initiatives, and robust regulatory framework, Hong Kong has emerged as a pioneer in aligning the financial system with global sustainability goals and advancing transformation in ESG and green finance.

Hong Kong has introduced mandatory climate-related disclosure for all listed companies, effective from 2025. Aligned with the Task Force on Climate-Related Financial Disclosures (TCFD), these requirements ensure companies provide transparent and standardised information on their climate-related risks and opportunities. This initiative not only strengthens corporate accountability but also enables investors to make informed decisions, further reinforcing Hong Kong's commitment to global sustainability goals.

The launch of the Core Climate international carbon market, designed to facilitate carbon credit trading, represents a significant milestone in Hong Kong's green finance ecosystem. Core Climate positions Hong Kong as a leader in the carbon market, supporting carbon offsetting for Hong Kong businesses and the government while fostering innovation in carbon reduction strategies. The platform has garnered global attention, further solidifying Hong Kong's role as a regional hub for carbon trading and sustainable investment.

Nanning: A gateway and hub connecting China and ASEAN

Nanning, the capital of the Guangxi Zhuang Autonomous Region, faces the Beibu Gulf and borders Southeast Asia, serving as a vital gateway between China and ASEAN. As a key node on the Belt and Road and a convergence point for the South China, Southwest China, and China-ASEAN economic circles, Nanning plays an indispensable role in fostering regional economic integration and international cooperation, drawing global attention.

Development of open platforms

Nanning benefits from the convergence of multiple national-level open strategies, including the China-ASEAN Expo and the China-ASEAN Business and Investment Summit. These platforms not only elevate Nanning's international reputation but also provide exceptional opportunities for domestic and foreign enterprises to engage and collaborate. In recent years, the Nanning Area of the China (Guangxi) Free Trade Pilot Zone has actively developed high-level open platforms, fostering the integrated development of initiatives such as the Nanning core zone for the financial open portal oriented to ASEAN and the Nanning core base of the China-ASEAN Information Harbour (CAIH). These efforts aim to create new advantages in open platforms and continuously enhance vitality in open development. Since the establishment of the Nanning Area of the China (Guangxi) Free Trade Pilot Zone six years ago, the total foreign trade import and export value has exceeded RMB 290 billion, with actual foreign investment surpassing USD 1.8 billion, creating a virtuous cycle of institutional innovation,

resource aggregation, and industrial development. These platforms have significantly enhanced Nanning's international reputation while providing extensive opportunities for domestic and foreign enterprises to engage and collaborate. Nanning's economic and trade interactions with ASEAN countries have grown increasingly robust, with deepening investment cooperation, collectively forging a new chapter of mutual benefit and win-win outcomes.

Trade and investment facilitation

To advance trade liberalisation and facilitation, Nanning has implemented a range of measures, including the launch of the China-ASEAN Cross-Border Trade Financial Interconnection Platform. This platform drives innovation in financial services, such as cross-border RMB settlement. These initiatives have effectively lowered trade costs for enterprises, enhanced trade efficiency, and strengthened trade and investment cooperation with ASEAN countries. As of the end of July 2025, the China-ASEAN Financial Town has attracted a total of 578 financial institutions (enterprises) and established 17 QFLP funds with a combined scale exceeding USD 2.6 billion. Nanning is also advancing the mutual recognition of Authorized Economic Operator (AEO) status with customs authorities in ten ASEAN countries. It has facilitated multiple cross-border RMB settlements through a local third-party payment institution in the region. Cross-border e-commerce exports constitute over 58% of the city's total exports to ASEAN countries.

Transportation infrastructure construction

Nanning is continuously improving its transportation network to strengthen connectivity with the Beibu Gulf and Southeast Asia. The Nanning International Railway Port has emerged as China's largest distribution centre for railway freight exports to Vietnam. Meanwhile, Nanning Wuxu International Airport has established multiple cargo routes to ASEAN and South Asian countries, creating a four-hour air logistics circle. Nanning has also been designated as a pilot city in Guangxi to implement the national strategy of building China into a country with a robust transportation network. Key projects, including the Pinglu Canal, the Nanning-Yulin High-Speed Railway, and the Nanning-Binyang Expressway, are progressing, further strengthening the comprehensive transportation network. Additionally, Nanning is leveraging its role as a national logistics hub to expand international freight routes and cross-border railway services, with a focus on establishing transportation channels from the GBA area to Southeast Asia via Nanning.

Cross-border industrial chain development

Nanning is dedicated to developing cross-border industrial, supply, and value chains with ASEAN, focusing on industries such as new energy, NEVs, and electronic information. To the west and south, the city is fostering synergistic development with industrial

parks along Guangxi's borders and ports through the Nanning-Hanoi Economic Corridor and the Pinglu Canal Economic Belt. Nanning is further strengthening collaboration with the Yangtze River Delta and Pearl River Delta regions, including Shanghai and Shenzhen, to develop a model integrating domestic R&D, Nanning-based manufacturing, and ASEAN assembly. Furthermore, Nanning utilises overseas raw materials for local processing and manufacturing, subsequently marketing the products globally, establishing an industrial chain model integrating overseas raw materials, Guangxi-based manufacturing, and international markets. For instance, in the NEV and components sector, a sodium battery project with a total investment of RMB 10 billion harnesses domestic technological expertise and Laos' manganese resources to establish a dual-circulation development pattern. The project aims to become a leading domestic base for the large-scale application of lightweight sodium-ion batteries. Furthermore, Nanning is actively fostering new business areas, such as cross-border data flows, cross-border finance, and cross-border e-commerce. The city is working to streamline industrial and supply chain circulation and promote industrial integration. These efforts not only enhance the technological capabilities and market competitiveness of local industries but also spur the development of related industries in ASEAN countries.

Special policy support

To promote further opening-up and development, Nanning has introduced a series of targeted policies to support business growth. In the AI sector, the *Notice of Nanning Municipal People's Government on the First Batch of Policies and Measures to Support the High-Quality Development of the China-ASEAN AI Innovation Cooperation Centre* was issued in April 2025. This policy provides comprehensive support for the AI industry, including promoting the clustering of AI enterprises, encouraging data governance and transparency, and fostering model development and application. Nanning is also actively advancing the development of cross-border e-commerce through the *Development Plan for the China (Nanning) Cross-Border E-Commerce Comprehensive Pilot Zone (2021–2025)*. This plan outlines the development goals and pathways for the cross-border e-commerce industry, offering extensive opportunities for related enterprises. Looking ahead, Nanning plans to increase investment in technological innovation by developing projects such as the China-ASEAN AI Innovation Cooperation Centre and enhancing collaboration with ASEAN countries on technological innovation to strengthen independent innovation capabilities. Building on its existing industries, Nanning will also focus on developing the low-altitude economy and other future industries, with an emphasis on low-altitude equipment manufacturing, particularly heavy-lift logistics drones and manned electric vertical take-off and landing aircraft.

Nanning will capitalise on its new national role and mission to deepen cooperation with ASEAN countries across various sectors. In cross-border industries, it will enhance collaboration with ASEAN nations in electronic information, new energy, and new materials, forging stronger cross-border industrial chains. In financial services, Nanning will make sustained efforts to develop cross-border trade and financial interconnection platforms, facilitating cross-border financial services and advancing initiatives such as cross-border RMB settlement and financial innovation. In terms of technological innovation, Nanning will share resources with ASEAN countries and collaborate on research projects and technical development to enhance the region's technological capabilities. It will also strengthen exchanges and cooperation with ASEAN nations on topics such as AI and the digital economy, jointly driving technological innovation and industrial upgrading.

Regional synergy

Global regional collaboration is evolving from economic cooperation to comprehensive governance, with a focus on addressing deglobalisation challenges through rule coordination, technology sharing, and resource integration. In the future, as digital technology and green transformation deepen, regional coordination will increasingly prioritise inclusive innovation—establishing high-standard rules through mechanisms like CPTPP and DEPA, while aiding developing countries in integrating into global value chains through initiatives such as the Belt and Road and South-South cooperation.

China's regional coordinated development strategy and urban agglomeration initiatives are advancing steadily, fostering significant internal structural growth. From the extension of innovation chains in the Beijing-Tianjin-Hebei Region and the synergy of Yangtze River Delta industrial clusters to the free flow of factors in the Guangdong-Hong Kong-Macao Greater Bay Area, a multi-layered, networked urban collaboration framework has taken shape, promoting greater regional specialisation and increasingly

evident benefits from shared resources and complementary strengths. Under the guidance of a unified national market, the flow of resources such as electricity, talent, and capital has become more seamless. The national unified electricity market enables western renewable energy to be transmitted to the east through market-driven mechanisms, reducing eastern reliance on coal power while allowing western regions to cultivate new advantages through clean energy. The Guangdong-Hong Kong-Macao Greater Bay Area has achieved cross-border integration of healthcare, education, and capital. The Beijing-Tianjin-Hebei Region has established 140 kilometres of advanced autonomous driving test routes, fostering a nearly trillion-yuan intelligent connected new energy vehicle cluster. From Beijing-Tianjin-Hebei Region to the Guangdong-Hong Kong-Macao Greater Bay Area, from the Yangtze River basin to the Yellow River region, different areas empower each other, collectively driving structural economic growth and demonstrating the significant impact of regional synergy and urban agglomeration development.

Chinese cities contribute high-quality resources to regional synergy, with this dimension encompassing five variables: Talent Attraction Index²⁰, which measures a city's ability to attract high-calibre talent and its policy advantages; Business Carrying Capacity²¹, measured by the number and occupancy rates of star-rated hotels, reflecting the level of high-end services and business activity; Social Organisation Linkages²², measured by the number of social organisation institutions, indicating the density and governance efficiency of cross-regional collaboration networks; Passenger and Freight Transport Scale, measured by cargo and passenger turnover, reflecting the level of logistics and personnel connectivity; Urban Collaboration Capacity²³, which demonstrates the capacity to drive cross-regional cooperation mechanisms, policy alignment, and resource integration.

In the Regional Synergy dimension, major cities such as Shanghai, Beijing, Guangzhou, Shenzhen, and Nanjing rank highly; cities like Taiyuan, Urumqi, and Lanzhou show significant contributions from this dimension to their overall scores. Regional synergy activates economic momentum, enabling smaller cities to grow through complementary roles: they either become hidden champions in niche sectors or integrate into broader economic cycles by leveraging their location, pursuing differentiated development paths distinct from core cities.



Regional synergy promotes urban development through three typical pathways: first, the experience-sharing model, where, within the Beijing-Tianjin-Hebei coordinated development framework, Beijing's Zhongguancun technology enterprises establish manufacturing operations in Tianjin and Hebei, while the Zhongguancun Z-Park in Xiong'an New Area is attracting high-end industries such as next-generation information technology, modern life sciences and biotechnology, AI, and aerospace information. Second, the resource-sharing model: Chengdu-Chongqing has established an integrated transport network of high-speed rail, highways, and aviation, while simultaneously advancing the Chengdu-Chongqing Hydrogen Corridor, computing power hubs, and ultra-high voltage projects; the division of labour with R&D in Chengdu and manufacturing in Chongqing has enabled the Chengdu-Chongqing economic circle to account for more than one-tenth of the national automobile production and electronic information output value; the Yangtze River Delta G60 Science and Innovation Corridor promotes sharing of scientific instruments and mutual recognition of innovation vouchers among nine cities, with listed companies on the regional STAR Market representing more than one-fifth of the national total. Third, the industry chain collaboration model: the Yangtze River Delta and Pearl River Delta regions have developed industrial cross-collaboration. The Yangtze River

Delta's integrated circuits, biomedicine, and AI industries account for approximately 3/5, 1/3, and 1/3 of the national total, respectively; the Pearl River Delta leads in electronic information, smart home appliances, and NEVs, with over 40% of global smartphones and 70% of consumer-grade drones produced there, home appliance manufacturing scale representing about 40% nationally, and the new energy vehicle industry chain being the most complete in the country.

In terms of Talent Attraction Index, eastern cities such as Beijing, Shanghai, Shenzhen, Guangzhou, and Hangzhou lead in scores. Talent flow between cities creates a collaborative intellectual network, facilitating complementarity in technology and industries. The *China City Talent Attractiveness Ranking: 2025* indicates that talent aggregation in Beijing and Shanghai has slowed for four consecutive years, the proportion of net talent inflow in second-tier cities has increased for two consecutive years, and talent continues to flow out from third- and fourth-tier cities. Hangzhou attracts a large number of internet and e-commerce professionals through its digital economy, leading in net inflow proportion; Chengdu-Chongqing promotes efficient talent mobility through shared employment data. Smaller cities should survey talent needs and develop differentiated attraction strategies in areas such as public services, employment guidance, and entrepreneurship support.



In terms of Business Carrying Capacity, Beijing, Shanghai, Nanjing, Qingdao, and Hangzhou hold leading positions. Business activities connect regional elements and promote market integration, with first-tier cities leading in the number of star-rated hotels due to their status, economic levels, and commercial activity. Urumqi, Guiyang, Xining, and Nanjing maintain high hotel occupancy rates owing to their roles as transportation hubs and tourism distribution centres. Quanzhou, as the only city in the country possessing all three categories of UNESCO intangible cultural heritage (ICH), leverages its location to absorb industrial influences from the Yangtze River Delta and Pearl River Delta, creating a collaborative network of cultural enhancement, service upgrades, and industrial linkages.

In terms of Social Organisation Linkages, Shanghai, Chongqing, Beijing, Shenzhen, and Hangzhou rank highly. Non-governmental associations and social institutions serve as important forces beyond government and market, flexibly connecting regions, groups, and industries to build trust networks and collaboration mechanisms. Through promoting supply-demand matching and establishing collaborative platforms, the Beijing Coordinated Development Service Promotion Association has facilitated enterprise cooperation among the three areas; the Shanghai Foreign Investment Association organises nearly 100 events annually to create a foreign investment service ecosystem; the Yangtze River Delta Entrepreneurs Alliance has established 19 industry committees that advocate for business policies through roundtable meetings. China has also established organisations such as the Belt and Road International Production Capacity Cooperation Alliance to promote economic and trade cooperation between various regions and key countries.

In terms of Passenger and Freight Transport Scale, Shanghai, Guangzhou, Chongqing, Shenzhen, and Xiamen lead in scores. China, relying on robust logistics infrastructure and integrated management mechanisms, leads globally in logistics efficiency. The World Bank's *2025 Doing Business* survey shows that China's customs clearance days for imported goods are fewer than those in middle- and high-income countries. This efficient flow of personnel and freight has been ensuring China's supply chain stability. Coastal and river hub cities such as Shanghai, Guangzhou, Ningbo, Qingdao, and Nanjing, leveraging deep-water ports and transportation networks, serve as logistics distribution centres for dual circulation and gateways for regional connectivity and openness. Beijing, Guangzhou,

Chengdu, and Shenzhen, with their population, aviation and rail networks, and service sector clusters, become core engines for cross-regional business, tourism, and talent flows. In 2024, the Shenzhen-Zhongshan Link and Huangmaohai Cross-Sea Passage opened to traffic, connecting Shenzhen with Zhongshan and Zhuhai with Jiangmen, ushering in a new stage of connectivity in the Greater Bay Area. As the core area of the Hainan Free Trade Port, Haikou saw its aviation passenger turnover and water freight turnover grow by 20% and 27%, respectively, in 2024. After Hainan's "customs closure" in December 2025, it will provide a more convenient trade environment for multinational enterprises.





In terms of Urban Collaboration Capacity, it is reflected in national land and space planning through core functions and positioning: Beijing, Shanghai, Guangzhou, Chongqing, and Tianjin are national central cities, with Guangzhou primarily emphasising its role as the country's southern gateway; Shenzhen is positioned as the national economic centre, advanced manufacturing base, gateway for opening up, and important bearer of international science and innovation centre; Harbin and Shenyang are positioned as Northeast Asia internationalisation central cities, targeting as the core of the Northeast Asia economic circle; Jinan, as an important central city in the Yellow River Basin, positioned to promote synergy between ecological protection and high-quality development. Xiamen is positioned as the hub for integrated development across the Taiwan Strait, exploring deep cross-strait integration; Qingdao and Dalian are important coastal central cities; Kunming is positioned as a regional centre oriented towards Southeast Asia. At the urban agglomeration level, Ningbo, Hefei,

Wuxi, and Changzhou are important central cities in the Yangtze River Delta, Changsha is the central city in the middle reaches of the Yangtze River, and Foshan and Dongguan are node cities in the Guangdong-Hong Kong-Macao Greater Bay Area. These positionings clarify city roles and lay the foundation for cross-regional synergy.

Looking ahead, as the national unified market improves and new urbanisation advances, the benefits of urban synergy will extend further, driving more cities in the central, western and border regions to achieve leapfrog development. driving rapid development in more central, western, and border cities. From eastern innovation hubs to inland cities with new potential, China's intertwined urban investment opportunities will offer diverse attractive areas for international capital. In this era of synergy-driven development, those who seize the value of urban linkages and act early will secure a competitive edge globally.

Regional Synergy Scoring Table

Rank	City	Talent attraction index	Business carrying capacity	Social organisation linkage	Passenger and freight transport scale	Urban collaboration capacity	Total score
1	Shanghai	59	59	60	60	60	298
2	Beijing	60	60	58	51	60	289
3	Guangzhou	57	49	51	59	60	276
4	Shenzhen	58	51	57	55	50	271
5	Nanjing	54	58	55	49	50	266
6	Hangzhou	56	56	56	40	50	258
7	Chengdu	55	51	53	45	50	254
8	Wuhan	52	38	49	52	50	241
9	Qingdao	49	57	54	50	30	240
10	Chongqing	24	35	59	58	60	236
11	Xi'an	42	55	46	41	50	234
12	Tianjin	47	21	52	53	60	233
13	Jinan	50	48	50	54	30	232
14	Xiamen	40	49	38	55	30	212
15	Shenyang	28	47	47	37	50	209
15	Suzhou	53	26	43	37	50	209
17	Dalian	27	54	45	45	30	201
18	Zhengzhou	38	41	27	43	50	199
19	Ningbo	48	34	48	45	20	195
20	Kunming	26	44	39	37	30	176
21	Fuzhou	31	37	24	48	30	170
22	Hefei	46	43	28	30	20	167
23	Wuxi	51	4	40	29	40	164
24	Changsha	45	39	42	14	20	160
25	Wenzhou	41	28	31	32	20	152
26	Taiyuan	16	26	11	44	50	147
27	Shijiazhuang	29	24	33	36	20	142
28	Harbin	5	15	35	34	50	139
29	Guiyang	21	41	15	21	40	138
30	Changzhou	39	14	34	9	40	136
31	Yantai	30	45	19	20	20	134
31	Changchun	11	22	32	19	50	134
33	Urumqi	13	40	6	24	50	133
34	Lanzhou	1	33	17	30	50	131
34	Taizhou	34	16	20	41	20	131
36	Nantong	33	29	22	22	20	126
37	Nanning	8	19	26	32	40	125
38	Haikou	9	12	14	55	30	120
39	Weifang	19	46	18	16	20	119
39	Foshan	44	9	44	12	10	119
41	Quanzhou	17	53	13	28	5	116
42	Xuzhou	14	6	41	34	20	115
43	Hohhot	20	23	3	26	40	112
43	Nanchang	22	19	30	11	30	112
45	Zhuhai	35	25	16	24	10	110
46	Jiaxing	37	13	10	8	40	108
47	Shaoxing	36	30	29	7	5	107
48	Yangzhou	25	9	36	13	20	103
49	Dongguan	43	1	37	10	10	101
50	Xining	1	31	2	18	40	92
51	Yinchuan	1	35	1	14	40	91
52	Weihai	18	31	12	4	20	85
53	Yichang	7	17	4	26	20	74
54	Yancheng	12	17	23	16	5	73
55	Tangshan	15	6	8	22	20	71
56	Huizhou	23	5	25	6	10	69
57	Baoding	6	6	21	5	20	58
58	Zhongshan	32	2	9	2	5	50
59	Jiangmen	10	2	5	3	10	30
60	Zhaoqing	1	9	7	1	10	28

Yangtze River Delta integration: Collaborating for synergy, shaping the future

The Yangtze River Delta (YRD) urban agglomeration encompasses Shanghai, Jiangsu Province, Zhejiang Province, and Anhui Province (the YRD provinces and municipality). It is one of China's most economically developed, innovative, and open regions. In 2024, the YRD region achieved a GDP of RMB 33.17 trillion, accounting for 24.6% of the national total, with its contribution to national economic growth reaching approximately 30%. Through its efficient coordinated development mechanism, which fosters deep integration in areas such as economy, science and technology, and ecology, the YRD region has emerged as a trailblazer in China's modernisation drive, exerting a significant impact on the global economy.

Strategic location and a well-developed transportation network

The YRD urban agglomeration is situated at the estuary of the Yangtze River, along the central part of China's north-south coastline, benefiting from

unique geographical advantages. The region boasts a dense transportation network, encompassing motorways, railways, aviation, and maritime shipping, facilitating seamless coordinated development. The total length of its motorways exceeds 15,000 kilometres, while its railways span over 13,000 kilometres. The region's aviation hubs include Shanghai Pudong International Airport, Shanghai Hongqiao International Airport, Nanjing Lukou International Airport, and Hangzhou International Airport, with routes connecting major domestic and international cities. Additionally, the YRD region is home to world-class ports, including Ningbo-Zhoushan Port and Shanghai International Port. In 2024, the former ranked first globally in cargo throughput for the 16th consecutive year, while the latter led in container throughput for the 15th consecutive year. These ports serve as a robust backbone, providing strong support for the region's international trade and logistics.



Economic strength and a solid industrial foundation

Occupying less than 4% of China's land, the YRD urban agglomeration generates nearly a quarter of the nation's economic output, underscoring its formidable economic strength and robust industrial foundation. The nine trillion-GDP cities in the region have forged tailored development paths aligned with their unique characteristics, further solidifying their leading role in China's national economic landscape. The region is home to over one-third of the nation's "Trillion Club Cities", four of the "Top 10 Chinese Cities by GDP", and 43 of the "Top 100 Counties in China", with both its total economic output and quality ranking at the forefront of the country. Shanghai, as an international hub for economy, finance, trade, and shipping, stands among the top tier of Chinese cities by GDP. Other cities, such as Suzhou, Hangzhou, and Nanjing, shine as sectoral powerhouses, each exuding robust economic vitality in their respective domains. The YRD region holds significant advantages in numerous strategic emerging and future-oriented industries.

Policy support and distinctive cooperation mechanism

In November 2018, the integrated development of the YRD region was elevated to a national strategy. The region plays a pivotal role in China's modernisation and comprehensive opening-up strategy, holding significant importance for driving the nation's high-quality development and building a modern economic system. Central and local governments have introduced a series of policies to support the YRD region's integrated development and established multi-level, multi-sector cooperation mechanisms. These efforts provide robust support for its coordinated development. For instance, the *Three-Year Action Plan for the Integrated Development of the Yangtze River Delta Region (2024–2026)* spans nine areas, including strengthening collaboration in scientific and technological innovation and building world-class industrial clusters, with a total of 165 key tasks outlined. The *Plan for the Development of the Yangtze River Delta Science and Technology Innovation Community* sets goals such as establishing a modern, international community for scientific and technological innovation by 2025. The *Plan for Higher-Quality Integrated Development of Transportation in the Yangtze River Delta Region* promotes the interconnection of transportation infrastructure. Additionally, the *Outline of the Plan for the Integrated Development of the Yangtze River Delta Region* aims for substantial progress in integration by 2025 and a high level of integration by 2035.

Industrial synergy fostering a distinctive ecosystem

The YRD urban agglomeration has achieved coordinated industrial development and innovative breakthroughs by building an industrial innovation ecosystem and establishing collaborative platforms. The YRD provinces and municipality share commonalities in their industrial planning, focusing on strategic emerging industries such as NEVs, integrated circuits, AI, and biomedicine, alongside future-oriented industries like robotics, quantum technology, and the low-altitude economy. These priorities align closely with the key fields of the ten world-class industrial clusters outlined in the *Outline of the Plan for the Integrated Development of the Yangtze River Delta Region (2019)*. They also correspond with the world-class industrial clusters specified in the latest *Three-Year Action Plan for the Integrated Development of the Yangtze River Delta Region*, reflecting a consistent and coherent trend.

—Advanced manufacturing: In 2024, the YRD region hosted 26 national-level advanced manufacturing clusters, representing 32.5% of the national total. These clusters span strategic emerging industries such as large aircraft, biomedicine, integrated circuits, high-end equipment, and NEVs. For instance, the large aircraft industrial cluster's spillover effect extends beyond the YRD region, encompassing Shanghai, Jiangsu, Zhejiang, Anhui, and Jiangxi. This cluster includes over one-third of China's large aircraft installation and supporting suppliers, alongside more than 900 industrial chain enterprises, with an industrial output value exceeding RMB 100 billion. Within a 100-kilometre radius of COMAC

(Commercial Aircraft Corporation of China, Ltd.), a comprehensive industrial chain has taken shape, covering R&D, design, component manufacturing, final assembly, and delivery.

—Integrated circuits: In cities such as Shanghai, Suzhou, and Wuxi, the industrial and supply chains for domestic chip production are highly developed. Shanghai excels in chip design, hosting numerous leading design enterprises and talent; Suzhou demonstrates strong capabilities in chip manufacturing, packaging, and testing, with a cluster of advanced manufacturers; while Wuxi holds distinct advantages in semiconductor materials and equipment. Inter-city collaboration enables the localisation of the entire industrial chain—covering chip design, manufacturing, and packaging and testing—thereby enhancing the overall competitiveness of China's integrated circuit industry.

—Biopharmaceuticals: The YRD region has a robust foundation for collaboration in the biopharmaceutical sector. Shanghai boasts strong R&D capabilities, hosting numerous headquarters and R&D centres of prominent pharmaceutical companies, such as WuXi AppTec and BeiGene. Suzhou has attracted a significant number of biopharmaceutical enterprises, forming a biopharmaceutical industrial cluster, exemplified by the Suzhou Industrial Park's biopharmaceutical industry. Nanjing holds distinct advantages in biopharmaceutical R&D and production, accommodating renowned enterprises like Simcere. Similarly, Hangzhou demonstrates considerable strength in biopharmaceutical R&D and production, nurturing a group of competitive companies.

—New energy vehicle industry:

The YRD region excels in the agglomeration and rapid development of the NEV industrial chain. In 2023, Shanghai, Jiangsu, Zhejiang, and Anhui collectively produced 3.42 million NEVs, accounting for 36.2% of China's total NEV output. Together, the YRD provinces and municipality have established a world-class NEV industrial cluster, encompassing a complete industrial chain from design and R&D to production. With Shanghai developing “brain” components such as chips and intelligent connectivity technologies, Jiangsu supplying “heart” components like power batteries, Zhejiang handling “body” processes including integrated die-casting, and Anhui assembling these into finished vehicles, this cluster exemplifies regional integration and industrial chain collaboration.

Industrial transformation facilitated by collaborative innovation platform

The *Data Insights into the Yangtze River Delta 2025* report highlights that among world-class city clusters, the YRD urban agglomeration achieved a total GDP of USD 4.65 trillion in 2024, maintaining its position as the second largest globally by scale. In 2024, the YRD region generated 31,600 sci-tech cooperation papers, up 13.22% year-on-year, and 15,500 patent cooperation

cases, up 48.75% year-on-year.

Shanghai exported technology contracts valued at RMB 62.82 billion to Jiangsu, Zhejiang, and Anhui. Jiangsu led with the highest number of technology contracts, totalling 17,700, while Anhui recorded the highest average contract value at RMB 11.43 million.

In the YRD region, the industrialisation of innovation is not a one-way process but a network of growth where achievements emerge at multiple points and spread widely. Leveraging its industrial chain advantages, Shanghai has developed a new model: Shanghai as the source of innovation and the YRD region as the base for incubation. Hangzhou drives the Digital Yangtze River Delta initiative to accelerate industrial digital transformation, while Nanjing leads with the Nanjing Metropolitan Circle Sci-Tech Innovation Ecosystem Map platform, fostering a synergy model of production in the periphery and R&D in Nanjing. The YRD region hosts two comprehensive national science centres, nine national laboratories, and other innovation resources. With increasing R&D investment intensity, the Shanghai-Suzhou and Nanjing clusters rank among the top in the Global Innovation Index, further strengthening the development of the sci-tech innovation community during the *15th Five-Year Plan* period.

The Yangtze River Delta G60 Sci-Tech Innovation Corridor serves as a pathfinder—an advanced corridor transitioning “Made in China” to “Created in China”, a pilot corridor driven by the twin engines of technological and institutional innovation, and a pioneering corridor for integrated industrial and urban development. Its goal is to evolve into a globally influential hub of sci-tech innovation and a world-class industrial cluster. The number of high-tech enterprises in the Corridor soared from 16,000 in 2018 to 59,000 in 2024, with R&D investment increasing by 82.4%. Invention patent grants and PCT international patent applications each represent 10% of the national total. The Yangtze River Delta Integrated Sci-Tech Innovation Cloud Platform provides comprehensive mapping for the coordinated development of multiple industrial chains across the YRD region. On this platform, companies can publish their innovation needs, facilitating efficient and precise matchmaking with partners in the region. A “1+7+N”²⁴ industrial alliance system has been established on the Platform, uniting 2,952 biopharmaceutical-related enterprises. In the integrated circuit sector, a complete industrial chain has formed, encompassing 121 key companies. Additionally, approximately 842 AI companies have converged in the region.

Community development driven by cross-regional data sharing

The YRD region is uniting to build a data sharing platform, fostering sci-tech innovation and industrial

collaboration. The added value of Zhejiang’s core digital economy sectors has exceeded RMB 1 trillion. Leading the way, the Shanghai Data Exchange has established China’s first data trading chain, implementing a one-place listing, full-chain circulation mechanism. Over 170 high-frequency government services are now accessible through an inter-provincial one-stop online portal, while regional market integration accelerates and the data element market progresses towards interconnection, supported by unified institutional rules for data property rights and circulation transactions.

Cross-regional public service sharing for convenience

The YRD region is actively promoting the sharing of educational and medical resources to elevate regional public service standards. In education, universities such as Fudan University and Zhejiang University have formed the Yangtze River Delta Research Universities Alliance, offering over 1,200 cross-institutional courses, achieving mutual recognition of 800,000 credits, and establishing an online course platform for resource sharing. In healthcare, Ruijin Hospital in Shanghai has established a remote consultation platform with hospitals in Jiangsu, Zhejiang, and Anhui provinces, enabling multidisciplinary consultations for complex cases within 24 hours. Additionally, 39 cities have implemented a unified medical insurance card, facilitating 8 million off-site medical visits. Through the sharing of equipment and expertise, regional medical service standards have been significantly enhanced.

Cross-regional joint protection and governance of the ecological environment

In pollution control, the YRD region has established the nation's first cross-provincial air monitoring super-station network, comprising 60 stations, enabling real-time sharing of PM_{2.5} and VOCs data, with pollution plumes traceable within 72 hours. Additionally, 320 automatic micro monitoring stations have been installed in cross-boundary water bodies such as the Yangtze River and Taihu Lake, allowing water quality anomalies to be detected within 30 minutes. The YRD region has harmonised enforcement standards and established the Blue Sword joint enforcement team, which inspected 12,000 enterprises in 2024 and addressed 1,320 cases of violations.

In terms of ecological protection, the YRD region has implemented measures including the closure, renovation, relocation, and conversion of all chemical enterprises within 1 km of the Yangtze River, the reclamation of 160 km of shoreline, and the addition of 320,000 mu (≈213 km²) of new forests. Furthermore, the Yangtze River Delta Wetland Bank has been established, with traded wetland compensation indicators totalling 2,800 mu (≈1.87

km²) and RMB 1.5 billion raised for cross-provincial wetland restoration. The Yangtze River Delta Regional Forestry Carbon Sink Trading Platform has been launched, completing carbon sink projects totalling 2 million tonnes. Additionally, the Yangtze Finless Porpoise Ex Situ Conservation Alliance has been jointly established, facilitating the sharing of DNA from artificially bred individuals.

Opening-up and collaborative planning for future industries

Leveraging future industries as a growth engine, the YRD urban agglomeration is advancing regional collaborative innovation while adopting differentiated approaches across frontier domains such as AI, quantum technology, and 6G. Shanghai demonstrates global competitiveness in AI and the metaverse; Hangzhou excels in algorithm application, Nanjing in chip design, and Suzhou in hardware manufacturing—each with its own distinct strengths. Anhui prioritises quantum information, Zhejiang focuses on brain-inspired intelligence, and Jiangsu specialises in future network technologies. The YRD provinces and municipality have introduced targeted policies to accelerate the development of future industries.

Urban resilience

Currently, various extreme weather and climate events, public health crises, and other sudden risks are occurring frequently. As the core carriers of economic activities, cities' ability to withstand emergencies, recover quickly, and adapt to changes directly affects the stability and sustainability of the investment environment. The Making Cities Resilient 2030 (MCR2030) initiative, led by the United Nations Office for Disaster Risk Reduction (UNDRR), has engaged over 1,800 cities, including six Chinese cities such as Chengdu and Zhuji.

China has undergone the largest and fastest urbanisation process in world history, while increasingly complex natural disaster risks pose severe challenges to cities' carrying capacity. In this context, China is reshaping urban safety protection systems through digitalisation, networking, and intelligentisation. This process shifts urban governance from the ways of passive emergency response to proactive prevention and creates broad application scenarios for new technologies and products. Virtual emergency command centres, supported by digital twin technology, optimise networks of emergency material reserve and plannings for rescue forces to ensure that cities can recover quickly from sudden incidents; the rising demand for drone-based emergency inspections and AI flood simulation systems is driving rapid growth in specialised markets like

intelligent monitoring equipment; the progress in sponge city construction allows technologies such as new waterproof materials and permeable pavement to be applied on a large scale, creating significant industrial expansion. It is noteworthy that China's standard systems and practical experience in smart city resilience are expanding globally through projects such as the Belt and Road green city cooperation and the natural resource evaluation and resilience assessment initiative with the World Bank.

This dimension selects five variables that cover the full process of city disaster risk assessment, monitoring, response, handling, and recovery: Disaster Prevention and Control Investment, measured by government fiscal input into urban disaster risks to assess prevention efforts and the development of emergency response capacity; Smart Governance Capacity²⁵, reflecting the level of intelligence and digitalisation in urban disaster risk prevention and response; Production Safety Level, measured by the rate of safety accidents per unit of production to indicate the control of safety risks in economic development; Property Risk Protection²⁶, reflected by the overall situation of property insurance purchases to indicate the degree of urban economic risk dispersion; Per Capita Medical Facilities, measured by the number of hospital beds per capita to assess the capacity of public health assurance during crisis events.

In the Urban Resilience dimension, cities such as Chengdu, Hangzhou, Beijing, Suzhou, Zhengzhou, Shenzhen, Nanjing, and Jinan rank highly, demonstrating their strong performance in disaster risk response capabilities; the achievements in resilience building by cities like Shijiazhuang, Harbin, Changchun, Baoding, and Xining significantly contribute to their overall scores.

Leveraging their distinct characteristics and facing varied risks and challenges, Chinese cities have developed numerous replicable and scalable resilience-building pathways: Beijing incorporates spatial, structural, operational, and community resilience into its overall urban planning; Hefei has established multiple resilient spatial zones with robust power and water supply functions; Chongqing has clearly designated key disaster risk prevention areas, delineating control lines for risks such as flooding and earthquakes. Shenzhen has integrated water management with urban governance through sponge city construction; Wuhan, aligned with the Yangtze River Economic Belt development strategy, has established a coordinated flood prevention system integrating rivers, lakes, and the city; Xiong'an New Area adopts simultaneous planning and construction of above-ground, underground, and digital cities, providing robust support for refined urban management and resident services. Zhuji in Zhejiang, by developing sponge city and national forest city plans, advances urban ecological and safety construction, has earned designation as the first Making Cities Resilient 2030 Resilience Hub in China.

In terms of Disaster Prevention and Control Investment, cities such as Beijing, Baoding, Tianjin, Harbin, and Chongqing perform strongly. In terms of fiscal expenditure, Beijing's related spending exceeds RMB 50 billion, focusing on smart meteorology to build a comprehensive sensing and precise early warning system for proactive risk prevention; Baoding's relevant expenditure surpasses RMB 27 billion, accounting for 22% of its general public budget, primarily allocated to post-disaster recovery, flood damage reconstruction, and flood prevention, enhancing the city's infrastructure resilience. In terms of technology application, Hangzhou integrates underground space data through city data models to support hazard identification; Jinan employs digital technology to establish a three-dimensional monitoring network combining space-based, air-based, and ground-based systems for real-time disaster risk detection.

In terms of Smart Governance Capacity, cities such as Beijing, Shanghai, Shenzhen, Guangzhou, and Hangzhou rank highly. Beijing advances its smart emergency system across multiple dimensions, including monitoring and early warning, command decision-making, and rescue operations, frequently deploying drones for patrol and rescue to meet mountainous disasters responses. Shanghai, Hangzhou, Nanjing and other cities in the Yangtze River Delta actively promote the application of technologies such as big data and cloud computing, establishing close cooperation and connections between cities to facilitate resource sharing and information exchange. Hefei collaborates with universities and research institutes such as Tsinghua University to deepen industry-academia-research-application synergy, jointly developing China's first urban lifeline safety engineering monitoring system, now serving as a technological sentinel for city safety.

In terms of Production Safety Level, cities such as Suzhou, Nanjing, Wuxi, Quanzhou, and Fuzhou perform strongly, achieving a balance between economic development and safety assurance. Nanjing has developed an intelligent safety risk map for hazardous chemical transportation, focusing on key influencing factors such as people, vehicles, roads, goods, and enterprises, providing a robust safety framework for the world's largest acetic acid and derivatives production base and the largest liquid methionine production base. Heavy industrial cities like Tangshan, focused on steel and chemicals, are enhancing production safety levels by adopting technologies such as AI safety helmets and "UWB + Beidou" satellite positioning systems. In Chongqing's densely built-up mountainous Yuzhong District, a comprehensive "one building, one code" system—integrated with image recognition and automated warning technologies—enables the rapid identification and resolution of fire hazards.



In terms of Property Risk Protection, cities such as Hangzhou, Chengdu, Shenzhen, Shijiazhuang, and Nanjing perform strongly. In terms of insurance coverage, major cities like Shanghai, Beijing, Shenzhen, Guangzhou, and Hangzhou lead substantially in property insurance amounts, driven by their large economic size and active commercial activities. When analysed by property insurance density per unit GDP, cities such as Haikou, Baoding, Shijiazhuang, Zhongshan, and Hangzhou show clear advantages, reflecting stronger risk awareness and a more proactive use of insurance mechanisms to transfer and resolve risks. China's insurance industry is actively innovating, introducing new property insurance products and methods such as comprehensive cyber security insurance, low-altitude aircraft exclusive insurance, and comprehensive catastrophe insurance community, which provide targeted solutions for risk protection in emerging fields.

In terms of Per Capita Medical Facilities, cities such as Harbin, Jinan, Xining, Zhengzhou, and Urumqi perform strongly. As major regional central cities, they provide extensive medical support to surrounding areas, leading to higher per capita hospital beds. In contrast, megacities like Beijing, Shanghai, and Shenzhen, due to their high population density, do not rank highly in per capita medical resource indicators. The swift response and effective treatment capabilities of medical systems are vital for managing natural disasters and addressing the challenges of an ageing population. Cities are actively strengthening medical resource reserves and

allocation: Wuhan has expanded emergency bed capacity by constructing, renovating, and expanding major epidemic treatment centres, significantly enhancing critical care capabilities; several regions are exploring telemedicine rescue mechanisms, using helicopter transfers for severely injured patients to achieve seamless integration of disaster area emergency care and off-site critical treatment; teleconsultation platforms enable medical staff in disaster zones to receive real-time guidance from experts in other places, effectively improving treatment efficiency for minor injuries.

In response to extreme climate challenges and the need for urban governance upgrades, China's resilient city construction demonstrates multiple values. Through diverse approaches, such as smart risk management in megacities and ecological resilience enhancement in small and medium-sized cities, China provides "Chinese Solutions" for the world. China is also opening up broad investment opportunities in areas like technology application, facility renovation, and mode innovation, injecting new momentum into the global emergency safety industry. Currently, technologies such as digital twins, AI monitoring, and drone inspections are accelerating their implementation; demand for products like intelligent monitoring terminals and modular rescue equipment is surging; the peacetime-emergency conversion mechanism, along with innovative business models like inclusive catastrophe insurance, is continuously evolving, collectively driving rapid growth in the safety emergency equipment and services sector. The future holds promise.

Urban Resilience Scoring Table

Rank	City	Disaster prevention and control investment	Smart governance capacity	Production safety level	Property risk protection	Per capita medical facilities	Total score
1	Chengdu	47	54	41	59	51	252
2	Hangzhou	29	56	46	60	46	237
3	Zhengzhou	53	42	24	52	57	228
4	Beijing	60	60	35	52	19	226
4	Suzhou	41	55	60	42	28	226
6	Shenzhen	52	58	52	58	5	225
7	Nanjing	13	52	59	56	40	220
8	Jinan	34	49	38	33	59	213
9	Guangzhou	46	57	33	56	17	209
9	Shanghai	33	59	29	54	34	209
11	Wuxi	46	45	58	22	36	207
12	Shijiazhuang	55	13	47	57	25	197
13	Wuhan	35	50	36	36	39	196
14	Ningbo	29	51	53	48	8	189
15	Chongqing	56	46	14	28	43	187
16	Xi'an	49	41	30	37	29	186
17	Tianjin	58	44	40	31	10	183
18	Qingdao	40	47	48	27	20	182
19	Guiyang	50	38	1	44	45	178
19	Changsha	21	37	25	42	53	178
21	Changchun	54	14	31	42	35	176
21	Fuzhou	48	43	55	14	16	176
23	Harbin	57	4	9	45	60	175
24	Baoding	60	3	17	52	41	173
25	Shaoxing	25	33	51	10	49	168
26	Shenyang	19	32	15	46	55	167
27	Kunming	43	19	10	43	47	162
27	Hefei	11	53	19	42	37	162
29	Jiaxing	5	34	37	23	54	153
30	Taiyuan	38	17	6	32	52	145
30	Foshan	25	40	27	47	6	145
32	Xiamen	29	48	44	17	4	142
33	Xining	51	2	3	25	58	139
34	Xuzhou	22	12	50	19	33	136
35	Nantong	16	27	54	12	26	135
35	Wenzhou	33	30	34	31	7	135
37	Changzhou	12	36	49	15	22	134
37	Yantai	40	29	28	5	32	134
39	Nanning	7	16	12	52	44	131
40	Taizhou	14	26	43	36	11	130
41	Nanchang	31	28	20	18	31	128
42	Zhongshan	9	21	56	38	2	126
43	Dongguan	3	39	26	54	1	123
44	Quanzhou	17	24	57	6	13	117
45	Lanzhou	23	15	7	21	50	116
45	Weifang	10	18	23	17	48	116
47	Weihai	8	31	42	3	30	114
48	Yancheng	26	9	45	7	24	111
49	Zhuhai	30	35	21	8	12	106
50	Yichang	42	6	18	1	38	105
51	Dalian	20	25	5	26	27	103
51	Urumqi	1	7	8	31	56	103
53	Tangshan	3	5	39	9	42	98
54	Yinchuan	19	8	22	25	21	95
55	Haikou	4	23	16	36	15	94
56	Huizhou	44	20	13	11	3	91
57	Hohhot	6	11	32	21	18	88
58	Jiangmen	37	10	11	13	14	85
59	Yangzhou	15	22	1	2	23	63
60	Zhaoqing	36	1	4	4	9	54

Chengdu: Smart governance forging a resilient defence line

In global urban governance, resilience has become the key measure of modern civilisation's progress. It is embedded not only in the infrastructure's robust framework and the vital pulse of the urban economy but also woven into the cultural heritage's essence, reflected in the wisdom of governance, and expressed through the pursuit of ecological civilisation. Chengdu, a historic city with a 3,000-year legacy, is crafting a unique narrative of resilience in the modern era. Through digitally empowered smart governance, Chengdu has not only built a robust urban shield to mitigate risks but also established a highly efficient urban hub. In doing so, it has created the Chengdu Model, a paradigm infused with distinctive Oriental wisdom, serving as an exemplar for cities worldwide.

Where cultural heritage and cultural resilience coexist

Blessed with a rich and storied history, Chengdu's cultural soul and spiritual essence have been shaped by the brilliance of the ancient Shu civilisation, deeply rooted in its identity. The golden foil of the Sun God Bird, unearthed at the Jinsha Site, stands as a symbol of China's cultural heritage and reflects the ancient Shu

people's awe and reverence for nature. The Dujiangyan Conservancy Project, benefiting communities for over 2,000 years, embodies the wisdom and resilience of ancestors in managing natural disasters and advancing agriculture. These historical treasures are not only cultural assets of Chengdu but also emblems of the city's enduring spirit, inspiring it to forge ahead and thrive in the modern era. Chengdu also serves as a hub where northern and southern cultures converge. The evolving intangible cultural heritages, such as Sichuan Opera face-changing, Shu embroidery, and Shu brocade, not only showcase the city's resilience in cultural preservation but also attract numerous tourists from both within China and abroad. As Chengdu advances its modernisation, its capacity to embrace and integrate diverse cultures reflects the vitality and resilience of its cultural innovation. Emerging cultural formats, including digital cultural and creative industries, animation, and gaming, are flourishing, drawing a wealth of young talent and infusing the city with fresh energy. Additionally, Chengdu has hosted various cultural events, such as the Chengdu International Music Week and Chengdu Creative Design Week, which have enhanced the city's cultural influence and global visibility.

Urban governance transformed by digital technology

In recent years, Chengdu, an ancient city imbued with 3,000 years of wisdom on harmonious coexistence with nature, has harnessed the dynamism of its thriving software development and IT services sector. Using digital technology as its brush, the city is painting a vibrant new chapter of intelligent urban governance, enabling technology to permeate every aspect of its evolution. In 2024, Chengdu ranked among the top tier in China's National Urban Smart Governance Index, with the number of urban operation digital signifiers rising to 1,933. This highlights Chengdu's robust capabilities in perception, analysis, and decision-making, empowering the city to achieve refined and efficient urban governance through digital means.

Urban brain and digital twin: Through the innovative application of urban brain, digital twin, and other technologies, Chengdu has developed a modern urban governance system that enables real-time data collection, efficient processing, and proactive responses. Leveraging the digital infrastructure of Smart Chengdu, the city has integrated vast amounts of urban operation data. This enables real-time mapping between Chengdu's physical and digital spaces, while supporting high-precision simulation forecasting and intelligent decision-making. Across the city, several digital twin platforms have been established, covering scenarios such as river basin management, traffic optimisation, and community governance. For example, the Urban Brain of the Chengdu High-tech Industrial Development Zone aggregates over 1.86 billion data entries

and supports 62 types of AI algorithms, facilitating unified urban governance through a single integrated system.

Smart governance in real scenarios

The in-depth application and innovative integration of digital technologies have enhanced the efficiency and effectiveness of Chengdu's modern urban governance. The city's intelligent energy management system enables real-time monitoring of energy consumption, improved energy distribution, and greater energy efficiency. Digital twin technology also contributes to optimising traffic governance. By using virtual simulation to predict congestion points, Chengdu effectively alleviates traffic jams in the downtown area. Additionally, Chengdu has a smart drainage integrated management and control platform that covers 7,600 kilometres of drainage pipelines. Equipped with sensors such as liquid level gauges and conductivity metres, the system enables real-time monitoring of sewage discharge and tunnel waterlogging, automatically triggering an emergency response when water levels exceed 30 centimetres. Additionally, Chengdu has innovatively introduced a "scan-to-report" system for grassroots governance. Residents can scan a QR code to report neighbourhood issues, and the system assigns the ticket to the relevant departments. Ninety-eight percent of issues are resolved within 48 hours. This mechanism establishes a closed-loop governance model: residents scan a QR code, the system intelligently assigns tickets, departments collaborate on handling, and the process is tracked end-to-end.

Emergency response empowered by digital technology

Chengdu has established an efficient emergency response mechanism powered by digital technologies. In emergencies, such as natural disasters and public health incidents, digital systems enable rapid alerting, resource deployment, and interdepartmental coordination. The high-tech zone has introduced an intelligent dispatch platform that integrates high-definition cameras and meteorological-hydrological data, enabling 24/7 monitoring. Additionally, the zone has implemented a four-tier early warning system (blue, yellow, orange, and red) to respond precisely to disasters like waterlogging. Building on its “112N” urban digital and intelligent foundation, Xinjin District has integrated meteorological warnings into its smart urban operation platform, enabling targeted pre-disaster notifications. Chengdu bolsters the capabilities of its emergency rescue personnel through digital simulation drills and targeted training. Additionally, comprehensive emergency care training has been delivered. In 2024, at least 50,000 individuals obtained emergency care certificates, and over 200,000 received first-aid knowledge training. These initiatives have not only strengthened the professional skills of emergency rescue teams but also heightened urban residents’ emergency awareness and self/mutual rescue capabilities.

“Protective web” for ecological well-being

Chengdu is intensifying efforts to protect the environment. By preventing and controlling air and water pollution, the city is enhancing the functionality and stability of its ecosystem. Through its sponge city initiative, Chengdu effectively mitigates rainstorm-induced flooding while improving the urban water environment. The programme incorporates technical modules such as rain gardens, ecological grassed ditches, and permeable pavements to facilitate the natural infiltration, purification, and discharge of rainwater. These measures not only reduce waterlogging incidents but also elevate the quality of the city’s ecological environment. Landmarks such as Longquan Mountain Urban Forest Park and Tianfu Greenway offer more than abundant natural resources and scenic views; they serve as vital ecological anchors within the sponge city system. In 2024, the forest park added 70,000 mu ($\approx 47 \text{ km}^2$) of greenery and landscape, while the greenway extended beyond 9,000 kilometres.

Green and low-carbon

The challenges posed by climate change are becoming increasingly severe, with extreme weather and climate events occurring more frequently. In 2024, the global average temperature reached a new historical record. This year marks the 10th anniversary of the Paris Agreement. Although countries are actively promoting green and low-carbon transitions, global climate governance still faces interference from factors such as unilateralism and protectionism, and the path to sustainable green and low-carbon development remains challenging.

China is actively advancing its green and low-carbon transition, having built the world's largest and most complete new energy industrial chain. A report from the International Renewable Energy Agency indicates that over the past decade, the average levelised cost of electricity for global wind and solar power projects has declined cumulatively by more than 60% and 80%, respectively, with a significant portion attributable to Chinese innovation, manufacturing, and engineering²⁷. Under the guidance of the New Quality Productive Forces, green and low-carbon development is not only an essential measure to address climate change but also a key pathway to propel China's economy toward an advanced green economy. Breakthroughs in new energy technologies such as photovoltaics and hydrogen energy not only facilitate the low-carbon transition but also generate emerging industries on a trillion-yuan scale. The application of new technologies like the Internet of Things and big data in environmental

monitoring has substantially improved pollution control efficiency. From the global supply of photovoltaic modules and wind power equipment to the vigorous development of the new energy vehicle industry, China offers broad development opportunities for numerous industries, fields, and both domestic and foreign enterprises. A Bloomberg report on new energy finance shows that in 2024, China's energy transition investment reached USD 818 billion, accounting for nearly 40% of the global total, and attracted substantial international capital to participate in China's green and low-carbon projects.

Chinese cities demonstrate strong innovation vitality and systematic thinking in the green and low-carbon transition. This dimension selects five variables: Waste Utilisation Level, measured by the scale of the waste resource utilisation industry to assess the resource reuse capacity and extent of cities; Government Environmental Protection Investment, measured by the level of government spending on energy conservation and environmental protection to reflect the emphasis on green and low-carbon development; Number of Green Factories²⁸, reflecting the actual level of market-driven green development; Carbon Emission Intensity²⁹, measured by carbon emissions per unit of GDP to evaluate the effectiveness of low-carbon economic transformation; Clean Energy Proportion³⁰, measured by the share of non-fossil energy consumption to assess the degree of clean energy adoption in cities.

In the Green and Low-Carbon dimension, top-ranking cities include major ones such as Shenzhen, Chongqing, and Changsha, as well as small and medium-sized ones like Foshan and Nanchang. Cities such as Foshan, Nanchang, Taizhou, Tangshan, Yichang, and Yancheng show notable contributions from this dimension to their overall scores. These cities have achieved significant results not only in ecological environment improvement and carbon emission control but also in economic transformation and upgrading, as well as enhancement of residents' well-being, serving as examples of green development.

Shenzhen serves as a pioneer in China's green and low-carbon development. Its industrial structure is highly modernised, with a low share of traditional high-energy-consumption industries, and its energy consumption and carbon emission intensity per unit of GDP are roughly one-third and one-fifth of the national average, respectively. The city lowers green development costs for businesses

through tools like carbon trading and climate financing, while actively enhancing its personal carbon incentive system, piloting zero-emission zones, and embedding low-carbon principles into urban governance. Currently, Shenzhen's share of green transportation modes stands at 78%, and the penetration rate for NEVs is 75%.

Tangshan, a key national steel hub, is pioneering green development strategies for traditional industrial cities. Its steel sector has adopted ultra-low emission processes, creating a system where solid waste is fully recycled on-site, with a comprehensive utilisation rate of 95%. Drawing on northern barren mountains and southern tidal flats, the city has built photovoltaic bases at the million-kilowatt scale. It is also developing an integrated model combining wind and solar power generation with hydrogen storage to supply clean energy to businesses, rebuilding the local green ecosystem through technological advancements and new energy systems.



In terms of Waste Utilisation Level, cities such as Nanchang, Taiyuan, Taizhou, Yichang, and Zhaoqing rank highly. China is building a comprehensive waste recycling system based on the core principles of reduction, reuse, and recycle. Established in 2024, China Resources Recycling Group Co., Ltd. is leading industry development. Cities are also leveraging their industrial characteristics and geographic conditions to explore the construction of zero-waste cities. Nanchang focuses on sectors such as steel, papermaking, and automotive components, developing a series of integrated recycling, processing, and utilisation bases for renewable resources. Taizhou promotes a system of distributed activated carbon adsorption with centralised regeneration, reusing regenerated waste activated carbon for VOCs treatment. Zhaoqing has developed a technology to create porous ceramics from aluminium ash, cutting carbon emissions by 160,000 tonnes per year and converting waste into high-value products. Shanghai and Jiangsu are working together to establish a zero-waste city cluster in the Yangtze River Delta, creating a cross-provincial platform for solid waste trading. In the coming years, the decommissioning of China's wind and solar equipment will spur substantial growth in the processing market for new types of solid waste.

In terms of Government Environmental Protection Investment, cities such as Xi'an, Tangshan, Shenzhen, Chongqing, and Hefei rank highly. Chinese local governments, aligned with dual carbon goals, have increased investment in multiple areas, including industrial decarbonisation, green transportation, ecological restoration, green energy, and green technology innovation. In terms of annual investment scale, Beijing and Chongqing lead with nearly RMB 20 billion; in terms of investment intensity (as a proportion of general public budget expenditure), Yinchuan, Tangshan, and Urumqi exceed 5%. A report by the International Energy Agency notes that over the past decade, China's share of global clean energy spending has increased from one-quarter to nearly one-third, with its total energy investment now equalling the combined sum of the United States and the European Union.

In terms of Number of Green Factories, major cities such as Shanghai, Tianjin, Chongqing, Beijing, and Shenzhen demonstrate strong performance. On one hand, these cities, with their early industrial development, initiated green transitions sooner; on the other hand, cities like Beijing and Shanghai, with robust green technology R&D ecosystems, have enabled numerous enterprises to become early adopters of green technologies. Currently, China has over 6,000 national-level green factories, with some exploring “zero-carbon factory” certification. As green and low-carbon technologies increasingly integrating into various industries, the green transformation of China’s factories will become a key market for global green technology applications.

In terms of Carbon Emission Intensity, Shenzhen, Beijing, Xiamen, Haikou, and Hangzhou lead the rankings. Cities such as Shenzhen and Beijing, having initiated technological upgrades and phased out energy-intensive industries at an early stage, have supported low-carbon urban operations. Coastal cities like Haikou, Xiamen, and Qingdao, driven by marine conservation goals, implemented strict entry barriers for high-pollution industries early on, resulting in lower carbon emission intensity. By 2025, China’s dual carbon control system will be fully rolled out, integrating sectors like steel and cement into the national carbon market, boosting the value of carbon financial instruments and prompting businesses to adopt comprehensive carbon management systems. Areas like carbon emission monitoring, carbon trading platforms, and carbon asset management are poised for steady growth.





In terms of Clean Energy Proportion, cities such as Xining, Chengdu, and Kunming have gained significant advantages by leveraging their natural geographic and climatic conditions. By the end of 2024, Qinghai's clean energy installed capacity reached 67.888 million kilowatts, with its strong green energy capacity attracting a doubling of local computing power investment. Chongqing, through the "Tibet-to-Chongqing" and "Xinjiang-to-Chongqing" power transmission projects, integrates western clean electricity with local new energy vehicle and bio-industries, establishing a model of clean energy supply, low-carbon industry clustering, and circular economic development. Cities such as Guangzhou, Shenzhen, and Foshan are actively developing clean energy sources like hydrogen and advanced energy storage. Changdao in Yantai leverages marine energy integration technologies to establish a dual-track system of "off-island power imports + on-island clean energy", aiming to achieve net-zero greenhouse gas emissions across the region by 2035.

According to the PwC's 2024 *Global Investor Survey*, 64% of global investors are pressing companies to boost investments in cutting carbon emissions, underscoring that green technology and environmental management are now regarded as vital for long-term business success. China's green investments have expanded beyond individual sectors, creating a trillion-yuan market fuelled by technological progress, policy incentives, and broadening market reach. Investors can deliver both societal benefits and financial gains by tapping into the full ecosystem of clean energy adoption, low-carbon technology deployment, and carbon asset growth.

Green and Low-Carbon Scoring Table

Rank	City	Waste utilisation level	Government environmental protection investment	Number of green factories	Carbon emission intensity	Clean energy proportion	Total score
1	Shenzhen	32	58	56	60	54	260
2	Chongqing	36	58	58	36	48	236
3	Changsha	26	53	53	55	41	228
4	Foshan	53	22	43	54	54	226
5	Chengdu	21	46	46	53	59	225
6	Nanchang	60	54	22	50	25	211
7	Guangzhou	24	32	49	51	54	210
7	Shanghai	22	42	60	45	41	210
9	Beijing	11	52	57	59	25	204
10	Hangzhou	40	28	33	56	41	198
11	Fuzhou	50	24	40	28	54	196
12	Yichang	57	34	9	37	57	194
12	Changzhou	41	37	42	33	41	194
14	Xiamen	4	36	47	58	48	193
15	Wuhan	28	27	51	42	41	189
16	Xi'an	14	60	54	52	6	186
17	Taizhou	58	27	27	24	48	184
18	Kunming	27	43	41	14	58	183
19	Changchun	51	46	35	16	28	176
19	Hefei	23	58	30	49	16	176
21	Qingdao	15	39	45	47	25	171
22	Tangshan	55	60	48	2	2	167
23	Dongguan	1	49	29	32	54	165
24	Zhengzhou	12	55	44	38	14	163
25	Nantong	44	11	22	44	41	162
25	Shijiazhuang	49	48	36	23	6	162
27	Yancheng	52	6	18	30	55	161
27	Ningbo	17	32	55	13	44	161
29	Jiaxing	48	4	32	26	48	158
30	Suzhou	30	38	52	21	14	155
31	Yangzhou	38	34	16	39	25	152
31	Tianjin	39	30	59	17	7	152
33	Harbin	42	18	50	10	25	145
33	Yinchuan	54	51	14	1	25	145
35	Shenyang	19	36	40	20	29	144
36	Jinan	43	30	20	46	4	143
37	Nanning	13	13	14	43	56	139
38	Quanzhou	34	19	40	27	17	137
38	Xining	3	46	23	5	60	137
40	Urumqi	35	50	14	3	33	135
41	Huizhou	29	40	26	11	26	132
42	Wuxi	10	41	34	35	9	129
43	Guiyang	18	11	28	29	42	128
44	Baoding	16	48	7	22	33	126
45	Jiangmen	47	3	2	18	54	124
46	Yantai	31	17	24	25	25	122
47	Wenzhou	25	9	37	34	14	119
48	Zhongshan	7	12	6	48	41	114
49	Taiyuan	59	27	16	9	2	113
50	Zhuhai	37	9	18	40	8	112
51	Zhaoqing	56	23	2	12	16	109
51	Shaoxing	46	5	14	41	3	109
53	Xuzhou	45	16	10	19	18	108
54	Lanzhou	33	15	6	6	44	104
54	Haikou	8	2	3	57	34	104
56	Hohhot	2	22	19	4	33	80
57	Weihai	9	2	4	31	33	79
58	Dalian	5	7	31	8	27	78
59	Nanjing	20	20	9	15	10	74
60	Weifang	6	14	25	7	14	66

Changzhou: A capital of new energy

Sustainable development has become a global priority, essential for long-term economic prosperity, social harmony and stability, and sustained habitability. A city that advances steadily on the path of sustainable development will undoubtedly gain a competitive edge in the future. Situated at the heart of the Yangtze River Delta, Changzhou is forging its own distinctive roadmap to sustainable development, combining unique charm with resolute commitment. In 2024, the city's GDP rose by 6.1% to RMB 1,081.36 billion, with its growth rate ranking third among China's trillion-yuan GDP club cities. Its industrial output exceeded RMB 2.2 trillion, making the greatest contribution to the economic growth of Jiangsu Province. The new energy industry surged beyond RMB 850 billion, achieving the nation's third-highest level of industrial agglomeration and topping investment attractiveness for three consecutive years. These achievements powerfully demonstrate that a trillion-yuan city is advancing with renewed momentum.

Rise of the “capital of new energy”

Changzhou has successfully transformed from an industrial star to the new energy capital in China. This journey began with the introduction of the *Action Plan for Revitalising Five*

Major Industries in Changzhou in 2009. Moreover, the city elevated the new energy industry to a citywide strategic priority in 2013, committing half of its resources to this sector. In 2015, the city strategically acquired a state-owned enterprise engaged in the lithium-ion battery industry. In 2016, the municipal government attracted leading new energy vehicle and battery manufacturers. In 2019, Changzhou partnered with a leading new energy automaker to establish a local OEM plant. In 2021, the city attracted multiple top-tier new energy companies to relocate their headquarters. Meanwhile, in 2023, the local government established a new energy group, dedicating significant resources to developing six key sectors, including distributed photovoltaic generation, charging and swapping infrastructure, hydrogen energy, and new types of energy storage. With more than a decade of development, Changzhou has firmly established itself as a leading player in the new energy industry. In 2024, Changzhou was officially awarded the title of China's New Energy Capital by the Ministry of Industry and Information Technology. The case *Key to Transformation into China's New Energy Capital* was recognised as a national model of the year.

Diversified and collaborative development of new energy industries

Changzhou's new energy industry boasts a well-developed layout, forming a diversified development pattern centred on NEVs, power batteries, photovoltaics, wind energy, and hydrogen energy storage. Each field features a complete industry chain and significant clustering effects driven by leading enterprises, with efficient collaboration in technological innovation and market expansion, positioning its overall competitiveness among the top in the country.

In the new energy vehicle sector, Changzhou has established a complete industry chain encompassing whole vehicle manufacturing, power batteries, electric motors, charging stations, and more, attracting nearly 4,000 related manufacturing enterprises. In 2024, Changzhou's new energy vehicle production reached nearly 800,000 units, with the penetration rate increasing to 46.5%, and the market scale continuing to expand.

The strength of the power battery industry is also prominently demonstrated. According to data from the *China New Energy Vehicle Power Battery Industry Development White Paper (2025)*, two enterprises in Changzhou ranked among the global top ten for power battery shipments in 2024, highlighting their technological innovation capabilities and global market expansion in this field.

In the power generation sector, Changzhou's photovoltaic, wind, and solar thermal industries are advancing in collaboration, maintaining sustained development momentum. In the photovoltaic industry, as of the end of June 2025, a local leading solar enterprise's cumulative shipments of 210 modules surpassed 200 GW, a scale equivalent to the total installed capacity of nine Three Gorges Dam, establishing its leadership in production capacity and market influence. In the wind power sector, a leading enterprise achieved a technological breakthrough, becoming the first in China to attain 3,000 tonnes of annual capacity for a 50K large-tow carbon fibre line, with its products capturing a 30% share of the global wind power fabric market and demonstrating core competitiveness at the top global level.

In the energy storage sector, Changzhou is focusing on developing the distinctive Hydrogen Valley industry cluster, which has attracted over 40 enterprises across the hydrogen energy industry chain, covering the full spectrum of hydrogen production, storage, transportation, utilisation, and testing, with the industrial ecosystem beginning to take shape. According to the plan, by 2026, the annual output value of the Hydrogen Valley hydrogen energy and related industries in Changzhou is expected to exceed RMB 5 billion, becoming a new growth driver for the high-quality development of regional new energy industries.

The progression of industries driven by technological innovation

Changzhou has been increasing R&D investment, nurturing innovative enterprises, prioritising emerging industry projects, and establishing world-class research platforms to significantly enhance practical high-tech innovation capabilities. In 2024, Changzhou's R&D expenditure reached 3.41% of its GDP. The city now hosts more than 100 listed companies, over 5,400 high-tech enterprises, 232 specialised and sophisticated "little giants" (innovation-driven SMEs with core technologies in niche markets and significant growth potential), and 39 manufacturing champions. In terms of technological innovation, Changzhou has seen rising numbers of patents and high-tech enterprises year on year. In 2024, the city had 42 projects listed as major projects in Jiangsu Province, with an annual planned investment of RMB 31.5 billion. Among these, 20 projects related to strategic emerging industries, focusing on new energy, synthetic biology, semiconductors, and advanced materials, while the city ranked second in the province for major industrial projects with 30 initiatives.

Pioneering the journey to a "zero-waste city"

As one of the cities selected for the second batch of the national pilot initiative, Changzhou has shown exceptional performance by actively promoting waste reduction, recycling, and harmless treatment across the industrial, agricultural, domestic, and construction sectors. The city has focused on five key areas: the collection-transport-storage system for organic wastes, industrial and sectoral solid waste governance, distinctive zero-waste recycling, green construction, and coordinated governance of waste and carbon reduction for multi-source solid wastes. Prioritising the construction of a waste recycling system, Changzhou has issued the *Action Plan for Accelerating the Construction of a Waste Recycling System in Changzhou*. Through this system, the city has significantly reduced waste generation while enhancing resource utilisation, laying a solid foundation for sustainable development. Changzhou integrates the new energy industry with waste recycling, actively exploring the reuse of end-of-life batteries from NEVs. These efforts deliver both economic and environmental benefits to the city. This innovative approach not only addresses waste management challenges but also offers new insights and pathways for the sustainable development of the new energy industry.

Practicing the dual carbon goals for green development

Changzhou is accelerating its efforts towards carbon peaking and carbon neutrality by leveraging the near-zero-carbon pilot initiative and green transportation. In 2024, Changzhou issued the *Three-Year Action Plan for Pilot Construction of Near-Zero-Carbon Parks and Factories in Changzhou (2024–2026)*, which establishes near-zero-carbon benchmarks over three years for piloting near-zero-carbon parks and factories. Looking ahead, with the aim

of becoming a national pilot city for carbon peaking, Changzhou will implement carbon budget management and explore a more scientific and rational system for carbon emission management. Meanwhile, the city will develop a green transportation system, promote the adoption of NEVs, optimise traffic structures, and reduce congestion and exhaust emissions. These initiatives aim to enhance the city's overall environmental quality and residents' quality of life, contributing Changzhou's strength to achieving the dual carbon goals.



Huzhou: A Chinese model for green and low-carbon development

Located on the southern bank of Taihu Lake, Huzhou derives its name from the lake. With over 2,300 years of history and positioned in the south of the Yangtze River, this ancient city is renowned for its stunning landscapes and exceptional ecosystem. On 15 August 2005, during an inspection in Yucun Village, Anji County, Huzhou City, Chinese President Xi Jinping—then Secretary of the CPC Zhejiang Provincial Committee—first proposed the concept that “lucid waters and lush mountains are invaluable assets”. Over the past two decades, Huzhou has pioneered a high-quality development pathway—pursuing green development, thriving through ecological advancement, embracing prosperity from sustainability, and sharing ecological benefits with its people. These efforts position the city as the sole model for national innovative sustainable development and international cooperation on ecological civilisation.

Solidifying institutional foundation through comprehensive legislation

The *Regulations on Promoting the Construction of Ecological Civilisation Model Cities in Huzhou City*, implemented in 2024, represent the first local regulation in the country to focus on developing an ecological civilisation model city. This initiative has codified Huzhou’s achievements in exploring ecological civilisation construction in recent years, while addressing weaknesses, vulnerabilities, and challenges under new

circumstances. These efforts provide a robust legal foundation for the city to establish itself as an ecological civilisation model.

Clarifying transformation pathways through guidelines. In line with the *14th Five-Year Plan for Ecological Environment Protection in Huzhou*, the city is committed to green development and will continue to promote structural adjustments in industries, energy, transportation, and agricultural inputs. At the same time, integrating green development into economic transition will enhance the city’s intrinsic drive for improving ecological environment quality. The *14th Five-Year Plan for Green Circular Development in Huzhou* outlines that, guided by the new positioning and goals of green circular development, Huzhou will prioritise eco-city construction to advance the socioeconomic transition to green, circular, and low-carbon development. This will be achieved by building a modern circular industrial system, enhancing the resource recycling system, promoting resource conservation and efficient use, and developing a low-carbon energy supply system. Additionally, efforts will focus on upgrading infrastructure to green standards, promoting green lifestyles, establishing a green technology innovation system, and refining the mechanisms for circular economy development. Huzhou is endeavoured to comprehensively advance the transformation of its economic and social development towards green, circular, and low-carbon models.

Fuelling the green transition through finance

As one of the first batch of pilot cities nationwide for green finance reform and innovation, Huzhou has systematically advanced effective practices in this area since 2017, addressing persistent challenges in sustainable investment. Leading the way in establishing a green finance standard system, the city has issued 26 standards and implementation guidelines. By developing digital evaluation systems for ESG and carbon accounts, Huzhou creates green and low-carbon profiles for enterprises, guiding financial institutions to provide differentiated pricing for green financing entities. This includes offering higher credit facilities at lower interest rates via expedited approval channels. In July 2025, the Bank of Huzhou released the *Transformation Plan for Bank of Huzhou*, the first transition plan in China's banking sector. The plan outlines a three-stage initiative for the bank: first, peaking carbon emissions from daily operations by 2028 and reducing carbon intensity per capita by 2030; second, completing full-scope carbon accounting by 2035; and third, achieving carbon-neutral operations.

Motivating low-carbon transformation through digital-intelligence empowerment

Huzhou is actively implementing the “carbon efficiency+” mechanism to unlock ecological value through digital

intelligence. The city is developing an integrated carbon measurement system that saves time while reducing errors and costs. It has also introduced an emission-efficiency-code system to evaluate corporate carbon performance across three metrics: carbon emissions, carbon efficiency, and carbon neutrality. Meanwhile, the local government has launched the Carbon Expert app to encourage citizens to adopt green lifestyles via a carbon credit system. Huzhou has also established accounting standards for household photovoltaic generation and electric vehicle emission reductions, and facilitates carbon sink trading. In addition, considering the supply and demand dynamics of the green industry, the city collaborates with third-party energy-saving service providers to implement list-based management for high-carbon enterprises. Huzhou has also achieved interconnection with the financial integrated service platform of the Zhejiang Regulatory Bureau of the National Financial Regulatory Administration (formerly the Zhejiang Regulatory Bureau of the China Banking and Insurance Regulatory Commission). It also connects with the Zhejiang Green Electricity Trading System to deliver comprehensive trading services. In terms of green consumption, all star-rated hotels in Huzhou ceased proactively providing disposable plastic items in 2024, while the city developed over 2,000 bamboo products to promote the substitution of plastic items with bamboo alternatives³¹.

Empowering the transformation and upgrading of green intelligent manufacturing through diversified innovation

Huzhou is the only model city in China characterised by green intelligent manufacturing to pilot the Made in China 2025 initiative. Guided by the Bountiful Harvest Plan³² across the city, Huzhou has established a trinity system for enterprise innovation, comprising laboratories, technological innovation centres, and research institutes. This system supports the implementation of the city's innovation blueprint—gathering new talents to cultivate emerging economies amid its picturesque landscapes. Local enterprises incorporate green and low-carbon principles across all stages, from product design and manufacturing to sales, to drive forward green and intelligent manufacturing. Supported by a digital transition towards information- and intelligence-oriented development, Huzhou achieves precise control in production processes and efficient resource utilisation.

Showcasing the charm of Chinese solutions on the international stage

In February 2024, the Huzhou Experience was showcased at the sixth session of the United Nations Environment Assembly, where Huzhou engaged with global representatives to build consensus for practical initiatives. Through collaborative exchanges, all parties sought to implement effective, inclusive, and sustainable global biodiversity conservation. In May 2025, the Huzhou Future Conference drew participants from Hungary and other countries, focusing on how high-tech empowers green production and smart governance. The event presented the

city's cutting-edge explorations in green development to the international community. In July 2025, Huzhou participated in the United Nations High-Level Political Forum on Sustainable Development, sharing its practical experience in sustainable development based on the concept that “lucid waters and lush mountains are invaluable assets”.

Expanding boundaries of green development in international cooperation

At the end of 2022, Huzhou was designated as the world's sole model city for international cooperation on ecological civilisation at the 15th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands (or COP 15), serving as a model and benchmark for global ecological civilisation construction. Huzhou is devoting all efforts to strengthening international exchanges by initiating an alliance of cities around Taihu Lake to implement the Kunming-Montreal Global Biodiversity Framework, making it the world's first such alliance to respond to the framework. The city has also established the Anji Yucun Ecological Civilisation International Communication Centre and International Communication Platform Observation Point, demonstrating its practical, theoretical, and institutional achievements in implementing the concept that “lucid waters and lush mountains are invaluable assets”. Furthermore, Huzhou has developed a regular exchange mechanism with the United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity, the International Knowledge Centre, and the BRI International Green Development Coalition.

Market environment

A vibrant market environment serves as a cornerstone for attracting business investment, bolstering economic resilience, and unlocking opportunities for innovation. Active market participants infuse energy into the economy, but high costs for land, rent, and labour quietly diminish a city's appeal. Strong digital governance by the government, coupled with a clear framework promoting regulated operations and fair competition, significantly enhances the business experience and restores confidence among enterprises.

China has made substantial progress in enhancing its market and business environment governance, yielding impressive outcomes. In breaking down barriers to market access, the development of a unified national market has gained momentum, with the market access negative list steadily reduced, significantly lowering transaction costs during the entry process. In refining the operating environment, the *Regulation on Fair Competition Review* came into effect in 2024, bolstering measures against monopolies and unfair competition. Additionally, guidelines such as the *Anti-Monopoly Guide on Industry Associations* have been introduced to standardise market order. According to the World Bank's 2024 *Doing Business* report, China's business environment ranks 31st globally, marking a remarkable 65-position improvement since 2013. In April 2025, the *World*

Bank Enterprise Survey in China, conducted by PwC, revealed that China surpassed the median performance of 103 economies in six key areas, including the resolution of commercial disputes and taxation. The country achieved world-leading standards in 12 evaluation metrics, such as electronic payments and getting electricity, while attaining globally advanced standards in areas like construction permits.

Market environment encapsulates a city's economic vibrancy and governance efficiency, reflecting both the dynamic growth of market entities and the strength of institutional and resource support. Market Entity Vitality variable, determined by the number of market entities at year-end and their growth rate, serves as a barometer of the market's dynamic vitality. Digital Government Services³³ evaluates the extent of digitisation in government services, highlighting the ease of administrative processes. Enterprise Regulatory Compliance gauges the robustness of market regulatory frameworks and the degree to which businesses operate lawfully and compliantly. Operating Cost Burden³⁴, which includes office rental costs and average wages, reveals the overall cost pressures businesses face. Fiscal Self-Sufficiency Capacity assesses the financial health of local government and its capacity to sustainably foster market development.

In the Market Environment dimension, Hangzhou, Shenzhen, Beijing, Shanghai, and Foshan achieve top rankings, driven by their robust factor supply, advanced digital government services, and strong institutional innovation capabilities, which consistently sustain market vitality. The performance of Shaoxing, Dongguan, Nantong, Quanzhou, Zhongshan, Haikou, and Hohhot in this dimension significantly boosts their overall rankings, underscoring the efforts of these regional cities to optimise business environments, enhance service efficiency, and provide stable financial support.

First-tier cities maintain their edge through resource aggregation and strategic policy guidance, while non-provincial capital cities carve out distinctive competitiveness by controlling costs, refining regulations, and delivering efficient services. For instance, Hangzhou capitalises on its robust private and digital economies, streamlining institutional transaction costs through innovative digital government services reforms. Shenzhen effectively manages comprehensive costs and lowers entry barriers with flexible policies and sophisticated government services. Beijing fosters fair competition through a strong legal framework and bolsters public services with its fiscal strengths. Shanghai enhances factor allocation

and stabilises expectations by leveraging internationalised governance and transparent regulations. Foshan, rooted in its manufacturing base, harnesses substantial fiscal resources to nurture market entities, drive institutional reforms, and support industrial growth.

In terms of Market Entity Vitality, five cities—Guangzhou, Wuhan, Kunming, Haikou, and Changsha—stand out. In 2024, the national daily average for newly established enterprises reached 24,000, while the number of new foreign-invested enterprises totalled 59,000, marking a 9.9% year-on-year increase. Six cities—Shenzhen, Chengdu, Chongqing, Guangzhou, Shanghai, and Xi'an—each boast over 3 million market entities. Meanwhile, Yichang, Wuhan, and Kunming achieved market entity growth rates exceeding 10%, with Wuhan and Guangzhou each recording nearly 300,000 new entities annually, positioning them in the first tier of market vitality. Guangzhou, harnessing its dynamic digital economy and biomedicine sectors, led the nation in 2024 for the number of newly established technology-based SMEs. Wuhan, leveraging its expertise in optoelectronics information and the digital economy, surpassed 16,000 high-tech enterprises and technology-based SMEs, with private enterprises accounting for over 90% of this total.

In terms of Digital Government Services, Beijing, Shanghai, Hangzhou, Shenzhen, and Guangzhou lead with the highest scores. The *United Nations E-Government Survey 2024* reveals that China's E-Government Development Index (EGDI) has climbed to 35th globally, with government service websites earning full marks for information provision. Beyond major hubs like Beijing, Shanghai, and Hangzhou, which boast advanced digital economies, second-tier cities are steadily enhancing their digital government service capabilities. In Qingdao, real estate transactions, registration, and taxation are streamlined through a single window—both online and offline—and completed in one process, with 98% of services finalised on the same day. Xiamen, leveraging digital technology, employs import cargo unloading diversion and export cargo gate diversion models, eliminating cargo transit and dock waiting times while optimising loading, unloading, and transportation processes.

In terms of Enterprise Regulatory Compliance, Shanghai, Wuhan, Shenzhen, Beijing, and Suzhou stand out with top rankings, while cities like Xining, Taiyuan, Hohhot, and Yinchuan see their overall scores significantly elevated by their strong performance in this variable. In recent years, China has actively refined its legal and regulatory framework for regulated operations, with certain cities spearheading pilot projects to transform market operation needs into specific institutional norms and legal protections. Various departments have introduced lists exempting first-time violations from penalties, waiving fines for minor infractions, and reducing penalties, fostering a more supportive environment for market entities. Concurrently, China is vigorously advancing the integration of the social credit system across all facets of economic and social development. These efforts have cultivated a growing atmosphere of mutual trust and benefit among market entities, contributing to an increasingly regulated and orderly market environment.



In terms of Operating Cost Burden, cities such as Baoding, Weihai, Weifang, Tangshan, Yichang, and Quanzhou exhibit strong competitiveness, benefiting from lower office building rents and reasonable wage levels. In contrast, Beijing, Shanghai, Shenzhen, Guangzhou, and Hangzhou score lower in this variable due to elevated rents and higher wages. Major cities can mitigate cost pressures through strategic measures, such as institutional innovation and enhanced services. For instance, efficient government services can reduce institutional transaction costs, while robust industrial support can lower supply chain expenses, helping to offset some explicit cost burdens. Furthermore, innovative models like shared offices, remote working, and flexible employment arrangements enable enterprises to alleviate financial pressures effectively.

In terms of Fiscal Self-Sufficiency Capacity, Hangzhou, Suzhou, Nanjing, and Wuxi boast fiscal self-sufficiency rates above 90%, while seven cities, including Xiamen, Dongguan, Shanghai, and Foshan, exceed 80%. This financial strength enables these cities to allocate substantial resources to critical business environment areas, such as digital enhancements to government services and intellectual property protection. Regarding revenue and expenditure growth, Yichang led the 60 cities in 2024 with a 9.3% year-on-year increase in general public budget revenue, followed by Harbin, Hohhot, and Zhaoqing, each achieving growth rates above 7%, reflecting robust

momentum. On the expenditure side, Baoding significantly boosted investments in livelihood areas like healthcare, education, and public services, with related spending rising by 40% year-on-year. Harbin's expenditures on science, technology, and cultural communication surged by 60% year-on-year, while Wuhan's spending on social security and employment also grew by 60%. Cities are strategically increasing investments tailored to their unique development needs, providing robust support for urban progress and enhancing residents' quality of life.

China's business environment reforms are progressing into deeper and broader realms, with digital government services advancing from "one-stop online processing" to "seamless smart processing". This shift allows digital tools to handle more workload, thereby easing the burdens on enterprises. Regarding market regulations, systems for fair competition reviews and intellectual property protection are set to become more sophisticated, further breaking down entry barriers and guaranteeing fair competition for all market entities. By coordinating efforts in factor supply, cost optimisation, and legal protections, cities not only draw in capital and technology but also establish the foundations for aligning with international regulatory frameworks. Looking ahead, China will cultivate a more inclusive, appealing, and competitive investment landscape, offering a robust platform for enterprises to flourish and capitalise on opportunities within the country.

Market Environment Scoring Table

Rank	City	Market entity vitality	Digital government services	Enterprise regulatory compliance	Operating cost burden	Fiscal self-sufficiency capacity	Total score
1	Hangzhou	55	58	53	5	60	231
2	Shenzhen	53	57	58	3	52	223
3	Beijing	52	60	57	2	43	214
4	Shanghai	35	59	60	2	54	210
5	Foshan	54	37	25	37	53	206
6	Wuxi	19	53	51	20	57	200
6	Wuhan	59	27	59	26	29	200
6	Dongguan	50	15	29	51	55	200
9	Shaoxing	19	52	40	48	36	195
9	Chengdu	41	55	46	12	41	195
11	Xiamen	15	54	50	16	56	191
11	Suzhou	27	42	56	7	59	191
13	Nantong	51	32	38	45	22	188
14	Nanjing	29	39	55	6	58	187
14	Ningbo	25	44	54	14	50	187
14	Quanzhou	48	38	14	56	31	187
17	Hefei	48	40	47	25	25	185
18	Changzhou	10	50	48	27	48	183
18	Guangzhou	60	56	27	5	35	183
20	Fuzhou	36	46	42	18	40	182
20	Changsha	56	34	30	18	44	182
22	Zhengzhou	43	3	45	45	42	178
22	Zhongshan	30	45	5	47	51	178
24	Qingdao	27	47	39	10	47	170
25	Haikou	57	20	33	19	33	162
26	Jiaxing	20	43	22	31	45	161
27	Hohhot	33	31	52	35	8	159
28	Wenzhou	49	51	12	30	16	158
29	Chongqing	41	49	31	24	11	156
30	Kunming	58	11	28	30	28	155
31	Yantai	5	22	44	49	34	154
32	Jinan	16	35	41	14	46	152
32	Taizhou	38	41	10	40	23	152
32	Yichang	42	17	32	56	5	152
35	Xuzhou	46	29	7	51	15	148
36	Taiyuan	38	1	49	35	21	144
37	Shijiazhuang	24	13	35	45	24	141
38	Nanning	22	48	24	33	12	139
39	Weifang	13	16	19	58	32	138
40	Xi'an	45	23	26	16	27	137
41	Jiangmen	22	25	9	52	26	134
42	Urumqi	32	5	36	9	49	131
43	Huizhou	15	21	15	46	30	127
44	Harbin	39	34	8	40	1	122
45	Shenyang	19	14	18	30	37	118
46	Baoding	35	4	13	60	2	114
46	Tianjin	32	28	23	11	20	114
48	Yancheng	12	36	2	53	7	110
49	Nanchang	45	8	3	36	17	109
50	Weihai	2	26	4	60	14	106
51	Dalian	24	9	11	22	38	104
52	Yinchuan	9	12	37	38	6	102
52	Guiyang	9	30	20	24	19	102
54	Lanzhou	11	10	34	32	10	97
54	Zhaoqing	4	24	6	54	9	97
56	Yangzhou	1	20	17	45	13	96
56	Changchun	29	6	16	41	4	96
58	Zhuhai	7	18	21	8	39	93
59	Tangshan	4	7	1	58	18	88
60	Xining	6	2	43	21	3	75

Hangzhou: Foster high-level business environment

Located on the southern wing of the Yangtze River Delta and the western tip of Hangzhou Bay, Hangzhou serves as the economic, cultural, and scientific and educational centre of Zhejiang Province. The city not only acts as the intersection of the extensions of the Silk Road Economic Belt and the 21st Century Maritime Silk Road but also as a strategic hub along the Online Silk Road. From e-commerce giants to the “six tigers” (namely DeepSeek, Game Science, Unitree Robotics, ManyCore, BrainCo and Deep Robotics) that went viral in early 2025, Hangzhou has nurtured numerous renowned local private enterprises and countless innovative SMEs. Hangzhou vitalises local enterprises within a favourable

business environment. In 2021, the city was one of the six pilot cities in China for business environment innovation in the first batch. In recent years, Hangzhou has been piloting the national strategy for business environment innovation, ranking first for five consecutive years in the *Evaluation of the Business Environment of 10,000 Private Enterprises*. Hangzhou’s ascent to a top-tier business environment stems from its age-old inclusiveness and traditional farming-reading culture, post-reform adherence to the “big market, small government” model, and relentless efforts to benchmark world-class standards in optimising its commercial ecosystem.



Consolidating reform achievements through innovative legislation

In 2023, Hangzhou introduced Zhejiang Province's first local regulation on optimising the business environment, the *Hangzhou Regulation on Optimising the Business Environment*. This regulation has institutionalised the city's experiences and practices in enhancing the business environment, converting them into binding norms to ensure the stability and continuity of policy measures. For example, this Hangzhou-style regulation clarifies that enterprise-friendly policies will be released and implemented through a unified digital platform, demonstrating the city's achievements in fostering a new type of government-business relationship through informatisation. The regulation also requires remote bid evaluation, reflecting the city's commitment to eliminating local protectionism via digital government construction. Additionally, innovative initiatives such as one-stop intellectual property services and the establishment of a "shared court" for industry associations and chambers of commerce represent pioneering and noteworthy efforts led by Hangzhou.

Invigorating enterprises through sound legislation

The *Regulation of Hangzhou on the Protection and Promotion of Intellectual Property Rights*, enacted in 2024, stipulates pilot practices in areas such as the construction of an intellectual property protection system, rapid dispute resolution, international exchange and cooperation, achievement transformation and application, and protection of rights in foreign-related disputes. These policies aim to strengthen the creation, utilisation, and protection of intellectual property, thereby providing robust policy support for innovation. The *Hangzhou Municipal Regulations on Promoting the Testing and Application of Intelligent Connected Vehicles* lay a solid legal foundation for the city's admission and on-road pilot operations for intelligent connected vehicles, as well as the pilot practice of vehicle-road-cloud integration. Hangzhou faced persistent challenges in data exchange and trading, including a lack of legislation, insufficient data supply, low data quality, and inactive transactions. To address these issues, the *Hangzhou Data Circulation and Trading Promotion Ordinance* was promulgated in 2025, specifying provisions on data rights, data access and authorisation, market cultivation, and safeguard measures. As a pioneer in innovative legislation, the city continues to make sustained efforts to maximise the vitality of the data industry.



Empowering corporate development through improved law enforcement

Improving the quality and efficiency of administrative law enforcement is key to building a law-based business environment. In the *Annual Assessment Report on China's Law-Based Government (2024)*, released in June 2025, Hangzhou ranked first nationally in the “administrative law enforcement” indicator. The city adheres to the minimum interference principle. In response to issues such as duplicate law enforcement and repetitive inspections, Hangzhou alleviates the burdens on enterprises from excessive regulatory interference through the “one-time inspection” mechanism and the “randomised inspection and assignment” approach. Additionally, the city has formulated the *Special Regulatory Plan for Enterprise-Related Administrative Law Enforcement* to oversee enterprise-related administrative law enforcement activities across the municipality. According to statistics,

the city recorded a year-on-year decrease of 29.43% in enterprise-related administrative inspections, with the figure dropping further by 62.83% year-on-year since 2025. Adopting an inclusive and prudent approach, the city has issued the *Several Opinions on Implementing No Administrative Penalties for Minor Illegal Acts in Accordance with the Law* and established an administrative discretion benchmark system. By providing explicit references to discretion benchmarks in enterprise-related law enforcement with justified reasons, Hangzhou minimises arbitrariness in administrative penalties. The city maintains 37 lists of “no penalty for first-time violations” and “no administrative penalties for minor illegal acts”, covering 21 law enforcement sectors. By the end of 2024, the number of no-penalty or minor-penalty cases (excluding traffic enforcement) in Hangzhou exceeded 140,000, waiving fines totalling over RMB 600 million for various market entities and ordinary citizens.

Safeguarding the legitimate rights and interests of enterprises

Since 2024, trans-provincial profit-driven law enforcement has increasingly attracted public attention and been likened to “fishing expeditions”. It primarily targets private businesses. To combat this misconduct, the Jiubao Police Station in Shangcheng District, Hangzhou, issued a notice titled *Prohibition of Unlawful Cross-Jurisdictional Enterprise Investigations by External Police Forces* in August 2024. The notice explicitly states that if law enforcement agencies from outside Hangzhou are found conducting enterprise investigations without being accompanied by officers from the Jiubao Police Station or the Shangcheng District Public Security Sub-bureau, enterprises must immediately report the incident to the police and gather photographic evidence. In this way, the city has established effective oversight of cross-regional law enforcement.

Fuelling government services through digital technologies

The municipal government actively responds to corporate demands. In June 2024, Hangzhou launched the “Enterprise Call-Government Response” service scenario. By establishing a dashboard for this initiative, the city has achieved “a global view, real-time monitoring, and comprehensive analysis” of enterprise-related issues, providing data support for precise resolution. Hangzhou continuously deepens the reform of one-stop online government services, maintaining service coverage above

99%. Specifically, 3,183 government service items have achieved province-wide accessibility, while 148 high-frequency service items are available across the Yangtze River Delta. Meanwhile, the local government has upgraded the “Qinqing Online” policy platform, compiling all municipal enterprise-friendly policies for one-stop inquiry and handling.

Guiding enterprises to prevent legal risks

In response to enterprise demands for “prioritising compliance over penalties”, Hangzhou has been advancing the construction of a legal risk prevention and control system for key industries. The city aims to drive the transformation of the administrative law enforcement model towards preventive control at the source. As of July 2025, Hangzhou has formulated and issued legal risk control guidelines targeting key sectors such as digital commerce and generative AI. Concurrently, the city organised over 80 specialised service activities on legal check-ups and legal risk prevention, covering more than 800 enterprises. To further optimise the enterprise-related service model, the Hangzhou Comprehensive Administrative Law Enforcement Bureau has innovatively introduced an on-demand guidance appointment mechanism. Upon receiving a one-click request, administrative departments assemble specialised teams to deliver door-to-door services tailored to the request details, establishing a precision guidance model based on enterprise requests and government processing. This model has now served over 1,000 enterprises.

Culture and quality of life

From the promotion of cultural heritage to the rise of digital creative industries, and from the redesign of urban public spaces to nationwide participation in sports events, global cultural life continues to expand its boundaries at the intersection of diversity and everyday engagement, acting as a vital pillar for strengthening social resilience and cohesion. Museums, libraries, and community theatres are gaining increasing vibrancy, while holiday exhibitions, street art, and park film screenings are progressively weaving into family routines, driving the interconnected development of creative industries and local economies.

The flourishing development of China's cultural and creative industries is profoundly transforming various aspects of urban life and demonstrating strong influence on the global stage. In 2024, Chinese cultural and related industry enterprises generated a revenue of RMB 19.14 trillion, and the revenue of new cultural format sectors such as digital content, animation and games grew by 12.4%, accounting for nearly 58% of the overall increase. The global reach of Chinese animation, online literature, and television dramas continues to expand, with several animated films earning international acclaim upon their worldwide release.

The integration of culture into urban life continues to deepen, with 7,046 museums across China hosting over 43,000 exhibitions each year and 3,248 public libraries housing approximately 1.5 billion books. Community cultural events, such as the “Four Seasons Village Gala”, actively engage residents, greatly enhancing their quality of life. This profound blending of culture with urban living, fuelled by innovation, is broadening the scope of industry services, making certain cities more appealing and distinctive.

The interplay between cultural life and urban liveability reflects a dynamic relationship between public provision and quality of life. This dimension encompasses five variables: Urban Green Environment³⁵, measured by the green space ratio, indicates the availability of high-quality leisure spaces for residents; Per Capita Sports Area assesses the provision of public sports facilities in cities; Public Health Investment demonstrates a city's commitment to enhancing residents' well-being; Museum Attendance³⁶ reflects the preservation of historical and cultural heritage and a city's external influence; and Cultural and Entertainment Consumption Preference highlights the shift in residents' lifestyles from material to spiritual pursuits.

In the Culture and Quality of Life dimension, Nanjing, Changsha, Hangzhou, Beijing, and Wuxi secure top rankings, while cities such as Yangzhou, Yancheng, Xuzhou, Nantong, Zhuhai, Yichang, Weihai, and Hohhot significantly elevate their overall scores through exceptional performance in this area. First-tier cities, leveraging their abundant resources, maintain a strong edge in delivering rich cultural experiences, though high population density restricts the expansion of public green spaces and sports facilities. Meanwhile, a cohort of second- and third-tier cities is breaking through traditional hierarchical limitations by cultivating distinctive cultural identities, optimising public spaces, and implementing community fitness programmes, emerging as dynamic new contributors to high-quality cultural life.

Nanjing excels across all five variable indicators, showcasing its comprehensive and exceptional liveability. Changsha weaves creative variety shows into urban life, providing diverse activities that resonate with the young generation. Hangzhou harnesses digital technology to craft immersive cultural tourism experiences and smart fitness spaces. Beijing sustains a world-class network of museums and art performances, further enriching cultural engagement through resident-focused cultural consumption vouchers. Wuxi stands out for its high-

quality green spaces and picturesque lakeside recreational areas. These cities' initiatives demonstrate that culture and quality of life have evolved from a peripheral aspect of urban development into a central competitive strength, fostering talent attraction, industrial growth, and distinctive city branding.

In terms of Urban Green Environment, Beijing, Dongguan, Dalian, Zhuhai, and Weihai demonstrate exceptional performance. These cities embed ecological principles throughout their planning, construction, and governance processes, forging pathways for harmonious coexistence between people and nature. Beijing, adopting a “greening every gap” strategy, has expanded park and green space coverage to 91% within a 500-metre radius, ensuring residents can see greenery from their windows and step into parks nearby. Weihai seamlessly integrates coastal shelter forests with community parks, creating a liveability model that blends blue oceans and lush forests. Dongguan connects rivers, green parks, and community spaces through its Thousand-Mile Greenway, enabling residents to immerse themselves in nature during commutes and leisure time. Dalian actively promotes vertical greening space, adorning slopes, retaining walls, fences, and bridge structures with roses and China roses, crafting a colourful and dynamic urban landscape.

In terms of Per Capita Sports Area, Zhuhai, Changzhou, Yancheng, Wuxi, and Yangzhou stand out with top rankings. China's robust sports development is propelled by both high-profile international events like the Olympics and lively grassroots initiatives such as "Su Super League" and "Village Super League". Zhuhai and Changzhou, adhering to a "10-minute fitness circle" standard, seamlessly integrate sports facilities into community governance, achieving per capita sports areas exceeding 5 square metres. Wuxi, through a "sports + tourism" integration model, incorporates embedded sports venues within green spaces, significantly boosting resident participation in fitness activities. In 2025, 30 cities initiated national pilot programmes to boost sports consumption and event economies, fostering the distinctive growth of Harbin's ice-and-snow sports, Qingdao's sailing sports, Chengdu's esports events, Hangzhou's digital sports, and the model of "sports + tourism" across numerous cities. These efforts are set to stimulate sectors such as sports equipment manufacturing and event management while supporting cities' shift from infrastructure-focused development to service-oriented progress.

In terms of Public Health Investment, Beijing, Shanghai, Shenzhen, Tangshan, Guangzhou, and Chongqing lead the scores. In 2023, China's national health expenditure surpassed RMB 9 trillion, representing 7.2% of GDP, with total expenditure growth over the past decade outpacing OECD countries by 3.8 times. By 2024, the number of medical institutions exceeded 1.09 million, with an additional 550 million patient visits, reflecting rising healthcare demand and supply alongside continuous improvements in medical service capabilities. Beijing and Shanghai allocate nearly RMB 3,000 per capita in medical fiscal investments. The "Hong Kong and Macao drug and medical device transit" policy continues to expand, encouraging Hong Kong residents to access healthcare and retirement services in Chinese mainland, fostering cross-border integration of medical services and accelerating healthcare collaboration within the Guangdong-Hong Kong-Macao Greater Bay Area under the Healthy Bay Area blueprint. Tangshan achieves 90% coverage in its occupational disease prevention and primary healthcare network, establishing a model for health transformation in industrial cities. Through targeted investments and intelligent services, these cities have not only built robust public healthcare systems but also unlocked investment opportunities in specialised sectors.

In terms of Museum Attendance, Beijing, Nanjing, Xi'an, Shanghai, and Chengdu perform exceptionally. From preserving cultural heritage to driving industrial momentum, Chinese museums, powered by both tradition and innovation, serve as tangible carriers of urban culture and value engines for the cultural industry. The Palace Museum in Beijing leads global museums with an annual visitor count of 17 million. Xi'an has developed "The Longest Day in Chang'an" (aka. Chang'an Twelve Hours) digital twin platform, enabling users to virtually explore streets and participate in digital market transactions. From the Palace Museum's digital artifact repository to the AR archaeological experience at Sanxingdui, from Shanghai Museum's restoration livestreams to Chengdu's Jinsha digital exhibitions, historical culture is becoming a major incubator for creative intellectual property. As digitalisation and internationalisation advance, urban culture is evolving from a historical repository into a dynamic interface connecting the cultural industry with the world.

In terms of Cultural and Entertainment Consumption Preference, Changsha, Nanjing, Suzhou, Changzhou, and Wuxi lead the rankings. High-quality cultural and entertainment experiences have become a pivotal factor in attracting population inflows, though elevated housing costs in first-tier cities restrict per capita spending on such activities. Changsha, propelled by large-scale events like variety shows and music festivals, has emerged as a magnet for

young consumers, with cultural and entertainment expenditure comprising 21% of total consumption in 2024, 10 percentage points above the national average. Suzhou seamlessly blends Kunqu opera into its historic gardens, crafting an immersive "garden as theatre" experience. Wuxi capitalises on its film base to build a comprehensive industry chain encompassing film production, live performances, and themed holidays. The flourishing cultural and entertainment consumption not only fuels the growth of urban cultural industries but also strengthens cities' cultural soft power.

The surge in digital creative industries, the transformation of sports consumption, the rise of museum intellectual property, and the integration of "sports + tourism" are generating markets valued from hundreds of billions to trillions of yuan. This expansion is driven not only by growing industry scales but also by the evolving aspirations of over 1.4 billion people, shifting from material satisfaction to cultural fulfilment. Presently, investment opportunities abound in areas such as cultural heritage digitisation, co-created animation and gaming IP, smart sports operations, and immersive entertainment tailored for Generation Z. Investors must accurately target consumers' deep-seated desires for cultural identity and high-quality experiences, capitalising on cities' unique strengths to identify diverse entry points within this culture-driven growth surge.

Culture and Quality of Life Scoring Table

Rank	City	Urban green environment	Per capita sports area	Public health investment	Museum attendance	Cultural and entertainment consumption preference	Total score
1	Nanjing	39	53	47	59	59	257
2	Changsha	53	46	32	52	60	243
3	Hangzhou	50	35	53	55	42	235
4	Beijing	60	42	60	60	12	234
5	Wuxi	47	57	43	23	56	226
6	Yangzhou	45	56	27	40	54	222
7	Suzhou	14	51	52	41	58	216
8	Nantong	48	55	52	10	48	213
9	Changzhou	40	59	29	22	58	208
10	Shanghai	44	9	60	57	34	204
11	Qingdao	21	49	39	47	38	194
11	Xuzhou	38	54	31	44	27	194
13	Dongguan	59	43	1	45	44	192
14	Wuhan	16	25	45	50	51	187
15	Guangzhou	13	8	56	54	53	184
16	Wenzhou	31	38	46	11	55	181
17	Chongqing	11	41	55	51	21	179
17	Zhuhai	57	60	19	2	41	179
19	Dalian	58	40	11	27	41	177
19	Hefei	27	32	44	24	50	177
21	Shenzhen	41	3	58	31	39	172
22	Yancheng	4	58	52	20	34	168
23	Foshan	52	33	21	21	37	164
24	Tianjin	3	25	55	46	34	163
25	Nanchang	18	16	36	48	44	162
26	Yichang	46	18	40	8	49	161
27	Weihai	56	50	28	18	4	156
28	Ningbo	17	37	52	25	23	154
29	Kunming	30	28	17	30	48	153
30	Yinchuan	51	47	7	17	28	150
30	Shaoxing	12	44	42	6	46	150
32	Tangshan	32	22	57	29	5	145
33	Jinan	22	15	48	33	23	141
34	Huizhou	55	39	24	3	18	139
34	Guiyang	20	45	5	39	30	139
36	Hohhot	43	11	15	42	24	135
37	Taizhou	34	36	22	4	36	132
38	Xiamen	26	21	41	28	15	131
38	Jiaxing	9	32	6	32	52	131
40	Xi'an	19	2	34	58	17	130
40	Zhengzhou	5	34	23	37	31	130
40	Yantai	29	52	33	7	9	130
43	Chengdu	7	18	36	56	9	126
44	Changchun	35	8	26	26	30	125
45	Fuzhou	28	29	38	15	13	123
46	Weifang	25	20	13	19	45	122
46	Shenyang	36	12	10	53	11	122
48	Zhaoqing	54	26	19	1	19	119
48	Quanzhou	33	27	31	14	14	119
50	Harbin	2	5	38	36	36	117
51	Zhongshan	37	14	2	38	25	116
52	Shijiazhuang	15	32	16	43	1	107
53	Nanning	8	10	26	35	27	106
54	Taiyuan	23	8	9	49	10	99
55	Baoding	42	25	21	5	4	97
56	Jiangmen	49	20	12	9	6	96
57	Haikou	24	48	3	13	7	95
58	Lanzhou	1	2	15	34	21	73
59	Urumqi	6	13	4	16	16	55
60	Xining	10	5	8	12	2	37

Macao: A creative stage for diverse cultural tourism

Macao, a sea-ringed city bordering Zhuhai to the north and facing Hong Kong to the east, is accelerating its transformation into an international and diversified economic hub. Drawing on the advantages of the “one country, two systems” policy, the unique charm of East-West cultural integration, and its strategic position in the Guangdong-Hong Kong-Macao Greater Bay Area, Macao is building a globally competitive comprehensive development platform, offering investors strategic opportunities to connect the Chinese market with those of Portuguese-speaking countries.

Integration of Chinese and western cultures

Looking back, Macao has always served as a key bridge for dialogue between China and Portuguese-speaking countries, from its role as a supply port on the Maritime Silk Road in the 16th century to its status as a Special Administrative Region following its return to the motherland in 1999. The central government’s positioning of Macao as one centre, one platform, and one base has endowed it with an irreplaceable role in the global trade and cultural exchange landscape. The city thus functions as a world centre for

tourism and leisure, a service platform for commercial and trade cooperation between China and Portuguese-speaking countries, and a base for cultural exchange and cooperation where Chinese culture is the mainstream and diverse cultures coexist.

As an international city where Chinese and western cultures converge, Macao boasts two celebrated cultural titles: world heritage site and city of gastronomy. As a world heritage site, the historic centre of Macao encompasses 25 nationally protected buildings, including the Ruins of St Paul’s, A-Ma Temple, and the Dom Pedro V Theatre, which have borne witness to over 400 years of cultural exchange between East and West. Notably, 2025 marks the 20th anniversary of its inscription on the World Heritage List. Recognised as a creative city of gastronomy by UNESCO, Macao fuses the culinary traditions of Chinese and western cultures, with unique offerings such as Macanese cuisine enjoying global renown. The city features 21 Michelin-starred restaurants and more than 300 local street-food stalls, providing a wide array of dining options to suit the preferences of diverse tourists.

Renewed vitality in integrated tourism and leisure industry

Macao has made notable progress in the development of the integrated tourism and leisure industry. Key indicators demonstrate that its tourism economy is recovering robustly and progressing towards diversification. In 2024, Macao's tourism market experienced explosive growth, recording nearly 34.93 million inbound tourists throughout the year, up 23.8% year-on-year. The average hotel occupancy rate rose to 86.4%, with tourists from the Chinese mainland accounting for 70.1% of all visitors. The number of international tourists reached approximately 2.42 million, an increase of 66.0%, signalling strong momentum in Macao's international tourism market. Overnight tourists stayed an average of 2.7 nights and spent MOP 2,878 per person, up 19% year-on-year. The proportion of non-gaming revenue rose to 58%, reflecting the ongoing optimisation of Macao's economic structure.

In terms of culture and tourism integration, Macao leverages its two titles as a world heritage site and city of gastronomy to revitalise cultural heritage and promote digital cultural tourism successfully. For example, it has launched a range of digital world heritage AR-guided tours, such as the light and shadow projection at the Ruins of St Paul's and the Time Corridor at Senado Square, achieving a secondary dissemination rate of 73%. Meanwhile, Macao deepens cross-sector integration through the "tourism+" strategy. Examples include "tourism+ MICE" to attract international conferences, "tourism+ sports" to host eight high-level sports

events such as the 15th National Games of the PRC and the 72nd Macao Grand Prix, and "tourism+ cultural creativity" to collaborate with IPs such as Pop Mart and Sanrio. These efforts have boosted foot traffic in business districts by 37%.

Synergistic drive from the MICE, commerce, culture, and sports industries

Macao is making efforts in both the MICE sector and high-level sports events, forming important engines driving the appropriate diversification of its economy. In 2024, Macao hosted 1,524 MICE events, up 31.4% year-on-year, generating approximately MOP 5.48 billion in non-gaming industry revenue. The innovative model of hosting one event in two places in the Guangdong-Macao In-depth Cooperation Zone in Hengqin has provided broad space for the development of the MICE industry. In 2024, 33 international conferences in Macao were recognised by the International Congress and Convention Association (ICCA), marking a significant year-on-year increase of 50%. These international conferences covered 79% of the key industries outlined in the "1+4" appropriate diversification development strategy³⁷. In 2024, Macao also continued to host at least two international events each month, such as the ITTF World Cup, the WTT Champions Macao, the FIVB Women's Volleyball Nations League Macao stop, and the 71st Macao Grand Prix. Concurrently, the 24th Macao Food Festival was held, forming a linked development pattern of MICE, sports, and tourism, and injecting new vitality into Macao's economy.

Investment hotspot supported by policies and funds

With a highly competitive tax preference system, targeted industrial subsidy policies, and efficient administrative services, Macao has established a world-class investment ecosystem. Through coordinated development with Hengqin, Macao has further expanded its industrial space and accelerated the shift towards economic diversification. The *Development Plan for Appropriate Economic Diversification of the Macao Special Administrative Region*, launched in 2023, has delivered significant benefits to investors. Enterprises investing in the four key industries may enjoy up to three years of exemption followed by two years of half reduction for business tax, supplementary tax on profits, and property tax. By implementing all relevant support policies, the Guangdong-Macao In-depth Cooperation Zone in Hengqin offers settlement rewards of up to RMB 20 million for MICE, cultural tourism, and cross-border e-commerce projects. It also facilitates customs clearance under the one event, two places model. The supportive tax and trade conditions create a favourable policy environment for the development of related industries. The Macao Special

Administrative Region Government has introduced a series of preferential policies and enterprise-supporting measures to attract investment and promote industrial development, including the *Guide on Supporting Policies for the Development of the Cultural and Tourism Industry in the Guangdong-Macao In-depth Cooperation Zone in Hengqin* and the *Supporting Policies for the Development of the MICE Industry in the Guangdong-Macao In-depth Cooperation Zone in Hengqin*. The combination of Macao's simple and low tax regime with its separate customs regime, alongside Hengqin's dual 15% tax preference policy, has attracted a large number of enterprises. In terms of cross-border capital flows, the multi-functional free trade accounts launched in 2024 have provided enterprises with greater flexibility in managing overseas funds. The one-stop investment service allows company registration to be completed within four hours, while a dedicated team from the Macao Commerce and Investment Promotion Institute oversees the entire process, from site selection and licensing to talent recruitment and financing. In the first half of 2024, implemented investments reached MOP 1.32 billion, surpassing the total for the whole of 2023.

Weihai: A model for integrating ecological cultural tourism

Situated at the eastern tip of the Shandong Peninsula, Weihai is a city with a rich history and abundant tourism resources. It has received the UN-Habitat Scroll of Honour Award and holds numerous titles, including National Health City, National Garden City, and National Model City for Environmental Protection. Weihai is the only city in Shandong Province with a 100% excellent nearshore water quality rating, maintaining the top rank in the province for six consecutive years. The city boasts 59 high-quality beaches and 1.2 million mu (≈ 800 km²) of marine ranches, with its exceptional ecological environment showcasing its outstanding quality and unique charm.

Integrating the inheritance of intangible cultural heritage with digital innovation

Weihai is a city steeped in profound historical heritage. Major historical events, such as the Sino-Japanese War of 1894–1895, have left a lasting

imprint on its history. Additionally, intangible cultural heritages such as Weihai paper cutting, Wendeng straw weaving, and Rushan Grand Yangko folk dance not only showcase distinctive regional cultural characteristics but also deeply influence the lifestyles and artistic aesthetics of local residents. Among these, traditional fishing culture has the most significant impact, shaping fields such as cuisine and handicrafts. In terms of cultural inheritance and innovation, Weihai transforms traditional cultural elements into modern expressions through digital technology, creating immersive and interactive cultural experience scenarios. This innovation is evident in the revitalisation of historical areas such as Qixia Street. For instance, by integrating intangible cultural heritage bazaars with modern technologies like digital light and shadow theatres, Weihai has developed innovative narrative methods while preserving cultural authenticity, resulting in a distinctive cultural experience.





Boom of cultural tourism consumption from mountain and sea self-driving

With the core IP of “Weihai, a cosy city with one thousand kilometres of mountains and seas”, Weihai has integrated more than 90% of its core cultural tourism and vacation resources to create a 1,001-kilometre-long self-driving tourism highway. Travellers along this route encounter 37 A-level tourist attractions, 50 star-rated hotels and boutique accommodations, 14 humanistic and historical exhibition halls and patriotic education bases, as well as 29 sports parks and fitness camps, making it a favoured choice among self-driving enthusiasts. Additionally, Weihai has introduced over 50 premium travel routes and 100 popular photogenic spots, such as Torch Eighth Street and the Blue Ways Cruise, to meet young people’s demand for atmospheric aesthetics. In 2024, Weihai welcomed 67.27 million domestic tourists and generated domestic tourism revenue of RMB 70.03 billion, reflecting year-on-year

increases of 13.9% and 11%, respectively. This fully demonstrates the deep integration of culture and tourism in Weihai and its strong appeal.

Building an enduring internet-famous city with 7.2 billion online impressions

In recent years, through modern media channels, particularly short video marketing, cultural tourism IP development, and international communication, Weihai has successfully crafted its brand image as a “fine city, happy Weihai”, positioning itself as a potential enduring internet-famous city. The trendy shooting of mountains and seas short video contest has garnered over 50,000 original clips, with the topic amassing 7.2 billion views, sparking a viral effect across the internet. The official Weihai cultural tourism account has attracted over 2 million views for a single short video, successfully propelling the hashtag “Weihai, a city with both sea and snow” to trend widely online.

Large-scale foreign trade advantages driven by the outdoor leisure industry

The outdoor leisure industry in Weihai has secured a competitive edge internationally. Renowned as “China’s City of Fishing Tackle”, Weihai hosts nearly 5,000 fishing tackle production and trade enterprises. The city produces over 40 million fishing rods annually, capturing more than 60% of the global market share. These products are exported to over 60 countries and regions, including the United States, Europe, and Japan. According to statistics, in 2024, Weihai’s fishing tackle exports reached RMB 3.54 billion, a year-on-year increase of 16.9%. From January to April 2025, the export volume rose to RMB 1.38 billion, up 19.6% year-on-year, demonstrating strong international competitiveness. Leading enterprises have transitioned from original equipment manufacturing to independent brand operations. Through advancements in carbon fibre technology, a shift towards smart manufacturing, and the empowerment of industrial data platforms, Weihai is driving the fishing tackle industry towards independent, high-end, and high value-added development across the entire industrial chain.

Weihai is China’s largest production base and export centre for recreational vehicles (RVs). In the first eight months of 2024, its RV export volume reached RMB 1.15 billion, accounting for 60.9% of the national total. Notably, Rongcheng City contributes over 70% of China’s RV export volume, with towable RVs holding a market share exceeding 60% in Australia.

Weihai also commands a significant global share in sectors such as stand-up paddleboards (SUPs) and water sports equipment. It accounts for 50% of the world’s SUP production capacity and holds a 20% global market share in recreational fishing boats, lifeboats, and assault boats.

Broad prospects for health and wellness tourism

Designated as the “Longevity Town in China”, Weihai possesses distinct advantages in medical and health care. With abundant medical resources and numerous institutions combining medical treatment with elderly care, Weihai is well-positioned to deliver high-quality medical and elderly care services. The city has established eight national elderly-friendly communities and developed 39 institutions integrating medical treatment and elderly care, providing a strong foundation for the growth of industries such as health and wellness tourism. These assets have attracted related enterprises to develop elderly care and health care projects, meeting the growing demand for health and wellness. The health and wellness tourism industry holds vast potential. As people increasingly prioritise health and wellness, demand is rising for related projects such as rehabilitation and recuperation centres, health clubs, and elderly activity centres. By fully leveraging its unique advantages, Weihai can foster the integrated development of the health and wellness tourism industry with sectors such as tourism, culture, and sports, by creating distinctive health and wellness tourism products and routes to meet the diverse needs of consumers.

Variables and indicators

03



This report analyses 10 observational dimensions, each comprising five variables. Depending on research requirements, each variable aligns with one to two specific indicators, resulting in a total of 66 indicators (for a detailed rationale on indicator selection, refer to

the *Executive Summary*). Of these, 10 indicators are sourced from third-party institutions, including the China Emission Accounts and Datasets (CEADs) and Renmin University of China, to whom we extend our special thanks.

No.	Dimensions	Variables	Indicators	Data year	Data source
1	Economic strength	Economic aggregate potential	Total GDP	2024	Statistical communiqué
2			GDP year-on-year growth rate	2024	Statistical communiqué
3		Per capita economic output	Per capita GDP	2024	Statistical communiqué
4		Deposit and loan density	(Year-end deposits + loans of financial institutions) / GDP	2024	Statistical communiqué
5		Number of brand companies	Fortune China 500	2024	2025 Fortune China 500
6		Government debt burden	Government debt balance/GDP	2024	Budget execution; statistical communiqué
7	Technological innovation	R&D investment intensity	Total social R&D expenditure as a proportion of GDP	2023	Statistical yearbook
8		Innovative talent pool	Higher education student enrolment	2024	Statistical communiqué
9			Proportion of the permanent population with a university degree	2020	Seventh National Population Census
10			Numbers of national high-tech enterprises	2024	Statistical communiqué
11		Innovative enterprises	Unicorn companies	2025	CB Insights
12			Gazelle companies	2024	2024 Hurun Global Gazelle Enterprise List
13		Invention patent density	Effective invention patents per 10,000 people	2024	Statistical communiqué and official reports
14		Technology transaction scale	Transaction value of technology contracts	2024	Statistical communiqué and official reports
15	Consumer vitality	Total consumption potential	Total retail sales of consumer goods	2024	Statistical communiqué
16			Growth rate of total retail sales of consumer goods	2024	Statistical communiqué
17		Per capita consumption expenditure	Annual per capita consumption expenditure of urban residents	2024	Statistical communiqué
18		Commercial prosperity index	Commercial prosperity index	—	2024 City Consumption Vitality Report, Changsha New Consumption Research Institute
19		Rent coverage ratio	Per capita disposable income of urban residents / monthly housing rent per square metre	2024	China Real Estate Price Network; statistical communiqué
20		Tourism revenue contribution	Total domestic and international tourism revenue	2024	Statistical communiqué and official reports

No.	Dimensions	Variables	Indicators	Data year	Data source
21	Digital-intelligence empowerment	Digital infrastructure	5G base stations per 10,000 people	2024	Statistical communiqué and official reports
22		Information network services	Total telecommunications business for the year	2024	Statistical communiqué
23		Number of smart factories	MIIT-certified 5G factories (2023 & 2024)	—	Ministry of Industry and Information Technology
24			Smart manufacturing demonstration factories (2021-2023)	—	Ministry of Industry and Information Technology
25		Data element market	Ranking of 2025 China City Data Element Top 100	—	2024-2025 China City Data Element Market Development Research Report, CCID
26		AI industry activity	Number of AI-related companies (founded between Jan 2020 and June 2025)	—	Qichacha
27	Open development	Foreign trade dependence	(Import value + export value) / GDP	2024	Statistical communiqué
28		Trade balance	(Export value - import value) / (export value + import value), deviation from the value of "0"	2024	Statistical communiqué
29		Foreign investment attractiveness	Actual utilised foreign investment	2024	Statistical communiqué
30			Growth rate of actual utilised foreign investment	2024	Statistical communiqué
31		Tourism activity	Total number of domestic and international tourists	2024	Statistical communiqué and official reports
32		International reputation	Ranking in the World Cities 2024	2024	Globalization and World Cities (GaWC) research network
33	Regional synergy	Talent attraction index	Ranking of 2024 China Top 100 Most Talent-Attractive Cities	2024	China City Talent Attractiveness Ranking 2025, Zhaopin Limited and Zeping Macro
34		Business carrying capacity	Number of star-rated hotels	2024	Ministry of Culture and Tourism Key Tourism City Monitoring Data
35			Average occupancy rate of star-rated hotels	2024	
36		Social organisation linkage	Number of social organisations	June 2025	Ministry of Civil Affairs Social Organisation Administration
37		Passenger and freight transport scale	Freight turnover volume	2024	Statistical communiqué
38			Passenger transport turnover volume	2024	Statistical communiqué
39		Urban collaboration capacity	City positioning	—	Territorial Spatial Plans

No.	Dimensions	Variables	Indicators	Data year	Data source
40	Urban resilience	Disaster prevention and control investment	Disaster prevention and control and emergency management expenditure	2024	General public budget execution
41			Ratio of the above expenditure to the general public budget expenditure	2024	General public budget execution
42		Smart governance capacity	China Smart Governance Evaluation Indicator System	—	China Smart Governance Index 2025, Renmin University of China
43		Production safety level	Number of deaths per 10 billion GDP (production safety deaths / total GDP)	2024	Statistical communiqué and official reports
44		Property risk protection	Property insurance income	2024	National Financial Regulatory Administration
45			Ratio of property insurance income to total GDP	2024	National Financial Regulatory Administration
46	Green and low-carbon	Per capita medical facilities	Number of hospital beds per thousand people	2024	Statistical communiqué
47		Waste utilisation level	Revenue from comprehensive waste Resource utilisation industry / revenue from industrial enterprises	2023	Statistical yearbook
48		Government environmental protection investment	Energy conservation and environmental protection expenditure	2024	General public budget execution
49			Ratio of the above expenditure to general public budget expenditure	2024	General public budget execution
50		Number of green factories	Total number of green factories from 2017-2024, MIIT	—	Ministry of Industry and Information Technology
51		Carbon emission intensity	Carbon dioxide emissions / total GDP	2022	China Emission Accounts and Datasets (CEADs)
52		Clean energy proportion	Proportion of non-fossil Energy consumption in total energy consumption	—	Relevant government reports and plans

No.	Dimensions	Variables	Indicators	Data year	Data source
53	Market environment	Market entity vitality	Number of market entities at year-end	2024	Statistical communiqué and official reports
54			Growth rate of market entities	2024	Statistical communiqué and official reports
55		Digital government services	Ranking of Local Government Digital Service Capability	2024	2024 Local Government Digital Service Capability Ranking, University of Electronic Science and Technology of China
56		Enterprise regulatory compliance	Ratio of fines and confiscations revenue to general public budget revenue	2024	General public budget execution
57		Operating cost burden	Office building rental cost	2024	China Real Estate Price Network
58			Average annual salary of employees in urban non-private entities	2023	Statistical yearbook
59	Culture and quality of life	Fiscal self-sufficiency capacity	Ratio of general public budget revenue to general public budget expenditure	2024	General public budget execution
60		Urban green environment	Greening rate of built-up areas	2023	2023 Urban Construction Statistics Yearbook
61		Per capita sports area	Per capita sports and recreation area	2024	Comprehensive research
62		Public health investment	Health expenditure	2024	General public budget execution
63			Health expenditure / permanent resident population	2024	General public budget execution
64		Museum attendance	Annual visits to tier 1 and tier 2 city museums	2024	Nationwide museum information reporting system
65		Cultural and entertainment consumption preference	Urban residents' expenditure on education, culture, and entertainment	2023	Statistical yearbook
66			Proportion of this expenditure as a share of total consumption expenditure	2023	Statistical yearbook

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Acknowledgements

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In recent years, PwC has continued to monitor development opportunities and urbanisation processes in Chinese cities. We have developed a scientifically rigorous and systematic methodology, while gaining extensive practical experience in areas such as urban and regional development strategies, comprehensive evaluation, business environment optimisation, urban resilience enhancement, and sustainable urban development. We aim to provide in-depth, forward-looking analysis backed by practical experience throughout China's urban development process, helping to enhance the quality of development, governance capabilities, and sustainability of Chinese cities.

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