

Solar Rickshaws Ready for Delhi

After a series of technical delays, a solar rickshaw project in India is back on track in time to put 1,000 human-electric hybrids on the streets of Delhi in time for the 2010 Commonwealth Games in October.

With over 8 million human-powered pedicabs and motor-driven auto-rickshaws in India, the Indian Council of Scientific and Industrial Research (CSIR) sought to give rickshaw drivers a boost with a specially designed battery-powered electric motor. Project goals include promoting both economic development and zero-emissions transportation.

The Soleckshaws, as they're called them, can carry two passengers at 9 mph for about 25 miles per charge. When batteries run out, the solar-powered rickshaw driver will swap the exhausted cells for fully-charged ones at solar-powered charging stations, to be installed in major transport hubs.

In addition to giving rickshaw drivers a hand in climbing steep hills, the electric motor could help stop the spread of disease in crowded Indian cities. CSIR director Samir Brahmachari told *India Today* that the average rickshaw driver is malnourished, getting only 1,600 calories a day when more than 4,000 are necessary to pedal customers around cities. Currently, "a quarter of the rickshaw pullers could get TB because of malnutrition," Brahmachari said.

The Soleckshaw project was first conceived in 2008, but prototypes failed to withstand the rigors of driving in busy streets, such as Delhi's Chandni Chowk market district. "The trouble is that when the vehicle has to stop and start rapidly in a place like Chandni Chowk, the motors get damaged," Pradip K. Sarmah, executive director of the Centre for Rural Development, told *India Today*. Sarmah, whose agency promotes Soleckshaws for job growth and environmental benefit, said that future models would be customized for specific routes.