

14 January 2022

Innovative Predictive Control System for Air Conditioning Wins Prestigious Asia-Pacific Region Award

The predictive control system for air conditioning at Hong Kong International Airport (HKIA) co-developed by CLP Power Hong Kong Limited (CLP Power), Airport Authority Hong Kong (AAHK), and the Hong Kong Observatory (HKO) has been awarded the Energy Project of the Year for the Asia-Pacific Rim region by the Association of Energy Engineers (AEE) in the United States. This is the third consecutive accolade CLP Power has received in the annual awards since 2019.

Using big data analysis of meteorological data, flight schedules, and electricity consumption data, the innovative system accurately predicts the cooling demand for the passenger terminal building at HKIA, achieving energy saving while maintaining the comfort of the terminal and enhancing passengers' airport experience.

This cooperation has made HKIA the first airport in the world to adopt a predictive control system for its air conditioning. With the upgraded chiller system, it can save an estimated 5.1 gigawatt hours (GWh) of electricity a year, equivalent to a reduction of around 1,900 tonnes of carbon emissions. CLP Power Managing Director Mr T K Chiang said he was honoured that the company had received the award from the AEE. "CLP Power is committed to helping our customers use smart technology to optimize their operations and improve energy efficiency. Assisting our industrial and commercial customers to better manage their energy use and reduce carbon emissions is in line with our full support to the Government's decarbonisation policy and we will offer our power expertise to achieve carbon neutrality before 2050 together with our customers and our community."

Mr Amen Tong, General Manager, Technical Services Infrastructure of Airport Authority Hong Kong said, "In collaboration with CLP Power and HKO, we have successfully implemented innovative energy-saving solutions at HKIA, as part of our efforts to achieve net-zero carbon at the airport by 2050 and develop into one of the world's greenest airports."

Ms Sandy Song, Assistant Director (Development, Research and Administration) of the Hong Kong Observatory said, “The Observatory has been promoting the use of our meteorological data and weather forecast services to the public and various industries. This project showcases the benefits of cross-sector collaboration in applying meteorological data and weather forecast services in energy management solutions, setting a good example for the industry.”

CLP Power will actively promote the predictive control system for air conditioning to other business partners, such as shopping malls and office buildings using large central air conditioning systems.

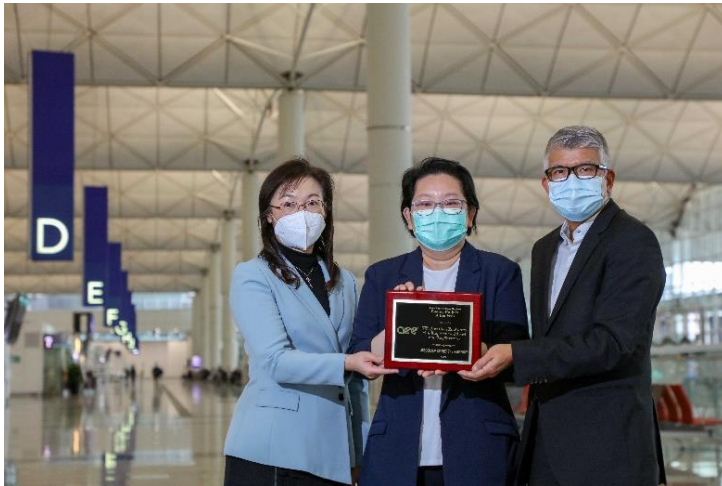
The AEE is a non-profit professional society with more than 18,000 members in over 100 countries. The annual AEE Awards programme recognises individuals and organisations worldwide for their achievements in the energy industry.

About CLP Power Hong Kong Limited

CLP Power Hong Kong Limited (“CLP Power”) is the Hong Kong utility subsidiary wholly owned by CLP Holdings Limited, a company listed on the Hong Kong Stock Exchange and one of the largest investor-owned power businesses in Asia. CLP Power operates a vertically integrated electricity supply business in Hong Kong, and provides a highly reliable supply of electricity and excellent customer services to six million people in its supply area. In 2021, CLP celebrated the 120th anniversary of its founding in Hong Kong with a commitment to continue to move forward with the community based on a shared vision of a better tomorrow.

Photo Captions:

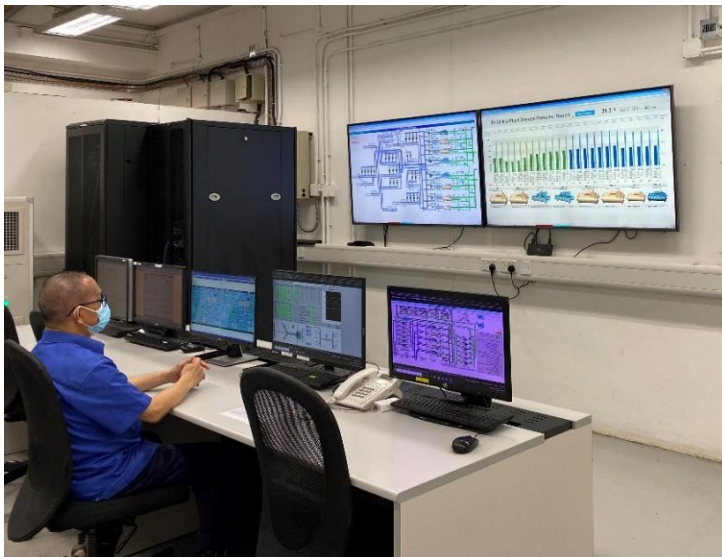
Photo 1



The predictive control system for air conditioning jointly developed by CLP Power, AAHK and the HKO is awarded the Energy Project of the Year for the Asia-Pacific Rim region by the Association of Energy Engineers in the United States.

(From left: Hong Kong Observatory Assistant Director (Development, Research and Administration) Ms Sandy Song, CLP Power Senior Director of Customer and Business Development Ms Lena Low, and Airport Authority Hong Kong General Manager of Technical Services Infrastructure Mr Amen Tong.)

Photo 2



The predictive control system for air conditioning uses big data analytics to accurately predict the cooling demand for Hong Kong International Airport's passenger terminal building to save energy, while maintaining the comfort of passengers the terminal and enhancing their airport experience.

Photo 3



Hong Kong International Airport is the first airport in the world to adopt a predictive control system for its air conditioning with the upgraded chiller system, saving an estimated 5.1 GWh of electricity a year, equivalent to the annual energy consumption of nearly 1,200 CLP Power residential customers. The reduction of carbon emissions by around 1,900 tonnes is equal to the planting of some 80,000 trees a year.

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