





Flourishing Throughout History

Dear colleagues,

The year is drawing to a close and I would like to make use of this opportunity to thank you for the outstanding work you have done in 2017. It's been a remarkable year and we could not have achieved what we have without your dedication and contribution. As we move towards Christmas and New Year, may I also wish you a happy holiday season. I hope you will take advantage of the upcoming break to spend some quality time with your family and friends, and come back in the New Year feeling refreshed and full of energy.

We have had an extremely busy few months in the second half of the year. The premiere of *A Century of Power* in October was a resounding success. We have received very positive feedback from our stakeholders. I trust that most of you have watched the film by now. If you have not had a chance to do so, it is available on our website. I would also encourage you to read the articles about the documentary in this issue of the newsletter that will surely pique your interest in it.

CLP has been serving Hong Kong and the Asia Pacific region for over a century. The documentary helps preserve our heritage and promotes an appreciation of history. As the future is in the past, we hope the documentary will also inspire the audience to build a better tomorrow for the generations to come and serve as a reminder for us as we plan for the future.



Education is the most powerful investment in our future. And October was a truly busy month for us in that regard. First, we celebrated the launch of CLP Power Academy to nurture young professionals who are interested in pursuing a career in the power industry. We also saw the inauguration of Professor Charles Ng as the first CLP Holdings Professor of Sustainability at the

Hong Kong University of Science and Technology. You can read more about Professor Ng in this issue. In addition, we officially opened the Low Carbon Energy Education Centre at the City University of Hong Kong, where visitors can learn about the important role played by nuclear energy and renewables in powering the world responsibly.

I was excited to have the opportunity to officiate the "Strike the Dragon" kick-off ceremony for Hong Kong's first light festival, *Lumieres Hong Kong*. Hong Kong has been home to CLP and we are honoured to be able to sponsor the festival which shares our goal of promoting the appreciation of history, and arts and culture. I hope that you and your family would also enjoy the event which is held at some of Hong Kong's most iconic landmarks across the Victoria Harbour.

In closing, I would like to borrow what our Chairman Sir Michael Kadoorie said at the end of *A Century of Power*: "I am proud of China Light and Power's record. It has not been an easy task to think of the needs of the future, historically we have done this and we will continue today."

Happy reading!

Richard Lancaster

Chief Executive Officer



A Century of Power



In a serene plain in northern China, rows of wind turbines spin majestically, generating electricity to power thousands of homes. On the snow-covered prairie below, herds of cattle wander slowly through a golden sunset. The evocative scene at CLP's Qian'an Wind Farm in northern China is one of many breath-taking sequences from *A Century of Power* – a stunning new documentary that records not only the



company's remarkable progress through the decades but also the ways in which it is making history today as it embraces new sources of clean energy and technology.

Lessons from the past

Filmed over two years by acclaimed producer Elaine Forsgate Marden, the documentary premiered in Hong Kong to a rapturous reception in October 2017. It presents the intertwined history of CLP and Hong Kong, and records how the company grew from a single generator workshop on Chatham Road in Kowloon to a leading energy service provider in the Asia-Pacific region.



The brainchild of CLP's Chairman Sir Michael Kadoorie, *A Century of Power* is part of his aspiration to pay tribute to Hong Kong's extraordinary evolution and to encourage young people to better appreciate history.

The 35-minute documentary begins with the story of the Kadoorie Family's move from Baghdad to Hong Kong at the beginning of the last century

where they became involved in the former British colony's power industry from its very inception.

"History provides the basis of our shared heritage, culture and values.

The change of Hong Kong has been a remarkable journey, and one which

we at CLP have been privileged to be part of."

The Honourable Sir Michael Kadoorie, CLP Holdings Chairman

By presenting the history of CLP and Hong Kong's transformation in parallel, the documentary shows how the company and the city have grown together. "CLP and Hong Kong are really partners together, hand in hand," says Elaine.

Man of Great Foresight

Sir Michael talks powerfully in the documentary about the driving force behind much of the company's progress through the decades – the vision and foresight of his father, the late Lord Lawrence Kadoorie.

"My father had a great belief of Hong Kong and this part of the world. And they have always taken a long-term approach. There were many ups and downs, but they stood firm – and I think they have been proved correct," Sir Michael says at the beginning of *A Century of Power*.

Long before Hong Kong's political future was an issue, Lord Kadoorie already talked about the importance of Hong Kong to a modern China. "We can see this area of the world is going to develop as a neutral point of contact between two different ideologies, and two different systems of government," Lord Kadoorie said in an archive interview captured in the documentary.

That vision sowed the seeds of growth of the company in China and other markets. In 1985, Lord Kadoorie made the bold decision to invest in Guangdong Nuclear Power Station – China's first commercial nuclear project. The investment subsequently led to a diversified portfolio of projects, including low-carbon thermal power plants, hydro power, and other renewable energy sources.



Shaping the future

A Century of Power traces the history of CLP through the company's long-standing commitment to the community using oral histories, old photographs, and archive materials, combined with footage of our modern-day operations in Hong Kong, mainland China, India, and Australia.

It also covers a sweep of major historic events and periods, including the Sino-Japanese war, the founding of the People's Republic of China, and the economic transformation of post-war Hong Kong, encompassing a century of seismic change and upheaval. Although young viewers may



never in their own lifetime experience such adversity, the film shows them how Hong Kong's success can never be taken for granted.

Sir Michael hopes that through the movie, younger viewers will learn from the spirit of their predecessors, commonly dubbed as the "Lion Rock Spirit" and better appreciate history. That's

why we have invited about 200 students to the premiere and planned additional outreach programmes over the next few months. "History helps us appreciate our past and shapes our future," he has said.

Ms Chan Mei Kuen, deputy headmistress of Ju Ching Chu Secondary School (Kwai Chung), took her students to the premiere. She says the youngsters were captivated.

"Through A Century of Power, we witness how Hong Kong has developed over the past century. A Century of Power also tells the story of CLP – how the company has grown over the years keeping pace with changing



times. The story of CLP inspires us all that we must adapt to change so that we can face up to our challenges," she says.

Since its premiere, *A Century of Power* has aired on television channels in Hong Kong including TVB, iCable, and Bloomberg, and is available on YouTube, inflight video channels of Cathay Pacific and Cathay Dragon, and the CLP website. It will also be distributed to schools, libraries, and museums to deliver its poignant message to an even wider audience.

Premiere moments

To make the cinematic journey through history more authentic, we have put up a set reminiscing the 1960s and 70s.

A taste of history

Today, buckets of popcorn and bags of crisps are common sights in cinema foyers, but in the past snacks came in all sorts of interesting shapes and sizes. Goodies packs with a selection of popular snacks from the 1960 and 1970 eras were given out to the audience. The snacks reflected the tastes of their times. For instance, sweets in spectacle-shaped packages were once a childhood favourite at a time when toys were expensive. A selection of classic Chinese pastries and drinks in vintage packets intrigued younger viewers while bringing memories flooding back for older members of the audience.

Hong Kong * Harvest



Each guest was given a silk charm filled with rice and designed exclusively for the event. This represents not only blessing and wealth in the Chinese tradition, but also the hard work that the previous generation has put in for the enjoyment of the younger generation.

Decoding secrets of the past

Three educational videos titled *CLP Secret Busters* were screened at the premiere to explore the myths and realities of Hong Kong and its power use in a fun and engaging way. The videos featured some fascinating cameo appearances, including one from Chief Corporate Development Officer Ms Quince Chong who played a rural villager and demonstrated her pitch-perfect singing in the video *New Territories Electrification Scheme*. Managing Director of CLP Power Hong Kong Mr Chiang Tung Keung, meanwhile, showed his versatility by playing three roles in the video *Thrifty Daddy*.



CLP Secret Busters has been uploaded onto the CLP Facebook page. Check them out and find out how much you really know about CLP and Hong Kong.

Shareholders' delight



About 200 CLP shareholders who have registered were among more than 700 guests at the premiere and many gave a thumbs-up to the documentary. The shareholder's screening had its own surprise highlight when Ms Chong joined artist Ram Tseung Chi Kwong in a duet of *Under the Lion Rock* at the end of the movie.





Producer Elaine Forsgate Marden discovers how a 116-year old company moves with times as she makes A Century of Power

No filmmaker knows the story of CLP and the Kadoorie Family as intimately as Elaine Forsgate Marden. A close friend of the Kadoorie Family for many years, Elaine would visit power plants with former CLP Chairman Lord Lawrence Kadoorie in the 1970s, when he would share stories with her that she remembers to this day.

"I was so privileged to be around at that time and to hear so many stories from Lord Kadoorie," she says in an interview with CLP.CONNECT. "As he got older, he wanted to record his stories. So he would ring me many times in the late afternoon and say 'Listen, I've finished all the work. Would you please come down? I've got some stories to tell you'."

The power of teamwork



Those insights gave Elaine a unique perspective as she set out to make CLP's two previous documentaries, *Power to Grow* and *Partners in Power*, in 1988 and 2000 respectively.

So when CLP decided to commission the production of a new documentary a few years ago, Elaine was the natural choice. What CLP

was looking for was not just a glorified corporate video. As one of Hong Kong's oldest and most iconic companies, CLP would like a new documentary to chart the parallel stories of CLP's 116-year history and the city's social and economic transformation through the decades.

Elaine, of course, didn't disappoint. After two years of planning and filming, *A Century of Power* was debut to much acclaim in October 2017. The humble producer gives the credit to teamwork.

Throughout the production, Elaine says she has been supported by the first class team of talented specialists she has worked with on a broad range of films over the years.

"I work with some fabulous people," Elaine says. "I have worked with my co-director Libby Halliday Palin for at least 25 years if not more. Libby and I shared the responsibility because I could not have done it on my own. To make a



film is teamwork. I am very blessed with a wonderful group of people such as director of photography, assistants, and research teams. It was people all working together."

"I also worked with some of the most amazing archivists in Washington. When I flew there, they would prepare everything for me. One day, I was scrolling through something, and I said 'Stop'.

The footage happened to be the grandfather of Sir Michael Kadoorie, Sir Elly Kadoorie, in Shanghai

in their old house, which was called Marble Hall. You see a small part of it in the film now with Sir Horace Kadoorie. That was an amazing discovery and we went out to celebrate."

A chairman's priceless insights

Perhaps the most powerful player on Elaine's team was the mastermind behind *A Century of Power* – Sir Michael Kadoorie himself. A history aficionado, Sir Michael gave the project not only his unreserved support but also invaluable guidance and advice on its content. With an encyclopaedic knowledge of CLP and his family, Sir Michael also helped ensure their histories were recounted accurately and vividly in the documentary. Elaine says Sir Michael's indispensable contribution was best illustrated in an episode which shows his father, Lord Kadoorie, returning to Hong Kong from Kunming after the war to help rebuild the city.



"One of the most important collaborators with me was Sir Michael Kadoorie because he has incredible recall and a great eye for detail," she says. "There is one section of the film when Lord Kadoorie leaves Kunming to come back to Hong Kong, and there was a DC3 plane. It was not the original plane in the film of course but I have a lot of footage of DC3s. Sir Michael spotted a wrong

flag on the plane so we had to erase it."

Capturing decades of progress

It's been nearly 30 years since Elaine made the first documentary for CLP. Naturally, the company portrayed in *A Century of Power* is markedly different from the one Elaine captured in her 1988 film, *Power to Grow*.

"In *Power to Grow*, CLP – although it had been established for a long time – was a smaller company," she says. "Its headquarters were still in Argyle [Street]. The company has the same ethos but CLP has matured and I think it has moved with the times. I think that's really important."

Three decades on, what strikes Elaine most was the changes in CLP's geographical reach and fuel mix.

"In A Century of Power, you can see that CLP is not just a Hong Kong company, and it uses not only fossil fuels now. I used to go out on a Sunday with Lord Kadoorie because he loved to visit the power plants and I enjoyed it too. That was so spectacular to see the buildings and the turbine going. You couldn't help being impressed," she says.

"But then when you look at those wonderful drone shots (featured in *A Century of Power*) from the north of China with the wind farms, solar parks, and the hydro-electric power plant, you know this company has really moved forward."

Elaine can't help but admire CLP's determination to go low-carbon.

"CLP is such a responsible company that they know the way forward is to be fossil fuel free, and that day will come. I think it will come sooner than anybody expects," she says.

CLP is not the only thing that has changed. The technology for film making has also come a long way.

"Drones have really changed the way films are made, because for years we used to pool our funds together depending on the budget to charter a helicopter, and even if you did have a helicopter it doesn't have the same effect," she says. "Drones are just wonderful."

"Another wonderful thing in this film is the time lapse. To me, that was so beautiful because it helps tell changes in a very subtle way."

Rolling on to new challenges



Elaine, who was born in Hong Kong and speaks fluent Cantonese, is taking a well-earned break now that the project is complete. But she expects to be back behind the camera before long.

"I am taking a sabbatical until January but I can't see myself not doing anything," she says. "I'm too curious, and I do have a few ideas." "My three daughters are all in the arts and very full of encouragement for me to do a Chinese movie, and my middle daughter is in the movie business in Los Angeles. I can't imagine anything better than collaborating with her."

Brief Biography

Elaine Forsgate Marden was born in Hong Kong. She has been involved in TV and film production for over 35 years, starting on camera in Hong Kong in the 1970s on TVB and in various films.

Elaine was trained at Salon Films Hong Kong under the late TC Wang and was production manager on many films using Hong Kong as a location. Her works include *Hong Kong Racing, A Way Of Life* for the Hong Kong Jockey Club in 1984 and *The Hong Kong Story*, which was a documentary film written and produced by Elaine about the lives of the people who had lived and were living in Hong Kong and their views of the imminent change with the handover in 1997.

In 2014, Elaine and her team won the Golden Dolphin at the Cannes Corporate and Media TV Awards for *Tradition Well Served* that was made for The Peninsula Hotels (The Hongkong and Shanghai Hotels Limited).



Engineering a Brighter Future



Engineers are known for their love of maths and science and for being methodical and perhaps a little dull. But Chiang Tung Keung, Managing Director of CLP Power Hong Kong, is not your average engineer.

Known affectionately across the company as TK or Ah Chiang, the new head of CLP Power confounded the stereotype of a stale but worthy engineering professional from the moment he took charge.



On his first day as Managing Director, TK demonstrated his human touch by visiting the customer hotline call centre and getting colleagues to share tips with him on how to handle enquiries and complaints.

That visit was no accident. TK understands that to lead successfully, he needs to understand the operation of the company from the bottom

upwards, exuding energy, commitment, confidence, and understanding to colleagues at every level.

His engaging personality shines through in the Managing Director's video messages he has introduced, sharing his thoughts and ideas in a humorous and light-hearted way. TK has also set up a dedicated email account to communicate directly with colleagues and a Friday casual gathering to listen to employees' feedback and comments.

Inspiring the next generation

TK credits his enduring passion for his work and interest in his fellow employees to the lessons he learned as a child from his father, an electrical technician. "I got to know a lot about engineering from what my father would tell me about his daily work," he said. "As I grew up, I became more and more interested



in engineering and I eventually decided I wanted to follow in my father's footsteps and become an engineer myself," he explained.

He joined CLP as a graduate trainee in 1988 and began a career path that would eventually lead him to become Managing Director. TK knows the company inside out after holding a variety of management positions in different areas including power system asset management, planning, design, operation and maintenance, power quality, and corporate and regulatory strategy.

"Throughout my years at CLP, I have been blessed to have had selfless and caring mentors who were incredibly honest and transparent and who were quality leaders," he said. "I would never have



been in the position I am today if it hadn't been for the guidance of my mentors. Now I want to pass those lessons on to my colleagues and to the Hong Kong community."

That is why you will often see TK's name on event listings in universities and colleges. He regularly attends alumni activities to share his experiences and knowledge with young people who will be the next generation of Hong Kong engineers.

Building on success

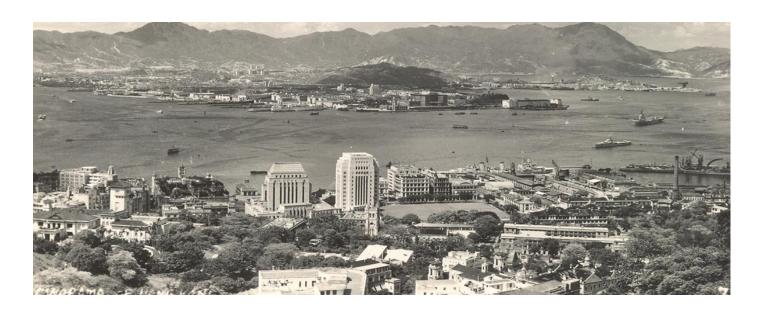
Successful engineers have a love for detail and number-crunching and an aptitude for solving complex problems and embracing new technology. For TK, however, a positive mental attitude is the most important quality in a leader. "Do your best, be humble, and good things will happen," he said. This 'do your best and be humble' attitude is best illustrated by TK's efforts to move beyond his engineering background to master a broad range of skills and attributes essential to leading a business in times of rapid technological changes and disruption. "Everyone should continue learning to keep abreast of the fast pace of change," he added.

For most people, the idea of a whole career with one company today might seem old-fashioned, but TK has never for a moment lost his passion for the power industry or his zest for life. "I have seen first-hand how CLP is uniquely positioned to provide a reliable electricity supply and power the growth of Hong Kong," he said. "What has kept me going for nearly 30 years in the electricity sector is a lifelong curiosity and the opportunities available."

In addition to curiosity, TK confessed that the diversity of exposure available at CLP is another reason why he has chosen to stay in the same company for such a long time. "Having the chance to work in different positions and departments allows me to gain different experience and deepens my knowledge about the industry," he said.

TK's energy and enthusiasm remain undimmed. "Our strengths as a company are our people, our reliable service, and our ability to rise to the responsibility of powering the future," he said. "I feel humbled by my appointment, yet I am ready to lead CLP Power forward to a new level of excellence."





Ten Years of Bringing Hong Kong History to Life



For the past 10 years, The Hong Kong
Heritage Project (HKHP) has been working
hard to preserve historically significant
documents and artefacts in a fast-paced city,
where the past is often too soon forgotten in
its rush to the future. Fanny Iu, Executive
Director of HKHP, looks back with
CLP.CONNECT on the project's first decade.

In 2007, Sir Michael Kadoorie embarked on a historic mission by establishing HKHP to "save the past for the future". The project has since drawn together an impressive collection of archives and oral history testimonies, covering a large canvas of Hong Kong's history and heritage for sharing with our fellow citizens, especially the younger generation.

A shared history

Founded with an aim to preserve the corporate records of the Kadoorie Family whose history has been closely intertwined with the development of Hong Kong over the past century, HKHP has gradually evolved to become a respected organisation that boasts a unique in-house archive and a wide range of outreach programmes aimed to promote heritage awareness.



Fanny shares with us one recent example of how HKHP has endeavoured to make history relevant and accessible to the public at large. "Earlier this year we designed and curated the *Hung Hom Heritage Walk* for the media, local students, CLP employees and the general public. A series of 'strolls down memory lane' were conducted by a professional tour guide who used many interesting anecdotes to offer the participants a glimpse into the yesteryears of a district they know so well in the present day. The Walk has attracted 300 participants from 15 tours in total, and the response from CLP employees was overwhelming. So we are going to introduce a few more rounds exclusively for their benefit."

Eye on Hong Kong

History is about people, and HKHP's archives indeed comprise fascinating life stories of individuals who had helped shape Hong Kong into what it is today. One such individual is the late Lord Lawrence Kadoorie, father of Sir Michael. In the post-war years he was one of the architects of Hong Kong's modern economy, not only through his business leadership and philanthropic activities, but also from the crucial role he played in encouraging the colonial administration to take the difficult decisions needed to support both Hong Kong's immediate needs at the time and its long term development.





Beyond the demand of his very busy schedule, Lord Kadoorie was a man of many interests, one of them being photography. As a keen amateur photographer, he would regularly carry a miniature 8mm Minox camera with him as he went about his life in Hong Kong in the 1950s. "The *Eye on Hong Kong* exhibition we held recently pays homage to Lord Kadoorie by showcasing more than 60 of his photographs of post-war Hong Kong, most of them previously unpublished," says Fanny. "These photographs depict daily lives, changing landscapes and fast-paced economic and infrastructure development during that period, as Hong Kong people set about

restoring, rebuilding and renewing their home after the war. Many of these photographs show how, despite Lord Kadoorie's own success, he remained familiar with life as it was lived by so many of his fellow citizens."

HKHP as publisher

HKHP published its first book *The Development History of Postwar New Territories* back in 2016. At the end of this year, a second publication, *Student Oral History Project – Professionalism in Hong Kong*, will be launched. It is a collection of the oral history interviews conducted by students as part of HKHP's Young Historian Programme (YHP). "Oral history testimonies are history based on personal experiences, opinions, and memories, and they form an integral part of the HKHP Archive," Fanny explains. "Those oral history exercises connected our young historians with industry elites, and we were thrilled to see the extraordinary interactions across generations. The resulting dialogues are both thought-provoking and heart-warming and are definitely worth recording."



The next 10 years



As HKHP celebrates its tenth anniversary, Fanny is looking to the decade ahead and hopes to expand the project to the broader Hong Kong community.

"We expect HKHP to build on its first decade and continue its mission of bringing Hong Kong's past into the present. After all, history never ends and Hong Kong will keep adding new chapters to its

remarkable history. We also look forward to playing our part in an ever-broadening collaboration between business, the professions, education and the community as a whole in enhancing the awareness of our history and heritage," Fanny says.



A Spellbinding Celebration of Light and Life

Hong Kong celebrates its first light festival with an explosion of creative colour



A mighty dragon crouched on top of the Clock Tower in Tsim Sha Tsui was one of the dazzling scenes of *Lumieres Hong Kong*, the city's first light festival, staged on both sides of the Victoria Harbour in November in celebration of Hong Kong's heritage and culture.



CEO of CLP Holdings Richard Lancaster was in the thick of the action as he officiated at a *Strike the Dragon* prelaunch ceremony for the festival on 22 November. A long-time supporter of arts and culture in Hong Kong, CLP is the Energising Partner for the festival, which was based on France's famous *Fete des Lumieres de Lyon* and was one of the activities to celebrate the 20th

anniversary of the establishment of the Hong Kong SAR.

At *Lumieres Hong Kong*, more than a dozen international and local artists mesmerised the city with their creative light installations, art pieces and video projections for three nights using 16 local landmarks in the city's first festival of its kind.

Strike the Dragon was the curtain-raiser for the installation Long Striker, the Light Keeper. The concept came from the High Striker funfair game and invited visitors to challenge each other by using a digital hammer to light up a dragon on the famous Clock Tower.

Speaking at the pre-launch ceremony, Mr Lancaster said, "Hong Kong has been home to

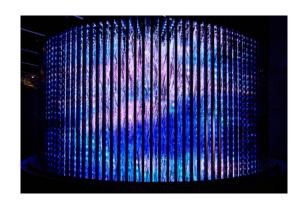


CLP for over a century. We are excited to be part of *Lumieres Hong Kong* which makes the city shine on the international stage. It gives us an opportunity to do what we do best, but in a fun and creative way. We feel strongly connected with the festival's recognition of Hong Kong's rich heritage and culture, because this is what CLP values too."



At other light installations, visitors to the *Undiscovered World* at D2 Place Two in Lai Chi Kok were taken on a spellbinding tour of the earth beneath our feet. The 4D display made use of LED lights, Animation Mapping, and Responsive Lighting Techniques to create its special effects. The installation runs until the end of December.

The Kowloon Clipper at the Peninsular Hotel in Tsim Sha Tsui was another key attraction of Lumieres Hong Kong. Visitors who stopped by the harbourfront landmark were captivated by the imaginary sight of the first commercial flight from North America to Asia arriving over Victoria Harbour in 1936. Hong Kong's rich history was also celebrated in the Memories from the Tower of Light



installation at the 1881 Heritage, or the former Marine Police headquarters.

In Chater Garden, meanwhile, The Village played host to hundreds of families and friends with fun-filled workshops and popular food and beverage stalls. CLP set up booths both at Chater Garden and D2 Place Two to share knowledge about electricity to celebrate our company's own unique Hong Kong heritage.





Embracing Innovation

EnergyAustralia Reaches Out to Start-ups with Breakthrough Ideas

To succeed in today's fast-moving business world, energy companies need an appetite for innovation and a willingness to embrace new and disruptive technologies. As one of Australia's leading energy retailers, EnergyAustralia prides itself on supporting and investing in new ideas, skills and technologies. Right now it is helping to shake up the energy market.

"For this industry, success means delivering reliable, affordable, and cleaner energy for all Australians," says EnergyAustralia NextGen Executive Andrew Perry. "It is a rapidly changing sector that requires foresight and agility."

In this spirit, EnergyAustralia has announced a partnership with the London-based Startupbootcamp to scout for new ideas for the energy industry from ambitious start-up companies.

Participating in the programme means start-ups could have their development fast tracked by up to 18 months. Over a 13-month period, the companies will work on their services and business models with the support of world-class technology, finance, and mentorship from EnergyAustralia and other sponsors before giving presentations on Demo Day.

Accelerating original thinking

Andrew says the accelerator programme was an opportunity to unearth fresh thinking and bring innovative ideas to market. "How often have we seen a great idea born in someone's workshop or garage?" he asks.

"The accelerator programme is about making great idea real and developing the next innovation that helps customers use energy in ways that save them money and help the environment."

Focused support for creative minds



IoT & Connectivity



Big Data & Advanced Analytics



AI & ML



Sustainable Cities & Living



Energy Sharing & Trading



Smart Buildings & Infrastructure



Smart Grid



Blockchain

The start-ups invited to the accelerator programme are expected to focus on eight key areas including big data and analytics, smart buildings and infrastructure, the Internet of Things and connectivity, and energy sharing and trading.

Applications opened in August. The three-month recruitment campaign that began in Adelaide will continue across Australasia, Europe and North America, with participants from Melbourne, Mumbai, Beijing, Hong Kong, London, Amsterdam, Tel Aviv, New York and San Francisco and many more.

Up to 10 start-ups will be selected to participate, with the accelerator programme to be held in Melbourne next year.



"Success means delivering reliable, affordable and cleaner energy for all Australians," says Andrew, "We are looking for the next wave of innovative ideas to make that happen, whether it is ourselves or someone else that takes up those ideas."



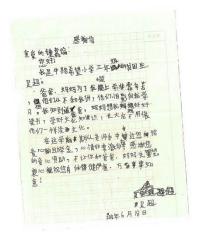
The Precious Gift of Learning



The life of little Wu Chao was transformed one day in June 2016, when his teacher told him that he had been awarded sponsorship from the CLP Support-a-Student programme.

For the delighted primary three pupil in Niulu Project Hope School in Guangxi, such news meant he would be able to continue his studies and achieve his dream of a good education.

Since joining the programme, the youngster from a poor rural family has thrown himself energetically into his school work, and has repaid his CLP sponsor with priceless, heart-warming letters of thanks.



"My parents both do very tough jobs so I can go to school," Wu writes in a letter to CLP Power Senior Project Manager - Strategic Development Ron Chung. "They never tell me about the hardship because they don't want me to worry about it and be distracted from my studies."

"Mum and dad want me to be educated and knowledgeable by studying hard so that I can follow a different path and not suffer the same hardship as them when I grow up."

Chung treasures the moving letters from Wu and has written back to the boy to encourage him to continue to dedicate himself to his studies.

"Do study hard, because with an education you will be able to help others and contribute to society," Chung writes in one of his replies. Although they have never met, Chung and Wu have

become unlikely pen pals – a friendship beyond age, distance and culture. It is a testimony of the power of education.

Who it helps	Launched in 2009 in Sichuan and Guizhou, the programme has supported more than 3,200 primary school pupils. It provides children from financially-challenged families with stipends to allow them to study in stable and formative learning environments. The programme also helps children from remote mountainous areas travel to school and attend classes.
Who pays	CLP matches donations from participating staff members dollar for dollar. Each pupil is paired with a sponsor. As well as donations, sponsors are encouraged to exchange letters with the pupils they support.
What students receive	An annual 500 - 560 yuan stipend is awarded to each pupil.
Where it operates	Huaiji in Guangdong province, Sandu in Guizhou province, Yang'er, Xicun, and Xundian in Yunnan province, and Fangchenggang in Guangxi province.



A Crusade for a Sustainable Tomorrow

CLP Holdings Professor of Sustainability Charles Ng Wang Wai outlines his mission to make the world more sustainable for future generations



Professor Charles Ng, the newly inaugurated CLP Holdings Professor of Sustainability at the Hong Kong University of Science and Technology (HKUST), has a keen interest in the survival of our planet.

Not only is he determined to do something to enhance the long-term viability of the Earth, he is doing it through a wide range of research including the shifting soils and debris that form the world. Specifically, he aims to generate ideas and practical engineering solutions that will help reduce the

impact of debris flow and make the planet more sustainable in the long term.

"I want to make my contribution so that our future generations can live a sustainable life. We should not destroy this planet. It is our responsibility to future generations," he said.

"I have been thinking what I can do so that somebody like President Xi Jinping will raise his eyebrows and take note. What should I do as a civil engineer? And I can think of two areas: energy and environment."

Making green ideas flow

The establishment of the CLP Holdings
Professorship in Sustainability was announced in 2016 and is the first of its kind for both
HKUST and Hong Kong. The professorship aims to promote education and research and to nurture future experts in the field of sustainability.



Professor Ng, currently Associate Vice-President

for Research and Graduate Studies and a Chair Professor in the Department of Civil and Environmental Engineering at HKUST, was chosen after a year-long selection process. He grew up in Hong Kong and was educated in the UK, and is today widely regarded as a global authority on advanced unsaturated soils mechanics and eco-friendly green slope engineering.

Professor Ng is currently spearheading an award-winning research into the debris flow damage and sustainable mitigation as extreme weather events multiply the risk of landslides.

His team's efforts are bearing fruit with a pioneering testing facility due to open in Kunming in the northwest of Hong Kong next year. The facility – a HK\$18 million joint undertaking between HKUST and the Chinese Academy of Science – will help examine the effectiveness of debris flow barriers. It has already won attention from the commercial world with two manufacturers expressing interest in using it to test their products. Professor Ng said this was a good example of how businesses and academics can work together to achieve sustainability.

"We started this project about two years ago and our goal is to protect urban cities like Hong Kong and make them sustainable without suffering from debris flow," he said.

According to Professor Ng, the project could have far-reaching impact because debris flow is a common issue in countries along China's Belt and Road initiative. To accelerate the infrastructure projects planned in those places, the issue had to be addressed, he argued.

"There are a lot of major investments like dams, power plants, and oil pipelines going on in these countries and you don't want pipelines to be destroyed or damaged by debris flow," he said. "This is all about trying to make the world more sustainable. Our energy supply would be at risk if debris flow destroys pipelines."



Sourcing cleaner energy

In line with his plan to focus on energy and environmental issues, the professor's other research focus is in clean energy such as methane hydrate, which he said could provide mankind with a significant source of low-carbon energy for centuries to come.

"If we look at the data published by the United Nations, the world's population will increase by 25% by around 2040 and that is a substantial rise," he said. "Where will the energy that we need come from?"

"Of course, there is research into batteries and wind farms. But if you look at the details, the major obstacle is how to store the energy. You can generate a lot of energy, but how can you store the energy so that people can use it? To me, shale gas and methane hydrate are the two real substantial sources of cleaner energy."

Spreading a global message



Having been elected the President of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) in September 2017, Professor Ng hopes to play a bridging role between the society – the world's pre-eminent professional body representing geotechnical engineers – and China's Belt and Road initiative.

"If the ISSMGE can be involved in the Belt and Road initiative, it can be a win-win outcome, because some of the Belt and Road projects can tap into their expertise," said Ng, the first Chinese president of the 81-year-old organisation. "This is what I am planning to do, so that we can bring benefits to both Belt and Road countries and to the Society."

Closer to home, Ng aims to make better use of the HKUST platform to drive sustainability by organising international academic conferences and nurturing students from around the world who are passionate about the subject. His starting point is his research team whose members come from 16 countries.

"They are from 16 countries including South Africa, India, Pakistan, Malaysia, Thailand, Bangladesh, China, Iran, Nigeria, and the UK," Ng said. "Through them, I am spreading the message of sustainability to 16 countries."





For Chung Yau Sam, the start of the school year in October meant much more than preparing his son for school. It brought a return to the classroom for dad too, as he embarked on an exciting new chapter in his professional life.

"I have been in the electrical and mechanical trade for two years and I know I need to have better qualifications if I want to advance my career," said CLP overhead line tradesman Chung, who left school after finishing Form Five.



Chung is among the 40 students from more than 170 applicants who successfully secured a place on the Professional Diploma in Power Engineering programme for electrical and mechanical tradespeople jointly offered by the CLP Power Academy and the Vocational Training Council.



Launched in October, the new CLP Power
Academy aims to provide vocational, wellstructured and accredited training programmes
for people like Chung who want to pursue a
career in the power industry and young achievers
who want to move up the social ladder.

Paul Poon, Vice Chancellor of the CLP Power

Academy, said he hoped the academy would be the preferred institution for both tradespeople in the electrical and mechanical engineering industry and new joiners looking for the best training to advance their careers.

Mr Poon said that the academy plans to recruit its second batch of students for the power engineering programme in early 2018 and offer courses with a focus on power generation. The academy also hopes in future to offer a diploma course for Form Three school leavers and to offer bachelor degree programmes in cooperation with local tertiary institutions.

Nurturing pillars of society

The Academy and its various initiatives come in response to the acute demand for manpower in the industry in Hong Kong because of the large number of infrastructure projects planned or underway in recent years, combined with an ageing population. It is estimated that the industry needs more than 2,000 new recruits each year but it is currently receiving only around half that number.

To help meet the industry's skills shortage, CLP teamed up with the Electrical and Mechanical Trade Promotion Working Group in September to welcome more than 800 apprentices into the

E&M sector.

Chief Secretary for Administration of the Hong Kong SAR Government, Matthew Cheung, said at a ceremony for the apprentices he was confident young people joining the industry would find they had made the right choice. "Society cares about you and there are great prospects working in the E&M sector," said Mr Cheung. "You are the pillars and the driving force of our society."

A powerful education tradition

CLP is committed to education and youth engagement. The company set up its first training school more than half a century ago and has trained thousands of engineers and technical staff over the decades.

To further strengthen its youth initiatives, CLP recently set up a dedicated office to focus on initiatives that would promote upward mobility for young people, raising the professional image of technical workers in the electrical and mechanical trades, and encouraging appreciation of history among young people.

"The future of Hong Kong rests upon the abilities of its young people. Setting up of the dedicated office and the CLP Power Academy demonstrate CLP's commitment in engaging our young people, helping them to help themselves through education, training and career development, and to take a positive outlook on life as they pursue their dreams," said Chief Corporate Development Officer of CLP Power Quince Chong.

Looking ahead, young father Chung is optimistic about the benefits his return to the classroom will bring. "I hope that by completing this programme, I can become a technician and provide my family with a better quality of life," he said.



Company News

Sir Michael Kadoorie Leads Delegation to Beijing

The Honourable Sir Michael Kadoorie, Chairman of CLP Holdings Limited, led a delegation of senior CLP management to Beijing in July to enhance relations with key stakeholders in mainland China, learn more about the central government's energy policies, and explore new investment opportunities. The delegation met



with Mr Nur Bekri, Administrator of National Energy Administration, Mr Wang Guangya, who was then the Director of the Hong Kong and Macao Affairs Office, and Mr Qian Zhimin, General Manager of China National Nuclear Corporation. The delegation introduced CLP's business development plan and expressed the company's confidence in long-term investment prospects in mainland China.



Our 2016 Annual Report Scores Top Marks

CLP's 2016 Annual Report and Sustainability Report have once again won the Best Report Award and Sustainability Reporting Award in the General Category in the Hong Kong Management Association Best Annual Reports Awards. Internationally, it has swept the board with 12 awards in the internationally-acclaimed Annual Report Awards Competition (ARC), capturing two Gold Awards, four Silver Awards, three Bronze Awards and three Honours Awards. The 2016 Annual Report was also presented with a Grand Award in the Chairman's Letter category for the first time. The HKMA and ARC awards are the latest in a succession of awards recognising the company's efforts in information disclosure and reporting.

CLP Power Named a Brand of the Year Winner

CLP Power has been named a Brand of the Year 2017 winner in the Power/ Energy Sector of Hong Kong in the World Branding Awards held in London in October. More than 3,000 brands from 35 countries were nominated and CLP Power was one of the 11 winners from Hong Kong. The award has a comprehensive



assessment scheme based on brand valuation, consumer market research, and an online public vote.



A Hi-tech New Home in India

CLP India has a permanent new home after moving from a rented office to its own headquarters in Mumbai in June. The move doubles the size of our previous office and signifies our determination to pursue growth and new energy development in India. The new premises include clutter-free workspaces,

spacious meeting rooms, recreation rooms, and a gym for employees. Energy conservation has been a key consideration and the new office is designed to make the most of natural light. Last but not least, its proximity to Mumbai's main airports means CLP India can connect easily with cities around India and the rest of the world. Be sure to pay a visit when you next come to India.

Green Substation Wins Gold Award at Asian Power Awards 2017

CLP Power's Hong Kong-Zhuhai-Macao Bridge (HMB) Substation has received a Gold Award for Transmission and Distribution Project of the Year at the Asian Power Awards 2017. The jury praised its sustainable and environmentally caring design



in providing a reliable and sustainable power supply to the Hong Kong-Zhuhai-Macao Bridge.

Situated on an artificial island at Chek Lap Kok, the HMB Substation will have green coverage on more than 30% of the surfaces of the low-rise substation, blending in with the surrounding environment. Other award winning features include photovoltaic (PV) panels with solar tracking devices, rainwater recycling and automatic dripping irrigation systems. Building Information Modelling (BIM) has been adopted to enhance the substation's environmental performance.



A Helping Hand for Aboriginal Businesses

EnergyAustralia has started a 12-month trial in September to test its new supplier arrangements under the Reconciliation Action Plan (RAP) designed to support Aboriginal and Torres Strait Islander businesses. A discount of up to 13% will be offered to certified indigenous

businesses, and the requirement for procurement approval will be waived. The RAP consists of 18 action plans and the above two are among the five specifically developed to help increase Aboriginal and Torres Strait Islander participation in EnergyAustralia's business. Christian Mena, Procurement Lead of EnergyAustralia, said RAP was important in strengthening the company's relationship with indigenous businesses.

CLP's First Multi-purpose Promotion Truck Sets Out on Green Mission

CLP's first multi-purpose truck is a mobile cinema, a classroom, and a customer service centre – all in one vehicle. It even has an extendable performing platform to let us get closer to customers.



As well as delivering an upgraded 4D movie experience and educational Augmented Reality (AR) games, the truck is equipped with a variety of interactive features, allowing visitors to learn about CLP's latest products and services in a fun and engaging way.

The multi-purpose truck has now teamed up with our Green Studio mobile classroom, touring local schools and communities to deliver green messages. Green Studio is the first 3D mobile classroom in Hong Kong to promote environmental education and has hosted more than 130,000 visitors since its launch in 2009.



Putting Control in Customers' Hands

EnergyAustralia has announced the launch of the next generation Redback Smart Hybrid System. The Redback system comprises a solar inverter and consumption monitor software, allowing end users to reduce their power expenses with better control of their energy source.

Siemens and CLP Sign MoU on Smart Energy Initiatives

CLP Innovation Enterprises Limited, a whollyowned subsidiary of CLP Holdings, and Siemens Limited, have signed a Memorandum of Understanding to foster collaboration on exploring and developing smart city and next generation energy initiatives. The partnership



will focus on four key areas, namely digitalised power generation, smart city solutions, smart grid applications and cyber security. Mrs Betty Yuen, Vice Chairman of CLP Power Hong Kong Ltd, said, "Smart city development is a global trend, and the collaboration will help CLP to bring in the smartest solutions to our customers."



The Shared Point

CLP is a big family and we operate in countries across Asia Pacific. Our employees come from different cultural and ethnic background. To be able to listen to what you think, your dreams and aspirations is vitally important to cultivate the bond among us. We sincerely invite you to share interesting stories or what touches your heart with us on this platform.

- 1. A Century of History in Half a Day
- 2. Guarding the Dam

A Century of History in Half a Day

By Angel Lam, Customer Solutions Officer, CLP Power Hong Kong



In March, I participated in "Our Home, Our History - Hung Hom Heritage Tour" organised by the Hong Kong Heritage Project and Walk in Hong Kong. The half-day trip was beyond expectation. The sights and anecdotes covered were captivating. They were made even more interesting by the lively and meticulous narration of our enthusiastic tour guide.



The tour began with some of Hung Hom's oldest streets and heritage spots: nostalgic cafés on Wuhu Street, mahjong craft shop hidden away under staircases, and the Lux Theatre – an old-style cinema that still manually allocates seats as a nod to the heyday of Hong Kong movie theatre. We also stopped by Kwun Yum Temple, which is packed with well-wishers every year on its Treasury Opening Day (that falls on the 26th day of the first lunar month). Apparently it was the only building remained unscathed during World War II when a bomb hit the neighbourhood. But before we could credit it to superstition, our guide quickly pointed out – with old photos as evidence – there

was a hill behind the temple, which probably had shielded it from destruction. Near the temple stood several buildings that served as living reminders of our former Chairman Lord Kadoorie's devotion to the community. They include the Hung Hom Clinic, which used to house a maternity home built with donations from CLP.

Our next stop was the landmark of Whampoa Garden – a ship-shaped shopping mall. Drawing the attention of curious passers-by, our tour guide quizzed us, "Why was this extensive area reserved for ship building? How much did an apartment cost in the 1980s?" We learned that the site used to be a deep-water berth dedicated to ship maintenance, and the mall was built in the shape of an ocean liner in remembrance of Whampoa's glorious heritage.

We then strolled along the Hung Hom promenade that is lined with private residential properties now but was home to the Hok Un Power Station previously. Our guide walked us through the geographic and strategic history of the power plant from opening to demolition. We were able to identify the power plant's location by the ridge of a hill shown in photographic records. As we walked down



the harbour front, our guide also told us an interesting anecdote about Lord Kadoorie. Immediately after the war, Lord Kadoorie was eager to come home to help rebuild the city. But on the military flight from Shanghai to Hong Kong, there was no seat available so he had to sit on piles of banknotes.

Our tour came to an end at CLP's Head Office, where the Hong Kong Heritage Project's Archive is housed. The staff showed us pages of precious records with extreme care and gave us detailed accounts of their fascinating collection of artefacts. This short but colourful history lesson of Hong Kong provided a perfect end to our half-day journey.

Guarding the Dam

By Hu Xingming, Public Affairs Manager, China



For people who have not seen a hydropower station before, the sight of Gaotang Dam will put them in awe – a 110-meter-tall dam set between two mountains that stores nearly 100 million cubic meters of water.

We set off from Huaiji County in the morning. After travelling through highways and small roads and then up the mountains, we finally arrive and are warmly greeted by colleagues at the entrance. They lead us into a small courtyard where a two-storey building stands. Behind it is the magnificent Gaotang Dam.

Our colleagues tell us that their responsibility is to "guard the dam".

In my previous job, I had the opportunity to set foot on an offshore oil drilling platform. Similar to here, people who work on a drilling rig live apart from their family; all the companies that they have are their duties and colleagues. In such circumstances, one can easily feel defeated by the remoteness and distance.



"What do you do when you are guarding the dam?" I ask.

"A lot," they reply. "We make sure the equipment works. We check the surroundings of the reservoir to ensure there are no potential security threats. We monitor the water level of the reservoir."

I had expected the colleagues to say how lonely they are when "guarding" the dam. Their answer is not what I had thought.

"What we worry most is security. People often come here to fish. We must maintain high vigilance because we are accountable to the people who live here," they add.

Throughout our conversations, I realise that what they care most is their work. What they are concerned most are other people's lives. I could not help but feel ashamed of my initial thoughts.

As I look around the courtyard, I see that trees are covered with green leaves. Under the hot summer sun, several small windmills spin serenely while solar panels shine brightly like mirrors.



Our colleagues live here through the year – surrounded by high mountains and in tranquillity. It seems as though our colleagues have built a Shangri-La here that is as pure as their souls.



In Pixels

Special memories are for sharing – so share your favourite photographs with the CLP family. Send us your pictures of your precious moments with colleagues and friends and we will feature them in this section of the newsletter. You will receive a souvenir from us when your picture is published. Here is our latest selection of the moments you captured.



What a thrill... Children and adult visitors alike enjoyed a simulated tour of a Combined Cycle Generating Unit at our booth in the Hong Kong Institute of Engineers Fiesta 2017. They were treated to a scale model and Virtual Reality technology. The verdict from our guests? It was awesome.



We keep on giving... Members of the CLP Volunteer Team gave a combined 11,300 hours of their time at 70 separate volunteer activities in 2016. Our efforts and those of some 30 social and charitable organisations we worked with last year were applauded at an appreciation ceremony on 12 September.



Strutting our stuff ... We celebrated our 15th anniversary in style at CLP India. We held a series of lively gatherings and parties where we demonstrated how we like to play hard as well as work hard.



Geared up for action ... We're getting ready for a major maintenance project at the Yallourn and Mount Piper power stations in Australia. To make sure it all goes smoothly, our engineers and technical staff at EnergyAustralia team did a detailed survey beforehand.



Blood brothers ... More than 100 of us gave blood on the CLP Blood Donation Day. As you can see from our broad smiles, we were delighted to give a little to help others a lot.



Let imagination and visions blend in creativity! We joined hands with teams of secondary school students to create this 121-metre masterpiece on the hoarding at the Black Point Power Station. Themed "Create Clean and Green Tomorrows", the mural carries our aspiration for a greener and smarter tomorrow.



What a wonderful opportunity to take the kids to the movie! It was a special screening of A Century of Power, and we loved all the goodies that came with the movie – some of our favourite old-time snacks. It was a meaningful day and my daughter got to learn more about Dad's work and the history of Hong Kong.



What a fabulous day ... We all enjoyed a beautiful and relaxed Saturday mixed with laughter, excitement and fun at the CLP's annual staff family event - Safety, Health and Environment (SHE) Day 2017.