Fukuoka FCV Club was established through local industry-academiagovernment collaboration, to integrally promote the dissemination of FCVs and development of hydrogen stations as a community-wide initiative. Fukuoka FCV Club **Dissemination of FCVs**

Major activities

- Promote understanding of FCVs
- Disseminate information relating to FCVs
- Spearhead the introduction of FCVs
- Promote the development of hydrogen stations

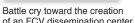
Fukuoka FCV Club

ent: Aug. 19. 2014 ve: Mr. Yutaka Aso (Chairman, Kyushu Economic Federation) Hiroshi Ogawa (Governor, Fukuoka Prefecture)

ship: Companies, universities, administrative bodies, etc. in Fukuoka that are engaged or interested in the introduction of FCVs or the development of hydrogen stations

Kick-off event (Aug. 19, 2014)







Spearheading the introduction of FCVs





Support for introducing FCV taxis

Promoting understanding



(Mar. 25, 2015)



(Fukuoka FCV Caravan)

Information provision

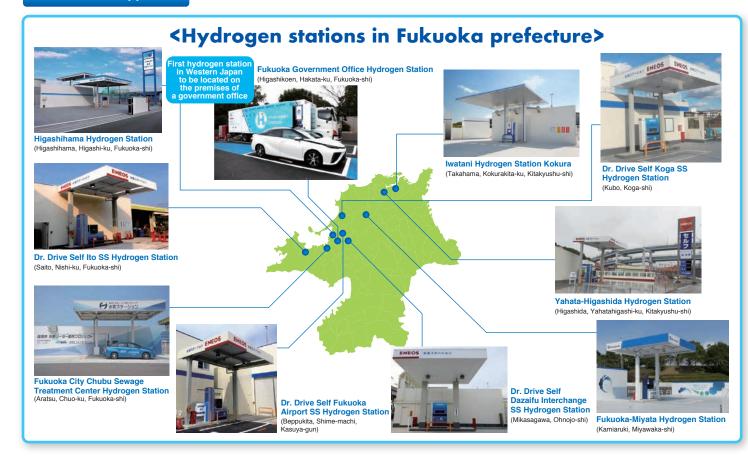
http://www.fcvclub.jp

Development of hydrogen stations

and acquisition support Consistent support, from the introduction of candidate sites to negotiations with land owners

Financial support

Support by means of prefectural subsidies in addition to national subsidies



Fukuoka Strategy Conference for Hydrogen Energy

7-7 Higashikoen, Hakata-ku, Fukuoka-shi, Fukuoka 812-8577

TEL.092-643-3448 FAX.092-643-3421 E-mail: info@f-suiso.jp URL: http://www.f-suiso.jp/

Industry-academia-government partnership

Fukuoka Strategy Conference

established prior to nationwide

for Hydrogen Energy

~Realizing a hydrogen energy society Towards~

Fukuoka Strategy Conference for Hydrogen Energy was founded in August 2004 as a pioneering all-Japan organization of its kind in the country run under industry-academia-government collaboration. Fukuoka's collective strength is being harnessed to propel a project for realization of a hydrogen energy society.

Fukuoka Strategy Conference for Hydrogen Energy

Date of establishment

Aug. 3,2004

Advisers

Hiroshi Ogawa, Governor, Fukuoka Prefecture Kenzo Yoneda.

Director General, Kyushu Bureau of Economy, Trade and Industry

Kenji Kitahashi, Mayor, City of Kitakyushu Soichiro Takashima, Mayor, City of Fukuoka

Chiharu Kubo, President, Kyushu University

- Nippon Steel Engineering Co., Ltd.
- Toyota Motor Corporation
- Hydrogen Energy Test and Research Center
 Honda Motor Co., Ltd.
- Iwatani Corporation
- Kyushu Electric Power Co., Inc.
- Saibugas Co., Ltd.
- Shimizu Corporation

Shinji Tanimoto, Nippon Steel Corp

Vice Presidents

Koji Toyoshima, Toyota Motor Corp.

Manabu Tsuyoshi, Iwatani Corp.

Yutaka Kuwahara, JXTG Nippon Oil & Energy Corp.

Kazunari Sasaki, Kyushu University

- JXTG Nippon Oil & Energy Corporation
- Electric Power Development Co.,Ltd.

- Mitsubishi Hitachi Power Systems, Ltd.
- Panasonic Corporation
- Kyushu University International Research Center for Hydrogen Energy
- Kyushu University Research Center for Hydrogen Industrial Use and Storage
- Saga University
- Kyushu Bureau of Economy, Trade and Industry
- Fukuoka Prefecture City of Kitakyusyu
- City of Fukuoka

822 companies and organizations

(as of Feb. 2020)



Case examples where the original subsidy system has been applied>

Hydrogen fuel CO densitometer



Yabegawa Electric Industries, Ltd.

Hydrogen telemetry



High durability rubber O-ring for hydrogen



Compact hydrogen sensor



that reacts specifically to hydroge Kvushu Keisokki Co., Ltd. / Atsumitec Co. Ltd.

Metal packing for ultra-high pressure hydrogen



TOKi engineering

Combustor for ENE-FARM



Knowledge provision (component workshops)

Knowledge of the structures and functions of component parts is provided with the cooperation of hydrogen manufacturers

Individual consultation and advice

Technical advisors (former employees of hydrogen-related companies) are dispatched to help companies identify technical issues, offer advice for improvement and provide individual support in making technical proposals to manufacturers.

idential fuel cell (ENF-FARM)









Business matching support

Support is provided to help companies participate in trade fairs toward cultivating sales channels for their products

R&D

Support by the most advanced research centers in the world

Development and

aggregation of

new industries

in the hydrogen

energy sector

Support is provided for R&D projects on hydrogen manufacturing, transportation, storage and usage, from global research centers on hydrogen and fuel cells that are congregated in Kyushu University.

HYDROGENIUS

(Kyushu University Research Center for Hydrogen Industrial Use and Storage)

(AIST-Kyushu University Hydrogen iterials Laboratory)



NEXT-FC (Next-Generation Fuel **Cell Research Center)**



R&D

Realization of a hydrogen

energy society

Promotion of the widesp read use of new energies

Encouragement of com munity-based innovatio

Promotion of global war ming counte

(International Institute for **Carbon-Neutral Energy** Research)





Community

demonstration

(model activities)

Energy interchange project using fuel cells Creation of a world-leading

ub for hydrogen knowle



CO₂-free hydrogen supply systems Renewable energy (solar power) Manufacture of hydrogen from solar power and re-utilizing it (to power FC forklifts, etc.) (Toyota Motor Kyushu, Inc. Miyata Plant)

Pure hydrogen supply via pipeline

Supply of pure hydrogen to the city

Kitakyushu Hydrogen Town

via pipeline (FY2010-2014)

Support for corporate product

their utilization of the pipeline

development initiatives through

Community demonstration (model activities)

New proposals for a hydrogen society

Untapped energy (sewage sludge)

Manufacture of hydrogen from sewage sludge and supplying it to FCVs (Fukuoka City Chubu Sewage Treatment Center)



Creation and demonstration of a smart hydrogen society

Demonstration of next-generation fuel cells, et (Kyushu University Ito Campus)



Energy interchange project using fuel cells

Sharing the power generated by ENE-FARM installed in rental apartments among households in the same apartment. (Fukuoka-ken Jyutaku Kyokyu Kousya Rental Housing Complex Ozasa Danchi)

Energy interchangeproject using fuel cells Creation of a world-leading hub for hydrogen knowledge



Development of hydrogen-related human resources

Development of

hydrogen-related

human resources

resources development

Held course

- Introductory course on hydrogen
- Specialized course on hydrogen

Support for corporate human Implementation of lecture courses in response to increasing needs accompanying the dissemination of FCVs and the ENE FARM system (attended by 1,400 participants to date)





Global dissemination and local introduction of knowledge International Hydrogen

Energy Development Forum Dissemination of Japan's

initiatives with a focus on Fukuoka and local introduction of knowledge from other countries



2010 IPHE* Excellence in Leadership Award

Award presented to individuals, organizations and international

projects that are recognized for their contribution to the transition toward a hydrogen economy





*International Partnership for Hydrogen and Fuel Cells in the Econor (framework of policy makers from institutions representing 18 worldwide count

Support framework for the FCV and hydrogen station sector

■Support for corporate technical development ■Acceleration of regulation reviews ▶ Safety improvement, Contribution to international standardization

cost reduction



National Institute of Advanced Industrial Science and Technology (AIST)

hanical Crystal structure Lattice defect Phase morphology
 Material plasticity

Performance tests of products developed based on HYDROGENIUS research data

Solutions to technical issues identified in tests at HyTReC



Support framework for the next-generation fuel cell sector

- World's first industry-academia intensive research in the next-generation fuel cell sector (Next-Generation Fuel Cell Research Center (NEXT-FC))
- Corporate laboratory ensuring strict confidentiality. Approx. 15 resident companies.
- One-stop support (consistent support from basic research to demonstration) Utilization of the seeds of diverse cutting-edge technologies in the university

