

CEO's Strategic Review



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Richard Lancaster
Chief Executive Officer

Against the background of all the unpredictable international events I pointed to in my Strategic Review last year, it is indeed pleasing to report that we achieved solid performance in 2017. Our industry continues to confront challenges and opportunities brought about by climate change and technological advances. We are tackling these challenges head-on and embracing the new opportunities they present. We remain true to our purpose which is to address the energy trilemma: providing a safe and reliable electricity supply in an environmentally responsible way and at a reasonable cost.

In particular, energy security is a key but often overlooked issue. We need long-term, reliable fuel supply to cope with economic developments and environmental needs, as in the case of Hong Kong. We also need a flexible, well-coordinated energy system to react promptly to sudden changes in the supply-demand balance, as in the case of Australia. At the same time, we need to be able to answer the combined need for new capacity while accelerating the retirement of older, carbon intensive facilities, as in the case of our growth markets of Mainland China and India. Addressing this requires long-term vision, continuous investment and regulatory support.

For now, I would like to focus on our performances in the five markets where we operate and outline the most important issues facing us in these areas.

Hong Kong

In 2017, operating earnings from our Hong Kong electricity business increased 2.6% to HK\$8,863 million. The new Scheme of Control (SoC) Agreement we reached with the Hong Kong Government for 2018 to 2033 gives us the certainty to plan for our future investments and developments. The new Agreement reinforces our commitment to working closely with the Government to implement its clean energy policies aimed

at making Hong Kong smarter and greener. We are also ready to serve growing demand from new housing development and infrastructure projects in our supply area. To this end, we have submitted a five-year Development Plan to the Government.

To build a cleaner Hong Kong, the Government targets to reduce carbon intensity by 65-70% in 2030 from the 2005 levels. Significantly for us, it has mandated an increase in the use of natural gas to around 50% of the total fuel mix for electricity generation in 2020. We are currently constructing a new HK\$5.5 billion gas-fired unit at Black Point Power Station which will start operating before 2020 and we are planning an offshore LNG terminal in Hong Kong waters, for which we plan to submit an environmental impact assessment soon. This initiative will help ensure Hong Kong's energy security and allow us to source fuels at competitive prices and deliver a reliable supply to power the city's transformation to a lower carbon future.

In the meantime, we are working on implementing a number of initiatives contained in the new SoC Agreement. One such is introducing a Feed-in Tariff programme which provides financial incentives to customers generating their own renewable energy. We are also issuing Renewable Energy Certificates to provide customers opportunities to participate in the local development of renewable energy. We hope that these initiatives will help provide impetus for the development of more renewable energy in Hong Kong.

Mainland China

Operating conditions in Mainland China continued to be challenging in 2017, particularly for coal-fired generation facilities. As a result, operating earnings fell 18.6% to HK\$1,238 million.

During 2017, coal prices remained high. This was primarily the result of tight supplies of coal brought about by the country's

efforts to clean up the wider coal sector by shutting down smaller, less efficient mines. On-grid electricity prices from coal-fired generation, however, were not adjusted accordingly. This affected the profitability of our coal-fired projects.

While thermal generation has been impacted by China's transition to a lower carbon future, non-carbon emitting generation plays an increasingly important role. CLP's clean energy portfolio was strengthened in 2017 by the completion of the Yangjiang investment, which signified a key milestone not only for our operation in Mainland China, but also for the Group as a whole. The investment is not only important from an environmental perspective, it will also bring a positive impact to our earnings. Meanwhile, the performance of our renewable projects was solid, thanks to continuous growth of our wind and solar portfolio.

As the Central People's Government continues to reform the energy sector and introduce mechanisms to open up the market, the proportion of market sales substantially increased, bringing down the average price of our realised sales. With a balanced portfolio in place, this enables us to effectively compete in this rapidly evolving market.

India

Our operations in India had a solid year as both our thermal and renewable projects performed well. This gave rise to a 38% increase in operating earnings to HK\$647 million.

We are well aware of the worsening pollution in India and have always been mindful of the impact of thermal projects on the environment. This is why we installed state-of-the-art environmental facilities for Jhajjar and Paguthan power plants.

We are particularly pleased by the near completion of our first solar project in India, Veltloor, in the south of the country. Renewables are an integral part of CLP's strategy in India and are expected to continue making a vital contribution to our business and the environmental performance of the country.

Southeast Asia and Taiwan

In 2017, operating earnings decreased 41.6% to HK\$160 million largely because our project in Taiwan, Ho Ping, was affected by higher coal costs and unplanned outages in the second half of the year. Meanwhile, our operations in Southeast Asia remained steady and we continued to press ahead with the development of our two coal-fired projects in Vietnam.

Australia

I am glad to report that value restoration in our Australia business has strong momentum and is ahead of plan. In 2017,

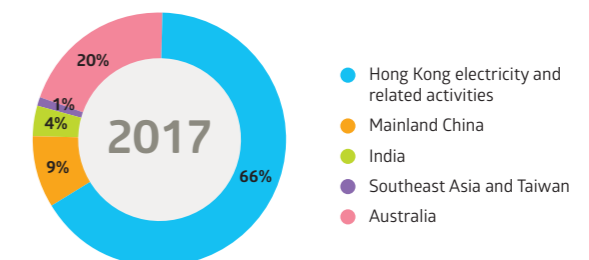
we achieved solid results in a very competitive market. Higher wholesale prices drove an increase in earnings from our Energy segment, while the Customer segment benefitted from the hard work we put in over recent years which puts our customers first and successful initiatives to lower costs. These resulted in a 48.1% increase in operating earnings to HK\$2,738 million.

Energy policies in Australia have been complex and sometimes conflicting. In October 2017, the Federal Government announced its National Energy Guarantee plan. We have examined it carefully and hope it can lead to agreement between State and Federal governments resulting in a national approach. We continue to work with our stakeholders on the redesign of the energy market assuring it does not lead to unnecessary cost for customers. Attracting investment in new generation is critical to restoring the vitality of the National Electricity Market. To achieve that, there is no substitute for stable energy policies.

Our results prove that our integrated business model works well. We are delivering to our customers the energy products, services and choices they need to manage the impact of rising prices while helping vulnerable customers deal with hardship. We can do this thanks to a strong and diversified portfolio of physical assets and contracts, including our initiative to underpin the development of 500MW of renewable energy with contractual offtake arrangements. Australia also urgently needs energy storage and reserve capacity to address the current energy security issue. EnergyAustralia is studying battery, pumped storage and demand response as part of a portfolio to help address that issue and provide reliable, affordable and cleaner energy for all customers. With a stable, national framework CLP is ready to help lead the shift to a cleaner energy future for all Australians.

Performance Highlights

Operating Earnings¹ by Market



About **5.2 million** customer accounts²

Electricity sent out³ **83.9 TWh**

Notes:

- 1 Before unallocated expenses.
- 2 Including 2.56 million in Hong Kong and 2.62 million in Australia.
- 3 Equity basis and capacity purchase arrangements. Also includes long-term power contracts from facilities in which we hold an equity interest.



The new Scheme of Control Agreement reaffirms CLP's commitment in contributing to Hong Kong's greener tomorrow

Safety

At CLP, we take safety to heart. The two fatal accidents in our Hong Kong operation last year which claimed four lives were a tragic reminder that we must be forever vigilant in our efforts to protect the safety of our staff, contractors and customers. In 2017, under the supervision of the Board, we carried out a fundamental review of our health and safety practices. Contrary to safety management theory and our expectation, we have seen the level of serious incidents across the Group remain relatively stable despite a strong downward trend in the total number of safety incidents. As a result, we significantly strengthened the focus of our safety procedures on the reduction of serious incidents, introduced action plans to improve standards in this area and further elevated the classification of safety in our Group risk register to ensure a sustained increase in oversight on safety. We have also appointed a new Senior Director of Health, Safety and Environment to oversee the new approach. We will closely monitor the implementation of these plans on an ongoing basis with a determination to do as much as we possibly can to prevent a recurrence of such tragic accidents.

Climate Change

It is now 10 years since CLP's Climate Vision 2050 was first published. During this period, climate change science has progressed, technology has advanced, our business has evolved and the Paris Agreement has increased global ambition to limiting temperature increases to 1.5 degrees Celsius. Against this backdrop, we undertook a comprehensive review of Climate Vision 2050.

It is now clear that increasing global demand for renewables has reduced costs to the point where in some situations renewable energy no longer requires subsidies. In the context of growing societal expectation and increasing technological promises, we have set ourselves tougher targets than those formulated in 2007. We now propose decarbonising our portfolio by over 80% from the 2007 levels and have introduced new carbon intensity reduction targets for 2030 and 2040 to replace the existing 2035 one. Our new goals are to have 30% of our generation capacity coming from renewables in 2030 and 40% from non-carbon emitting sources that year.

Finally, as business models evolve and decentralised generation takes up an increasing part of the system, contracting new renewable energy becomes more mainstream. CLP has historically reported our carbon intensity, proportion of renewable and non-carbon emitting generation on an equity basis reflecting solely our ownership in the generating plant. However, we believe this approach reflects a relatively narrow view of our generation position as it does not take into account the capacity purchase that we make from plant we don't own. Therefore, from now on, we will also report our targets and progress on a basis that includes our capacity purchase.

Innovation

The digital revolution means the world is changing at a rapid pace and our industry needs to seize the opportunities presented by this phenomenon. We have long recognised this and have made innovation a priority in our long-term plans for the Group. Since 2016, we have appointed a Senior Director of Innovation and a Director of Big Data to our new innovation team, which has been tasked to define and refine how we can leverage all the new and emerging technologies that can help us to be better and more efficient at what we do. This process will help our customers to save energy usage and costs.

We are already making progress. In 2017, we invested in a venture capital fund in Silicon Valley which can help us explore new opportunities. We have also applied new technologies in our operation to boost performance and efficiency. For example, in Hong Kong, we are using drones as "inspectors" to look at aspects of our Black Point Power Station, in particular the operational areas where access by our staff is difficult or potentially dangerous. In Mainland China, we started using robots to clean our solar panels. In Australia, we have rolled out the Redback Smart Hybrid System which combines a solar inverter with battery storage and a smart home energy management software, and a demand response trial for customers to have better control of their energy use. We also utilise data analytics to enhance asset management across the Group.

Changes to the first registration tax waiver on electric vehicles have dramatically reduced the sale of electric vehicles in Hong Kong and has impacted our Smart Charge business which we launched in 2016. However, many manufacturers are now focusing on the development of newer and cheaper electric car models which may again boost sales. We remain confident in the long term for this 50%-owned enterprise.

As the world becomes smarter and connectivity increases, the probability of cyberattacks is also on the rise. Today's utilities are far more vulnerable to these attacks as our infrastructure has become more complex and digital. Therefore, we are actively strengthening our systems and improving our response capabilities to deal with potential cyber events. To keep up to date in this challenging area, we have also taken steps to strengthen our cyber resilience through collaboration with leading international utilities.

Outlook

Since the launch of our Focus · Delivery · Growth strategy in 2014, we have been focusing on what we do well – managing our operations professionally – and delivering a dependable and increasing return. We have also been growing our portfolio at a steady pace. Our positions are strong and our pathways are clear.

In Hong Kong, the new 15-year SoC Agreement provides certainty for our investments in the energy transition and the new technologies necessary to meet our customers' needs. We look forward to a future that is continuously underpinned by a clear and stable regulatory framework with confidence.

For the longer term, Mainland China and India will remain our major growth markets. In Australia, there has been a long period of energy policy uncertainty which has brought with it significant market volatility and rising energy costs. Having said that, our value restoration programme has borne fruit since introduction in 2014 and from now on, providing and assuming the introduction of a more stable and modern regulatory framework, our focus will be to create value for the long term.

Globally, we note the trend in the development of smart cities, which comes with unprecedented connectivity across all sectors and regions. To support the development of a smart city in Hong Kong, we believe a reliable, efficient and clean energy system will be needed. At CLP we have the drive, desire and expertise to be an integral part of these exciting new developments.

I should stress that the energy industry is a fundamentally solid business amid all these challenges. We are well-prepared to recognise and seize the opportunities that they are bringing,

benefitting from a diversified portfolio, our forward-thinking, clear focus, agility, strong financial structure and a capable workforce. With these new opportunities coming up, we will continue to strengthen our talent pool. The launch of the CLP Power Academy in Hong Kong last year is one good example of this effort.

In the past year, we undertook an exercise to review our brand identity. Our refreshed brand and our new tagline – Energy for Brighter Tomorrows – speak to our purpose to deliver a fundamentally positive contribution to the community as a reliable and engaging energy service provider. It reflects both our achievements over the years in providing energy for the communities we serve and our determination and commitment to continue to innovate and improve. We look forward to a dynamic and bright future and positive engagement with all our stakeholders.



Richard Lancaster
Hong Kong, 26 February 2018

Q What would be some of the most game-changing technologies, business models, and trends for the power industry over the next two years? How is CLP incorporating these elements into everyday operations and the development roadmap?

A The electricity industry is witnessing change at an unprecedented pace. Technology innovation and digitalisation are big drivers of this change, and CLP recognises the importance of embracing innovation and being a leader in the deployment of new technology.

In 2017, we started taking steps to build our knowledge and organisational skills. We also identified strategic partners around the world to bring new skills and know-how to complement our own expertise in the power industry. With so much going on in this field it's important to have a clear focus. We have this and are concentrating our efforts on how we can play a role in smart cities, how we can help customers better manage their energy needs through smart energy platforms and how we can deploy data science to improve our operations, lower costs and provide better customer service. We are now at the stage of taking several innovative ideas through pilot projects which will help us understand the new possibilities and how best to implement them across the business.

But we know our ambitions won't be achieved without a strong organisation with the right culture and capabilities to support innovation. We have a talented workforce with deep and broad industry expertise, and we need to successfully combine this with new skills, ideas and ways of working that we need to adopt. Simply put, the most critical part of CLP's innovation journey is our people.



Jane Huynh
Project Engineer
CLP Group Operations



Richard Lancaster
Chief Executive Officer