

## Press Release

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May 29, 2012

# Wind Power and Secondary Battery Systems Installed at Mori Seiki Iga Campus

Mori Seiki is pleased to announce the installation of the WindCarrier wind power system (WC) and the CellCube FB10-100 secondary battery system (CC) at its Iga Campus.

Both systems, made by our German collaboration partner GILDEMEISTER AG, were installed for the purpose of reducing environmental burdens and securing power supply in an emergency. In addition to these systems, we have introduced the Nissan Leaf electric vehicle and the Toyota Prius plug-in hybrid vehicle as courtesy cars.

The WC is a vertical axis wind power generator with a rated output of 10 kW, and characterized by its quiet operation, lightweight construction and independence from the direction of the wind. It starts up and begins generating power when the wind speed reaches three meters per second. The power generated by the WC, some of which is supplied to the Assembly Plant, is stored in the CC.

The CC is a kind of the vanadium redox flow battery featuring long cycle life. It ensures a high level of safety because no combustible or explosive substance is used or generated, and enables easy expansion of storage capacity. The CC is expected to serve as a promising storage solution for industrial use. The CC FB10-100 system, which we installed at the Iga Campus, is capable of storing up to 100 kWh of electricity, and can be used to charge the EV and the PHV and to supply electricity to our disaster headquarters in the Assembly Plant in case of emergency.

Mori Seiki will continue its efforts towards reduction in environmental burdens while verifying the potential for further utilization of these green energy technologies.

### ■ Wind power system WindCarrier

Type : Vertical axis wind power generator  
Specification : Rated output 10 kW  
Size : 4,700 mm (rotor diameter), 14,250 mm (overall height), weight: 2.5 t  
Reference installation price for Japan: 19,000,000 yen (in the Kanto and Chubu regions)

### ■ Secondary battery system (CellCube FB10-100 manufactured by Cellstrom)

Type : Vanadium redox flow battery  
Specification : Energy storage capacity 100 kWh, output voltage 200 V (single-phase)  
Size : 4,500 mm (L) × 2,200 mm (W) × 2,400 mm (H), weight: 10 t  
Reference installation price for Japan: 34,000,000 yen (in the Kanto and Chubu regions)

# Mori Seiki Energy Solution Park



(From the left: WC, CC, EV, and PHV)

