

Business Performance and Outlook

Our “**Focus · Delivery · Growth**” strategy has worked well for us. This section presents an integrated view of our performance in each of the five markets where we operate, and outlines the existing challenges and opportunities that lie ahead





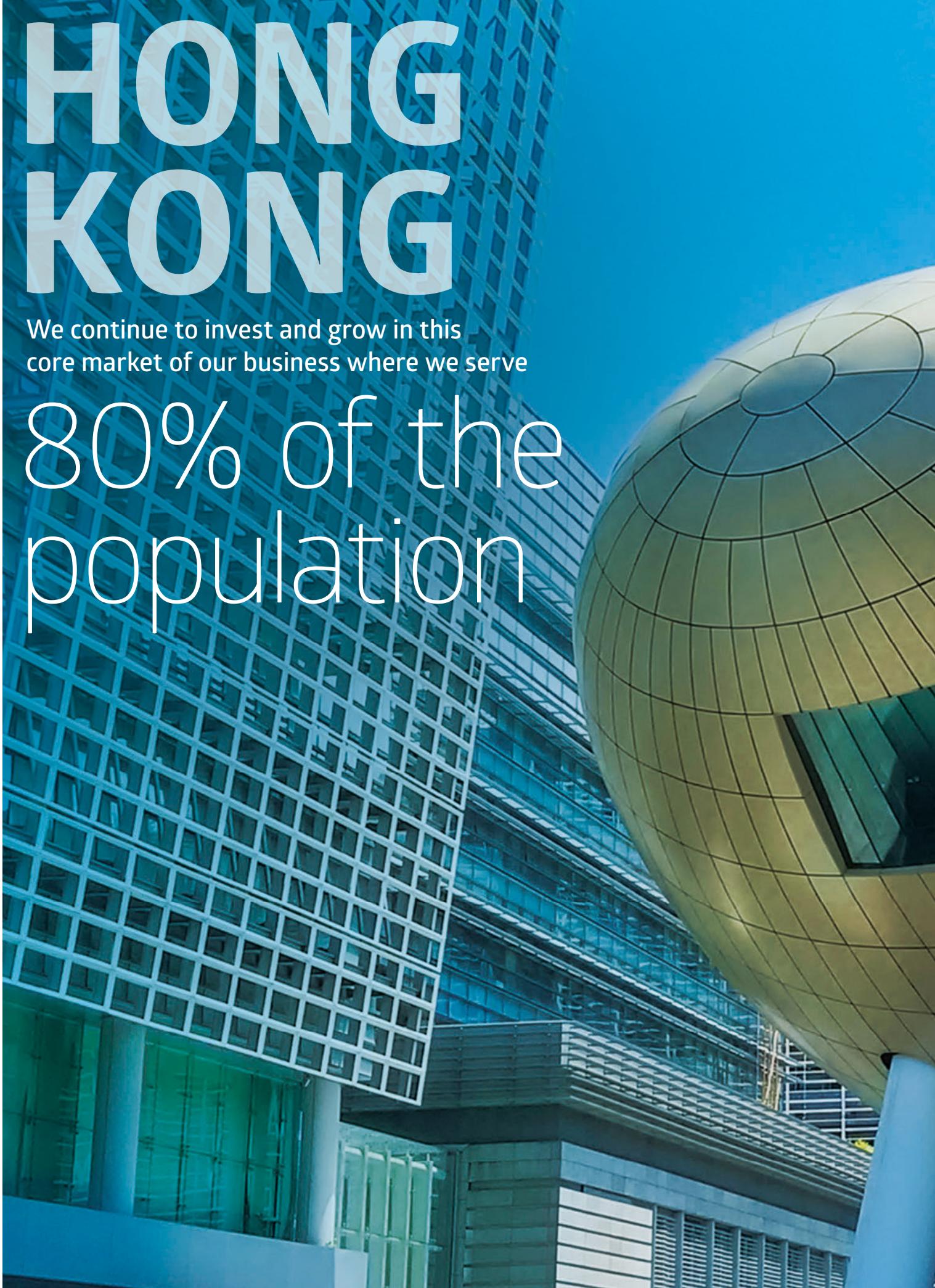
CUSTOMERS



HONG KONG

We continue to invest and grow in this core market of our business where we serve

80% of the population

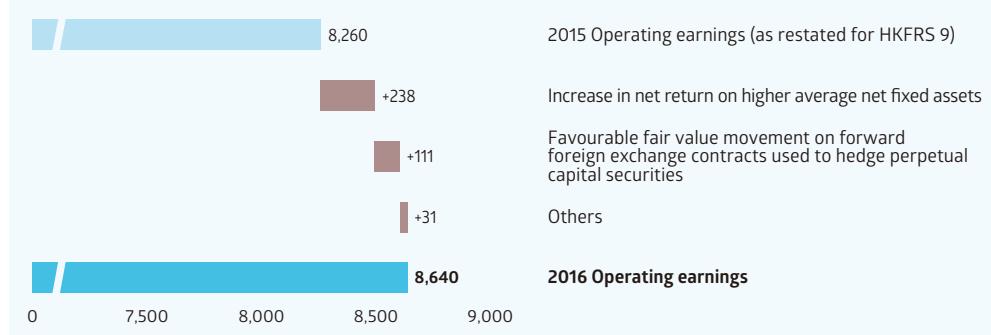


Financial and Operational Performance

Overview

In 2016, we continued to provide our 2.52 million customers in Hong Kong with a safe, reliable and environmentally responsible electricity supply at a reasonable cost. Operating earnings from our electricity business were HK\$8,640 million, a 4.6% increase from 2015. The chart below summarises our performance in 2016.

Operating Earnings of Hong Kong Electricity Business (HK\$M)



During the year, we invested HK\$7.3 billion to maintain and enhance our supply system and generation assets to meet both current and future energy demand. This included the upgrade of existing generation units, commissioning of new substations to support new development areas and the expansion of Hong Kong's railway networks, and the commissioning of new circuits to reinforce our transmission and distribution networks.

Demand for electricity and its delivery infrastructure was driven by new infrastructure projects and the city's ongoing development. Local electricity sales in 2016 rose 0.6% to 33,237 gigawatt hours (GWh) compared with the previous year and sales to the Mainland increased by 1.5% to 1,205GWh. Combined total electricity sales in 2016 increased by 0.6% to 34,442GWh. Please refer to our [website](#) and [supplementary information online](#) for details on sales by sector.

We understand customers' concerns about the need for reasonable electricity prices, and we have always emphasised prudent management of costs. For 2017, we are able to freeze the Average Total Tariff at HK\$1.132 per unit of electricity and at the same time offer our customers special fuel rebates amounting to nearly HK\$800 million, or 2.3 cents per unit of electricity consumed in 2016.

Our local electricity business is regulated by the Hong Kong Government through the SoC Agreement. As the current agreement will expire in September 2018, we are in discussions with the Government over a new SoC Agreement. The SoC Agreement has served Hong Kong well for over half a century and has been an effective framework to meet the Government's energy objectives and community aspirations. We look forward to reaching agreement with the Government.

Climate Change

We endeavour to minimise the impact of power generation on the environment and to play our part in transforming Hong Kong into a smarter and greener city. We continued to pursue a number of key initiatives to support the Government in achieving its policy objective of increasing the use of natural gas to around 50% of the total fuel mix for electricity generation in 2020.

In December 2016 we obtained approval from the Government to construct a 550MW gas-fired generation unit at our Black Point Power Station which will use state-of-the-art combined-cycle gas turbine (CCGT) technology. Construction work has started and we aim to commission the new unit before 2020. The total estimated capital expenditure of the new gas unit is about HK\$5.5 billion.

Hong Kong

In addition, we continued our discussions with the Government and other stakeholders regarding the proposal to build an offshore LNG terminal in Hong Kong waters. The terminal will enable us to have direct access to a range of gas sources from around the world and strengthen the reliability of Hong Kong's fuel supplies. We are progressing with various studies under the environmental impact assessment of the project, and are proactively engaging with potential suppliers to secure the additional supply of gas needed on a long-term basis. A final investment decision is expected by the end of 2018.

Meanwhile, to cater for gas demand in the near term, we are working closely with CNOOC China Limited to link the new Wenchang gas field currently under development in the South China Sea to our existing pipeline to bring gas to Hong Kong from 2018 onwards as supply from the Yacheng gas field declines.

In order to combat climate change and in support of the Government's recently announced target to reduce carbon intensity in Hong Kong from the 2005 level by 65% to 70%

by 2030, CLP will undertake both supply and demand-side measures focusing on mitigation, adaptation and resilience.

Mitigation

As an electricity supplier, CLP is committed to mitigating the impact of our operation on climate change. On the supply side, we strive to lower the emissions from our power generation by using cleaner fuel and promoting the use of renewable energy where practicable despite its constraints in Hong Kong. For our existing fleet, we completed the upgrade of two generation units, one at Black Point and another at Castle Peak in 2016, with advanced emissions control technologies to improve efficiency and reduce emissions. We also supported the development of renewable energy and have connected more than 250 renewable energy systems to our grid. One example is the support we provided for the Drainage Services Department to build Hong Kong's biggest solar farm near the airport. The 1.1MW solar farm made up of over 4,200 solar panels is capable of generating electricity for about 230 households a year. We are also applying for an

CLP's Green Tools and Education Programmes

EE&C Support for Customers

- Conducted 160 free energy audits for some of our commercial and industrial customers, and helped save 15.8GWh of electricity.
- Launched the "Supporting SME with 6 Energy-Saving Rewards" campaign to help small and medium businesses to reduce electricity consumption.

Eco Power 360

- Launched the enhanced online home energy assessment platform to encourage our residential customers to use energy wisely.

POWER YOU

Kindergarten Education Kit

- Has enabled 135,000 kindergarten children in Hong Kong to learn about electricity and energy efficiency through this electricity-themed interactive kit.



Eco Building Fund

- Provided subsidies to residential building owners to enhance the energy efficiency of the communal areas of their buildings.
- Approved 83 applications, with total funding reaching HK\$36.4 million.

Meter Online

- Developed an innovative energy management tool that provides a nine-day energy forecast based on weather information to help our commercial and industrial customers predict and manage their electricity consumption.

CLP's Green Studio

- Received over 110,000 visitors since 2009 through Hong Kong's first mobile classroom with interactive 4D movie and augmented reality educational games.



environmental permit from the Government to develop Hong Kong's largest landfill gas power generation project that will produce 10MW of renewable power close to our Black Point Power Station.

On the demand side, our efforts focus on the promotion of energy efficiency and conservation (EE&C) through the green tools and education programmes shown on the left.

Adaptation and Resilience

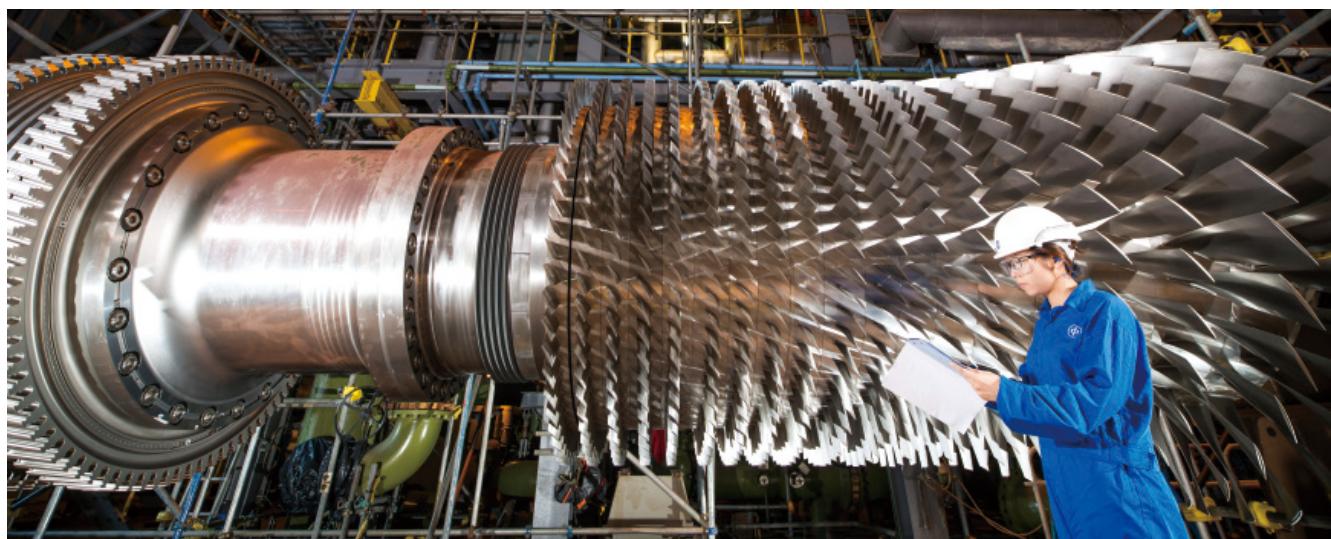
While we work to reduce carbon emissions with the above measures, we also need to adapt and upgrade our facilities to strengthen our defence against extreme weather events that are becoming more frequent.

In 2016, we completed the reinforcement project for pylons of 400kV overhead lines and various critical structures at Castle Peak Power Station so that they can better withstand super typhoons. We have also installed flood damage mitigation and alarm systems at our low lying substations to guard against storm surges.

In addition, we conducted post-typhoon reviews and regular drills to ensure a smooth execution of our contingency plans when needed. Looking forward, we plan to develop a model that can more accurately forecast the effect of an approaching typhoon on our network so that we can be better prepared.

Innovation

The phenomenal advancement of information and communication technologies in recent decades has provided ubiquitous connectivity and intelligent automation. The idea of "smart city" has emerged and cities around the world are building their own version of this concept. As an innovative energy service provider, CLP is well-positioned to support Hong Kong's transformation into becoming a smart city.



Investment in new gas-fired generation capacity enables us to lower emissions and support the Government's climate objectives

To further promote energy efficiency and conservation among our residential customers, we launched an innovative initiative Eco Rewards, a scheme that encourages energy savings where customers can earn points to redeem rewards. In addition to the many smart green tools that provide our customers with more choice, we recently cooperated with the Hong Kong Science and Technology Parks to explore new digital technologies designed by local start-ups to be showcased in our newly revamped customer service centre. These technologies will enable a more interactive and interesting experience for our customers in learning about the latest energy saving products and smart home solutions. Through this collaboration, CLP aims to act as a catalyst for innovation in Hong Kong.

Moreover, CLP is supportive of the Government's initiatives in developing a pilot project in Kowloon East to explore the feasibility of making Hong Kong a smart city. We will take every opportunity to apply emerging technologies in providing reliable, smart and greener electricity to customers.

In 2016, we joined forces with HKT in the Smart Charge service to promote green driving in Hong Kong. In addition to this, CLP has developed an extensive electric vehicle charging network in our supply area, where drivers can find a quick charging station on average every 10 kilometres.

Environmental Performance

Air Emissions

We have established a robust system to manage environmental issues, in particular air emissions, for our generation portfolio and we conduct regular assessments to ensure our environmental controls are up to date.

Hong Kong

In 2016, we continued to meet the stringent emissions caps set out by the Government which require CLP to reduce its emissions by up to 65% from the tight base of 2014. We adopted a number of operation measures including:

- further optimising our fuel mix,
- continuing the usage of low emissions coal, and
- enhancing the effectiveness of our emissions control facilities to meet the reduction targets, while maintaining high supply reliability at the same time.

During the year, we concluded discussions with the Government on a new set of emissions caps for our power stations starting from 2021. The new caps further tighten the allowances for emissions of sulphur dioxide, nitrogen oxides and respirable suspended particulates from the already stringent 2020 caps. With the approval of the new gas-fired generation unit at Black Point Power Station, we are on track to increase our natural gas generation to around 50% of our fuel mix starting in 2020.

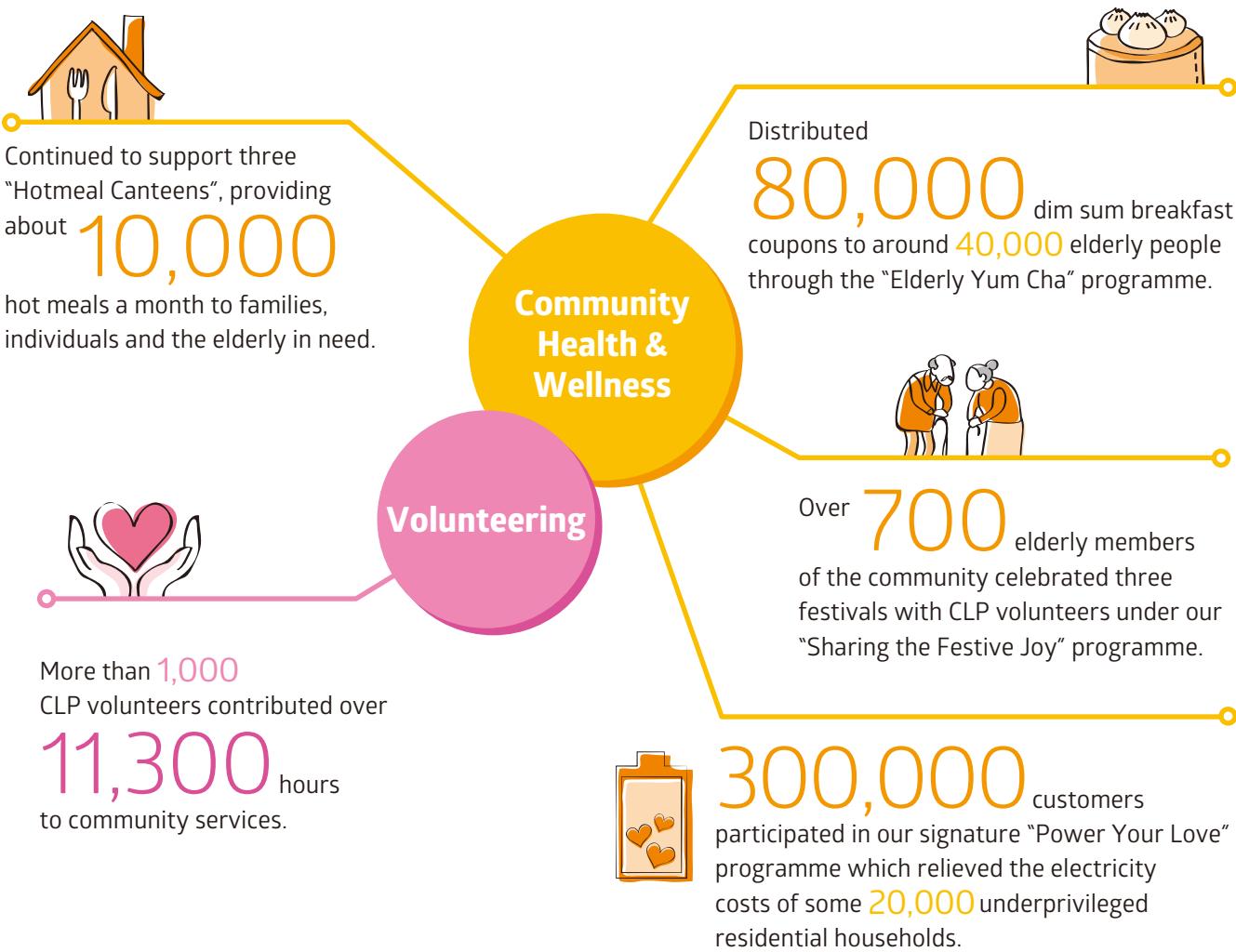
Environmental Regulatory Compliance

All of our assets in Hong Kong achieved another year of full compliance with all environmental regulations in 2016.

Social Performance

The success of our business is closely aligned with the well-being of the communities we serve. In Hong Kong, we work closely with local non-governmental organisations and community groups to identify the society's evolving needs and develop programmes that can help meet those needs. Helping the disadvantaged is one of our main focus areas and in recognition of our efforts in 2016, CLP received the Outstanding Contribution Award from the Social Welfare Department for our support to its Partnership Fund for the Disadvantaged.

During the year, we initiated and supported 447 community projects in Hong Kong. Some of the key projects are highlighted below while more details can be found in the Social and Relationship Capital chapter on pages 81 – 84.



Outlook

We look forward to agreeing with the Government on the new SoC Agreement in the near future, which will enable us to continue to provide a safe, reliable, environmentally friendly electricity supply for our customers at a reasonable cost.

We are equally committed to maintaining our excellent and innovative services for our customers and to stepping up our engagement with them through the offering of new products such as various digital platforms and visits to our new smart

energy experience centre. As we expect electricity demand to continue to grow in our supply area on the back of new infrastructure developments and population growth, we need to keep pace with evolving customer needs, enabling their energy management and offering them more choice.

As Hong Kong's largest power company, we will also work closely with the Government to play our part in achieving its 2030 climate targets, supporting our city's transition to a greener and smarter future.



My company is a green partner of the Eco Rewards scheme. How can CLP Power help residential customers with energy efficiency and conservation through the scheme?

At CLP, we believe conserving energy is essential for sustainable development and we do our utmost to help customers understand that they can contribute to this mission through making small changes in their lives. For example, we have rolled out a range of initiatives to promote energy saving and Eco Rewards is one of them. By participating in Eco Rewards, customers can gain Eco Points through lowering their electricity usage and joining other green activities such as signing up for green bills. They can then use their Eco Points to redeem a variety of prizes offered by our green partners. So far, their response has been encouraging. This new programme has started well and we hope activities like this can help more customers to adopt a green lifestyle.



Mr Donald Tse
Chairman and Executive Director
Hung Fook Tong Group Holdings Limited



Quince Chong
Chief Corporate Development Officer

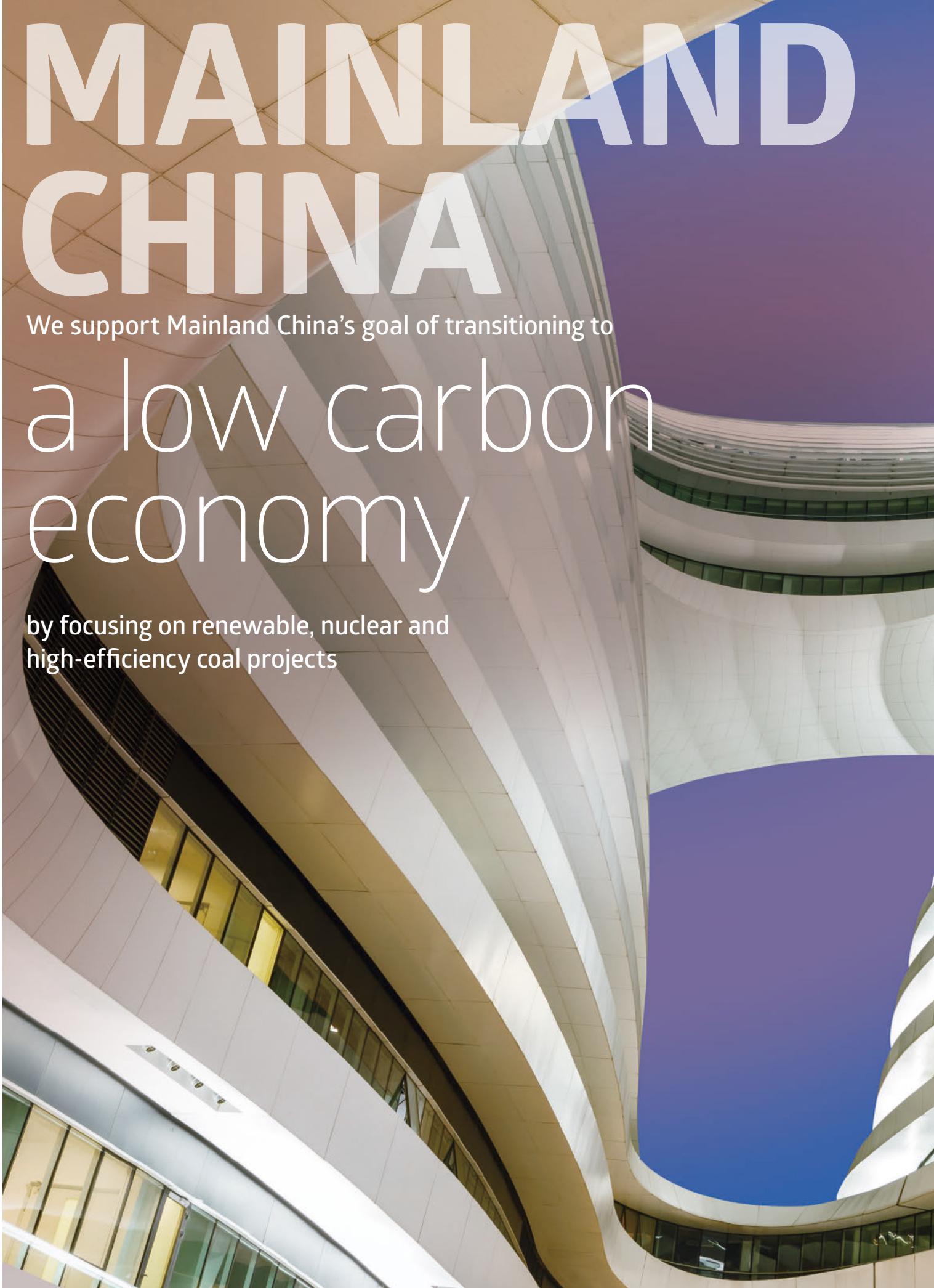


MAINLAND CHINA

We support Mainland China's goal of transitioning to

a low carbon
economy

by focusing on renewable, nuclear and
high-efficiency coal projects



Financial and Operational Performance

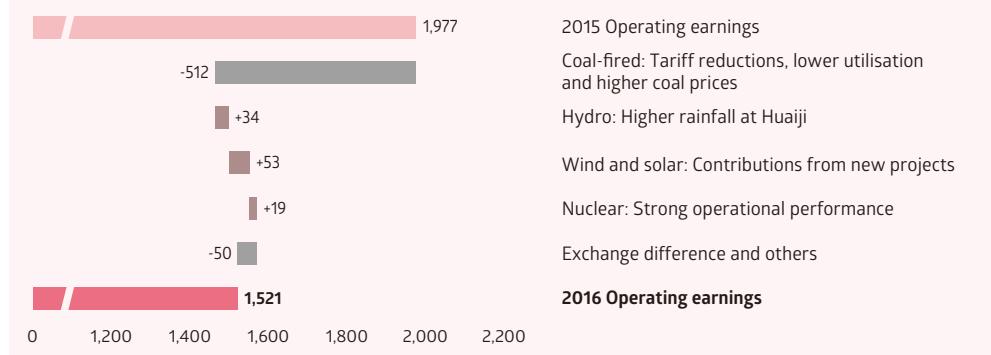
Overview

In 2016, while Mainland China's economy continued to grow, albeit at a slower rate, utilisation of most thermal power plants remained low. This was partly due to the country's structural reform to shift away from heavy industry and other traditional growth sources as well as the continuous deployment of both thermal and renewable generation capacity. As a result, there was a glut in electricity supply in the northern and western parts of China with associated grid constraints and curtailments, particularly for renewables. In addition, more stringent environmental controls significantly affected thermal power plants. This is in line with China's commitment to reducing coal's dominance in the energy mix that was underlined in the 13th Five-Year Plan announced in December 2016.

Against this backdrop, CLP's business in Mainland China reported a 23.1% decrease in operating earnings in 2016, mainly due to significant tariff reductions for our coal business, low utilisation hours, and the rebound of coal prices in the second half of the year. However, earnings of renewables rose by 27.4% to HK\$404 million, largely driven by increased contributions from our hydro projects as well as new wind and solar projects. The earnings contribution of our renewable portfolio approached that of our coal projects. Meanwhile, earnings from our 25% stake in Daya Bay Nuclear Power Station increased by 2.3% as the plant continued to operate reliably with high utilisation rate. Our performance in Mainland China is summarised below.

Operating Earnings	2016 HK\$M	2015 HK\$M	Change %
Renewables	404	317	+27.4
Thermal	429	941	-54.4
Nuclear	863	844	+2.3
Operating and Development Expenditures	(175)	(125)	+40.0
Total	1,521	1,977	-23.1

Operating Earnings of Mainland China (HK\$M)



Renewables Projects

In support of the Government's low carbon transition and CLP's Climate Vision 2050, we added 275MW to our renewable capacity in 2016, including 230MW wind and 45MW solar, bringing the total capacity of our renewable projects to over 2,000MW.

During the year, our hydro projects reported strong overall performance. Power generation at Huaiji in Guangdong province increased significantly thanks to abundant rainfall.

Mainland China

Our solar portfolio grew with the full-year operation of Xicun II in Yunnan province, which was commissioned in the second half of 2015, and our acquisition of the remaining 49% shareholding in Sihong in Jiangsu province from our joint venture partner in July. As a result, generation from our solar facilities increased by 17% compared with 2015.

Generation of our wind projects also increased from a year ago following the commissioning of Xundian I in Yunnan province, Sandu I in Guizhou province and CLP Laizhou I in Shandong province.

Notwithstanding the increase in earnings of our overall renewable portfolio, the financial performance of our

renewable projects in Yunnan, Sichuan, Gansu and Jilin provinces were affected by grid curtailments and lower tariff rates prescribed by the local authorities under the different market sales programmes in 2016.

In 2016, Yang_er Hydro and Penglai Wind achieved Platinum 5-Star ratings from the internationally-recognised National Occupational Safety Association for the first time, recognising the projects' high safety, health and environmental standards.

Performance of our renewable projects can be seen in the table below. Please refer to our [supplementary information online](#) for more details. 

Renewables Projects – Performance

	Installed Capacity ¹ MW	Electricity Sent Out ¹ GWh		Availability %		Utilisation %	
		2016	2015	2016	2015	2016	2015
Wind							
Wholly-owned	395	603	312	98.9	98.9	22.3	18.6
Minority-owned	937	1,714	1,617	98.2	97.6	20.5	20.4
CGN Wind JV	1,993	3,677	2,910	97.2	98.1	20.1	19.0
Solar	262	422	357	99.7	100.0	18.3	19.3
Hydro	509	1,879	1,705	88.2	89.5	43.6	40.1

Note:

1 Indicate total installed capacity and sent-out of all projects in operation without adjusting for CLP's equity share

Thermal Projects

During the year, utilisation of Fangchenggang Power Station was affected by the economic slowdown and competition from both nuclear and hydro projects in the Guangxi Zhuang Autonomous Region. The financial performance of Fangchenggang was also impacted by the discounted tariffs of increased direct sales. Because of these short-term adverse circumstances and the substantial environmental investment to enable Fangchenggang Power Station to effectively compete in the presently oversupplied market, we have booked a HK\$199 million impairment to the carrying value of Fangchenggang's cash generating unit. Nevertheless, we remain optimistic about the long-term prospect of Fangchenggang due to its strategic location to the Association of Southeast Asian Nations (ASEAN) countries. We are confident that demand for electricity will grow as

more investors establish their businesses in Guangxi to take advantage of the region's access to the growing Belt and Road markets, a key initiative of the Central People's Government.

In the fourth quarter of 2016, we successfully commissioned two new units which use the most advanced ultra-supercritical technology at Fangchenggang Power Station Phase II.

In 2016, we were invited by the Guangxi Government to become a founding member of the Guangxi Power Exchange Centre. This provides us with an opportunity to contribute our knowledge and capitalise on our experience in competitive markets such as Australia.

Meanwhile, performance of our other minority-owned thermal projects was affected by tariff reductions, low utilisation and higher coal prices in the second half of the year.

The table below shows details of our thermal projects in Mainland China over the past year.

Thermal Projects – Performance							
	Installed Capacity ¹ MW	Electricity Sent Out ¹ GWh		Availability		Utilisation	
		2016	2015	2016	2015	2016	2015
		2,580	3,081	2,933	97.2	88.9	28.1
Majority-owned Fangchenggang I & II	10,720	47,111	47,741	95.6	95.0	53.6	52.8

Note:
1. Indicate total installed capacity and sent-out of all projects in operation without adjusting for CLP's equity share

Nuclear Projects

We believe nuclear energy plays a very important role in the world's and China's transition towards a low carbon economy. In November 2016, we entered into a conditional equity transfer agreement with CGN Power to acquire a 17% equity stake in Yangjiang Nuclear Power Co., Ltd. The acquisition is a valuable opportunity for CLP to strengthen our presence in China's nuclear industry and in Guangdong province.

During the year, Daya Bay Nuclear Power Station operated steadily and its safety performance was ranked favourably by the World Association of Nuclear Operators.

Environmental Performance

Air Emissions

Fangchenggang is currently our only fossil-fuel based power station under CLP's operational control in China. Its air emissions in 2016 reduced from 2015 due to low dispatch levels.

The newly commissioned Fangchenggang II is designed and built to meet the latest and most stringent air emission requirements in Mainland China. We have begun tendering for a major retrofitting project for Fangchenggang I to enhance the efficiency and emission standards of its two supercritical units so that they can meet the same emissions requirements by 2020.



Power generation by our solar facilities in Mainland China increased 17% in 2016 compared with 2015

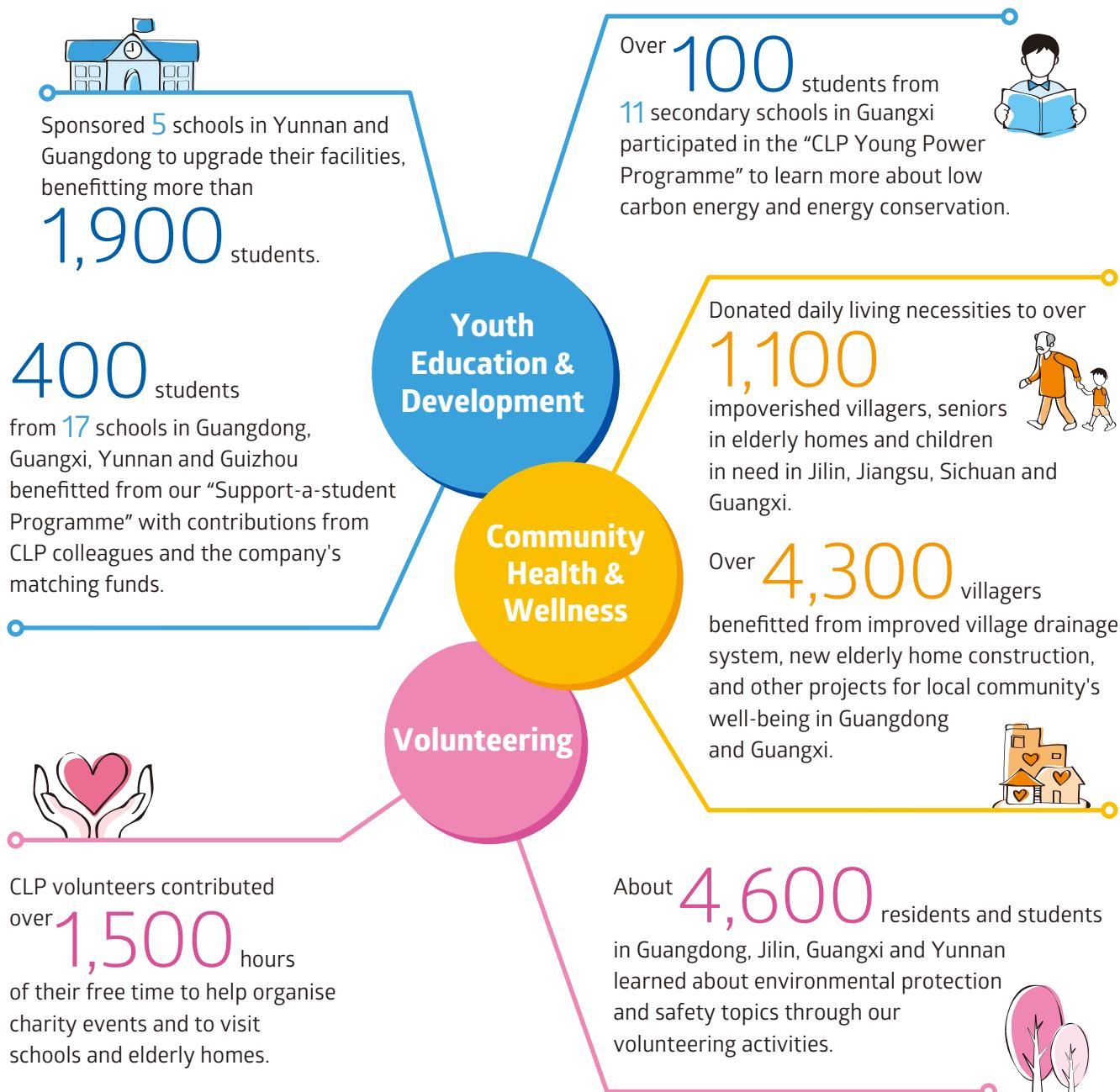
Environmental Regulatory Compliance

During the year, there was one environmental issue at Sandu I wind farm in Guizhou province where the construction of an access road and wind turbine platforms resulted in a greater impact on the environment and forestry land than initially authorised. The local Forestry authority has imposed a sanction totalling RMB14 million as at the end of 2016. A site environment restoration programme has mostly mitigated the impact with some seasonal revegetation works to be carried out in 2017. Project management and technical procedures have been enhanced to improve our future performance at this type of geographically difficult locations.

Social Performance

Stakeholder Engagement

Mainland China is a key growth market for CLP. We are keen to contribute to the country's power sector reform through sharing our operational and safety excellence as well as expertise on clean energy, corporate governance and community initiatives with our peers. To this end, we held a number of activities in 2016 to strengthen key stakeholder relations and promote the awareness of CLP. During the year, we met with government departments at the central and provincial levels, including the National Development and



Reform Commission, the National Energy Administration, Hong Kong and Macao Affairs Office, and the China Electricity Council.

Members of our senior management also met with State Councilor Yang Jiechi and Vice Minister of Science and Technology Yin Hejun to introduce CLP's operations in China.

Community Initiatives

The establishment and upkeep of community relations is an important part of our stakeholder engagement efforts in Mainland China. In 2016, we continued to focus our community initiatives on education and community well-being and launched a number of pioneering activities. Some of the key projects are highlighted on the left while more details can be found in the Social and Relationship Capital chapter on pages 81 – 84.

Outlook

With our diversified generation portfolio and an increasing share of non-carbon capacity, we are well-positioned to participate in the energy transition in Mainland China and

withstand the impact of declining utilisation of our coal projects. In the coming years, we will focus on further expanding our clean energy portfolio, although we expect competition for new renewable projects to be keen and an evolving market regime is likely to affect their performance. At the same time, we expect the Yangjiang acquisition to have a positive impact on our future earnings from completion, which is expected to take place in the first half of 2017.

We also take note of the fact that direct trading with large power users will likely become more prevalent as China continues to reform its power sector. To this end, we will also seek to sign more direct sales contracts to boost utilisation.

As part of the move by the Central People's Government to combat climate change and lower emissions, it will establish a national carbon market in 2017 in order to expand the role of market forces in the development, manufacturing and operation of low carbon energy technologies. CLP will continue to monitor and prepare for the new market and ascertain how we can contribute our international experience to its development.



In recent years, reforms in the power sector in Mainland China have accelerated. What is CLP's role in the series of reforms as one of the largest external independent power producers in the China market?

For over a century, CLP has been involved with the electricity business from power generation and transmission to retail business. Our investments encompass power facilities of different fuel types including coal, gas, and non-carbon emitting sources of nuclear and renewables. Since the late 1990s, we started to expand to other power markets in Asia Pacific under different regulatory regimes. We serve about 5.15 million customers in Hong Kong and Australia. We believe our experience in the Australian electricity market will prove to be of particular value to the Government officials and our industry peers in Mainland China. We can share our experience in how the current market mechanism works there and the successes and failures during different stages of the reforms.

We are honoured that we have been invited to participate in the Guangxi Power Exchange Centre and we are delighted to be able to play our part in contributing to China's power reform.



Mr Li Xiangxing

Deputy Director General of Development and Reform Commission of Guangxi Zhuang Autonomous Region & Director of Energy Bureau, Guangxi Zhuang Autonomous Region



Chan Siu Hung

Managing Director - China

INDIA

We are one of India's biggest renewable energy producers

and among the largest foreign investors
in the Indian electricity sector

Financial and Operational Performance

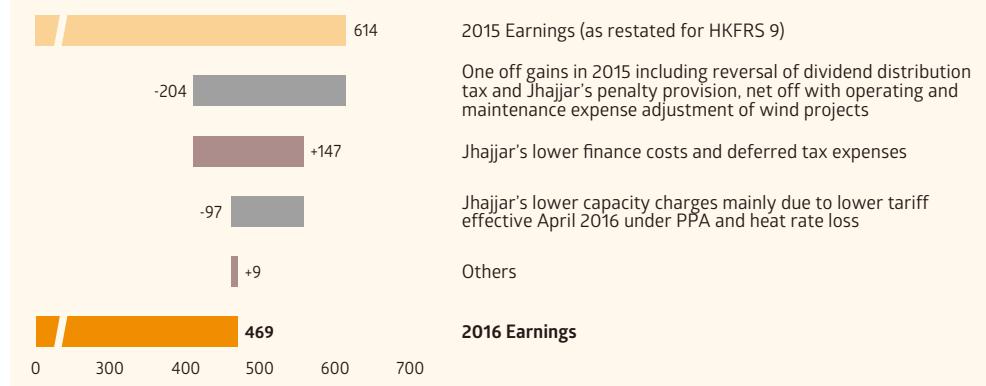
Overview

In 2016, operating conditions in India's power sector showed signs of improvement on the back of steady coal supply for thermal plants and better grid management for the renewable energy sector. Demand for power in India in recent months, however, has softened due to slower growth in the economy and the issue of power affordability. Nonetheless, the country continued to make progress with its low carbon transition in line with the target to achieve 160GW of renewable power by 2022.

During the year, availability of both of our thermal projects was above 90% with Jhajjar achieving a record availability of 93%. Energy produced by our wind farms increased from 1.5TWh in 2015 to 1.7TWh in 2016, reflecting the commissioning of new units. Despite these positive figures, operating earnings came down by HK\$145 million to HK\$469 million, mainly due to the fact that we benefited from several one-off elements in 2015 that amounted to HK\$204 million and a contractual step down in tariffs for Jhajjar in 2016. Our performance in India is summarised below.

Operating Earnings	2016 HK\$M	2015 HK\$M	Change %
Renewables	135	134	+0.7
Thermal	334	480	-30.4
Total	469	614	-23.6

India Earnings (HK\$M)



Renewables

2016 marked our entry into India's solar energy segment through a joint venture with Suzlon Group to develop a 100MW project in Telangana. CLP owns a 49% stake in the Veltoor Solar Farm with an option to acquire the remaining 51% in the future. The project is expected to be commissioned by mid-2017.

India

Our operating wind capacity totalled 924MW at the end of 2016. We commissioned Tejuva and Chandgarh wind farms in the second half of 2015 and their addition boosted the amount of electricity generated by wind power in 2016.

Meanwhile, Theni in Tamil Nadu had lower grid curtailment in 2016 compared with the previous year while our three wind farms in Rajasthan continued to face grid constraints throughout the year, although they had started to ease off in the fourth quarter. This challenge is not unique to CLP, and we are working closely with other members of the wind industry to resolve the issues.

In addition, we faced problems with one of our contractors suffering from financial difficulties, which led to lower availability of some of our projects. We are developing a course of action to address the situation and mitigate the adverse impacts on our business.

Thermal Projects

In 2016, both Paguthan and Jhajjar performed steadily.

At Paguthan, availability stood at 94%. The Government cancelled auctions for subsidised imports of gas from March 2016 due to a lack of competition. Consequently, utilisation has remained at around 10% as our customer Gujarat Urja Vikas Nigam Limited (GUVNL) was reluctant to buy electricity from us due to the expensive fuel prices.

At Jhajjar, availability remained high at over 93%, but utilisation was low due to lower dispatch as a result of overcapacity and soft demand in the state of Haryana.

Despite the fact that our income from both plants is mainly determined by availability, we are working hard with our customers to raise utilisation so that both plants can be used more efficiently.

The table below shows the performance of our wind portfolio and thermal projects in 2015 and 2016. Please refer to our [supplementary information online](#) for more details. 

Renewables and Thermal Projects – Performance

	Installed Capacity MW	Electricity Sent Out GWh		Availability %		Utilisation %	
		2016	2015	2016	2015	2016	2015
Wind	954	1,704	1,473	92.9	94.4	21.0	20.6
Coal	1,320	2,965	5,406	93.2	82.4	27.3	49.9
Jhajjar							
Gas	655	547	621	94.4	97.4	9.7	11.1
Paguthan							

Environmental Performance

New Environmental Regulations

A set of new statutory limits applicable to Jhajjar will become effective in December 2017, covering particulates, nitrogen oxides, sulphur dioxide, and mercury. There is also a water use intensity requirement. Jhajjar is already equipped with environmental control systems to comply with most of these limits. A cross functional team has been formed to ensure Jhajjar will be able to meet all the new requirements.

Air Emissions

Overall air emissions levels for both Jhajjar and Paguthan were lower than 2015 due to low dispatch. However, Jhajjar's sulphur dioxide emission slightly increased in 2016 due to higher oil consumption.

Environmental Regulatory Compliance

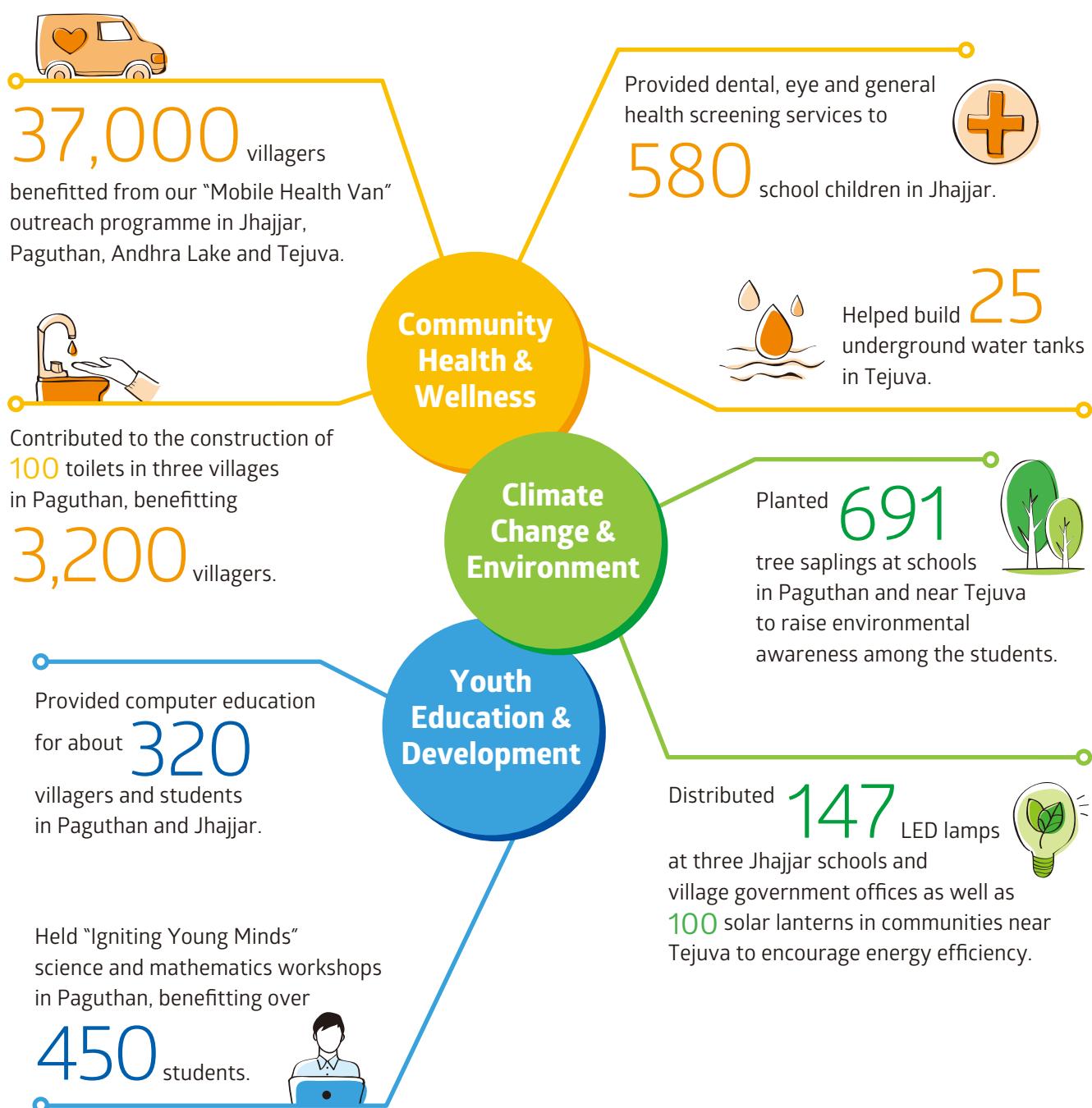
During 2016, there were no fines or prosecutions arising from environmental-related regulatory non-compliances for any of our India assets in which we had operational control.

Social Performance

Community Initiatives

Our key community initiatives in India focused on primary healthcare, youth education and skill development, community infrastructural support and women empowerment. In 2016, we reinforced and scaled-up existing community initiatives at Paguthan and Jhajjar and we have made a good start with our renewable operations. We also stepped-up our efforts to make clean water readily available to the communities in which we operate through providing "Water ATMs" to the villages around our assets. These water

vending machines make use of Reverse Osmosis, a water purification technology, to reduce the total dissolved solids in the ground water to a level that is potable. Two such "Water ATMs" have been inaugurated in recent months, in Paguthan & Kothi villages in the state of Gujarat. We plan to roll these out progressively to cover more communities near our assets in 2017. In addition, the construction of a 50-bed secondary care hospital near our Jhajjar plant is close to completion. We plan to donate it to the Haryana State Government for the community's use once it is completed. Some of the key projects we carried out in 2016 are highlighted below.



Outlook

The slowdown in the economy in recent months has led to softer demand for power in India. The Government's demonetisation initiative in November 2016 to curb black money and the implementation of a goods and service tax reform are expected to further dampen short-term economic growth. But in the long run, we expect these reforms to put India on a stronger footing towards improving transparency and better compliance, benefitting the business sector.

At the same time, in 2016 the Indian Government approved a restructuring package for the country's debt-ridden electricity

distribution companies called Ujjwal Discom Assurance Yojana (UDAY). UDAY aims to improve the financial capacity of the distribution companies so that they can become financially and operationally viable for the long term. If successful, the initiative is expected to solve the biggest challenge facing the power sector.

We remain confident of the future prospects of India's power industry and will continue to contribute to the country's transition to a low carbon future through investing in renewable energy projects, including the possibility of decentralised generation, and potentially in transmission infrastructure to bring that energy to customers.



CLP India celebrates its 15th anniversary of operation on 20 February 2017



CLP has recently installed a water ATM facility at Paguthan village to provide clean drinking water to the community. How does CLP plan to help its neighbouring communities to address water resource management issues?

The scarcity of water in India, especially of clean drinking water, is distressing. We recognise the need to help communities around our plants in this regard and work with different stakeholders to customise solutions according to their needs and challenges. At CLP India, we strive to create positive impact on climate change and the environment by supporting projects and programmes that optimises the responsible use of resources. Through the water ATM initiative in Paguthan, the community can get 24/7 safe water access. We plan to expand this initiative to most of the villages in the neighbourhood of our assets. Likewise, we have constructed underground water storage tanks for effective storage of fresh water for individual households and a water pond for animal consumption in Jaisalmer near our wind farm. Other initiatives include provision of clean drinking water for schools in Jhajjar. We are soon going to launch watershed management and rain water harvesting initiatives in communities around our other sites.



Ms Pushpa Rana
Principal
Government Primary School, Paguthan



Rajiv Mishra
Managing Director – India



SOUTHEAST ASIA AND TAIWAN



We are committed to investing in and developing power projects to support the

economic
growth

of the region

Financial and Operational Performance

Overview

During 2016, our assets in Southeast Asia and Taiwan operated reliably. However, operating earnings declined by 12.2% to HK\$274 million.

Although Ho-Ping coal-fired plant in Taiwan continued to perform steadily during the year, its profitability was affected by reduced tariffs resulting from a lagging contractual tariff adjustment mechanism which reflected lower coal prices in the previous year.

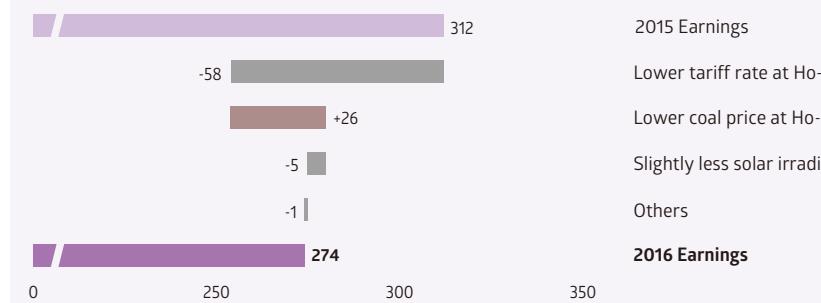
In Thailand, the Lopburi solar farm continued to perform solidly in 2016 although marginally lower solar resources resulted in reduced earnings.

In Vietnam, significant progress was made in the development of our two coal-fired projects – Vung Ang II and Vinh Tan III. Negotiations with the Vietnamese Government for the Build-Operate-Transfer Contract and Power Purchase Agreement (PPA) have reached the final stage and efforts to raise financing have progressed very well.

Our performance in Southeast Asia and Taiwan is summarised below.

Operating Earnings	2016 HK\$M	2015 HK\$M	Change %
Renewables	60	65	-7.7
Thermal	249	274	-9.1
Operating and Development Expenditures	(35)	(27)	+29.6
Total	274	312	-12.2

Southeast Asia and Taiwan Earnings (HK\$M)



Outlook

In the near future, we will continue to focus on our existing operations in Ho-Ping and Lopburi, as well as the development of Vung Ang II and Vinh Tan III. In addition, we will explore opportunities in the renewables sector in markets where we operate to support the Group's transition to a low carbon future.

AUSTRALIA

Guided by our customer-focused strategy, we provide

reliable and
innovative

energy services to our customers
while supporting Australia's transition
to a cleaner future



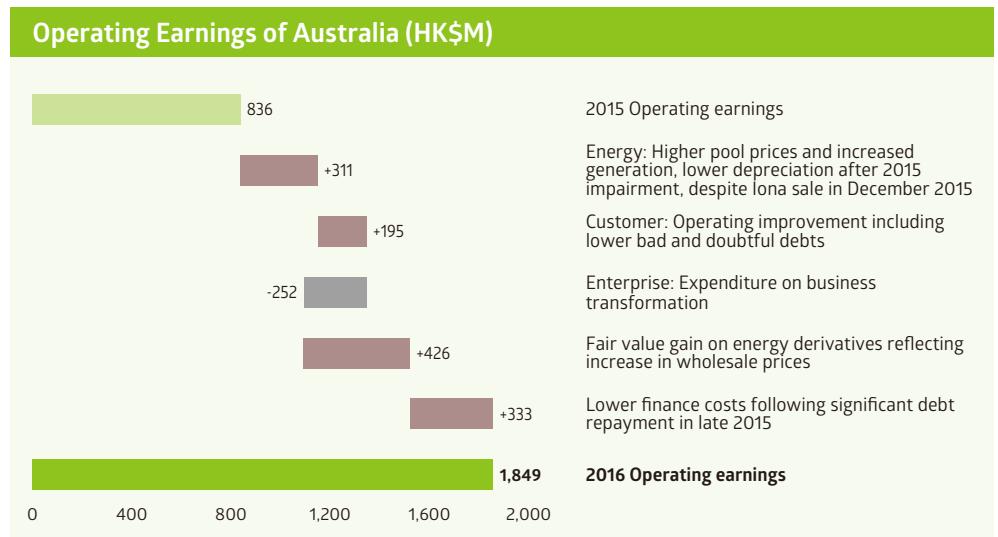


Financial and Operational Performance

Overview

EnergyAustralia performed well in 2016 with operating earnings up 121.2% to HK\$1,849 million. Our customer-focused strategy continued to deliver progress and performance of the generation business improved due to higher volumes and higher wholesale electricity prices. Lower finance costs after repaying debt in December 2015, favourable non-cash mark-to-market gains on energy derivatives and lower depreciation and amortisation also contributed to the increase in earnings. Overall, the result represented continued good progress towards a goal of restoring value to the business.

The improvements were all the more notable in an eventful year for the broader industry. The need for a national approach to energy policy was highlighted by a series of issues including a major blackout in South Australia, generator and network reliability, the closure of coal-fired power stations, intense retail competition and Australia's climate change commitment. The chart below summarises our performance in Australia in 2016.



Customer

Competition for customers in Australia remained intense in 2016 with discounts and rebates dominating the acquisition strategies of retailers. Despite this, EnergyAustralia, one of the around 30 retailers active in the key markets of New South Wales and Victoria, delivered value by increasing customer tenure with improvements to customer service and investment in its capacity to develop new products and services. Net Promoter Score, a metric of customer experience, improved compared to a year ago while the overall number of customer accounts held steady.

Crucially, better service has led to customers staying longer; EnergyAustralia's churn rates in New South Wales and Victoria were 13% and 19% respectively, against the industry's average of 17% and 24%. Across the business, complaints to state ombudsmen about customer service fell from a year ago while at the same time our capacity to collect and manage account payments improved, resulting in significantly lower bad debts.

The improvement in customer service was reflected in top ratings and awards, such as the recognition of our Geelong contact centre as the best in its category in Victoria. The opening of a new contact centre in the Philippines in March 2016 has allowed EnergyAustralia to extend operating hours at lower cost.

In December 2016, EnergyAustralia launched *Go Neutral*. The initiative is a government-certified carbon neutral product that allows existing residential customers to offset all the carbon emissions generated from the electricity they use at no cost to them.

Australia

Energy

In 2016, an excess of supply eased through a combination of short and long-term factors, including drought in Tasmania, interconnector and plant reliability, a tighter gas market and power station closures.

Meanwhile, demand in aggregate across the National Electricity Market (NEM) increased over the year, driven by a 4% growth in demand in Queensland from increased LNG production. However, increased renewable generation as a proportion of the NEM contributed to price volatility.

These market conditions and high utilisation of key assets underpinned the performance of the EnergyAustralia generation portfolio. Utilisation of the Mount Piper plant in New South Wales increased as coal supply issues were addressed. In addition, steps were taken to ensure the plant's future, with EnergyAustralia and partner Centennial Coal announcing an enhancement to an existing proposal to build a water treatment plant to support an extension of the Springvale Mine, which is the key source of coal supply for Mount Piper. The enhancement will improve the

environmental outcomes of the water project and ensure significant long-term investment in the local community.

In the broader market, plant closures were a constant topic of discussion. In the last three years, operators of four base-load coal plants in the NEM which represent over 3,000MW have closed or announced plans to do so. In the latest closure, announced in November, France's ENGIE will shut down its 1,600MW Hazelwood coal-fired power plant by 31 March 2017. The station currently provides more than 20% of Victoria's power. While closing the plant will significantly lower Australia's carbon emissions, it will also reduce base-load supply to the NEM.

Intermittent renewable generation will likely replace this base-load coal capacity as Australia pursues a national Renewable Energy Target under which renewable sources will supply 23.5% of total energy by 2020.

The table below shows the performance of our generation projects in Australia in 2015 and 2016. Please refer to our [supplementary information online](#) for more details. 

Renewables and Thermal Projects – Performance

	Installed Capacity ¹ MW	Electricity Sent Out ¹ GWh		Availability %		Utilisation %	
		2016	2015	2016	2015	2016	2015
		66	156	168	86.0	89.0	27.9
Wind	Cathedral Rocks	66	156	168	86.0	89.0	30.0
Gas		1,589	1,154	2,737	89.6	85.6	9.9
Coal		2,880	17,746	15,383	82.8	86.0	76.0

Note:

1 Indicate total installed capacity and sent-out of all projects in operation without adjusting for CLP's equity share

Supporting Low Carbon Investment

EnergyAustralia is committed to meeting its obligations under a national Renewable Energy Target and continues to support an orderly transition toward cleaner forms of energy. In December 2016, EnergyAustralia announced that it would sign agreements to underpin the development of up to 500MW of renewable energy in the form of new wind and solar projects across eastern Australia. As part of this

commitment, EnergyAustralia has already announced that it has agreed to take output from the Manildra Solar Farm in New South Wales, the Ross River Solar Farm in Queensland and the Gannawarra Solar Farm in Victoria.

The approach supports the country's efforts to lower the emission intensity of electricity generation by helping new renewable energy projects to be built and operated in the most cost-effective way.

The table below shows the generating capacity of renewable energy under contract to EnergyAustralia in 2015 and 2016.

Generating Capacity under Contract to EnergyAustralia		Installed Capacity MW	Electricity Sent Out GWh	
		2016	2015	
Wind				
Boco Rock		113	373	307
Gullen Range		166	514	433
Mortons Lane		20	67	63
Taralga		107	318	147
Waterloo ¹		131	318	289

Note:
1 EnergyAustralia purchases half of the energy generated by Waterloo Wind Farm Stage 1 (111MW)

New Business

EnergyAustralia established a "NextGen" business unit in 2015 to identify and develop innovative products and solutions to meet the current and future needs of customers. NextGen has a particular focus on technology that allows customers to manage their energy consumption in ways that help them save money and reduce their impact on the environment.

In October 2016, EnergyAustralia committed to invest A\$9 million in an Australian business, Redback Technologies.

Redback's flagship product is a Smart Hybrid Solar Inverter System, combining a smart solar inverter, battery enclosure and sophisticated energy management software into one package. The technology will allow customers to decide how they use, save and even sell energy captured from their roof-top solar panels, all managed from a smartphone. The EnergyAustralia/Redback partnership plans to roll-out the second generation of this technology in the first half of 2017. More details of this venture will be discussed on page 73.



EnergyAustralia has committed to underpin the development of up to 500MW of renewable energy such as wind and solar

Environmental Performance

Air Emissions

EnergyAustralia had a generally stable year in environmental performance. Air emissions from our Australian thermal power stations increased by 10.7% compared with the previous year, but were below 2014 levels. This was mainly due to increased coal-fired power station output to meet higher demand for electricity, partially offset by lower running of gas-fired generation facilities due to higher gas prices.

Environmental Regulatory Compliance

During 2016, there were no fines or prosecutions arising from environmental-related regulatory non-compliances for any of our assets in Australia where we had operational control.

An audit carried out by the Victorian environmental regulator of the Yallourn power station identified no non-compliance or significant findings. The New South Wales environmental

regulator also audited the Mount Piper power station and the Wallerawang ash dam. We received recommendations, which we are implementing, to improve the Mount Piper pollution incident response management plan as well as the monitoring and reporting of data from Wallerawang.

Social Performance

EnergyAustralia engages external stakeholders to help us understand and address issues of importance to them. Two key developments from this work in 2016 are the Reconciliation Action Plan (RAP) and Financial Inclusion Action Plan (FIAP). In addition, we continued to carry out a range of other community initiatives as highlighted below. Please also refer to the Social and Relationship Capital chapter on pages 81 – 84 for more details of EnergyAustralia's initiatives in this area.



Community Health & Wellness

EnergyAustralia introduced its first Reconciliation Action Plan (RAP) in 2016, setting out the steps to increase our engagement with the Aboriginal and Torres Strait Islander peoples. **8** RAP launches were held across our sites with a total attendance of approximately **400** staff.



Volunteering

EnergyAustralia was the **1st** energy company in Australia to participate in the government-funded Financial Inclusion Action Plan (FIAP) programme. We launched our own FIAP in 2016 in order to help our more vulnerable customers achieve financial security and independence.



Over **170** employees participated in almost **900** hours of volunteering.



Outlook

In 2016, the Australian energy industry was characterised by wholesale market volatility and sustained high prices. With the announced closure of Hazelwood, new renewable projects and gas supply constraints, we expect wholesale electricity prices to remain strong but more volatile in the short term. We believe this suggests an urgent need for Australia to adopt a national energy plan to support the delivery of reliable, affordable and cleaner supplies of energy to customers.

While utilisation of EnergyAustralia's generating assets is likely to benefit from tighter market conditions, gas portfolio margins are expected to be materially lower than in 2016 as supply costs increase.

We expect the retail market to remain intensely competitive. In this environment, EnergyAustralia will continue to focus on improving customer service, and evaluating and supporting innovative ideas for new energy-efficient technology.



Why is financial inclusion important? Why has your organisation decided to become a Financial Inclusion Action Plan programme Trailblazer? What are some of the outcomes you are expecting?

Financial vulnerability is one of the biggest challenges facing the energy industry. The profile of hardship customers is changing. In EnergyAustralia, we often see people fall into financial difficulties unexpectedly. More and more, it is people with jobs and mortgages to pay who are struggling. Last year a leading Australian NGO noted 30% of its clients seeking support have jobs and a mortgage; five years ago that was only 5%.

Affordability is a sensitive and challenging issue, and one we cannot solve alone. It is an issue that is part of a broader economic and cost-of-living problem which needs an all-industry approach, government support and regulatory reform. And we want to be part of the solution.

Our Financial Inclusion Action Plan is about working together to do what we believe is the right thing for our customers. We believe people should be supported with the products, services and guidance they need to manage their finances before it gets too late. Immediate outcomes include policies and practices that better support those experiencing and exiting abusive relationships. Longer-term outcomes include customers having access to appropriate and affordable products and services.



Mr Adam Mooney
CEO
Good Shepherd Microfinance



Catherine Tanna
Managing Director –
EnergyAustralia

