

# Global strategy transforms local power player

## More than 120 years of highlights



1890

**1889**

The Hongkong Electric Company Limited is incorporated and shares offered to the public.



**1890**

The company commences operations and lights up Hong Kong's first electric street lamps with two steam driven 50 kW generators imported from the UK, installed at the newly constructed Wanchai Power Station.

**1898**

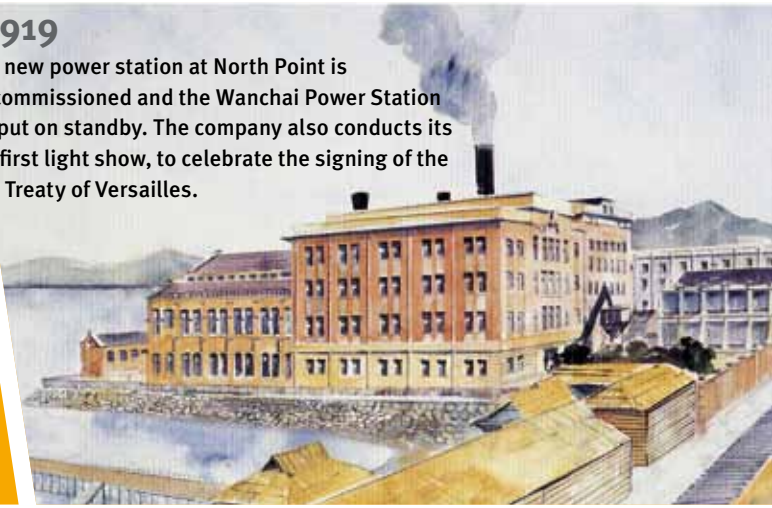
Hong Kong's first electric lifts are installed at the Queen's Building powered on a DC supply from the company's first sub-station.

**1905**

The company adopts a policy of keeping all cables underground, despite the persistent risk of termites eating the cable coverings.

**1919**

A new power station at North Point is commissioned and the Wanchai Power Station put on standby. The company also conducts its first light show, to celebrate the signing of the Treaty of Versailles.



**1968**

A 60 MW unit is commissioned at the new Ap Lei Chau Power Station to meet surging demand.

**1972**

The company's first Mitsubishi 125 MW generator is installed at Ap Lei Chau, upgrading the transmission network voltage to 132kV.



1972

**1981**

The first interconnection is made with China Light & Power's Kowloon network, allowing transfers of up to 480 MW.



1982

Since embarking on an international strategy 10 years ago, Power Assets Holdings Limited has successfully established itself as a force in the global energy market. Earnings from its activities outside Hong Kong now exceed those from Power Assets' Hong Kong operations and, as *Sphere* reports, are set to contribute even more.

FOR MOST OF ITS LONG EXISTENCE, the company now known as Power Assets was a local utility through and through. The city's hectic pace of development across different eras meant that the home town of the Hongkong Electric Holdings Limited, as it was known until mid February this year, offered plenty of room to grow.

All that began to change about 30 years ago, when manufacturing started moving out of Hong Kong into southern China's Pearl River Delta. At the same time, land shortages constrained prospects for the city's further physical expansion and population growth on Hong Kong Island, the power company's heartland.

"There used to be a 10-12 per cent annual increase in electricity demand during the 1970s," recalled Power Assets Group Managing Director Tso Kai Sum. "But this has now declined to around 1-2 per cent in recent years especially with energy conservation initiatives in various sectors of the community." Faced with a mature, low-growth local market, the company decided to shift course. "Power Assets had to go global for its shareholders," said Mr Tso.

Now, the company has interests in 6,790 megawatts (MW) of power generation assets and over 400,000 kilometers of power and gas networks outside Hong Kong serving a total of 12 million customers.

The new focus has brought the company face-to-face with a host of challenges in the global power market, such as the need for investors to have very deep pockets and lengthy investment horizons. This high entry barrier explains the cautious, considered approach behind Power Assets' investment strategy, namely that it is long-term, focused on areas with clear regulatory regimes and looks for stable, reasonable returns.

As pinpointed by Mr Tso, Power Assets' ability to team up with heavyweight partners HWL and Cheung Kong Infrastructure Holdings Limited (CKI) has delivered significant financial muscle, on top of an enviable business reputation. This has boosted the company's standing as a serious player in the international energy market, a view reflected by senior executives of overseas power businesses in which Power Assets has already invested.

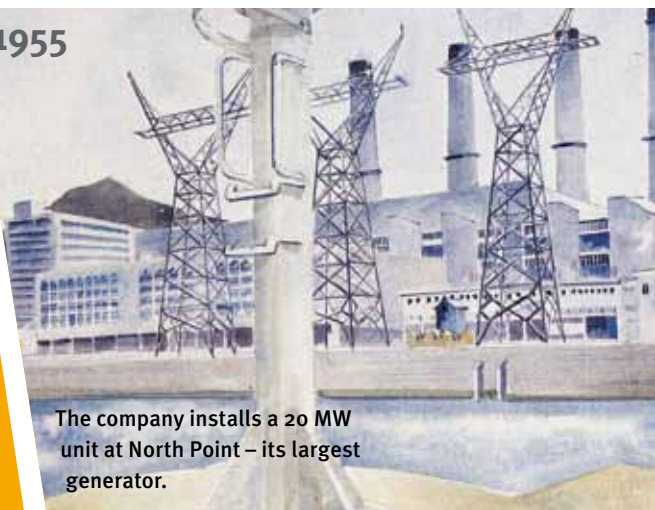
**1945**

The company resumes operations at the North Point Power Plant after over three years of Japanese occupation.



**1955**

The company installs a 20 MW unit at North Point – its largest generator.



**1976**

Hongkong Electric Holdings Limited is established as the holding company of Hongkong Electric and other subsidiaries and listed in Hong Kong.

**1977**

Publication of a colourful history of the company, *A Mountain of Light, The Story of The Hongkong Electric Company*, written by celebrated Hong Kong-based author Austin Coates.



**1982**

The company's first 250 MW unit is commissioned at the new Lamma Power Station within 40 months – a world record – increasing the transmission network voltage to 275kV.

**1985**

Hutchison acquires a substantial interest in the company from Hongkong Land for HKD2.9 billion.

“Financially, having the backing of Power Assets underpins the stability of our business, and that helps enormously whenever we need to access capital from the marketplace,” said Robert Stobbe, CEO of ETSA Utilities in South Australia, in which Power Assets has a 27.93 per cent share. “As a capital-intensive business, having that sort of ownership strength is a major benefit.”

In addition to meeting the high cost of entry, Power Assets has had to navigate the complex world of terms and conditions set by government regulators in each market. “Besides money and technical know-how, market entry can only occur when the entrant fully understands and effectively manages regulatory and legal challenges,” said

C K Woo, senior partner of US-based consultancy Energy and Environmental Economics, Inc (E3). “Moreover, obtaining permits and transmission access is another major barrier that one cannot overlook.” Mr Woo estimates that, as a result, the number of qualified players active in that market worldwide is small: “probably fewer than 50”.

Power Assets has been able to leverage its business reputation and experience as an exemplary energy provider – with a supply reliability rating in Hong Kong of over 99.999 per cent since 1997 – to good effect at a time when the openness of overseas energy markets has coincided with a rise in the number of investment opportunities.

As the global economy weakens, more holders of utilities are looking to raise cash for other obligations. “With Europe’s current financial challenges, European assets may be put up for sale. Power Assets is particularly qualified to invest in these opportunities as they arise,” Mr Tso noted.

Power Assets’ approach to any prospective investment target draws on the company’s decades of technical expertise. “After

buying a company, Power Assets has never discovered any skeletons in the closet,” said Mr Tso, attributing this to the quality of due diligence conducted by Power Assets’ world-class engineers.

What is more, the company’s hands-on approach does not simply end once the investment has been made. Power Assets’ commitment to international best practice, especially in the areas of safety and environment, involves the provision of technical support to each new asset after purchase, and the application of considerable technical expertise to ensure long-term safety and profitability.

“In many technical areas, Power Assets’ expertise has been extremely useful,” said Mr Stobbe. “Various technical studies have been greatly facilitated by having access to Power Assets’ staff and experience, and, over the years, many of our own staff have been lucky enough to visit their installations and learn from their employees.”

In terms of geographical spread and types of assets considered, Power Assets priorities are high-quality, long-term plays, with returns over 20 to 30 years or more. “More important than where we buy, is what we buy,” said Mr Tso. “We look at the quality of assets before we consider where they are located.”

Investments are currently spread evenly across six countries on four continents, with a particularly strong recent focus on utilities in the UK. In June last year, Power Assets acquired a 25 per cent interest in Seabank Power Limited, an electricity-generating company. Four months later, it acquired what is now called UK Power Networks Holdings Limited, an electricity distributor whose networks serve around 7.8 million customers – more than 13 times the number of Power Assets’ customers in Hong Kong.

## “Having the backing of Power Assets underpins the stability of our business.”



**1986**

A new 350 MW coal-fired unit is commissioned at Lamma Island, capable of generating 3,500 times more power than the company’s first facility at Wan Chai.

**1989**

With maximum demand topping 1,000 MW every month of the year for the first time, the company moves all operations to Lamma and decommissions its oilpowered plant at Ap Lei Chau.

**1990**



**2000**

**2000**

The company acquires a 50 per cent stake in both ETSA Utilities and Powercor of Australia, followed by the acquisition of a 50 per cent interest in Citipower, Australia in July 2002.



**ETSA Utilities**




Power Assets has leveraged its business reputation and experience in Hong Kong when investing internationally.

The positive impact of these acquisitions was particularly felt earlier this year, when Power Assets' 2011 interim results were announced. First-half earnings from operations outside Hong Kong were HKD2.27 billion (about USD294 million) – a record high and 133 per cent more than for the first half of 2010. Earnings from Power Assets' Hong Kong operations were a steady HKD1.78 billion.

With booming Mainland China as a natural investment target for an energy company based in Hong Kong, Power Assets is keen to grow from its current mix of conventional thermal power and renewable energy, especially in the neighbouring province of Guangdong. The company now has stakes in wind farms in Yunnan and Hebei, and power-plant assets in Zhuhai and Jilin, and continues to look for further investment opportunities.

Although Power Assets will continue its strategy of investing internationally to strengthen its base for earnings growth, Hong Kong remains an important source of revenue and continues to attract ongoing investment in project development, particularly in renewables.

A future highlight will be a 100 MW wind farm situated four kilometres southwest of Lamma Island. Currently in the early stages of development and wind monitoring, with its Environmental Permit approved in June last year, the completed facility could come online within four years. The project, which will add a fascinating new dimension to the company's power generation capabilities at home, is further evidence of Power Assets' strong environmental credentials as well as its "green" outlook, as it continues to make its mark in the global market. 



## 1990

The company celebrates its centenary with a special stamp issue titled *100 Years of Electricity*, and the establishment of the Hongkong Electric Centenary Trust and Lamma Trust for charitable and community service. Celebrations also include a permanent street light display in Edinburgh Place and a glittering Electric Light Show which lit up Central.

## 2005

The company acquires a 19.9 per cent stake in the UK's Northern Gas Networks, increased to over 40 per cent by 2009.

2005

  
Northern  
Gas Networks  
*Working with United Utilities*

# Hongkong Electric – lighting up an ever-changing city

CELEBRATED AS THE OLDEST ELECTRICITY COMPANY in the world to have operated continuously, Hongkong Electric is Power Assets' arm that lights up Hong Kong Island. It also embodies an entrepreneurial spirit that goes back generations in the city.

Its Victorian era founders were visionaries and risktakers among the then British colony's business elite who facilitated Hong Kong's rise as a modern centre for international commerce in "the Far East".

Pioneering businessman, urban planner and government advisor Sir Catchick Paul Chater, who in 1889 co-founded Hongkong Land, was among the first to see the merits of introducing electric power to Hong Kong. He played a key role in moving the project forward, eventually remaining a director of Hongkong Electric for 37 years.

When the Hongkong Electric Company commenced operations on 1 December 1890, residents experienced their first taste of "pale daylight", the original colloquial Chinese name for electric streetlight. Its ghostly quality was nonetheless considered superior to the illumination provided by (then) prevailing gaslight.

As the company acquired the status of a true Hong Kong institution, it contributed to the city's life in unexpected ways. In the 1930s, the arrival at the company's main coaling wharf in North Point of racing ponies shipped from Australia provided annual excitement among the racing fraternity. Some years later the company's wharf witnessed an even stranger spectacle: circus elephants unloaded from ships in slings lifted by derricks.

The Japanese invasion of 1941, which brought dark times to Hong Kong, gave rise to one of the proudest moments in the company's history. Following the Japanese landing on Hong Kong Island, a volunteer force consisting of power station engineers and veterans of former wars took up positions in the company's North Point power station. They put up a fierce fight to hold up the Japanese advance.

Power station manager Vincent Sorby later died of his wounds and many employees were interned in camps for the duration of the war. Remarkably, though, the company's records survived intact, despite widespread looting and scavenging for fuel. This was thanks to a one-time billings clerk who spirited them away and hid them in his home.

As the nightmare of war ended, Hongkong Electric's

## 2006

Hong Kong's first commercial wind turbine is commissioned at Tai Ling, Lamma Island, generating up to 800 kW of electricity. The company also introduces the use of liquefied natural gas as a fuel for electricity generation.

## 2007

The company acquires a 50 per cent interest in Stanley Power, which has stakes in six power stations in Canada.

## 2008

The company co-develops wind farms in Mainland China's Dali and Laoting, with a 45 per cent stake in each. This is followed by the 2009 acquisition of three power plants in the Mainland.

generators sprang back to life, providing a constant backdrop to the following decades of rapid change and unprecedented growth.

The colony's population surged as refugees flooded in to escape upheavals in the Chinese Mainland. Many perceived Hong Kong Island as the safest haven, boosting the tiny island's population to more than one million by 1950 and creating a surge in demand for electricity, especially with the post-war rise of local industries.

To spread the load, power to factories on Hong Kong Island was switched off between 6 pm and 10 pm each night. In homes, lighting during evening peak hours was not as bright as later in the evening. But because of the diligence of the company's engineers, at least no one worried about it going off.

The presence of sophisticated, wealthy Shanghainese among the new arrivals, with their higher expectations of modern comforts, boosted demand for electricity, as did changes in fashion to lightweight business suits in summer; the construction of taller buildings with elevators and, later, the increasing popularity of television, spearheaded by the legendary TVB show *Enjoy Yourself Tonight*.

Hongkong Electric staff rose to meet the challenge head-on, often going to extraordinary lengths to keep the power supply to Hong Kong's factories and households running smoothly. Power Assets Group Managing Director Tso Kai Sum, who has spent more than 30 years of his career with the company, recounts such a challenge in 1966. He was tasked with building and commissioning a plant on the island of Ap Lei Chau, off the southwest shore of Hong Kong Island, in little over two years – then a world record.

After this, the company's network shortfall meant transmission was needed by overhead and marine cables all the way to North Point, some nine kilometres away. Mr Tso's team achieved this in only nine months – but not without Mr Tso

spending nights sleeping on-site to meet the tight deadlines. Such complex technical challenges were a far cry from those faced by company engineers of an earlier era, when a shoal of small fish swimming into the cooling water inlet of the North Point power plant was enough to cause a major blackout.

By the 1970s, legions of old-style "amahs" had departed domestic service for more lucrative jobs in Hong Kong's factories, hastening the adoption of a wide range of electrically-powered household appliances. Most important was the now-ubiquitous electric rice cooker – which became a mainstay of almost every Hong Kong home.

From 1950-70, the company's power output increased tenfold, while Hong Kong Island's population less than doubled, quantifying the true extent of the electrification of daily life.

Hongkong Electric played a crucial role in powering this lifestyle revolution.

In the mid-1980s, nearing its centennial, Hongkong Electric underwent ownership changes. Facing financial difficulties in a distressed property market, Hongkong Land sought to offload non-core assets and found Hutchison a willing buyer for its share of Hongkong Electric.

This was a pivotal development for the formerly-traditional, colonial-style company. "Hutchison's involvement helped Hongkong Electric move into property development and realise returns from developing our old Ap Lei Chau site into the popular residential complex South Horizons," according to Mr Tso. "Hutchison also provided us with the stability of what has since grown into a life partnership."

With such a long history behind it, the company's natural inclination is to keep looking to the future. As Mr Tso put it: "We are always thinking 'what can we do next?' And that is very important for our company. You can never sit still."

The recent completion of a solar power system, coupled with the proposed development of a wind farm near Lamma Island, is evidence of this forward-thinking approach, along

**“We are always thinking ‘what can we do next?’”**



**2008**

The company commissions a gas-fired power station in Ratchapuri, Thailand where it has a 25 per cent stake and acquires 50 per cent of an electricity network in Wellington, New Zealand.





*Above left:* Officiating guests and Lamma Island residents launch eco-routes developed under the “Green Lamma Green” project undertaken by Hongkong Electric and The Conservancy Association.

*Above right:* Local retirees participating in a University of Third Age (U3A) fun day visit the Lamma Power Station.

## “First and foremost, Power Assets is a utility company that serves the people.”

with a concern for sustainability and a deeply-felt responsibility to the community. “First and foremost, Power Assets is a utility company that serves the people,” said Mr Tso.

He also pointed, however, to community initiatives, notably the company’s three-year Green Lamma Green project, to enhance the island’s biodiversity and ecological appeal as well as the University of Third Age project to promote lifelong learning among the city’s retired population. As a result of these and other efforts, the company has recently been presented with a “Total Caring Award” in recognition of its achievements in promoting corporate social responsibility.

While much has changed in some 120 years, the company’s philosophy on service has remained a constant. “Power Assets is still very keen to serve people and enhance reliability,” said Mr Tso, drawing on the experience of his own decades of service. “Our way of investing in power stations, the spirit of

being a reliable utility company and treating our customers well, have been constants throughout my time. The idea that Power Assets can only be better, not worse, is a key value of the past which remains today.”

This commitment also applies to staff. According to Mr Tso, there are some 300 employees, out of the company’s workforce of nearly 2,000, who have been with the company for 30 years or more.

The latest chapter in the company’s ongoing story has involved changing the name of the holding company to Power Assets to better reflect the global nature of its business today, and of its future ambitions.

Domestically, however, senior management decided to keep the name Hongkong Electric. They recognised the value of keeping alive in the community for years to come the company’s legacy of service to Hong Kong people. 



**2010** Hong Kong’s biggest solar generation project is commissioned in July at Lamma Power Station, generating 550 kW of electricity. The company also announces the proposed development of a 100 MW wind farm near Lamma Island by 2015.

**2010** The company acquires a 25 per cent stake in Seabank Power near Bristol in the UK in June 2010. Four months later, it acquires a 40 per cent interest in UK Power Networks comprising three regional electricity networks.

**2011** The company changes the name of its holding company to Power Assets, retaining Hongkong Electric for its domestic operations.



Power Assets Holdings Ltd.  
電能實業有限公司