

かながわの電気自動車への挑戦 (EV)

KANAGAWA'S EFFORTS AT PROMOTING EVS

Kanagawa EV Promotion Measures

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2008. 3

Kanagawa EV Promotion Council

Kanagawa EV Promotion Measures

Greetings

The issue of global warming is one of the most serious, top-priority subjects we have to address for the future of mankind and the earth. Solution of this issue requires reform of consciousness of all global citizens, as well as their hands-on activities. In particular, reduction of CO₂ emission from automobiles, which accounts for about 20% of the total CO₂ emission in Japan, is the important subject, and further technological innovation is necessary in the field of automobile.

In January this year, the Kanagawa Prefectural Government (K.P.G.) made “Cool Renaissance Declaration” to widely appeal for “Earth Renaissance” and to take the initiative in doing whatever we can do now for preventing global warming. K.P.G. is conducting specific programs, such as popularization of the electric vehicle (EV) and photovoltaic generation.

Especially, the EV, of which marketing is scheduled for next year, does not emit any exhaust gas while running, and the volume of CO₂ produced in the process of power generation for the EV battery, etc. is just one fourth of that of the gasoline vehicle. The EV is considered as one of the most powerful cards to cope with the “environmental and resource issues”, such as prevention of global warming, improvement in urban environment, and reduction in oil dependence.

Kanagawa Prefecture has a large accumulation of production and development bases of automobiles and lithium-ion batteries, as well as universities and institutes conducting research and development of automobile technology and power generating units. In 2006, “Kanagawa EV Promotion Council”, comprised of government, industry and academia, was established to develop and promote the EV on the basis of these advantages of Kanagawa. The Council has continued deliberations on concrete measures for EV promotion.

And March this year, the Council compiled the deliberations into the “Kanagawa EV Promotion Measures”. The “Measures” sets out the objective to “increase the use of EVs to 3,000 in the prefecture by FY2014”, and presents programs to be taken respectively by the national government, K.P.G., business operators, etc.

We still have the issues to solve in introducing and promoting the EV, such as

improvement in EV' s performance and development of battery charging infrastructure. And cooperation from business operators and the concerned institutions/organizations is indispensable. We will continue our utmost efforts at promoting the EV through collaboration among government, industry and academia. Kind assistance and cooperation from many people in this regard would be appreciated.

We firmly believe that transmission of Kanagawa' s efforts to all parts of Japan and the world will lead to popularization of the EV, and to solution of the environmental and resource issues.

Shigefumi Matsuzawa

President of the Kanagawa EV Promotion Council
Governor of Kanagawa Prefecture

1. Basic Policy

With a view to preventing global warming, reducing oil dependence, and improving urban environment, the Kanagawa EV Promotion Council will increase the use of EVs to 3,000 in the prefecture by FY2014 as the common objective of government, industry and academia. The Council will substantiate its members' respective measures and promote the use of EVs, paying particular attention to the trend of the market and technology development.

Regarding the promotion measures to achieve the objective, the Council will examine the effectiveness of these measures, and enhance their contents including cooperation with enterprises that agree on the purport of the Council.

2. Objective

- ◇ Kanagawa Prefecture aims to increase the use of EVs to 3,000 in the prefecture by FY2014.

The above numerical target is set up based on the fact that the number of hybrid cars reached 3,000 within 5 years after they had been placed on the market. The objective intends to create an environment, where EVs will be fully used in the prefecture like the hybrid cars.



3. Promotion Measures

1) Measures for Further Improvement in EV' s Performance, etc.

The national government and K.P.G. will promote research and development of EV batteries such as lithium-ion battery. The automobile and battery manufacturers will promote the following measures to develop higher-performance, more durable, lower-cost batteries, and put them on the market at an early point.

A. Development of high-performance, low-price batteries, etc.

- ◇ The Ministry of Economy, Trade and Industry (METI), on its program “Development of High-performance Battery System for Next-generation Vehicles” , will conduct development of high-performance batteries required for early commercialization of the highly efficient, next-generation vehicle.
- ◇ In cooperation with industry, academia and other governments, K.P.G. will carry out research and development to improve the core technology of the EV, such as lithium-ion battery and electronics.

B. Marketing of EVs and lithium-ion batteries

- ◇ Mitsubishi Motors Corporation (MMC) will put a minicar-type EV on the market by FY2010.
- ◇ Fuji Heavy Industries Ltd. (FHI) will put a minicar-type EV on the market by 2009.
- ◇ Nissan Motor Co., Ltd. will carry out the verification test of a new-type EV by 2010, and sell it on the market at the early time of the 2010s.
- ◇ GS Yuasa Corporation aims to begin commercial production of the lithium-ion battery for EVs in FY2009.
- ◇ NEC Lamilion Energy, Ltd. aims to begin supply of the lithium-ion batteries by FY2009.
- ◇ ELIYY Power Co., Ltd. aims to begin commercial production of the lithium-ion battery in FY2009.

2) Measures for Creating the Initial Demand

In order to create the initial demand for EVs, the national government, K.P.G., the municipal governments and the major car users will take the initiative in using EVs. They will also promote the following measures, such as subsidy and tax break, to reduce the initial users' burden, and introduce incentives to increase these users' convenience.

A. Initiative in using EVs

- ◇ K.P.G. will gradually replace its 100 cars with EVs by FY2014.
- ◇ Tokyo Electric Power Co., Inc. (TEPCO) will gradually replace its business cars with EVs by FY2014.
- ◇ K.P.G. will encourage the municipal governments and the major car users to introduce and use EVs.
- ◇ K.P.G. will consider a system to encourage business operators to use low-emission vehicles including EVs.

B. Subsidy

- ◇ METI will assist users in purchasing EVs through the "Clean Energy Vehicle Promotion Program" of the Electric Vehicle Promotion Center.
- ◇ K.P.G. will begin providing additional financial assistance of about half the national subsidy to purchase the next-generation EVs at the time of their sale (estimated for FY2009).
- ◇ The City of Yokohama will include EVs in the list of vehicles to be covered by its subsidy system of "Private Sector's Low Pollution Vehicles Promotion Project" .
- ◇ In view of the sale of EVs, the City of Kawasaki will examine the inclusion of EVs in the list of vehicles to be covered by the existing "Low Pollution Vehicles Subsidy System" .

C. Reduction of taxes

- ◇ K.P.G. will reduce the automobile tax and automobile acquisition tax on EVs by 90% beginning in the year when the next-generation EVs will be marketed (estimated for FY2009).
- ◇ K.P.G. will encourage the municipal governments within the prefecture to reduce the light motor vehicle tax.

D. Reduction of parking fees, etc.

- ◇ K.P.G. will reduce the parking fees and give parking priority to EV users when they park at the toll parking lots under the jurisdiction of K.P.G.
 - The toll parking lots which are directly operated by K.P.G. will begin these preferential treatments for EV users in FY2009.
 - Regarding the toll parking lots which are operated by the designated managers, K.P.G. will encourage them to begin these treatments in FY2009 or later.
- ◇ K.P.G. will encourage the municipal governments and private operators of toll parking lots to reduce fees and give parking priority to EV users.

E. Reduction of expressway tolls

- ◇ K.P.G. will examine with the expressway companies, etc. possibility of reducing tolls of EVs paid through the ETC system.

F. Development of financial instruments, etc.

- ◇ K.P.G. will examine provision of loans for purchasing EVs in the prefectural loan program for small and medium-sized companies through financial institutions. K.P.G. will encourage banks and other financial institutions to develop financial instruments, such as low-interest loans, for those who purchase EVs. It will also encourage casualty insurance companies, etc. to develop insurance products of inexpensive premiums for EV users.
- ◇ K.P.G. will continue to examine measures in Kanagawa EV Promotion Council to give economic and social advantages to business users of EVs over those that use other type of automobiles.

3) Measures for Development of EV Battery Charging Infrastructure

K.P.G. will promote the below measures to establish network to charge EV batteries using 100 and 200-volt outlets, and install quick chargers so that EV users will be able to charge easily on the street.

- ◇ K.P.G. aims to establish “EV Battery Charging Network” using 1,000 outlets of 100 and 200 volts within the prefecture by FY2014.
- ◇ K.P.G. will install quick chargers in about 30 locations within the prefecture by FY2010.

A. Establishment of “EV Battery Charging Network” using 100 and 200-volt outlets

- ◇ K.P.G. will install 70 outlets of 100 and 200 volts for charging EV batteries in parking lots within the prefecture by FY2011.
- ◇ K.P.G. will ask parking lot operators/managers to cooperate in making the existing outlets of 100 and 200 volts in their parking available for charging EV batteries. K.P.G. will also encourage installation of 100 and 200-volt outlets in parking lots without these outlets.

B. Installation of quick chargers, etc.

- ◇ K.P.G., TEPCO, MMC and FHI will install a total of about 30 quick chargers within the prefecture by FY2010.
- ◇ Kanagawa Rent-A-Car Association will examine possibility of cooperation in installing quick chargers considering their costs and sizes.
- ◇ Nippon Telegraph and Telephone East Corporation (NTT East) will examine possibility of cooperation in installing quick chargers considering their costs and sizes.
- ◇ K.P.G. will encourage the municipal governments to install quick chargers.
- ◇ METI will give financial assistance to those who install EV battery chargers through the “Clean Energy Vehicle Promotion Program*” of the Electric Vehicle Promotion Center.
- ◇ K.P.G. will work on the national government to establish a subsidy system for developing EV battery charging infrastructure.

- * A program to provide corporations and self-employed business owners with subsidy that corresponds to half of the equipment and construction costs (¥500,000 at the maximum) necessary for installing EV battery chargers.

4) Measures for Increasing Awareness of the Prefetural Citizens

K.P.G., TEPCO and the automobile makers will promote the following measures to effectively popularize EVs and provide information on EVs, such as conducting a test-driving.

A. Promotional activities targeting the prefectural citizens

- ◇ In cooperation with the members of the Kanagawa EV Promotion Council, K.P.G. will hold events and forums where participants can test-drive EVs, and use EVs for environmental education at elementary schools and junior high schools every year until FY2014.
- ◇ In cooperation with TEPCO and the automobile makers, K.P.G. will examine and implement test-drive programs and model projects for the prefectural citizens to experience high environmental performance of EVs by actually using them.

B. Promotional activities targeting major car users, etc.

- ◇ TEPCO, MMC and FHI will lend EVs to the municipal governments and major car users for a test drive to advertise EVs' high driving performance, as well as their environmental performance.
- ◇ K.P.G., TEPCO, MMC and FHI will hold exhibitions and test-driving of EVs in FY2007 and FY2008 at the events held by the municipal governments and major car users to develop their understanding of EVs and publicize EVs to the local citizens.

4. Promotion System

1) Kanagawa EV Promotion Council

Kanagawa EV Promotion Council will continue discussion on the activities laid out in the Promotion Measures to achieve the objectives.

TEPCO and automobile makers that sell EVs will make quarterly reports to K.P.G. about the number of EVs sold, as well as the number, locations, etc. of quick chargers installed.

K.P.G. will review the overall progress of the measures, and report it to the Council at the end of every fiscal year.

2) Promotional efforts transcending the prefectural boundaries

K.P.G. will work on METI to designate the Kanagawa EV Promotion Measures as one of the model projects of the “EV and pHV Town Concept*” proposed by METI.

K.P.G. will also conduct promotional activities in wide areas, such as reporting the Council’s promotional efforts and results at the summit meeting of the governors and mayors of the 8 metropolitan prefectures and cities, etc.

* In order to accelerate popularization of EVs, the “EV and pHV Town Concept” sets out the projects to install quick chargers and develop 100 and 200-volt outlet battery charging infrastructure in the designated model regions of the metropolitan area, as well as the project to verify effects of the incentives introduced for using EVs. These initiatives were presented in the “Proposals for the Full-Scale Popularization of Next-Generation Vehicles (June 2007, METI)” .

METI plans to establish a council by the end of FY2008 to carry out these model projects in FY2009.

Kanagawa EV Promotion Council

The Council consists of the automobile manufacturers, battery manufacturers, electric power company, major car users, universities, as well as the national and local governments. It has been conducting various promotion activities of the EV, battery charging infrastructure, etc.

List of the Council Members

President

Shigefumi Matsuzawa Governor of Kanagawa Prefecture

Vice Presidents

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Masao Omichi Executive Officer, Mitsubishi Motors Corporation

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Goro Yamazaki Chairman, Kanagawa Federation of Small Business
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Hiroshi Saito Chairman, Kanagawa Bus Association

Kenjiro Yoshida Executive Director, Kanagawa Rent-A-Car Association

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