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CLP Power's Energy-Saving Competition Inspires Creative Youngsters to Design Solutions to Improve the Lives of Disadvantaged Communities

CLP Power Hong Kong Limited (CLP Power) launched a new programme **Empowering Youth for a Sustainable Future** this year to increase young people's awareness of sustainable development and social responsibility through an **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition**. The competition, funded by CLP Community Energy Saving Fund, was organised in partnership with the Institution of Engineering and Technology (IET) Hong Kong. The competition's finals and award presentation ceremony were held on December 14. Team U14, formed by students of City University of Hong Kong, Hong Kong University of Science and Technology, and The University of Hong Kong won the Gold Award in the Undergraduate Category. Team SD56 from Hong Kong Institute of Information Technology and Youth College won the Gold Award in the Sub-Degree Category.

The **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition** attracted entries from more than 90 teams from higher educational institutions, who were challenged to improve the lives of disadvantaged people and the community at large by designing practical solutions to encourage energy saving and low carbon living. Twenty teams were selected as finalists in the two categories and received funding of HK\$15,000 each from CLP Power to create prototypes of their proposed solutions. Feedback and advice on the prototypes were provided by professional engineers and representatives from the social welfare sector to help the students turn their ideas into reality. A total of 8 teams with outstanding performance in the two categories were awarded and received a total cash prize of HK\$110,000.

The award ceremony was officiated by CLP Power Chief Corporate Development Officer Ms Quince Chong, Director of Electrical and Mechanical Services Mr Poon Kwok-ying, and IET Chairman Dr Mak Shu-lun. The judging panels included engineers from CLP Power, the Electrical and Mechanical Services Department, the IET, and representatives from social welfare organisations including Christian Family Service Centre and Tung Wah Group of Hospitals.

CLP Power Chief Corporate Development Officer Ms Quince Chong said, "By organising the **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition**, we hope to encourage young people to unleash their creativity and show compassion for the

community by using their knowledge in energy efficiency and conservation to help disadvantaged communities change their electricity consumption habits and improve their quality of life. The proposals designed by the participating teams excelled in terms of technical feasibility, innovation, and impact on those in need. I hope the students gain valuable insights from the competition and continue to contribute to sustainable development."

Director of Electrical and Mechanical Services Mr Poon Kwok-ying praised the solutions developed by the teams which he said highlighted the limitless creativity of young people in Hong Kong as well as their proactive approach and keen powers of observation. He remarked, "Achieving carbon neutrality requires cross-sectoral collaboration, and engineers often play a crucial role in this effort. Today's competition showcased the close cooperation among businesses, engineering professionals, academia, and the social welfare sector. The innovative thinking and practical spirit demonstrated by the students are fundamental to becoming excellent engineers."

Team U14 won the Gold Award in the Undergraduate Category with their invention of a rechargeable vibrating shoe insole as a navigating aid for visually impaired people. Team member Cecilia Leung from City University of Hong Kong explained, "Some visually impaired people also have hearing problems. Many aiding tools available nowadays rely mainly on auditory navigation, neglecting the needs of this group of people. The insole we developed uses different vibrations to guide visually impaired users to their destination and alert them to obstacles, ensuring their safety."

Team SD56, which won the Gold Award in the Sub-Degree Category also focused on the needs of the visually impaired. Team captain Vincent Yip from the Hong Kong Institute of Information Technology stated that despite rapid advancements in artificial intelligence technology, the visually impaired people still find it difficult to benefit from such development. They hope to continue improving their research and development solutions in the future to reduce the time visually impaired people need to browse the internet and process information, thereby enhancing their online experience and further bridging the gap between them and the world of information technology.

The **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition** began in September and it invited the young generation to conduct research on the energy needs and behaviour of specific disadvantaged communities, including elderly people, disabled individuals, and low-income families, and devise solutions. The competition is supported by six higher education institutions as academic partners and Tung Wah Group of Hospitals and Christian Family Service Centre as supporting organisations. Participating students joined design thinking workshop to enhance their problem-solving skills and a sharing by representatives of NGO partners to understand the living conditions and challenges faced by disadvantaged communities, allowing students to design solutions that better meet societal needs and help build a sustainable low-carbon city.

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 service to more than six million people.

Photo captions :

Photo 1



CLP Power Chief Corporate Development Officer Ms Quince Chong says the **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition** aims to encourage young people to unleash their creativity by using their knowledge in energy efficiency and conservation to help disadvantaged communities change their electricity consumption habits and improve their quality of life.

Photo 2



Director of Electrical and Mechanical Services Mr Poon Kwok-ying praises CLP Power for organising the competition which showcased the close cooperation among businesses, engineering professionals, academia, and the social welfare sector.

Photo 3



CLP Power Chief Corporate Development Officer Ms Quince Chong (fifth from left, second row), Director of Electrical and Mechanical Services Mr Poon Kwok-ying (fourth from left, second row), CLP Power Senior Director – Power Systems Mr Eric Cheung (first from right, second row), CLP Power Senior Director – Generation Mr Kevin Lau (first from left, second row), Chairman of the Institution of Engineering and Technology (IET) Hong Kong Dr Mak Shu-lun (second from left, second row), and IET Community Committee Asia Pacific Chairman Mr Keith Chan (second from right, second row) pose for a photo with the Gold Award winners.

Photo 4



The Gold Award in the Undergraduate Category went to Team U14, formed by students of City University of Hong Kong, Hong Kong University of Science and Technology and The University of Hong Kong. Their creation, **Visionary Smart Insoles**, aims to develop a rechargeable vibrating shoe insole as a navigating aid for visually impaired people.

Photo 5



The Gold Award in the Sub-Degree Category went to Team SD56, formed by students of Hong Kong Institute of Information Technology and Youth College. They develop the solution **GeProVis AI Screen Reader 2.0** centered around artificial intelligence technology to provide image descriptions on web pages for the visually impaired and other users in need.

Photo 6



CLP Power Chief Corporate Development Officer Ms Quince Chong (sixth from right) presents souvenirs to the members of the judging panels.

Photo 7



Finalists outline their research findings and prototype solutions to officiating guests.

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CLP Empowering Youth for a Sustainable Future Programme Energy-Saving and Low-Carbon Innovation for Tomorrows Competition

Introduction

- CLP Power Hong Kong Limited (CLP Power) launched the **Empowering Youth for a Sustainable Future Programme**, funded by CLP Community Energy Saving Fund this year. The new initiative aimed to increase youth awareness of sustainable development and social responsibility through **Energy-Saving and Low-Carbon Innovation for Tomorrows Competition**.
- The competition started in September this year. Participating teams conducted research on the energy needs and behaviours of specific disadvantaged communities, including the elderly, disabled individuals, and low-income families, and then devise solutions. Twenty finalist teams received funding of HK\$15,000 from CLP Power to create prototypes of their proposed solutions.
- Design thinking workshop was arranged for participating students to enhance their problem-solving skills. Representatives from social welfare organisations shared the current living conditions and challenges faced by disadvantaged communities, enabling students to design solutions that better meet societal needs.

Competition Results

Undergraduate Category

Award	Team	Institutions	Invention
Gold Award	U14	<ul style="list-style-type: none">• City University of Hong Kong• Hong Kong University of Science and Technology• The University of Hong Kong	Visionary Smart Insoles
Silver Award	U27	<ul style="list-style-type: none">• The Hong Kong Polytechnic University• Hong Kong University of Science and Technology	Walkabout HK
Bronze Award	U6	<ul style="list-style-type: none">• Hong Kong Metropolitan University	Digital Twin MR
Bronze Award	U13	<ul style="list-style-type: none">• City University of Hong Kong	Counting E

Sub-Degree Category

Award	Team	Institution	Invention
Gold Award	SD56	<ul style="list-style-type: none">• Hong Kong Institute of Information Technology• Youth College	GeProVis AI Screen Reader 2.0
Silver Award	SD57	<ul style="list-style-type: none">• Hong Kong Institute of Information Technology	AudioSense
Bronze Award	SD36	<ul style="list-style-type: none">• Hong Kong Institute of Information Technology	SAFERIN Home Edition
Bronze Award	SD50	<ul style="list-style-type: none">• Hong Kong Institute of Vocational Education	SolWind Tree

Partners

Strategic Partner

- The Institution of Engineering and Technology (IET) Hong Kong

Academia Partners

- The Chinese University of Hong Kong, Faculty of Engineering
- Hong Kong Metropolitan University, School of Science and Technology
- Hong Kong University of Science and Technology, School of Engineering
- The Technological and Higher Education Institute of Hong Kong
- Hong Kong Institute of Vocational Education
- Hong Kong Institute of Information Technology

Supporting Organisations

- Christian Family Service Centre
- Tung Wah Group of Hospitals