

Demonstration Project for ENEOS Business Models for Developing Service Stations as Comprehensive Energy Supply Bases for Electric Vehicle Users

Nippon Oil Corporation (President: Shinji Nishio) will undertake a demonstration project from October, 2009 to March, 2011* to run an experimental quick charge service targeting users of electric vehicles (hereinafter “EVs”) and also to verify the effectiveness of the solar power supply.

In recent years, the rapid and extensive introduction of environmentally friendly vehicles in response to the issues triggered by global warming has been notable within the automobile market. With domestic automobile manufacturers currently developing and releasing EVs, the development of charging infrastructure and the promotion of the widespread use of such facilities is essential to enable the widespread use of EVs.

Through this demonstration project, a quick charge service will be available at 22 ENEOS service stations (hereinafter “SS’ s”) nationwide, with a central focus on Tokyo and Kanagawa. A Quick Charger will be located in these SS’ s and 20 i-MiEV’ s, an EV model produced by Mitsubishi Motors Corporation, will also be located. For selected SS’ s, additional services will be available to customers waiting for the charging process to be completed and a SS-based car-share service will be available using i-MiEV’ s. In this manner we will verify the business feasibility of SS services targeting EV users.

The effectiveness of energy-saving solar cells in SS’ s will also be assessed by locating them in 19 out of 22 SS’ s. Furthermore, solar power will actually be supplied to the Quick Charger at one of these 19 SS’ s for the quick charge service.

While developing business models through this project in order to respond to the potential widespread use of EVs, Nippon Oil Corporation also plans to conduct a number of demonstration projects to assess the likelihood of the commercialization of hydrogen supply stations targeting fuel cell vehicles (FCVs). By characterizing SS’ s as comprehensive energy supply bases we will ultimately establish next-generation SS’ s where diversified energy resources will be available.

*We will collaborate with the NEC Corporation and Nihon Unisys, Ltd. to perform this project under the title “Fiscal 2009 Environmental Demonstration Project for the Potential Widespread Use of Electric Vehicles” (demonstration project sponsored by the Ministry of Economy, Trade and Industry targeting power charge services provided at gas stations) over six months from October, 2009 to March, 2010. We plan to run the project under our own initiative for one year beginning in April 2010.

● Overview of the demonstration project

1. Target locations and the number of SS’ s

Total of 22 SS’ s in Tokyo (9), Kanagawa (10), Aomori (1), Okayama (1) and Fukuoka (1)

*The names of the SS’ s and the project time frame will be announced on our website when such information becomes available.

2. Details

(1) Quick Chargers will be installed in a total of 22 SS’ s to provide a quick charging service
→Creation of an optimal certification and charging system (fees will apply from April, 2010)

1) Quick Chargers will be located at 10km intervals for Tokyo and Kanagawa (for a total of 19 SS’ s).

*It is necessary to place Quick Charger at defined intervals in order to satisfy users of EVs who are concerned about the maximum range of their cars.

2) Quick Chargers will be located in specified SS’ s in Aomori, Okayama and Fukuoka (total of 3 SS’ s).

3) In order to identify the needs of EV users, 17 out of 20 i-MiEV units will be loaned to survey participants that reside in the neighborhood of applicable SS’ s.

(2) Supply of additional services targeting customers waiting for the charging process to be completed (time required for the process is approximately 30 minutes) and the SS-based car sharing service using EVs
→Development and verification of business models for SS services targeting EV users

- 1) The additional services will be available at a total of 17 SS' s located in Tokyo (7), Kanagawa (9) and Fukuoka (1).
 - 2) Services such as car washing, cleaning of car interiors and car inspections will be available to customers as these services can be completed during the charging process. Feedback from 17 survey participants will be utilized to identify the needs of EV users.
 - 3) 3 out of 20 i-MiEV units will be used for the car-share service to be provided at a total of 3 SS' s in Tokyo (2) and Kanagawa (1).
- (3) Solar power supply for Quick Charger
- Identification of any technical issues and the verification of cost effectiveness
- 1) Both solar cells and storage cells will be located at the SS in Fukuoka to supply solar power to the Quick Charger.
 - 2) Solar cells will be located at 18 other SS' s (though solar power will not be supplied to the Quick Charger) to verify their energy-saving effectiveness within the SS.

Appendix:  [Quick Charger's main body and specifications](#)