



EcoMobility

PRIORITY FOR ECOMOBILITY IN OUR CITIES. A SERIES OF LOCAL STORIES

Hangzhou, China The world's largest bike sharing program

Summary: In May 2008, Hangzhou launched China's first bike sharing system to support a more EcoMobile transport system. Meanwhile, it became the world's largest bike share program. Residents and visitors may rent a bicycle and take advantage of the hundreds of kilometers of dedicated bike lanes.

Start-up and regulation

The bike share system in Hangzhou was designed, built, and funded by the local government in order to cover the last kilometer from the public transportation stop to the customer's destination or vice-versa. Several hundred million Chinese yuan (approximately 30 Million Euro) were invested at the start-up of the system. Strong local government involvement helps to ensure the financial sustainability of the bike share system, prevent vandalism, and improve the service level.

How the bike rental works

This municipally owned and operated the system which uses a card in conjunction with the city's bus system and parking. Over 80% of the rental stations in Hangzhou are unmanned service stations. At one of these self-service kiosks, the customer inserts his or her card into the machine unit. Then, a bike is unlocked and the docking station flashes a green light. A deposit of 200 Chinese yuan (22€) is then deducted from the card and the rental period has begun. To return a bike, the customer simply puts the bike in the open slot and places the card in the machine. The deposit is then returned and the rental period is over. The appropriate rental charge is then deducted from the card's balance.



Bicycle only lane in Hangzhou

© Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

A growing bike sharing community

In May 2008, Hangzhou had 61 bike sharing stations with 2,800 bicycles. One year later, there were 640 stations with 16,000 bicycles. At the end of 2009, there were 2,000 stations with 50,000 bicycles and the system has since expanded to 2,200 stations with 60,600 bicycles. A station can now be found every 100 meters – almost 3.6 bike stands per km².

Since its opening, the daily use per bicycle has increased from less than one ride to five rides. There are approximately 240,000 daily usages of the system, with the highest single day usage being 320,000 rides.

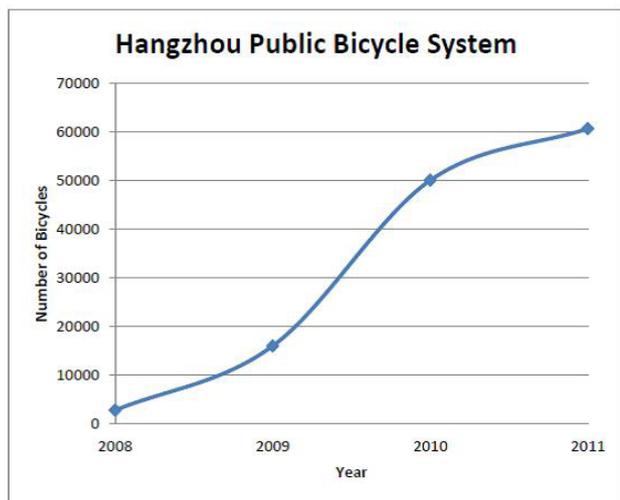
Bicycle trips in Hangzhou account for 43% of all trips, and the city's bike sharing system is partly to credit for that. Daily bike sharing trips cover about 1,123,200 km. An automobile covering the same distance would produce more than 200,000 kg of CO₂ emissions. Given these figures, and the goal of reaching 175,000 public bikes by 2020, there is potential for further greenhouse gas emission reductions.

Fee structure and business model

Since many people use the system for the first or last kilometer of a trip, 96% of trips are under one hour, with an average ride time of 23 minutes. Three percent of trips are between one and two hours, 0.6% are between two and three hours, and only 0.4% are greater than three hours. Since bikes are free during the first hour of rental and most trips are under one hour, the bike system itself does not generate much revenue. Advertising on the bikes is the main source of funding. Since advertising revenues are large, bikes are available to customers at a very affordable rate. For a use of one to two hours, the fee is one yuan (0.11€). For two to three hours, it is two yuan (0.22€). After three hours, the fee is three yuan (0.33€) per hour.



A bicycle repair stand, Hangzhou



The fleet of public bikes and the daily trips per bike have been steadily growing in Hangzhou.

“Hangzhou is going to have 100,000 to 200,000 bicycles. The ultimate goal of public bike service is not only to solve the last mile to end a trip of citizens, but also the last 100 meters.”

– Guoping Wang, former Secretary of Hangzhou Municipal Party Committee, 2009



Hangzhou, China

The City of Hangzhou is a city in Eastern China, located on the Yangtze River 180 kilometers southwest of Shanghai. It is the capital city of the Zhejiang province. Hangzhou is made up of six central urban districts which make up 683 km² and are populated by over 2.2 million people. Hangzhou’s economy is based on light industry, agriculture, textiles, medicine, and information technology.

Department: Hangzhou Public Bicycle Operation Company



www.iclei.org/casestories
ecomobility@iclei.org
www.iclei.org/ecomobility



EcoMobility Alliance