

2 October 2025

CLP Power Wins Three International Awards for Innovative Energy Management

CLP Power Hong Kong Limited (CLP Power) has been bestowed three prestigious international awards in recognition of its commitment to innovative energy management. The company's self-developed "Innovative Demand Optimisation and Forecast Model" won the "Energy Project of the Year – International Award" from the Association of Energy Engineers (AEE) in the United States. Another energy management project in collaboration with Hong Kong Disneyland Resort also received the "Corporate Energy Management Runner Up – International Award" from the AEE. Meanwhile, CLP Power's collaborative project with Chinachem Group (Chinachem), the "5G-powered Cooling Load Prediction System for Sustainable Shopping Malls", also earned a "Gold Medal" at the International Exhibition of Inventions Geneva. These accolades affirm CLP Power's excellent performance in driving Hong Kong's transition to a low-carbon society.

The "Innovative Demand Optimisation and Forecast Model" was designed to support CLP Power's peak demand management initiatives for residential customers. Since 2020, CLP Power has run the "Summer Saver Rebate" programme, encouraging residential customers to adjust their electricity usage during anticipated peak periods, with the aim of reducing Hong Kong's overall electricity demand. As participation in the programme surged with the increasing installation of smart meters, the model was developed in 2022 to help identify optimal target districts and participant numbers based on demand reduction goals enabling the programme to be implemented more effectively.

Between 2022 and 2024, CLP Power conducted five "Summer Saver Rebate" events, saving a total of approximately 990,000 kilowatt hours (kWh) in 10 hours, equivalent to the monthly electricity consumption of around 3,000 households and a reduction of around 386 tonnes of carbon emissions. The judging panel commended the model's robust data processing capabilities, which forecast energy-saving potential across district combinations and optimise incentive planning, helping CLP Power implement electricity demand management initiatives effectively.

CLP Power has a long partnership with Hong Kong Disneyland Resort in implementing a range of energy management initiatives since 2019. These include enhancing the efficiency of the cooling system through innovative technologies, replacing lighting with high-efficiency equipment, and connecting the 3,600,000 kWh of electricity generated annually by over 7,900 solar panels installed across the resort to CLP Power's grid. The resort has also participated in CLP Power's Renewable Energy Feed-in Tariff Scheme. In addition to producing zero-carbon electricity, the solar panels help block direct sunlight, reducing the need for air conditioning. With CLP Power's support, the resort established its first all-electric Halal kitchen, significantly enhancing energy efficiency in culinary equipment and offering Halal dining at the newly themed restaurant, "Wayfinders' Table".

The third award-winning innovation is the "5G-powered Cooling Load Prediction System for Sustainable Shopping Malls", jointly developed by CLP Power and Chinachem. Having successfully deployed at Chinachem's flagship property, Nina Mall, the system has significantly enhanced its cooling efficiency. By integrating 5G technology, the system monitors real-time people flow and carbon dioxide levels across different zones, alongside environmental parameters such as sunlight intensity, temperature, and relative humidity. Using artificial intelligence and big data analytics, the system forecasts cooling demand, adjusting air conditioning temperature and airflow more swiftly and precisely than traditional smart cooling systems. Since its implementation, the system has improved comfort levels at Nina Mall while achieving an estimated annual energy savings of 675,000 kWh, equivalent to a reduction of 256 tonnes of carbon emissions. The investment has successfully recovered its cost within one year, demonstrating outstanding performance.

CLP Power Managing Director Mr Joseph Law said, "We are honoured to receive three international awards for our breakthroughs in energy management at the AEE and the International Exhibition of Inventions Geneva. These awards reflect our team's dedication to energy saving and decarbonisation, and our commitment to supporting residential, commercial and industrial customers to enhance their energy efficiency with our power expertise and innovative technologies. We will continue to introduce smart solutions and work with the community to drive low-carbon transformation, supporting Hong Kong's goal of achieving carbon neutrality by 2050."

The AEE is a non-profit professional society with over 17,000 members in over 133 countries. Its annual awards programme recognises individuals and organisations worldwide for their achievements in the energy industry. The International Exhibition of Inventions Geneva is one of the most significant global annual events on inventions, featuring around 1,050 inventions from 35 countries and regions, judged by an international panel of experts.

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 more than six million people in its supply area.

Photo captions:

Photo 1



CLP Power Director of Customer Success and Sales Dr Anthony Lo (right) and CLP Power Principal Manager of Residential Sales Mr Victor Auyang (left) receive the “Energy Project of the Year – International Award” from the Association of Energy Engineers at a ceremony in Atlanta, Georgia in the United States.

Photo 2



CLP Power has partnered with Hong Kong Disneyland Resort to implement a range of energy management initiatives at the resort. With its remarkable performance in the

innovative application of technologies, energy efficiency, and sustainable development, the project wins “Corporate Energy Management Runner Up – International Award” from the Association of Energy Engineers. CLP Power Director of Customer Success and Sales Dr Anthony Lo (fourth from right) and Mr Chi Wing Foo, Director, Facility Services of Hong Kong Disneyland Resort (third from left) celebrate the award with the team.

Photo 3



CLP Power wins a “Gold Medal” at the International Exhibition of Inventions Geneva with its “5G-powered Cooling Load Prediction System for Sustainable Shopping Malls”. CLP Power Senior Director of Customer Success and Experience Ms Lena Low (third from left) and CLP Power Director of Customer Success and Sales Dr Anthony Lo (third from right) join the team for a team photo.

Photo 4



CLP Power Principal Manager of Corporate and Commercial Sales of Customer Success and Experience Mr Simon Tsui (first from left) presents the “5G-powered Cooling Load Prediction System for Sustainable Shopping Malls” to the judging panel at the International Exhibition of Inventions Geneva in Switzerland. The system integrates 5G

real-time image recognition technology, artificial intelligence, and big data analytics to instantly predict and adjust cooling output and enhance energy efficiency.

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