China’s first hydrogen refueling station opens

Global energy giant BP and SinoHytec, a Chinese firm that specializes in developing and commercializing renewable energy and energy-saving transportation technologies, recently celebrated the opening of China’s first hydrogen refueling station. Located at Zhongguancun Yongfeng High-Tech Industrial Base, the Beijing International Hydrogen Park is the first demonstration project for new energy vehicles in China. It is also BP’s largest site so far to provide hydrogen for transportation.

The park covers an area of 1.3 ha (3.2 acres), including an R&D center, hydrogen refueling station, fuel cell vehicle garage and maintenance workshop. The companies say that the facility is designed to gain real-world experience in hydrogen fueling infrastructure through demonstrating and operating new energy vehicles, and also to help build public awareness of this developing technology.
The park will provide a fueling service for several large-scale hydrogen FCV trial programs in China, such as the United Nations Development Program and the National Hydrogen Program (the ‘863’ Project), which are being developed and co-funded by the Chinese Ministry of Science & Technology, as well as the FCV fleet expected to be in-service during the 2008 Beijing Olympic Games.
The BP-branded hydrogen refueling station, covering an area of 4000 m2, will comprise a number of hydrogen supply infrastructure options. To date a gaseous trucked-in supply and on-site natural gas reforming unit have been chosen, but future options will allow hydrogen to be produced from renewable energy sources, and the use of hydrogen/compressed natural gas (CNG) blends for refueling vehicles powered by internal combustion engines.
The station uses Air Products’ Series 300 fueling technology – an integrated vehicle system that compresses and dispenses hydrogen for use by vehicles. This is designed to meet early vehicle fleet fueling requirements by providing the customer flexibility of using hydrogen generated on-site, or a distributed hydrogen supply.
The station will supply several fuel cell buses that will serve normal mass transit routes in preparation for a shuttle service that will be eventually used during the 2008 Olympics.
Supported by the Chinese Ministry of Science & Technology, the Beijing Municipal Government and Tsinghua University, SinoHytec was set up during July 2004 in response to a national call for self-innovation and accelerated commercialization of research and development.