

# Electric bikes on a roll in China

February 21 2010, by Joelle Garrus

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A worker stands next to electromotive bicycles at the workshop in Tianjin Hanma Electromotive Bicycle Factory in China's northern city of Tianjin in January. Up to 120 million e-bikes are estimated to be on the roads in China, making them already the top alternative to cars and public transport, according to recent figures published by local media.

Chinese commuters in their millions are turning to electric bicycles -- hailed as the environmentally-friendly future of personal transport in the country's teeming cities.

Up to 120 million e-bikes are estimated to be on the roads in China, making them already the top alternative to cars and public transport, according to recent figures published by local media.

"This is the future -- it's practical, it's clean and it's economical," said manufacturer Shi Zhongdong, whose company also exports electric bikes

to Asia and Europe.

The bikes have been hailed as an ecologically-sound alternative in a country which is the world's top emitter of [greenhouse gases](#), with their [rechargeable batteries](#) leaving a smaller [carbon footprint](#) than cars.

But some have expressed concerns about the pollution created by cheaper lead batteries, calling for better recycling and a quick shift to cleaner, though more expensive, lithium-ion battery technology.

More than 1,000 companies are already in the e-bike business in China, with many of them clustered in the eastern coastal provinces such as Jiangsu and Zhejiang, which both border Shanghai.

Another 1,000 firms are producing e-bikes on an ad hoc basis, Shi told AFP during a visit to his Hanma Electric Bicycles factory in the port city of Tianjin, about 120 kilometres (75 miles) north of Beijing.

"The business has exploded since 2006," Shi says, while admitting that the company took a hit last year due to the financial crisis.

Some e-bikes can reach speeds of more than 35 kilometres an hour (21 miles per hour), and a few manufacturers boast their models can last up to 50 kilometres on a single battery charge.

[Battery](#) chargers are simply plugged into an electricity socket at home. Most e-bikes also have pedals, except for the bigger, scooter-like models.

Shi was an electrical engineer who worked for a state-owned firm for most of his career, but as he turned 55 and retirement was beckoning he founded Hanma in 1999, investing about 500,000 yuan (75,000 dollars) of his own money.

He is wary of giving exact production figures, but says Hanma is churning out between 50,000 and 100,000 e-bikes a year.

In his company's icy, old-fashioned workshops, several models are lined up: from electric bikes with "green" lithium batteries, made especially for export, to some that look more like mini-scooters.

They are everywhere in the streets of Beijing -- no licence plates, no driver's licences needed. Enthusiasts say they are a godsend in a city where the number of scooter and motorcycle drivers is restricted.

"I get around traffic jams so easily," said one Beijinger before speeding off from an intersection in the capital, where more than four million vehicles are clogging the roads and polluting the already thick air.

But not everyone is on the e-bike bandwagon -- "real" cyclists have complained bitterly that their once peaceful lanes are now clogged with irresponsible, uncontrollable speedsters.

In December, authorities tried to re-impose a maximum speed limit of 20 kilometres (12 miles) per hour on e-bike riders, along with licence rules, but the plan caused such a public and industry uproar that it was suspended.

"The rules will never go through. Hundreds of factories would be forced to shut down. And what would those who already own e-bikes do?" Shi says.

In a report released last June, the Asian Development Bank said e-bikes could become "perhaps the most environmentally sustainable motorised mode available" in China.

But it called for the replacement of lead acid batteries and better

regulations on the allowable weight and speed to keep accidents at a minimum.

Shi says nearly a third of his production goes abroad -- to Asia, notably India, to the European Union and even to the United States.

"There is a big future for electric bikes in Europe, where people are very concerned about saving the environment," he said, explaining that the models with safer but more costly lithium batteries are shipped to EU nations.

Shi says he sells the export models for 400 dollars, as opposed to just 240 dollars for those sold in China. But the bikes can sell for a whopping 1,200 dollars in France and Germany.

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