China rolls out low-cost maglev trains

A newly developed maglev train is seen at a factory of the Zhuzhou Electric Locomotive Co. Ltd. of China South Locomotive and Rolling Stock Corporation in Zhuzhou, Central China's Hunan province, Jan 20, 2012. [Photo/Xinhua]
A locomotive producer in central China's Hunan province on Friday rolled out a low-cost magnetically levitated (maglev) train that is more environmental-friendly than conventional ones.
The three-carriage train is designed to run at a maximum speed of 100 km per hour and carry 600 passengers, said Xu Zongxiang, general manager of Zhuzhou Electric Locomotive Co. Ltd. of China South Locomotive and Rolling Stock Corporation (CSR).
Xu said the new train was much quieter than conventional ones. While a conventional train moves forward by using friction between its wheels and the railway tracks, the maglev train replaces wheels by electromagnets and levitates on the guideway.
According to Xu, his company's has minimized the risk of the new maglev train derailing or overturning. "It's ideal for mass transportation, as it is quiet and environmental-friendly. Its manufacturing cost is about 75 percent of a conventional light-rail train," said Xu.
The maglev train has a minimum turning radius of 50 meters and can easily run in residential communities or on hilly slopes. "It's an ideal public transport option for Chinese cities and major tourist destinations," said Xu.
Railway transport specialist Liu Youmei, also an academician with Chinese Academy of Engineering, said the new train is green, economical and safe. "It can be used for public transport in populous areas and at scenic spots with fragile environments."
Liu said China is one of a few countries that have applied maglev technology.
Beijing is building a maglev route, the Daitai line (S1), which starts at its IT center in Haidian district, passes through Shijingshan district, and ends in Mentougou district on its western outskirts. The line will be operational next year.

The eastern metropolitan of Shanghai runs the world's first commercial maglev system on a 30-km stretch between the downtown business district and Pudong airport. The German-made maglev went into operation on December 31, 2002.