





NEWS RELEASE

News Release

May 31, 2011

Fuji Electric Co., Ltd.

Japan Airlines Co., Ltd.

Innovation Thru Energy Co., Ltd.

Planning Commences to Initiate Business Projects that Apply Refrigeration and Cold Storage Technologies in Distribution

Fuji Electric Co., Ltd. (Shinagawa Ward, Tokyo; president and representative director: Michihiro Kitazawa), Japan Airlines Co., Ltd. (Shinagawa Ward, Tokyo; president and representative director: Masaru Onishi) and Innovation Thru Energy Co., Ltd. (Chiyoda Ward, Tokyo; President and CEO: Pankaj Kumar Garg) today announced that they will enter a collaboration in the area of distribution to initiate business projects that employ advanced refrigeration and cold storage transport technologies.

1. Background and objectives

The three companies will collaborate on creating distribution systems that utilize the IceBattery® System* and refrigerant plates developed by Innovation Thru Energy.

In the past, cold storage techniques have relied on the use of dry ice. The techniques are considered problematic due to the difficulty in maintaining constant temperatures; large amounts of CO₂ are also emitted during storage. The IceBattery® System, however, is able to maintain a constant temperature within a range from minus 20 degrees to 8 degrees Celsius for up to 120 hours. This is achieved through the application of refrigerant plates produced with cold gel technologies that are used in the aerospace industry. By applying these technologies, items can be transported at fixed temperatures that remain constant, allowing highly reliable transport of goods that have been challenging

to handle in the past, such as fresh foods, medical supplies, and semiconductor materials.

Fuji Electric has earned a strong reputation for its refrigeration and cold storage equipment employed at food distribution centers and retail stores, and possesses considerable expertise in refrigeration and cold storage technologies for food distribution. Meanwhile, Japan Airlines has gained extensive experience in the airline transport industry, in which requirements for safety and quality control are stringent. With its know-how and original transport systems that utilize the IceBattery® System, Japan Airlines intends to leverage its international transport network to create new business opportunities not only in Japan, but also overseas.

The collaboration between Fuji Electric, Japan Airlines, and Innovation Thru Energy aims to achieve reliable, extended transportation of fresh foods, as well as medical supplies such as blood for transfusions, which require precise temperature control. The three companies also aim to create an innovative, global scale distribution system in the future. Furthermore, positive steps will be taken toward achieving highly efficient distribution systems that reduce environmental burden, while considering initiatives that contribute to energy savings in Japan in the aftermath of the Great Eastern Japan Earthquake.

* IceBattery® is a registered trademark of Innovation Thru Energy Co., Ltd.

Distinct features of the IceBattery® System achieved through the technologies developed by Innovation Thru Energy for application in distribution:

- Energy savings: as the system does not require electricity for the transport of goods, overall electricity usage can be reduced up to 50%
- Temperature control: a constant temperature can be maintained within a range from minus 20 degrees to 8 degrees Celsius, even if the outdoor temperature is above 40 degrees Celsius
- Extended storage: constant temperatures can be maintained for 120 hours or more
- Reduction of CO₂: significant reductions in CO₂ emissions are possible since no dry ice is used
- Cost efficiency: costs can be cut by approximately 60% in comparison with cold storage systems that use dry ice or other methods

Innovation Thru Energy's Web site: http://www.ithrue.com/index.php



Japan Airlines' airlift box

IceBattery®

(Japan Airlines' application example)

2. Contact information

Public Relations Group, Fuji Electric Co., Ltd.

Telephone: 81-3-5435-7206