

## The Chinese Experience

### Case16: Sino-French Wuhan Ecological Demonstration City

Wuhan, Hubei Province

Wuhan has traditionally closest connection with France. At present, the amount of Sino-French joint ventures and independently owned French enterprises in Wuhan reaches over 100. 40% of French investment in China comes to Wuhan. In this context, on March 26, 2014, with the witness of leaders of two countries, the cooperation of the development of Sino-French Wuhan Ecological Demonstration City was initiated. It is located in Caidian district, western part of Wuhan city, and covers the area of 30 km<sup>2</sup>. The target of Sino-French Wuhan Ecological Demonstration City is to become:

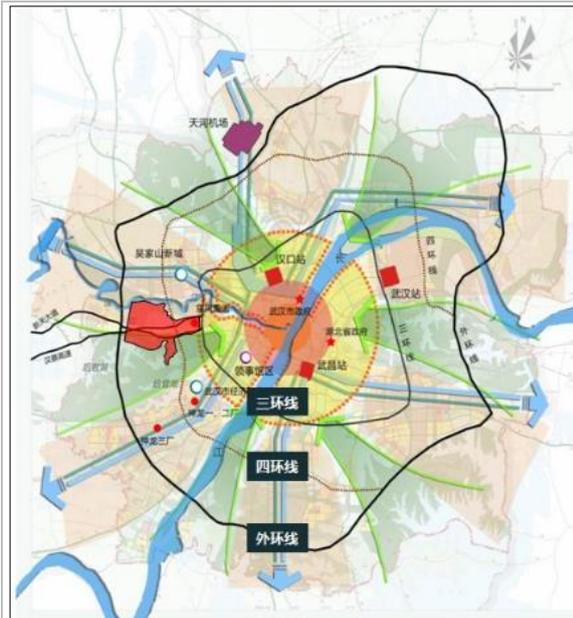
- the platform for cooperation on low carbon development and for technical exchange between China and France;
- the demonstration on urbanization,
- national demonstration on ecological & environmental friendly industry park
- production & life integrated livable community

	<b>Primary Tools:</b> →Tool CUD 1, →Tool CUD 2, →Tool CUD 4
	<b>Secondary Tools:</b> Education and cultural innovation
	✓ Demonstration of eco-industry,
	✓ Education and cultural innovation.
	✓ Green building, underground gallery, smart city, road network and watercourses, urban design.



<http://en.hubei.gov.cn/news/newslist/201601/W020160107561633889767.jpgV>





Wuhan urban growth



Wuhan Phoenix towers project<sup>i</sup>

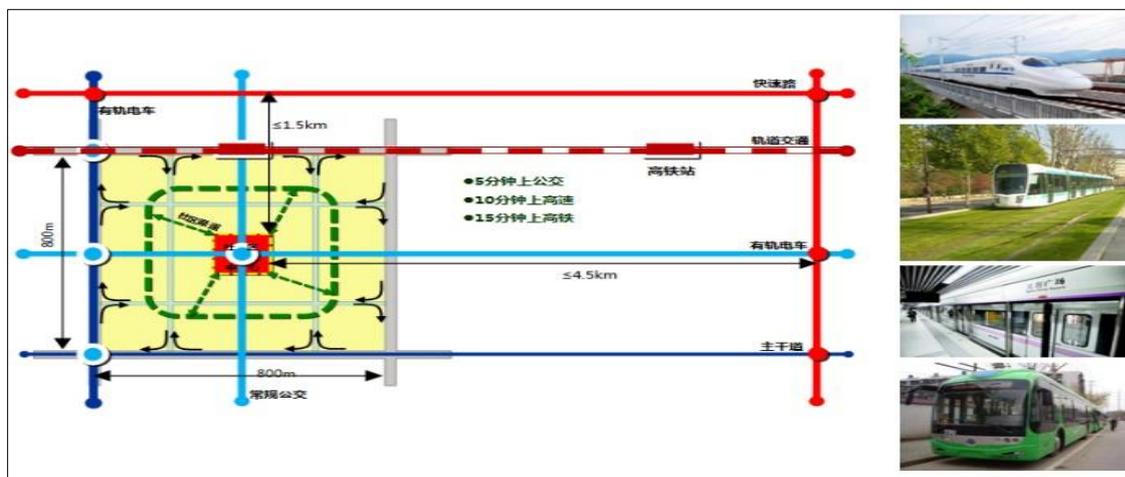
The development is on planning phase. 6 sector plans are included, with emphasis on the following efforts: → wetland protection and sponge city development, → green building, → underground gallery, → smart city, → road network and watercourses, → urban design. Industry orientation is the highest priority in the long list of priorities:

→ High-end service industry, focused on recreation service, hotels, exhibitions, wedding service, health care & service for senior citizens.

→ High-tech innovation industry, including Sino-French technology valley for software development & outsourcing, chip design; establish car centre and aviation centre incorporating research, sales, display function.

→ Demonstration of eco-industry, including establishing French style farms and chateaus for developing eco-planting & eco-tourism; implement circular economy, promote clean production, enhance clean energy and renewable energy.

→ Education and cultural innovation. So far EDF Group, Suez Environmental group, France Kutei group, Nanomade and LAM have signed cooperation agreement with the demonstration city.

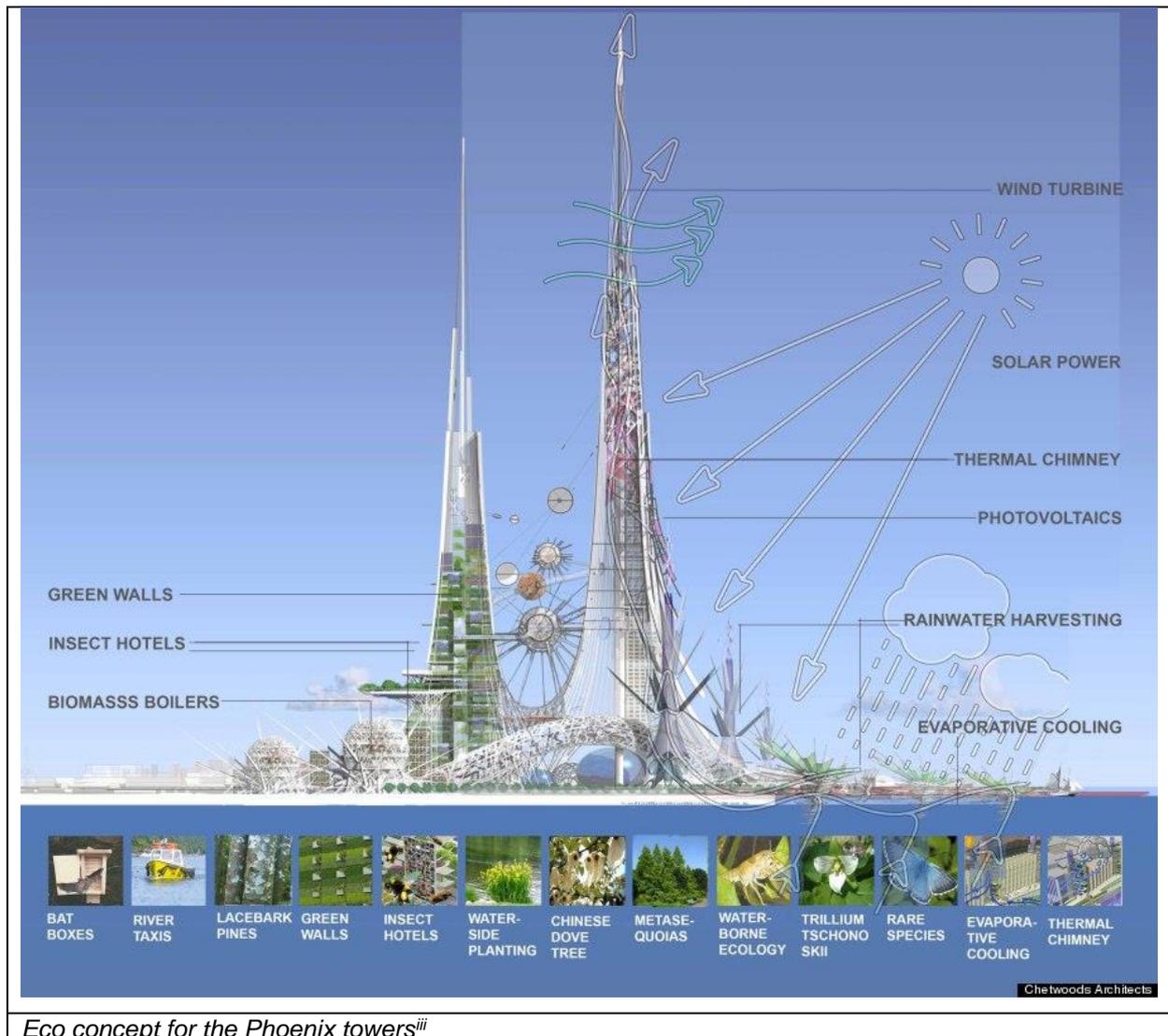


Wuhan public transportation concept<sup>ii</sup>

## The Phoenix towers

China is embarking on one of its most ambitious engineering challenges to date: the construction of the Phoenix Towers, a pair of skyscrapers in the city of Wuhan that will be the world's tallest and greenest structures.

"The use of a pair of towers reflects the dualist elements of Chinese culture in contrast to a more western monolithic form," said the towers' British builders, Chetwoods Architects, in a press release. "Based on the traditional Chinese Phoenix symbol of two birds, male Feng and Huang, the plan was generated from the Yin/Yang form to represent perfectly balanced union."



*Eco concept for the Phoenix towers<sup>iii</sup>*

Standing at a height of 3,280 feet, the futuristic structures use sustainable technology on a massive scale. The Feng tower will have a hollow central shaft called a "thermal chimney," which takes advantage of the structure's location above one of Wuhan's many lakes. The chimney sucks up air that passes over the water and uses it to cool the tower and turn a massive turbine. This, combined with the numerous solar panels that will also cover the outside of the Feng tower, will provide electricity for both structures.

The outer walls of the Huang tower will be covered with habitats for indigenous species, as well as greenery that will clean the air. Rainwater collectors in the base of the Feng tower will also be used to provide water for residents of both towers. Together, the structures will use different but complementary technology to help offset some of the pollution that has blighted China's landscape, the firm says.

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**Sources and Further Reading:**

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<sup>i</sup> Source: [https://www.huffingtonpost.com/2014/07/17/wuhan-china-environmental\\_n\\_5579019.html?guccounter=1](https://www.huffingtonpost.com/2014/07/17/wuhan-china-environmental_n_5579019.html?guccounter=1)

<sup>ii</sup> Source: Source: <http://ecoen.caidian.gov.cn/>

<sup>iii</sup> [https://www.huffingtonpost.com/2014/07/17/wuhan-china-environmental\\_n\\_5579019.html?guccounter=1](https://www.huffingtonpost.com/2014/07/17/wuhan-china-environmental_n_5579019.html?guccounter=1)