

Chinese Mainland



Financial Performance

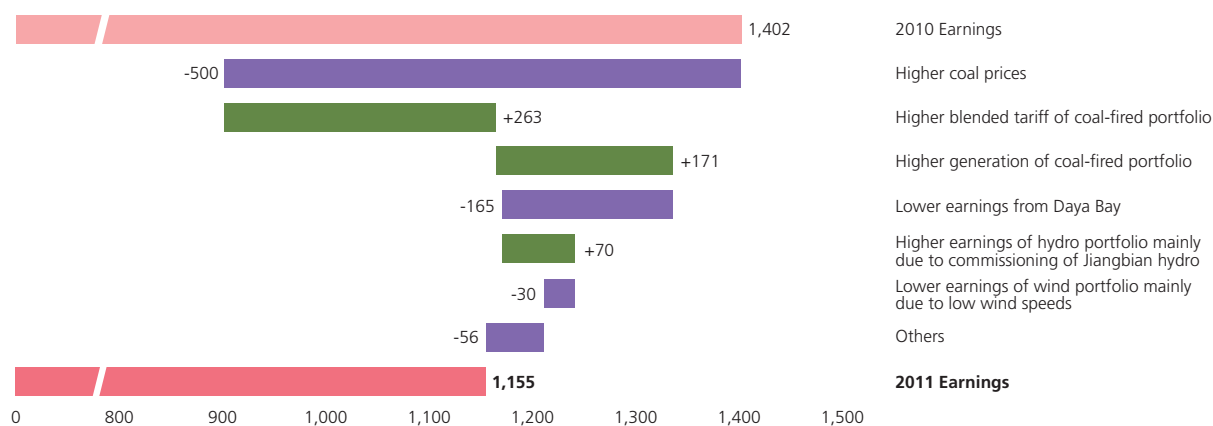
Earnings from the Chinese mainland (including our 25% stake in the Daya Bay Nuclear Power Station, 70% of its output serves our Hong Kong electricity business) in 2011 totalled HK\$1,155 million, a decrease from HK\$1,402 million in 2010.

Earnings from Fangchenggang and from our investment in the Guohua International joint venture were supported by strong market demand and good operational performance, but all our coal-fired projects were affected by high coal prices. There were modest adjustments to tariffs in April 2011, followed by more substantial nationwide increases in December 2011 together with caps on spot coal prices. We hope these measures can mitigate the impact of high fuel costs in 2012.

The increasing contribution from our renewable energy investments reflected the successful commissioning and smooth operation of Jiangbian hydro. The earnings from our wind energy portfolio in China were below those in 2010, despite new capacity coming into service. This was due to low wind speeds in 2011.

Daya Bay maintained satisfactory operational and safety performance. Its earnings decreased in 2011 mainly because of lower shareholders' funds resulting from a higher dividend pay-out in 2011.

Chinese Mainland Earnings (HK\$M)



Operational Performance

Coal-fired Power Stations

Overall, our coal-fired power stations maintained a high level of generation, due to strong market demand, supported by effective asset operations and maintenance.

The major contribution to our coal-fired generation activities in the Mainland continues to come from Fangchenggang. Electricity demand in Guangxi has grown as the economy recovers and at the same time, regional hydro electricity generation has been adversely affected by dry weather. Consequently, there have been severe electricity supply shortages and generation from Fangchenggang has made an essential contribution to support the local grid, leading to high dispatch levels. The high demand growth, proven operational performance and the use of imported coal support the construction of two further 660MW units at Fangchenggang. We therefore propose to develop Fangchenggang Stage II. We await approval from the NDRC for this expansion project.

Coal costs have been high at the other power stations in the Mainland in which we hold an interest. Our local partners have been able to obtain lower prices in some cases, but economic performance has still been adversely affected, particularly in Shandong. The coal price-linked tariff adjustment was not fully implemented by the Government for most of the year, with only minor tariff adjustments in several provinces.

Coal-fired Power Stations – Performance

| | Rating (MW) | Generation (GWh) | | Utilisation (%) | | Availability (%) | | Operating Hours (Hours) | |
|--------------------------------|----------------|---------------------|--------|--------------------|------|---------------------|------|----------------------------|-------|
| | | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 |
| Shiheng I and II | 1,260 | 6,390 | 6,632 | 58 | 63 | 89 | 91 | 5,071 | 5,526 |
| Heze II | 600 | 3,334 | 3,357 | 63 | 64 | 95 | 93 | 5,556 | 5,595 |
| Liaocheng I | 1,200 | 6,788 | 6,665 | 65 | 63 | 94 | 91 | 5,657 | 5,554 |
| Yire | 400 | 2,394 | 2,417 | 68 | 69 | 95 | 96 | 5,985 | 6,043 |
| Sanhe I and II | 1,300 | 7,660 | 7,489 | 67 | 66 | 96 | 93 | 5,892 | 5,761 |
| Panshan | 1,030 | 6,225 | 6,214 | 69 | 69 | 93 | 94 | 6,044 | 6,033 |
| Suizhong I and II [#] | 3,600 | 18,830 | 15,092 | 60 | 55 | 90 | 79 | 5,231 | 4,858 |
| Zhungeer II and III | 1,320 | 6,960 | 7,175 | 60 | 62 | 96 | 91 | 5,273 | 5,436 |
| Shenmu | 220 | 1,471 | 1,371 | 76 | 71 | 98 | 95 | 6,686 | 6,233 |
| Fangchenggang | 1,260 | 7,896 | 7,055 | 72 | 64 | 87 | 91 | 6,266 | 5,599 |

Units 3 and 4 of Suizhong II Power Station (2 x 1,000MW) entered commercial operation in February and May 2010 respectively

Renewables – Wind Energy

CLP's investments in wind energy in the Mainland are in three forms:

- minority shareholdings in individual projects (reflecting the limitations in earlier years on non-Mainland companies holding a majority stake in such projects);
- our 32% shareholding in the CGN Wind joint venture; and
- more recently, wholly-owned projects which are also operated and maintained by CLP itself.

In 2011, 20 out of 22 of CLP's minority-owned projects were in commercial operation. Of the remaining two, the 48MW project in Shanghai is under construction with a target completion date in early 2012, whereas construction of the 49.5MW project in Shandong (Haifang Wind) was delayed due to land permitting issues. Future capacity growth from minority-owned projects will be limited to expansions of existing projects which have already performed well.

In March 2010 CLP completed the acquisition of a 32% stake (HK\$1.19 billion) in CGN Wind. However, CLP and our partner, China Guangdong Nuclear Power Holding Company, Limited (CGNPC), have had different views about the speed and scale of the expansion of this joint venture. CGNPC now intends to expand the business more quickly than previously expected, whereas CLP has been concerned that this growth might result in the development of projects that do not match our own investment criteria. Accordingly, we have reached an agreement whereby CLP's equity stake in the joint venture will be diluted from 32% to 15.75% as CGNPC continues to inject additional capital. Implementation of this agreement is pending approval by the relevant PRC authorities.

Our first wholly-owned wind project, Qian'an I, entered commercial service in November 2010 and is operating smoothly. We obtained approval for the construction of phase II at Qian'an, an additional 49.5MW, in early 2011 and all 33 new wind turbines were in commercial operation by October 2011. We are subsequently pursuing the necessary approvals for the development of phases III and IV at Qian'an. Construction of phase I (48MW) of the Penglai wind project, CLP's second wholly-owned wind project, has progressed well with energisation completed in December 2011 and commercial operation achieved in February 2012.

Wind Energy Portfolio – Performance

| | Rating (MW) | Generation ⁽¹⁾ (GWh) | | Utilisation ⁽¹⁾ (%) | |
|-------------------------------------|----------------|------------------------------------|-------|-----------------------------------|------|
| | | 2011 | 2010 | 2011 | 2010 |
| Minority-owned | | | | | |
| Shuangliao I | 49.3 | 74.6 | 83.2 | 17.3 | 19.3 |
| Shuangliao II | 49.5 | 89.8 | 96.4 | 20.7 | 22.2 |
| Datong | 49.5 | 81.2 | 96.3 | 18.7 | 22.2 |
| Changling II | 49.5 | 67.7 | 92.1 | 15.6 | 21.2 |
| Qujiagou | 49.5 | 90.6 | 102.9 | 20.9 | 23.7 |
| Mazongshan | 49.5 | 105.5 | 94.1 | 24.3 | 21.7 |
| Changdao | 27.2 | 55.3 | 59.0 | 22.8 | 24.7 |
| Weihai I & II | 69.0 | 143.7 | 161.6 | 23.5 | 26.7 |
| Laizhou | 40.5 | 69.8 | 86.9 | 19.7 | 24.5 |
| Nanao II | 45.1 | 124.2 | 107.9 | 31.5 | 27.3 |
| Nanao III | 15.0 | 36.9 | 10.5 | 28.1 | n/a |
| Hekou | 49.5 | 93.9 | 118.7 | 21.7 | 27.4 |
| Lijin I | 49.5 | 81.6 | 112.1 | 18.8 | 25.8 |
| Lijin II | 49.5 | 94.5 | 39.2 | 21.8 | n/a |
| Zhanhua I | 49.5 | 92.1 | 116.3 | 21.2 | 26.8 |
| Zhanhua II | 49.5 | 97.8 | 31.4 | 22.5 | n/a |
| Rongcheng I | 48.8 | 94.5 | 108.5 | 22.1 | 25.4 |
| Rongcheng II | 49.5 | 108.9 | 34.8 | 25.1 | n/a |
| Rongcheng III | 49.5 | 100.0 | n/a | n/a | n/a |
| CGN Wind JV (32%) | | | | | |
| CGN Wind Portfolio ^(2,3) | 1,671 | 2,663 | 2,110 | 16.9 | 21.3 |
| Wholly-owned | | | | | |
| Qian'an I | 49.5 | 92.3 | 25.2 | 21.3 | n/a |
| Qian'an II | 49.5 | 36.3 | n/a | n/a | n/a |

(1) n/a (not applicable) is for projects which had not yet commissioned for a full year's operation.

(2) The total capacity of operational wind farms of CGN Wind Portfolio in 2010 was 1,231MW, of which the utilisation and operating hours are applicable to projects with full-year operation in the portfolio.

(3) CGN Wind is expected to undergo restructuring in the near future whereby its gross capacity under operation and construction will be reduced to 1,794MW. The total capacity of CGN Wind Portfolio under operation stated herein refers to that after such pending restructure.

Renewables – Hydro and Biomass

The Jiangbian Hydro Power Station, comprising 3x110MW units in Sichuan Province is the first wholly-owned greenfield hydro project in China to be developed, constructed and operated by CLP. We completed construction and commissioning of all three units in June 2011, within budget and ahead of schedule. There were many challenges in working at a remote site that is subject to floods, rock bursts, landslides and earthquakes, but the project was managed in compliance with both national and CLP standards on safety, quality, health and environment. Our most significant achievement was zero fatalities during construction, consistent with the value we place on the safety of all those working on our sites. All three units have performed well since the start of commercial operation.

Electricity sales for both Dali Yang_er and Boxing biomass projects improved significantly in 2011. In the case of Dali Yang_er this was due to increased water discharge from the upstream lake; at Boxing this was due to commissioning of an additional 15MW condensing turbine.

Hydro and Biomass Power Stations – Performance

| | Rating (MW) | Generation (GWh) | | Utilisation (%) | | Availability (%) | | Operating Hours (Hours) | |
|--------------------|----------------|---------------------|------|--------------------|------|---------------------|------|----------------------------|-------|
| | | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 |
| Boxing Biomass | 15 | 93 | 75 | 61 | 62 | 82 | 81 | 5,329 | 4,271 |
| Huaiji Hydro | 125 | 307 | 443 | 28 | 40 | 90 | 92 | 2,455 | 3,541 |
| Dali Yang_er Hydro | 50 | 181 | 176 | 42 | 40 | 90 | 75 | 3,638 | 3,542 |
| Jiangbian Hydro* | 330 | 1,143 | n/a | 66 | n/a | 93 | n/a | 4,002 | n/a |

* All three units entered commercial operation in June 2011

Nuclear

Daya Bay achieved a utilisation rate of 93% in 2011, compared to 91% in 2010. In January 2011, an enhanced notification mechanism for non-emergency Licensing Operational Events was introduced for the Daya Bay units. There was no such event at Daya Bay in 2011.

Following the Fukushima accident, a comprehensive safety review, requested by the State Council, was conducted by the National Nuclear Safety Administration (NNSA) at all nuclear power stations in China, including Daya Bay. The report of the review is expected to be released by the State Council shortly. Preliminary findings have confirmed that the design and operation of Daya Bay is in full compliance with existing national regulations and standards. Prior to the NNSA's review, Daya Bay also conducted its own internal review and had been formulating improvement initiatives in dealing with natural disasters of extreme severity in order to further enhance its safe operation.

In July 2011, CLP reached an agreement with CGNPC, our longstanding partner in Daya Bay, to acquire a 17% equity share in the Yangjiang Nuclear Power Station project (6 x 1,080MW of the CPR1000 technology) in Guangdong. Regulatory approvals from the relevant Mainland authorities are being sought. Construction of the station commenced in 2008 and has been making good progress. The project is expected to commission in phases between 2013 and 2017 and will supply power to Guangdong.



Jiangbian Hydro Power Station

Environmental Performance

During 2012 CLP intends to enhance and extend its processes for the measurement of emissions from each asset where we have operating control. Emissions to be measured are expected to include carbon intensity, SO₂, NO_x, particulates, recycled or reused water and hazardous waste. We aim to set baseline levels for each asset, establish specific targets to reduce emissions and strengthen the benchmarking of performance against other assets elsewhere in the Group and those of our peers in the Chinese mainland. We also aim to contribute to the Group's efforts to move towards a more sustainable rate of resource use, such as by measuring water use and discharges and developing initiatives to promote a culture of efficient resource use in the offices of our project companies, such as in respect of paper, water, batteries, stationery and the like.

Social Performance

Our colleagues in the Mainland contribute actively to the Group's efforts in community investment. During the past year, four additional staff volunteer teams were set up to provide support and assistance to meet local needs. For example:

- in Fangchenggang CLP donated dictionaries and classroom furniture to primary schools, benefiting 455 students;
- at Boxing our volunteers planted saplings for local farmers and paid caring visits to the elderly and children with special needs;
- in Qian'an our volunteers established a mentoring system and supported promising, but under-privileged, local university students; and
- in Huaiji our volunteers gave electrical and fire safety talks at primary schools, as well as taking care of elderly people.

Throughout the Mainland, CLP has funded 18 schools. These include two in Sichuan as part of relief efforts after the earthquake of 2008. Staff in the Mainland and Hong Kong continued to contribute to our "support-a-student programme". This provides financial assistance to 354 students living in poverty in Guangdong, Guangxi and Sichuan Provinces.

Stakeholder engagement forms part of our commitment to the communities in which we operate. A particular aspect of this in 2011 was the need to respond to the growing concerns of the Hong Kong public on nuclear safety, especially following the Fukushima accident and to their demands for greater transparency regarding the operations of Daya Bay. Although CLP does not operate Daya Bay, we have deployed and enhanced communication channels with media and public on the safe operation of Daya Bay and, more broadly, on the issues related to nuclear power. Daya Bay site visits have been organised for various groups, nuclear experts were invited to Hong Kong for public speaking engagements and nuclear related topics were included in the e-learning kit which forms part of liberal studies curriculum in local secondary schools. A Nuclear Resources Centre to support public education is being established. All these efforts are aimed at facilitating more informed discussion among members of the community about nuclear energy.

Outlook

China's economy remains strong with annual GDP growth running at about 9 to 10%. The Government's macroeconomic controls continue to guide economic development, including growth of the power sector, where both power demand and generating capacity have increased in recent years. We expect that supply and demand will remain generally balanced nationwide in the near term, although there may be local power shortages in some areas, such as parts of Southern China that are affected by a combination of high demand growth, low rainfall and high coal prices.

Approval for new generating projects has become more difficult over the past year. The proposed expansion of Fangchenggang Power Station has been delayed and new wind farm projects now need to be registered with the Central Government before approval can be given by the relevant provincial government. Some of this delay comes from the need for better co-ordination between additional generating capacity and strengthened transmission infrastructure.

The People's Bank of China maintained a tight monetary policy in 2011 through raising the RMB deposit reserve requirement ratio and also the benchmark lending interest rate. The major banks strengthened risk control, making enterprise financing more difficult and financing costs higher. Despite tighter fiscal and macroeconomic policy, there are still opportunities for growth in the Mainland's power sector. CLP has demonstrated the ability to develop, construct and operate new projects using coal, hydro and wind technology, and we have been able to apply our own standards on safety, reliability and technical quality. We are now exploring the possibility of greater control of upstream coal supply to mitigate some of the volatility in coal market prices, which would be particularly beneficial in the Chinese market.

The growth opportunities in the Mainland power sector will reflect the government's policy measures to mitigate and adapt to climate change. The 11th Five-Year Plan (2006-2010) included requirements to achieve defined reductions in energy consumption and greenhouse gas emissions per unit of GDP. Good progress has been made in this respect. For example, in 2010 China installed significantly more wind power than any other country. The outline of the 12th Five-Year Plan released in 2011 further promotes green and low-carbon development. CLP's own climate strategy is consistent with the policy direction in China. We will therefore continue to rationalise the ownership of minority-owned coal-fired assets and to invest in renewable energy projects. We are already one of the largest external investors in wind power in China and we will use ultra-supercritical technology for the Fangchenggang expansion project to maximise thermal efficiency.

Nuclear energy will play a key role in achieving the target set by the PRC Government in its 12th Five-Year Plan to reduce the Mainland's carbon intensity by 40-45% by 2020, as compared to the 2005 level. The Fukushima accident has led to construction and planning of nuclear power stations being placed on hold, pending the NNSA's safety review. Nonetheless we believe China's nuclear generation expansion plan will continue, with additional safety measures being expedited for existing nuclear power stations and more advanced design features being adopted for new stations.

In this context, CLP's priorities for the year ahead include:

- introducing technical improvements at Fangchenggang to maximise availability for high dispatch periods in the local grid and exploring the possibility of a dedicated supply of imported coal to mitigate high and volatile market prices;
- obtaining Central Government approval to proceed with the development of Fangchenggang II;
- maintaining a high operational standard at Jiangbian and exploring new hydro project opportunities to build on the experience gained on that project;
- obtaining approvals and commencing construction of at least two further wind projects and identifying other development opportunities;
- following up with our joint venture partners on any necessary actions that may arise from the NNSA's safety review with regard to Daya Bay and Yangjiang nuclear power stations;
- continuing to improve communication channels with the public on nuclear related matters in Hong Kong, including the launch of the Nuclear Resources Centre and a new nuclear energy website; and
- completing the process for the acquisition by CLP of its minority stake in the Yangjiang project and thereafter monitoring its progress to support completion on time and within budget.

Based on the current international and domestic coal prices and transportation fees and the operating and generation profile in 2011, what will be the financial performance of CLP Guangxi Fangchenggang Power Company Limited in 2012?



Mr. Wei Jiasen
Vice President,
Guangxi Power Grid Corporation

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A

Fangchenggang Power Station has performed well since commissioning and remains one of the major profit contributors to CLP's Mainland business. The station generated high output in 2011, reflecting both the strong economic growth in Guangxi Region and also the extended dry season, which depressed the supply of hydro electric power. Fangchenggang is conveniently located on the coast, which enables the use of imported coal. Our fuel costs were controlled by a combination of long-term coal supply and freight agreements, supplemented by spot purchase. Our power station team has also experimented with mixed-firing of environmentally friendly coal with low sulphur content, which manages fuel costs and sulphur dioxide emissions. With continuing equipment improvements and strengthening of management, we expect operational efficiency and performance of the station to improve further. The tariff increase in December 2011 should also help to maintain profitability.



Benjamin Lui
Director - China

Another Q&A

