



1 April 2021

VTC and CLP Join Hands to Groom New Generation of Power Engineering Talent with Inception of CLP Power Engineering Laboratory

The Vocational Training Council (VTC), in collaboration with CLP Power Hong Kong Limited (CLP Power), unveiled the CLP Power Engineering Laboratory (The Lab) today (1 April). The new Lab represents the joint efforts of the two parties in leveraging innovative technologies and advanced training facilities to nurture a new generation of power engineering talent, equipping them with smart grid and high voltage knowhow to propel and support the transformation of Hong Kong into a low-carbon smart city.

The Lab forms part of the purpose-built facilities of the Haking Wong Campus of the Hong Kong Institute of Vocational Education (IVE), a VTC member institution. With CLP Power's contributions, the Lab was set up with valuable industry input and equipped with professional training facilities. The Lab will serve as a versatile platform to catalyse talent development through academia-industry collaborations. The Chief Secretary for Administration of the HKSAR Government Mr Matthew CHEUNG Kinchung and Secretary for Innovation and Technology Mr Alfred SIT Wing-hang addressed today's ceremony to mark the occasion. The event was also witnessed by Chairman of CLP Power Mr William MOCATTA, Chief Executive Officer of CLP Holdings Mr Richard LANCASTER and Vice Chairman of CLP Power Mrs Betty YUEN; and Chairman Mr Tony TAI, Deputy Chairman Dr Daniel YIP and Executive Director Mrs Carrie YAU of VTC.

Mr Matthew CHEUNG Kin-chung, Chief Secretary for Administration, noted in his prerecorded video speech, "The HKSAR Government has accorded top priority to building a greener and livable low-carbon city in response to global climate change. Reducing carbon emissions is our primary goal. Indeed, Hong Kong is going further in deep decarbonisation, and we will strive to achieve carbon neutrality before 2050." He continued to say, "Green infrastructures with smart power supply are key to Hong Kong's gradual transformation into a world-class smart city. Smart grids which integrate information and communication technologies with the power generation and distribution network can help enhance energy efficiency, reliability and safety. As many new infrastructural projects are under construction, Hong Kong needs more new power engineering talents to help take forward the smart energy initiatives."

Mr Alfred SIT Wing-hang, Secretary for Innovation and Technology, said that the opening of the CLP Power Engineering Laboratory is such a good example of joint effort between academia and industry, providing a cradle for nurturing power

engineering talent to help Hong Kong transform into a world-class smart city, a smarter Hong Kong.

Speaking on behalf of CLP Power, Mr William MOCATTA said the company has been a cornerstone in Hong Kong's extraordinary growth and development over the past 120 years. In response to the demand of the society and industry, CLP Power has cultivated expertise in power engineering and provided young people with opportunities for upward mobility in their careers. He also noted, "CLP Power is committed to climate action and to helping the Government achieve its 2050 carbon neutrality target. We look forward to nurturing more talent in electrical engineering and smart grid technology as we build a zero-carbon economy."

Mr Tony TAI, VTC Chairman, thanked CLP Power for the generous contributions in the setting up of the CLP Power Engineering Laboratory which was equipped with advanced smart grid and high voltage training facilities. Mr Tai added that the new Lab would benefit some 500 students studying VTC's electrical engineering programmes every year and serve as a multi-purpose teaching and learning platform for both vocational and professional education and training students and in-service practitioners to acquire new knowledge and applied skills to support industry development in the digital era.

The new Lab consists of two main sections: a Smart Grid Operation Centre and a High Voltage Training Centre. With these new facilities in place, IVE students studying the Higher Diploma in Electrical Engineering and Professional Certificate in High Voltage Engineering, as well as students of Professional Diploma in Power Engineering coorganised by VTC and CLP Power Academy will further benefit from the structured and well-recognised power engineering training.

The Smart Grid Operation Centre within the Lab is equipped with a real-time smart grid simulation and testing system that mirrors real-life community power supply and analyses the data. Students will learn how smart grids operate and explore solutions for enhancing energy efficiency. The centre is also stocked with equipment such as smart meters and photovoltaic panels that can be looped into the simulator. An example is using the simulation and positioning system, students will be able to test how the solar energy generated by photovoltaic panels can be best integrated into the smart grid system. Through these wide-ranging installations and systems, students will learn to apply the latest industry technologies. This will enrich their knowledge of smart grids and relevant new technologies, thereby raising their employability and helping to promote smart, clean energy development.

The energy sector has a high demand for people conversant with high voltage power engineering expertise. In the past, only power companies provided in-house training for their staff in the field. The High Voltage Training Centre is furnished with remote control and monitoring systems for high voltage switchgears that simulate real-life high voltage engineering works, enabling students to learn about the operation, fault diagnosis and safety procedures required. In-service personnel studying related professional diploma and professional certificate programmes can receive practical training in the Centre. Those having completed the programmes and fulfilled related requirements are eligible to apply for the Grade H Registered Electrical Worker qualification so that they can take up roles that involve high voltage engineering and serve the industry.

The new Lab will also promote multi-disciplinary applied research, providing a platform for knowledge exchange between academia and industry. To this end, VTC, CLP Power and the University of Strathclyde, UK, signed a tripartite Memorandum of Understanding earlier this year to conduct multi-faceted collaboration on smart grids, Cloud data sharing and AI applications, as well as to initiate applied research and academic projects for fostering smart grid applications and development.

About Vocational Training Council

Established in 1982, the Vocational Training Council (VTC) is the largest vocational and professional education and training provider in Hong Kong. The mission of VTC is to provide a valued choice to school leavers and working people to acquire the values, knowledge and skills for lifelong learning and enhanced employability, and also to provide support to industries for their manpower development. VTC has 13 member institutions, namely the Technological and Higher Education Institute of Hong Kong (THEi), the Institute of Professional Education And Knowledge (PEAK), the School for Higher and Professional Education (SHAPE), the Hong Kong Institute of Vocational Education (IVE), the Hong Kong Design Institute (HKDI), the Hotel and Tourism Institute (HTI), the Chinese Culinary Institute (CCI), the International Culinary Institute (ICI), the Maritime Services Training Institute (MSTI), Youth College, Pro-Act by VTC, the Integrated Vocational Development Centre (IVDC) and the Shine Skills Centre. Website: www.vtc.edu.hk

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 celebrates 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 CLP Power Engineering Laboratory was officially unveiled today (1 April). The Lab provides advanced teaching and training facilities to help students acquire professional knowledge in smart grids and high voltage power systems. Secretary for Innovation and Technology, Mr Alfred SIT Wing-hang (third from right), Chairman of CLP Power, Mr William MOCATTA (second from left), Chief Executive Officer of CLP Holdings, Mr Richard LANCASTER (first from left), VTC Chairman Mr Tony TAI (second from right) and Executive Director Mrs Carrie YAU (first from right), officiate the opening ceremony of the Lab.

Photo 2



In his pre-recorded speech, Chief Secretary for Administration Mr Matthew CHEUNG Kin-chung says that while reducing carbon emissions remains the primary goal, the HKSAR Government will strive to achieve carbon neutrality before 2050.

Photo 3

Secretary for Innovation and Technology Mr Alfred SIT Wing-hang says at the opening ceremony, the opening of the CLP Power Engineering Laboratory is such a good example of joint effort between academia and industry, providing a cradle for nurturing power engineering talent to help Hong Kong transform into a world-class smart city, a smarter Hong Kong.

Photo 4



Secretary for Innovation and Technology Mr Alfred SIT Wing-hang (second from left, front row), CLP Power Chairman Mr William MOCATTA (second from right, front row), VTC Chairman Mr Tony TAI (first from left, front row) and other guests tour the CLP Power Engineering Laboratory.

Photo 5 and 6





The Smart Grid Operation Centre in the new Lab is equipped with a real-time smart grid simulation and testing system that mirrors real-life community power supply and analyses the data.

Photo 7



The High Voltage Training Centre in the new Lab enables learners to take high voltage training programmes accredited by the Electrical and Mechanical Services Department, helping them gain the Grade H Registered Electrical Worker qualification.