

## India Receives Hydrogen Fuelling Equipment from Air Products, IdaTech Opens Fuel Cell Manufacturing Plant

by Patrick Stelmach, PATH intern

Air Products will supply hydrogen fueling equipment for a hydrogen transportation demonstration project in New Delhi, India. The project, being financially and technically supported by The International Centre for Hydrogen Energy Technologies (ICHET) of the UN Industrial Development Organization (UNIDO) will be conducted over two years beginning in July 2010 and include development of a fleet of 15 three-wheeled vehicles. The hydrogen-powered fleet will transport visitors at the Pragati Maidan, where many large public exhibitions are held in New Delhi, in partnership with the India Trade Promotion Organization. The Indian Institute of Technology (IIT)-Delhi will oversee the project's management, and the vehicles will be developed by Mahindra & Mahindra, one of the major automobile manufacturers in India, in collaboration with IIT-Delhi.



Air Products and INOX Air Products will be providing the hydrogen fueling equipment, expertise on hydrogen safety, and hydrogen supply strategy. Project organizers hope the fleet will be operated well beyond the end of this project and that it will help support the establishment of hydrogen refueling facilities and hydrogen vehicles across New Delhi and India. UNIDO-India will be completing the consortium of team members involved with the project and undertaking liaison activities in collaboration with the Indian Minister of New and Renewable Energy and ICHET, which is based in Turkey. ICHET's aim is to support developing countries leap-frog the use of hydrogen as a clean energy carrier by helping in the development and demonstration of such technologies by supporting universities and industries.

In 2005, Air Products was a key player in the opening of India's first hydrogen fueling station at Indian Oil Corporation's R&D center in Faridabad, north of New Delhi. Air Products and INOX Air Products supplied a dual fueling dispensing unit. The system is able to separately fuel vehicles with hydrogen, or a mixture of hydrogen and compressed natural gas.



US fuel cell maker IdaTech is on track to establishing a production facility in India to fulfill the fuel systems deliveries under the 2008 agreement with Indian power equipment provider ACME Group and said that following the first batch of 310 hydrogen-based units, the remainder of the initial 10,000 units will be running on natural gas. The deal signed with ACME originally envisaged the supply of up to 30,000 5-kW hydrogen fuel cell systems over four years.

Significant advancements in IdaTech's proprietary technologies will allow it to produce more robust and significantly more cost effective integrated fuel cell systems by 2010. The hydrogen cells for ACME will be built at IdaTech's manufacturing facility in Tijuana, Mexico, and the other units in India which will be fully operational by the end of 2009.

Sources:

“Air Products' Hydrogen Fueling Equipment to Boost UNIDO-ICHET Demo Project”. PR Newswire. 12 March 2009.

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