







# Tottori Prefecture, Tottori Gas, Sekisui House and Honda Sign an Agreement for a Project to Establish a Base for Hydrogen Energy Demonstration (and Environmental Education)

--Realizing an environmentally-responsible, comfortable and smart lifestyle with hydrogen --

TOKYO, Japan, January 25, 2016 – Tottori Prefecture, Tottori Gas Co., Ltd, Sekisui House Ltd. and Honda Motor Co., Ltd. today held a ceremony and signed an agreement to jointly pursue Tottori Prefecture's project to establish a base for a hydrogen energy demonstration (and environmental education) with the goal to prevent global warming and create a sustainable and low-carbon society. This will be Japan's first case where hydrogen energy will be utilized through the integration of a hydrogen station which creates hydrogen from renewable energy, a smart house and a fuel cell vehicle (FCV).

The purpose of this project is to promote the popularization of smart houses and FCVs and achieve a shift in the lifestyles of people toward the future realization of a hydrogen society. To this end, the project will install, for the first time on the Sea of Japan side of the archipelago, a Smart Hydrogen Station (SHS)\*1 that supplies hydrogen created by electrolysis of water using renewable energy. Moreover, the project will propose and increase public awareness of a comfortable and smart lifestyle that can be achieved through energy-saving and energy-creation with the use of hydrogen energy.

Based on the agreement signed today, the project will install a base for hydrogen energy demonstration (and environmental education) which will help increase public understanding of how a hydrogen society works in the future, and Tottori Prefecture and Tottori Gas will promote and run demonstrations using this facility.

To be more precise, a SHS and solar panels will be installed on the property of Tottori Gas Group (located in Gotandacho in Tottori City). Using electricity generated from a solar power generation system, this SHS will create and supply hydrogen to a FCV. In the meantime, an exhibition building of Sekisui House already existing within the same property will be turned into a smart house. At this smart house, visitors will be able to have firsthand experience with technologies and systems that enable an environmentally-responsible, comfortable and smart lifestyle, including power feeding from the fuel cell of a FCV to a smart house. Moreover, a new facility will be built within the same property for the purpose of offering environmental education for people of all ages. By conducting various hydrogen energy-related demonstrations such as creation of hydrogen through electrolysis of water, Tottori Prefecture and Tottori Gas will promote the enhancement of public awareness toward the utilization of hydrogen energy.

<sup>\*1</sup> A hydrogen station equipped with Honda's original high-differential-pressure electrolyzer. SHS is a world's first hydrogen station where the key components are housed in a box-shaped package.

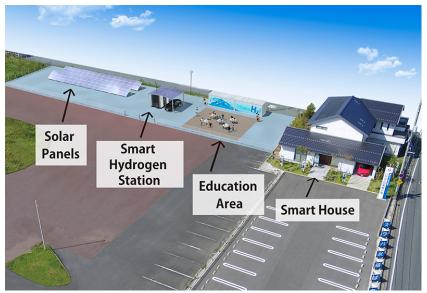


Image of facilities

# 1) Outline of the base for hydrogen energy demonstration (and environmental education) to be established thorugh this project

The facilities will offer visitors a firshand experience with technologies and systems that enable an environmentally-responsible, comfortable and smart lifestyle.

- •Smart Hydrogen Station (SHS) and solar panels will be installed.
- •Using electricity generated from a solar power generation system, this SHS will create and supply hydrogen to a FCV.
- •Exhibition building of Sekisui House\*2 already existing within the same property will be turned into a smart house which will get a power feed from the fuel cell of a FCV.
- •A new facility will be built for the purpose of offering environmental education to promote enhancement of public awareness toward the utilization of hydrogen energy.
- \*2 Inaba no Shiki Tenjijyo (which means "Exhibition Hall for Four Seasons of Inaba") with total floor area of 258.34m<sup>2</sup>

#### 2) Hydrogen-based lifestyle that Tottori Prefecture envisions

## --Smarter and more ecological future lifestyle realized by hydrogen--

Environmentaly-responsible, comfortable and smart future living can be realized with a "hydrogen-based lifestyle." "Hydrogen-based lifestyle" enables the utilization of renewable energy and gas, and utilization of FCVs as a backup power source will lead to the enhancement of the prefecture's disaster prevention capability.



Hyrdogen-based lifestyle envisioned by Tottori Prefecture

## 3) Roles to be played by each party

- Tottori Prerecture will bear a portion of the SHS installation cost and the cost of installing a smart house and study area. Tottori prefecture will also act as a liaison among four parties.
- **Tottori Gas** will be responsible mainly for installing and operating the SHS.
- Sekisui House will be responsible mainly for designing and installing the smart house.
- Honda will be responsible mainly for providing technological know-how related to the SHS and delivering its all-new FCV, CLARITY FUEL CELL.