

Toyota Tsusho Corporation
Internet Initiative Japan Inc.,
Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

"Lao PDR Energy Efficient Datacenter Project"

Cloud Datacenter Using Joint Crediting Mechanism Starts Demonstration Operations

TOKYO, November 30, 2016 - Toyota Tsusho Corporation, Internet Initiative Japan Inc., and Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. today announced the start of a joint demonstration project in the Lao People's Democratic Republic (Lao PDR), aimed at evaluating the effectiveness of greenhouse gas emission reduction effect and energy efficiency using advanced container-type datacenter technology. (as previously announced on January 26, 2016)

Lao PDR's first government-operated eco datacenter was completed in Vientiane, on November 29, 2016 (local time) and a ceremony was held to commemorate the datacenter's opening, attended by Dr. Boviengkham Vongdara, Lao PDR Minister of Science and Technology, Ambassador of Japan in the Lao PDR Takeshi Hikiyama, and other dignitaries.



Datacenter opening ceremony



Exterior view of Lao PDR's first eco datacenter

With integrated cloud infrastructure ^(*) and security solutions, the new datacenter will serve as a cornerstone of Lao PDR's IT foundation and contribute to the development of e-Government applications for their people. Additionally, the datacenter will be utilized for training future generations of IT engineers, industrial development and for a broad range of other initiatives. By operating the datacenter, the Lao PDR government also aims to strengthen its IT governance.

This datacenter is also expected to serve as a springboard for the maturation of the local IT industry, encouraging Japanese-related companies to expand their IT business in the country.

Features of Lao PDR's First Government-operated Datacenter

1. Large electricity savings enabled by using in-direct outside air cooling system (40% electricity savings compared to conventional building-type datacenters)
2. Short construction time enabled by delivering and installing servers in preset operational configuration
3. Cloud datacenter appliance design incorporating facilities and ICT virtual systems
4. High quality and efficiency enabled by Japanese manufacturing
5. Flexible scalability enabled by modular design

The highly energy efficient datacenter leverages IJ's IT/cooling all-in-one packaged design "co-IZmo/I". This design approach made it possible to complete the datacenter in just seven months after construction began in May 2016 (about one-third the time typically required for conventional building-type datacenters). The project that provides IT solutions combined with highly energy efficient "co-IZmo/I" and cloud infrastructure is especially critical for Lao PDR and other developing countries with an urgent need to develop their IT infrastructure.

This project is conducted on the basis of the commission by the New Energy and Industrial Technology Development Organization (NEDO), as part of its Global Warming Mitigation Technology Promotion Project selected in July 2015. The governments of Japan and Lao PDR have signed the bilateral document concerning the Joint Crediting Mechanism (JCM)^(*2). The project will use the JCM system (confirmation of suitability, project registration, monitoring, reporting and verification of emission reductions attributed to the project) to support the efficient and effective implementation of specific, demonstrable greenhouse gas emissions reduction projects overseas using Japanese superior low-carbon technologies and products which have not been introduced or spread little among the developing countries.

The JCM joint committee held in October 2016 has approved the JCM methodology for calculating the amount of greenhouse gas emissions reduced by this project. Currently, preparations for registration for this project are underway, and we expect to apply for emission reduction credits once the demonstration period ends in February 2018.

(*1) Servers, networks, storage, and other functions provided as resources.

(*2) Joint Crediting Mechanism: Mechanism for facilitating diffusion of low-carbon technologies, products, systems, services, and infrastructure, as well as implementation of mitigation actions in developing countries and appropriate evaluation of Japan's contributions to greenhouse gas emission reductions or removals in a quantitative manner to achieve Japan's emission reduction target.