

## **Toyota to release solar charger for electric vehicles**

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The charging equipment. Image: TechOn

(PhysOrg.com) -- Toyota is developing a solar charging station for electric cars and plug-in hybrids, making a green technology even greener. It has also designed a battery charger for mounting inside an electric vehicle or plug-in hybrid to recharge the storage batteries.

Toyota Industries Corporation's announcement follows similar press releases in August by <u>Nissan Motor</u> Co Ltd and Showa Shell Sekiyu KK.



Toyota's solar charging station will consist of <u>solar cells</u> capable of generating 100/200V of electricity. The station includes storage batteries to store the electricity generated until it is required to recharge <u>electric</u> <u>vehicles</u>. The station also has a communication facility to authenticate users' identification information, and to communicate the amount of charge and other data to a remote data center. The communication system is expected to use LANs and Mobile networks.

Earlier this year Toyota Industries unveiled a new public charging station for electric vehicles, which went on sale a few months ago at a cost of 450,000 Yen (around 4,600USD). Both the earlier public charging station and the new solar charging system were developed in collaboration with Nitto Kogyo Corporation.

A variety of charging station options is needed to address the potential range limitations of electric vehicles, and a significant network of charging stations will need to be deployed to make electric vehicles viable for longer distance travel. Virtually all major car manufacturers are planning to launch electric or plug-in hybrid cars starting next year.

Charging stations for electric cars are gradually becoming more widespread. In the UK the Department of Transport estimates there will be about two million electric vehicles by 2020. In the US, SolarCity and Rabbobank have created a partnership to provide free electric charging for electric vehicles traveling between San Francisco and Los Angeles along Highway 101. SolarCity has also bought SolSource Energy, which is in the business of installing charging stations for <u>electric cars</u>.

Toyota made the announcement and exhibited the charging station and battery charger at the 2009 Tokyo Motor Show being held from October 23 to November 4, 2009 at Makuhari Messe, in Chiba City, Japan. The solar charger is scheduled for release late next year or in 2011 at a price of several hundred thousand Yen.



Via: <u>TechOn</u>

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