CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_01	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Energy Science and Engineering Discipline **Other Preference:** Environmental Affairs Discipline
	Project Name	Development on Renewable Energy Market
	Business Objective(s)	• To support the development of renewable energy (RE) • To facilitate the team on providing intelligence on the market trends as well as monitoring the application status of Feed-in Tariff.
	Project Description	• To provide support on application status and data analysis of RE initiatives. • To conduct market intelligence on the latest trends of RE market development in HK from media, customers, internal stakeholders, etc.
	Required Skills	• Good presentation and excellent command of spoken and written Chinese and English • Assertive communication • Proficient in PC application, e.g. Excel, Microsoft Word, PowerPoint • Well-organised and with good analytical and numerical capability

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_02	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Energy **Other Preference:** Building Services
	Project Name	CLP Retro-commissioning Charter Programme / Development of other EE&C initiatives to support energy saving targets
	Business Objective(s)	• Uplift customer knowledge on retro-commissioning (RCx) and facilitate the implementation of RCx in commercial and industrial customers via the CLP Retro-commissioning Charter Programme. • Develop other energy efficiency and conservation (EE&C) initiatives to support the achievement of energy saving targets under the Scheme of Control. Promote company image on driving EE&C initiatives via variety of communication/promotion channels, and arouse public awareness on pursing these initiatives.
	Project Description	CLP Retro-commissioning Charter Programme • Partner with HKGBC to provide a recognised RCx training course for our customers. • The programme will be run to end 2022 and is targeted to engage 100 companies, i.e. target around 300 customers and representatives for participating this programme. • The participating companies have to sign a charter and commit to apply RCx in their buildings within the programme period..Development of other EE&C initiatives to support energy saving targets. • Engage potential customers / vendors to promote CLP EE&C initiatives including Eco Building Fund, Energy Audit and Electrical Equipment Upgrade Scheme. • Identify latest energy saving technologies and build pilot case for Eco Building Fund application. • Conduct site visit to provide energy saving advices to customers.
	Required Skills	• EE&C knowledge • RCx knowledge • Communication skills

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_03	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Energy engineering **Other Preference:** Mechanical engineering
	Project Name	EE&C programmes in HK
	Business Objective(s)	• Assist in different funding schemes and programmes in support of energy efficiency and conservation (EE&C) development in HK. • Conduct research and analysis in relation to the development of EE&C and decarbonisation in China and Hong Kong.
	Project Description	• Assess energy saving achieved in different kinds of retrofit projects (e.g. lighting/chiller replacement) and retro-commissioning projects, which are supported or funded by CLP2. Handle other application-related work, including communication with applicants on different enquiries, monitoring of application progress, etc. of the funding schemes. • Support in streamlining workflow and identifying areas for improvement of the schemes. • Support in reporting the energy saving achievement to key stakeholders. • Conduct research and analysis in relation to the development of EE&C and decarbonisation in China and Hong Kong.
	Required Skills	• Basic knowledge in EE&C • Good presentation skills • Good command of spoken and written English and Chinese • Good communication skills

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_04	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Electrical Engineering **Other Preference:** Building Services Engineering
	Project Name	Application of 5G in energy management, Smart Technology in EV Charging
	Business Objective(s)	• Support customer to adopt smart technology for energy saving. • Support customer to adopt smart technology for sales development.
	Project Description	• Application of 5G in Energy Management - This project will develop a cooling load prediction model for a shopping mall and the development of a machine learning system to apply the predicted cooling load to eliminate energy waste in air conditioning. • Application of EV Load Management System (LMS) in car parkThis project calls for the use of load management system to expand the total number of EV chargers in a car park under the same utility power supply and customer rising mains.
	Required Skills	• Basic understandings in electrical engineering • Basic understandings in machine learning • Basic understandings in regression methods of statistics • Good command in MS Excel

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_05	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to Jun 2023
	Preferred Discipline	**First Preference:** Energy, Electrical, Building Services Engineering & Mechanical Engineering **Other Preference:** Engineering related
	Project Name	Electrical Vehicles promotion projects in Hong Kong
	Business Objective(s)	• To promote Electrical Vehicles Adoption in Hong Kong. • To promote and drive more EV related technology in Hong Kong.
	Project Description	Develop and promote solutions for EV promotions with innovative approach: • Enrich the charging location map with more chargers and the corresponding real-time status; • Develop and provide on-line self-service program / calculator to estimate fuel consumption, cost and emission between ICE and EV; • Develop and study Vehicle to Grid application in CLP system; • Provide on-line power supply application (similar to FiT application) and application status checking; • Gauge and evaluate the effectiveness of EV ToU Tariff and load shifting effectiveness; • Update EV related latest technology news in CLP EV Web page.
	Required Skills	• Website or IT related skills • Excel for mathematical and statical analysis • Computer programming • Technologies on energy efficiency and conservation • Communication skills • Attention to details and data analytics

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_06	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Sustainable Energy Engineering **Other Preference:** Electrical Engineering
	Project Name	Utility Scale Battery Energy Storage System
	Business Objective(s)	• Develop the business case and technical concept of a battery energy storage system for integration to the Hong Kong grid.
	Project Description	The intern will join the project development engineering team. Exact role will be dependent on the status of the project development at the time of the internship, but in general the activities could involve assisting the engineering team to: • prepare scopes of work for engineering studies, review tenders, oversee the output from the studies • check existing plant parameters for the integration of BESS (e.g. power, controls, grid integration) • review concept designs and preparation of specifications • organise workshops and prepare presentations in the interests of stakeholder engagement.
	Required Skills	• Interest in energy decarbonisation and demonstration of relevantmodule(s) undertaken in their chosen degree

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_07	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Aug 2022 to Jul 2023
	Preferred Discipline	**First Preference:** Mechanical Engineering **Other Preference:** Electrical Engineering
	Project Name	Renewable asset performance analysis and enhancement
	Business Objective(s)	• Study, identify enhancement opportunities on renewable asset performance through data analytics. • Assist the development of performance enhancement and operational preparedness initiatives, such as process digitization, extreme weather preparedness.
	Project Description	• Perform performance analysis with tools such as a centralized data analytic platform on solar and wind portfolio. • Assist operational reporting and management update preparation. • Support digitization and business preparedness initiatives, including but not limited to digitized process development/integration/interfacing, market regime, extreme weather preparedness.
	Required Skills	• Basic understanding of wind / solar generation technology • Good analytical, problem solving and communication skills • Basic office software knowledge

CLP Internship Programme 2022

Project Focus – Energy Engineering (12-month)

Project Code	EN_SAND_08	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	Engineering
	Project Name	Hong Kong Offshore Wind Farm
	Business Objective(s)	• To support the RE Team on developing CLP's Offshore Wind project and other greenfield and acquisition opportunities. • To support the RE Team with the implementation and execution of advanced technology trials and support CLP Group in digitisation initiatives.
	Project Description	• The candidate will be working as part of a multi-discipline team on the development of an offshore wind farm in Hong Kong. • The candidate will be working with internal and external stakeholders on the selection and appointment of vendors, the technical and commercial evaluation of bids and the formation of contracting strategy, together with the project team. • The candidate will help form the asset management strategy for the wind farm and be involved in identifying potential sites for operations and maintenance, including both port and onshore facilities. • The candidate will also support the improvement of asset management systems and capability, via technology trials and evaluation there of. • The candidate will report on the status and performance of current and future trials and will be involved in identifying and selecting vendors.
	Required Skills	• Advanced MS Excel & PowerPoint skills • Knowledge of Renewable technologies (i.e. Wind, Solar, Battery Storage, Hydro) • Excellent communication skills (both written and spoken) • Ability to speak Mandarin would be desirable, but not critical