

An aerial photograph of a city, likely Nanjing, China, showing a wide river with a large stone bridge featuring multiple arches. A modern multi-lane road runs parallel to the river, with a prominent traditional Chinese gatehouse structure. A white boat is moving on the river. The background shows modern high-rise buildings.

Housing & Urban Development 2024 (China)

Lishuang CHEN
China Great Wall
Society



Table of Content

- Part 1 : Introduction to Hangzhou
- Part 2 : The Hangzhou Model – “Why it matters”
- Part 3 : Housing in Hangzhou
- Part 4 : West Lake Longjing – “Going Out” Culture
- Part 5 : Relocation Projects of Urban Industries
- Part 6 : Green Asian Games 2022



Part 1

Hangzhou Introduction



Introduction to Hangzhou

- Hangzhou is the capital of Zhejiang Province. It is located 45 mins to the west of Shanghai by the bullet train. It was one of the six ancient capitals of China. As per the census in 2022, the city has 12.376 million permanent residents.
- It is also known as the **city of 1,000 Islands** and **Garden of Shanghai**. Popular for the things – **i) The West Lake ii) Alibaba (Jack Ma), and iii) Longjing Tea**.
- The excavation of the **Cross Lake Bridge** site shows that humans have been thriving in Hangzhou for over 8,000 years. The Liangzhu culture in Hangzhou, more than 5,000 years ago, is known as the "**dawn of Chinese civilization**".
- The city has many cultural relics including numerous natural and culturally significant landscapes. The has has a very rich and long **Silk and Tea Culture**.



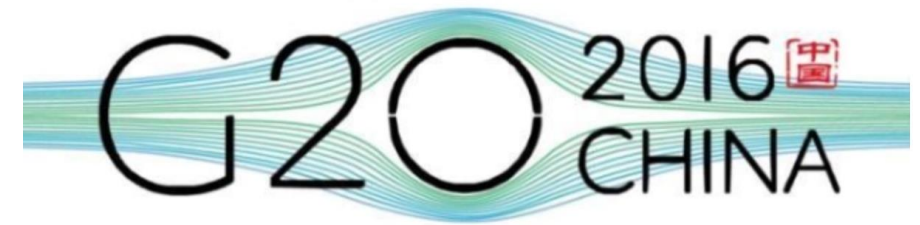
Hangzhou is known for

- **A global leader** in the standardization of sustainable urban development.
- First city in China to establish various kinds of **standardization methods and framework**.
- First city in China to establish **intelligent disability care stabilization**.
- First city in China to establish **elevator emergency response standardization** and demonstration committee.
- First city in China to establish **e-commerce quality management standard technical committee**.
- One of the first Chinese cities to participate in first **public bicycle carbon emission trading**.



Hangzhou is known for

- In 2023, GDP of the **Hangzhou reached 2 trillion RMB** (277 billion USD), an increase of 5.6% over the previous year.
- Among this the contribution of **primary industries was 34.7 billion RMB**, the added value of **secondary industry was 566.7 billion RMB**, and added value of **tertiary industry was 1,404.5 billion RMB**.
- It is referred as the **software capital of China**. The only other city outside of Shenzhen to largely handle software & technology infrastructure.





Part 2

Hangzhou Model –
Why it Matters





Why Hangzhou Matters ?

- It is essential to understand why Hangzhou can serve as a **model for future urban development** and how its **characteristics make it ecologically sustainable**.
- The **city's digital economy accounts for 28% of the province's GDP**, which is a new record high. Hangzhou drives new-age businesses and science and technology sectors that promote economic growth and innovation.
- The manufacturing industry contributes 4.5% to the GDP, with sectors such as **industrial robotics, automation, and solar being among the fastest-growing** in the region.
- Hangzhou and the province are home to a highly educated talent pool and are known for their **thriving digital economy and manufacturing industries**.

The Hangzhou Model

- Hangzhou **ranks fourth** in the country in terms of **average salary**, **third** in **per capita deposits**, and **first** in **per capita consumption expenditure**, making it an attractive destination for businesses, policymakers, and government to adopt new standardization rules.
- The city also has a young population and a high number of high-income families, **ranking fifth** in the country after Beijing, Shanghai, Guangzhou, and Shenzhen. These metrics indicate the region's **healthy financials and consumption trends**.
- The increasing population places a greater demand on urban governance and public services.
- The city policies have made the city sustainable, fostered a high level of **migration inclusivity**, and addressed modernization while **preserving cultural heritage**.
- Understanding the "**Hangzhou Model**" is vital in **predicting future changes** in the region.

Urban Development Projects

- Hangzhou is making every effort to improve the comprehensive transportation corridor and promote the construction of comprehensive transportation hubs such as **Hangzhou West Station**, **Xiaoshan International Airport**, **Huhang Railway**, and **Hangzhou West Station Hub**.
- Hangzhou focuses on **promoting expressways as a landmark infrastructure** for the development of international metropolises, with a total length of **506 kilometers of expressways** in the city.
- **130 new** and optimized **subway connections**, community, and urban-rural bus routes have been opened, and **2,535 new energy vehicle charging stations have been built and renovated in the public sector**.





Part 3

Housing in Hangzhou



Housing in Hangzhou

- The Hangzhou government has implemented **six major policies to address the issue of housing security** for **migrant workers** (including graduates, talents, and entrepreneurs):
 - Distribute rental subsidies
 - Shared property rights guarantee housing
 - Blue collar apartments
 - Public rental housing
 - Talent rental housing
 - Real estate developers own long-term rental apartments
- In 2023, the city boasted **400,000-degree holders under the age of 35**.



- Every year, Hangzhou provides **rental subsidies of over 1 billion RMB to college graduates** who come to Hangzhou for employment.
- City built specialized **rental housing for migrant workers** - blue collar apartments, totaling over 40,000 units.
- In 2023, more than **320,000 households** in Hangzhou were provided public rental housing under the affordable housing scheme.
- The Hangzhou government is continuously preparing to build talent specific rental housing. Qualified talents will pay much lower prices than the market and receive better rental housing.
- **New graduates** who move to the city can receive a **housing allowance** for 2-3 years, with an **undergraduates** receiving **10,000 RMB per year**, **post-graduates** receiving **30,000 RMB per year** and **doctoral candidates** receiving **100,000 RMB per year**.
- The city has established "**Special Talent Day**" to support and encourage local talent pool.





Part 4

West Lake Longjing Tea
– “Going Out Culture”





Going-Out Standardization of Culture

- The **West Lake Longjing Tea** is considered as one of the **premium teas** in China
- The first-grade tea cultivation area spans 1,000 acres and is regarded as a **protection area** of the west lake.
- Hangzhou West Lake Scenic Area Management Committee has developed a "**National Beautiful Tea Garden Comprehensive Standardization Demonstration Zone** (West Lake)."
- The committee's objective is to harmonize the **ecological, production, and aesthetic aspects of the tea industry.**
- By improving the technical standards that govern the ecological environment of tea, as well as the skill level of tea farmers, there has been a dual enhancement of social and economic benefits. This has led to the exportation and international recognition "**going-out**" of tea due to standardized practices.

- In 2016, the West Lake Longjing Tea Producing Area launched an initiative to **promote international management standards in tea cultivation** and use.
- As part of this initiative, a “**Sino-European Mutual Recognition and Mutual Guarantee**” launch ceremony was held in August 2016 to showcase the management norms, quality, and brand of West Lake Longjing tea.
- By **standardizing the production and marketing** of Longjing tea, **the cultural aspect of urban development and sustainability is also being preserved.**
- This way, the “**going out**” of the product due to standardization preserves the urban & ecological heritage.
- Furthermore, this approach to urban development promotes commercial cooperation between nations and helps to develop urban infrastructure in a culturally-sensitive way. **This is an important strategy that separates regular megacities from culturally harmonious developed urban cities.**



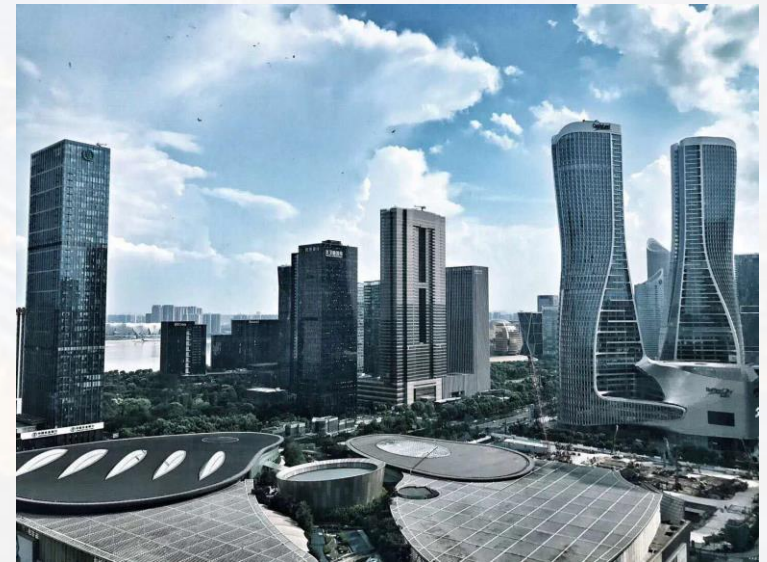


Part 5

Relocation Projects of
Urban Industrial
Enterprises



- Since 2002, the city has been **moving urban industrial enterprises** to more suitable locations to adjust the industrial layout and urbanization of the city.
- The main goal is to upgrade and create a modern urban environment, improve people's lives, **encourage non-green industries to relocate with structural adjustments**, and increase investment in technological transformation.
- **It is not about making cities bigger, but rather about making urbanization sustainable by adopting more green technology and innovation.**
- A classic example of this is, in 2002, a **Hangzhou Oxygen Generation Factory** (Hangxi Industries), which had over 50 years of heritage, moved from the Gongshu Suburban district to the Lin'an Suburban district. The biggest challenge was the **6 industrial-style buildings were lying here as relics for over 10 years**. Herzog & de Meuron, after surveying the site, concluded that the industrial remains would be **valuable in Hangzhou's future urban life**, requiring thoughtful planning, new architecture, and landscape design. **The existing factory building was renovated, repurposed, and regenerated**. After several years of upgrading, the O2 museum was showcased to the world in stages, including **China's first Urban Museum leading Global Urban Change** and the **Museum of Arts and Science** defining the concepts of the future of museums.





Future Museums





Creative Space





Gallery & parks





Part 6

Green Asian Games



Green Asian Games 2022

- The Hangzhou Asian Games 2022 has been nicknamed "**Green Asian Games**". This edition of the Asian Games has placed a strong focus on sustainability and green initiatives.
- The games have aimed for **low or zero carbon emissions** by using methanol as a low-carbon fuel for the torch and flare.
- The city has also issued the Asian Games Green and Healthy Building Design Guidelines, **promoting pre-fabricated buildings, renewable materials, sound absorption materials, and insulation pipelines**. Additionally, the city chose **low-carbon equipment and processes**, which significantly reduced construction waste.
- Sustainable urban development requires the construction of healthy buildings that have a **minimal carbon footprint** and can be easily **repurposed in the future**.
- The "Asian Games Squash Hall of the Hangzhou Olympic Sports Center" was created by **rebuilding the original** 4D exhibition hall of "The Hangzhou National Expo Center," using the same facilities and equipment.



- Hangzhou showcased its **green development methods and lifestyles** through the **Asian Games and China's Waste-Free City Construction model**.
- Many local government departments and committees are integrating sustainable urban development practices to make the entire city a sustainable future city.
- We need more "**Zero Waste Infrastructure**" policies, methodologies, and frameworks taught in class as a part of sustainability, **green engineering & infrastructure**, and **inclusive urban culture**.
- To create a healthy and thriving culture in future urban cities, incorporating green infrastructure, sustainable practices, and urban development standardization frameworks are not enough.
- It is imperative **to prioritize migration inclusivity and local community engagement as part of sustainable urban development**. This approach will help boost the economy, create new-age businesses, and sustain family businesses (legacy businesses).
- Many cities in Zhejiang Province have adopted selective frameworks of **Hangzhou modernization** and applied them in their city.
- However, it is essential to tailor and adapt the takeaways from Hangzhou, keeping in mind the **unique cultural history and characteristics** of each city.



Green Asian Games

Green Torch

- First use of **green methanol regenerated** from waste carbon as fuel for the main flare tower

Digital & recycle

- During the ignition ceremony of the opening day, **digital figures ran and passed torches on the city and Qiantang River in the darkness**. What the online audience saw was a digital person entering the screen inside the venue, running towards the main torch stand and finally lighting the **holy flame**.

Stadium & Operation

- The stadiums and their walls were made with sound absorbing materials and insulation pipelines. Largely low carbon equipment and processes were selected to reduce construction waste.





Welcome to Hangzhou