



# Case Study

## Yokohama Smart House Project



The intelligent technology used to manage the home's energy ensures that it is both comfortable and efficient.

### Site Overview

Location	Yokohama, Japan
Coordinates	35.5 °N 139.6 °E
Average global irradiance	1,357 kWh/m <sup>2</sup> /yr
Average temperature	16.3 °C • 61.4 °F
Average precipitation	1,555 mm • 61.2 in/yr

### Installation Overview

Date onstream	November 10, 2010
System capacity	2.125 kWp
Panel type	SC85-A (85W)
Number of installed panels	25

*"We selected Solar Frontier's CIS modules because their all-black appearance not only offers good design, but excellent value as well. We recommend them to anyone who wants a 'smarter' house."*



**Shingo Iwai**  
Store Manager  
Yokohama Branch  
Housing Division  
Sumitomo Forestry

At the 2010 edition of the Asia-Pacific Economic Cooperation Conference (APEC) held in Japan, there was more on the agenda than just economic partnerships. Sumitomo Forestry also unveiled its "Smart House," a model home which showcases the latest environmental technology, as well as Solar Frontier's CIS modules. Sumitomo Forestry, established in 1691, is one of Japan's leading homebuilders.

The Sumitomo Forestry Minato Mirai Exhibition is part of the Yokohama Smart City Project, a joint public-private project for the realization of a sustainable society. The project demonstrates the energy efficient Smart House, which is designed to create a comfortable environment that also is environmentally friendly. The house is installed with next-generation power management systems and is significantly more efficient than ordinary homes. Indeed, the house is not just carbon neutral, it is carbon negative: each step in its entire life cycle helps to reduce CO<sub>2</sub> emissions.

A key component in this project is the use of intelligent energy sources like photovoltaic panels. Solar Frontier's CIS modules were the perfect choice to complement the technologies used in the home. Not only do the high-performance modules contribute to achieving the carbon-negative goal, they also enhance the building's appearance. Solar Frontier built its business on installations like these, offering homeowners across Japan and around the world performance and beauty.

### About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions, on the world's largest scale. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit [www.solar-frontier.com](http://www.solar-frontier.com)