The Green Airport Relay Initiative of New Kansai International Airport Company

Representatives of the EAAA member airports gathered in Osaka on October 10, 2013 for the 12th EAAA Annual Meeting. At this meeting representatives signed the Green Airport Relay Declaration, which includes a commitment by the 12 member airports to implement initiatives to improve awareness of environmental problems by means of a monthly relay, coming into effect from January 2014.

As a starter of this relay initiative, New Kansai International Airport Company held a presentation session and a site tour as an activity of our Smart Island Council and shared information and understanding of clean energy usage with government organizations and companies operating at our airport.

Smart Island KIX Environmental Plan

Kansai International Airport aims to be an "environmentally advanced airport" which is people-friendly and Earth-friendly through the use of clean energy and adaptation of highly advanced information technologies. We are especially focusing on local energy generation initiatives such as photovoltaic, wind power, and hydrogen fuel, and aiming for an equivalent of 10% of electricity production from locally generated sources which will cover electricity consumption on the island. The yearly amount of electric power which KIX had started selling from February 1, 2014 will be twelve million kwh which is equivalent to 7% of electricity consumed at the airport.

In addition, we have set up KIX Hydrogen Grid Plan heading towards a hydrogen usage community. We have started considering the use of hydrogen as energy source for forklifts and towing tractors, and the expansion of hydrogen fueling stations and other hydrogen related facilities.

The Green Airport Relay Initiative at Kansai International Airport

- Date: Jan 27th, 2014
- Venue: Kansai International Airport
- Number of participants: Approx. 60
 (Government agencies, airlines, cargo/freight carriers, energy companies etc.)

<Part 1: Session> 13:30-14:50

1. Hydrogen usage trend by Iwatani Corporation

[Key Topics]

• Fuel Cell Limousine Bus has been operating between Terminal 1 and Terminal 2 at

KIX since Terminal 2 opened in October 2012, this is one of the projects of the Japan Hydrogen & Fuel Cell Demonstration Project subsidized by the Ministry of Economy, Trade and Industry (METI).

• Kansai Hydrogen Station is a small satellite hydrogen station which consists of only a high pressure hydrogen storage unit and a dispenser. It has distinctive characteristics that while the station is now a simple facility suitable for the early stage on which there are few hydrogen fueled vehicles, but additional equipment like a liquid hydrogen pump, will be able to gradually extend station capacity on a practical scale with the growth in hydrogen demand.

[Other Topics]

- Characteristics of hydrogen
- Trend of enabling-hydrogen community
- Examples of hydrogen usages abroad

2. Outline of KIX Mega Solar (solar power project) by Solar Frontier K.K.

[Key Topics]

• KIX Mega Solar consists of 73,000 solar panels which are placeed in the southern part of the 2nd island and to the rooftops of the cargo facilities, and is able to generate 11.6MW which is the largest among Asian airports.

[Other Topics]

- Course of solar power projects
- Demand trend of solar panels
- Selling electric power in Japan

3. High Volume Low Speed (HVLS) Fan by Toyota Tusho Corporation

[Topics]

- Characteristics of HVLS Fan
- Introduction of examples of HVLS Fan used abroad
- About Leadership in Energy & Environmental Design (LEED) Program

<Part 2: Site tour> 15:00-15:40

1. KIX Mega Solar

We visited KIX Mega Solar at the southern part of the 2nd island which is 1.2 km long. To prevent bad effect to pilots and air traffic controllers, solar panels are coated with anti-reflection films.

2. Hydrogen Station

At the hydrogen station, there is a high pressure hydrogen storage unit and a dispenser, and we saw the site where hydrogen was replenished from a liquid hydrogen storage type mobile refueling station.

Picture in front of KIX Mega Solar

