# IDENTIFYING CHINA'S UP-AND-COMING TECH HUBS

China's tech sector has grown in significance in recent years. The country is now the second largest global market for Research & Development (R&D) spending and is expected to surpass the U.S. by 2020. Total spending on R&D, predominately in the software and internet as well as industrial sectors, reached US$60 billion in H1 2018[1].

The country also possesses a deep pool of tech talent, with 4.0 million STEM graduates every year supporting the growth of homegrown tech companies and the entry of major international tech firms.

Beijing, Shanghai and Shenzhen are firmly established as the country's leading tech hubs, while Hangzhou, home to Alibaba's headquarters, is also a major focal point for the industry.

Tech innovation has also been identified as a strategic focus of the Greater Bay Area, which includes Hong Kong, Guangzhou and Shenzhen.

## EMERGING TECH CITIES

With China aiming to establish itself as a technological powerhouse, many tier II cities are upgrading their value chains as they look to shift away from serving as traditional manufacturing hubs.

CBRE has identified several emerging tech cities in Chengdu, Nanjing, Wuhan and Xian, where there has been significant investment in research and technological development.

Other factors supporting the rise of emerging tech cities include infrastructure development such as the High-speed Rail (HSR) network, which are improving talent accessibility and mobility nationwide.

Although top tech talent usually prefer to be based in tier I cities, looser household registration policies ("hu-kuo" 戶口) and tax incentives in emerging tech cities are luring skilled employees.

Examples include Chengdu, which provides citizenship for migrants obtaining undergraduate degrees or above in the city, along with various financial incentives for start-ups.

## SECOND HEADQUARTERS AND START-UPS

Emerging tech cities are an increasingly popular choice for large domestic tech firms seeking to establish secondary headquarters outside tier I cities.

In addition to infrastructure, government policies, incentives, and the availability of talent, criteria for setting up second headquarters include the cost of doing business and livability.

Examples include Tencent in Chengdu, Xiaomi in Wuhan, Netease in Guangzhou, Alibaba in Nanjing and ZTE in Xi'an.

These cities are also home to several burgeoning start-ups, including Guangzhou's Unicorn XPeng Motors and Wuhan's DouyuTV, which are poised for major growth nationwide.

China's emerging tech cities each possess their own unique strengths and areas of expertise and should therefore not be viewed as competitors.

Chengdu has carved out a niche as the leading tech city in the West, specialising in R&D, tech manufacturing and new media.

Xi'an, already a leader in semi-conductor manufacturing, is also attracting an increasing number of start-ups following Samsung's decision to open a production facility.

1. 14th annual PwC Strategy & Global Innovation 1000 study

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## AMBITIOUS DEVELOPMENT PLANS

As part of the central government's policy to promote the tech sector, specific areas to host tech companies have been identified in major cities.

One of the most ambitious initiatives is the development of Xiong'An New District, located at the centre of the Beijing-Tianjin-Hebei city cluster.

Although details are still being drafted and construction will not commence for several years, the district has been earmarked as a pilot for smart city, high-tech R&D and financial innovation.

Other major initiatives in the pipeline include a plan for the Greater Bay Area, where it is hoped that closer collaboration between Guangzhou, Shenzhen and Hong Kong will drive the formation of tech hub to rival Silicon Valley in the U.S.

Although most tech companies regard government policy support and incentives as important criteria for location selection, business potential remains the foremost consideration.

While CBRE expects tech start-ups to remain close to their clients in tier I cities, expansion by China's leading tech firms will support the development of the industry in these up-and-coming areas.

## TABLE 1: PROFILE OF EMERGING TECH CITIES

| City | Major tech occupiers (Size of regional headquarter / office) | Policies / incentive for talent attraction | Target Hi-tech Industries | Education and R&D Resources |
|---|---|---|---|---|
| **Guangzhou** | • Netease (52,600 sq. m. land in business park)<br>• BIGO (27,000 sq. m.)<br>• Huya (10,000 sq. m.) | • *Household registration policies*: Citizenship is granted to employees aged under 40 with university degrees | • Telecom<br>• Internet<br>• New Energy Automobile | • R&D 2.5% of GDP<br>• 4 China's tier 1 universities |
| **Chengdu** | • Migu Music (12,240 sq. m.)<br>• Tencent Game (210,000 sq. m.)<br>• Bytedance (28,000 sq. m.) | • *Household registration policies*: Citizenship is granted to undergraduates or above<br>• *Incentives*: Free apartments for employees and financial incentives for start-up companies | • AI<br>• Electronic Information<br>• Automobile<br>• Aerospace<br>• Rail Traffic<br>• On-line Games | • R&D 2.6% of GDP<br>• 5 China's tier 1 universities |
| **Wuhan** | • Xiaomi (52,000 sq. m.)<br>• Bytedance (12,000 sq. m.)<br>• Ifly Tek (12,800 sq. m.)<br>• Synopsys (70,000 sq. m.) | • *Household registration policies*: Citizenship is granted to graduates with college degree or above | • Chips<br>• Aerospace<br>• New Energy<br>• Intelligent Connected Vehicle | • R&D 3.1% of GDP<br>• 7 China's tier 1 universities |
| **Nanjing** | • Alibaba (140,000 sq. m. land in business park)<br>• Xiaomi<br>• SAP<br>• ZTE | • *Household registration policies*: Citizenship is granted to employees graduates aged under 40 with university degrees<br>• *Incentives*: Financial incentives for R&D institutions and incubators | • Electronic Information<br>• Intelligent Automobile<br>• Intelligent Equipment<br>• Bio-tech<br>• New Material | • R&D 3.1% of GDP<br>• 8 China's tier 1 universities |
| **Xi'an** | • Samsung's (9.4 sq km land for chips factory)<br>• Alibaba<br>• ZTE | • *Household registration policies*: Citizenship is granted to all employees below 45<br>• *Incentives*: Low-price apartments for employees | • Chips<br>• Bio-tech<br>• IT<br>• AI<br>• Intelligent Manufacturing<br>• Aerospace<br>• New Energy | • R&D 5.0% of GDP<br>• 7 China's tier 1 universities |

Source: CBRE Research, April 2019