

As a global investor, our commitment toward protecting the environment and corporate social responsibility reflects the core values of our company.

Tso Kai Sum Group Managing Director



With a long tradition of supplying a reliable and stable source of electricity to our customers in Hong Kong, we are committed to putting every effort into continuing success of this core mission, at home and abroad. Since the turn of the century, we have achieved significant growth through expanding businesses beyond Hong Kong, culminating in record profits for 2011.

At the same time, we also reached a milestone in the Group's history as earnings derived from operations outside Hong Kong have passed the 50-per cent mark for the first time, bolstered largely by the acquisitions we made in 2010 in the United Kingdom, which reported their first full-year earnings contributions.

As we celebrate the success of this global investment strategy, we will continue to seek quality investments outside Hong Kong. We certainly see many opportunities for the Company as we add value to our investments in the United Kingdom, Australia, mainland China, Canada, New Zealand and Thailand. Worldwide, the Group now has interests in over 10,000 MW of power generation assets and over 400,000 km of power and gas networks serving a total of over 13 million customers.

In Hong Kong, we are keen to see the development of a low carbon economy and support the Government's policy to meet the challenging goal of reducing the city's carbon intensity by 50-60% by 2020 as compared with 2005. Going forward, one of the strategies to reduce the carbon intensity of our electricity generation is by increasing the use of renewable energy. We have started work to expand the solar power system at Lamma Power Station, which is currently the largest in Hong Kong, and commenced wind monitoring programme in connection with the construction of a 100 MW offshore wind farm in Hong Kong waters. To ensure that our customer base of more than half a million in Hong Kong will continue to enjoy a world class supply reliability rating of over 99.999% – an exemplary record we have maintained since 1997, we have undertaken various projects to ensure the reliability of our electricity supply.

We are also committed to operating in a socially responsible manner. Our Corporate Social Responsibility (CSR) committee, of which I am the Chairman, meets regularly to devise and implement CSR strategies. In 2011, we issued our first Sustainability Report using internationally recognised reporting standards covering our activities and operations in 2010.

Our human resources strategy puts a strong emphasis on employee engagement, enabling each one of our 2,000 highly-skilled and diverse workforce to be fully involved in, and dedicated to, his or her task. We hope to enable our employees to use their talents and strengths fully, and to help them develop their careers with us.

As a socially-responsible company, we have in place a number of initiatives and projects aimed at improving the environment and the lives of the people in the communities which we serve. Our programmes in Hong Kong help senior citizens reach out to know more about their community, and encourage them to pursue lifelong learning and volunteerism. We also work on inculcating energy efficiency and conservation to the young, through many thematic activities in schools and ecological projects.

It is heartening to know that our CSR efforts and practices have been recognised by various third-party organisations. We were presented with two major awards – by the Hong Kong Council of Social Services in April 2011 and the Hong Kong Productivity Council in December 2011 – that recognise our performance in delivering corporate social responsibility.

We also topped the list of 15 local participating companies in the Carbon Disclosure Project as we continued to be included in the Hang Seng Corporate Sustainability Index.

We have built a strong foundation in our first year as Power Assets. As we enter the new financial year, we look forward to increasing investments in our future to drive sustainable growth. While we are mindful of uncertainties in the global economy in 2012, we remain optimistic about the opportunities within and outside Hong Kong.

Earnings: HK\$9,075 Million



Net Assets: HK\$57,873 Million



Customers: 13 Million



Power Assets' Global Presence



United Kingdom



Gas pipeline length: 37,000 km Interest: 41.29%

Total pipeline length: 37,000 km

Seabank Power Station

Gas-fired: 1 x 755 MW, 1 x 385 MW Interest: 25%

Total installed capacity: 1,140MW

UK Power Networks Cable length: 185,500 km Interest: 40%

Total cable length: 185,500 km

Canada



Gas-fired CCGT: 108 MW Interest: 25%



Gas-fired CCGT: 68 MW Interest: 25%



220 MW Interest: 50%



Coal-fired: 2 x 390 MW Interest: 12.5% Stanley Power Ottawa

Gas-fired CCGT: 68 MW Interest: 25%

Stanley Power Fort Saskatchewan Gas-fired CCGT:

118 MW

Interest: 15%

Total installed capacity: 1,362 MW

Jinwan Power Plant

Laoting Wind Farm, 🔼

Coal-fired:

2 x 600 MW

Interest: 45%



Mainland China

Zhuhai Power Plant Coal-fired: 2 x 700 MW Interest: 45%

Siping Cogeneration Plant

Coal-fired: 2 x 50 MW, 1 x 100 MW Interest: 45%

Dafengba Wind Farm, Dali, Yunan Province Wind Turbine:

Wind Turbine: 64 x 0.75 MW Interest: 45%

Total installed capacity: 2,898 MW

2,898 MW

Hebei Province

Wind Turbine:

33 x 1.5 MW

Interest: 45%

Hong Kong

HK Electric Network Cable length: 5,800 km Interest: 100%

Lamma Power Station

Coal-fired: 3 x 250 MW, 5 x 350 MW Gas-fired CCGT: 1 x 335 MW, 1 x 345 MW Oil-fired GT: 4 x 125 MW, 1 x 55 MW Solar: 550 kW

Interest: 100%

Lamma Winds Wind turbine: 800 kW Interest: 100%

Total installed capacity: 3,736 MW Total cable length: 5,800 km

New Zealand

Wellington Electricity Lines Limited Interest: 50%



Total cable length: 4,600 km



ETSA (

Cable length: 87,500 km Interest : 27.93%

Powercor Cable length: 84,600 km Interest: 27.93%

CitiPower Cable length: 6,500 km Interest: 27.93%

Total cable length: 178,600 km

Thailand

Ratchaburi Power 🜔

Gas-fired CCGT: 2 x 700 MW Interest: 25%

Total installed capacity: 1,400 MW

Growing Markets

United Kingdom

UK Power Networks

Power Assets has a 40% interest in UK Power Networks (UKPN), one of the largest electricity distributors in the country delivering electricity to over eight million customers in London, and the East and South East of England. In 2011, the business reported a strong financial performance that was ahead of expectations.

UKPN made very significant progress to improve the performance of the network and minimise the impact of power interruptions. Customer Interruptions, which represent the number of times customers experience a loss of supply, was reduced by 30% in 2011. Customer Minutes Lost, which represent the average time each customer is without power, was reduced by 40%. The company continued to make planned investments in infrastructure in 2011, investing £550 million in its regulated networks.



UKPN is proud of its contribution to the construction and operation of the distribution network for the London 2012 Olympic Park. Construction work on the high and low voltage electricity distribution was completed in March 2012. A large number of employees have volunteered to participate in enhanced operational rotas during the Olympic Games so that UKPN can quickly respond to any events that may impact the distribution network.



UKPN stands ready to power the 2012 London Olympic and Paralympic Games.

The company during 2011 also advanced on Low Carbon London (LCL), a pioneering learning programme that uses London as a test bed for various smart grid solutions. Funded by UK energy regulator, the Office of Gas and Electricity Markets, the LCL programme plans to install 5,000 smart meters within the trial areas. Work has started on rolling out to an initial 500 customers in the smart meter trial, with subsequent roll-outs for the remaining 4,500 customers scheduled for 2012. LCL is active in signing up customers for demand-side management and other aspects of the trial.

As part of the current price control framework, UKPN participated in a scheme whereby distribution network operators are allowed to spend money annually to remove overhead power lines from locations designated as areas of outstanding natural beauty. Nearly 100 km of overhead lines have so far been placed underground under the scheme.

UKPN Customer Minutes Lost



Seabank Power Limited

Power Assets holds a 25% stake in Seabank Power Limited (SPL), which owns a 1,140 MW combined cycle gas turbine power plant near Bristol.

In 2011, SPL completed two scheduled outages, including on Module 1 a major lifetime-extension to increase its integrity and reliable operation for a further 100,000 operating hours. There were no lost time incidents or environmental occurrences during 2011.



Seabank staff put their best foot forward to raise money in the "3 Peak's Challenge."

Northern Gas Networks Limited

Power Assets owns 41.29% of Northern Gas Networks Limited (NGN), which has 37,000 km of gas distribution pipelines, servicing a population of 6.7 million. NGN delivers gas to around 2.6 million customers from the Scottish borders to South Yorkshire, representing around 11% of the UK population.

The UK experienced one of the coldest and most extreme winters in the last 100 years at the start of 2011. The extreme weather conditions generated more emergency and repair work for NGN but the company was able to maintain its strong operational performance.

NGN continued working on the network extension programme to support the alleviation of fuel poverty in various locations in the area it serves. As of December 2011, NGN has supported specific schemes which enabled a further 1,600 households to be connected to the gas network, bringing the total number to 3,000 since 2009. The company also continued to make significant investment in mains and services replacement works to replace 528 km of iron pipe annually, in line with a national long-term policy replacement programme. In 2011, NGN achieved for the first time, internationally recognised safety and environmental accreditations for the entire organisation.

In customer service, NGN has continued to deliver a strong performance in 2011, where the number of complaints was reduced by 24% from a year ago. In the quarterly surveys of customer opinions, NGN made good progress and finished the year strongly, ranked among the gas distribution networks 3rd in Connections, 3rd in Replacement and 2nd in Repair.

NGN Customer Complaints

No. of Complaints



NGN undertook a Carbon Impact Assessment exercise in 2011 to capture its total carbon footprint for the first time and published its first Sustainability Report. NGN has continued in 2011 to support local projects and community environmental improvement schemes through the Northern Green Networks initiative.



NGN helps combat fuel poverty in the local community with the extension of gas supply network and installation of new energy efficient central heating systems.

Growing Markets

Australia

ETSA Utilities

Power Assets holds a 27.93% shareholding in ETSA Utilities (ETSA), which is the sole electricity distributor in the State of South Australia, serving over 825,000 customers.

In 2011, ETSA and transmission provider ElectraNet undertook an A\$300 million project to improve security and reliability of supply for Adelaide's Central Business District and southern metropolitan suburbs. The project was required by the South Australian Essential Services regulator to meet the city's projected demand, increase supply security and ensure continued reliability into the future.



ETSA improves reliability and customer service with the installation of next-generation meters, along with pole-top monitoring and communications devices. Severe storms in February, November and December presented tough challenges to the maintenance of reliability. Nevertheless, the annual minutes without supply per customer excluding major event days recorded for 2011 at 134 minutes was lower than the 152 minutes for 2010.

ETSA Utilities Customer Minutes Lost (Excluding Major Event Days)



In 2011, ETSA focused on developing a new suite of customer self-service applications including Power@MyPlace™, which is a free SMS service that will advise registered customers of interruptions to their supply as well as provide estimated restoration times. The service will also provide updated information on power outages, including notification of when electricity has been restored. The company in 2011 received various awards that recognise achievement and high standards of management, training and commitment to excellence in customer service.

ETSA was successful in a number of environmental management and sustainability initiatives in 2011. The company signed a Memorandum of Understanding with



the State Government's peak recycling body, Zero Waste SA, and implemented several key initiatives detailed in the Waste and Recycling Improvement Action Plan.

CitiPower and Powercor Australia

Power Assets holds a 27.93% shareholding of both CitiPower and Powercor Australia. CitiPower's distribution network covers the Central Business District and inner suburbs of Melbourne and serves more than 310,000 customers. Powercor Australia serves 730,000 customers in the western half of the State of Victoria and is the largest distributor in Victoria.

In 2011 the number of CitiPower customers increased by 1.17% and Powercor customers increased by 2.01%. Both companies achieved significant improvement in network reliability during the year despite state-wide floods in January.



Citipower's award-winning Southbank Zone Substation features an innovative exterior design and utilisation of modern GIS technology.

CitiPower opened in July its A\$55 million Southbank Zone Substation, a key distribution hub which will ensure a secure and reliable supply of electricity to one of Melbourne's busiest inner city precincts. The substation is also equipped to cater for significant growth in power demand in the area.

By the end of 2011, CitiPower and Powercor had installed more than 500,000 smart meters under the Advanced Metering Infrastructure (AMI) programme. The customer satisfaction level for AMI installations was 77%, a rise of two percentage points from 2010.

CitiPower & Powercor Smart Meter Installation Customer Satisfaction Level



Victoria's first real-time customer SMS or email outage information subscription service was launched by the CitiPower and Powercor business in 2011, providing updates on planned and unplanned outages. A new customer charter was also developed and issued. Both companies won the Australian Service Excellence Awards in the Victorian and National Large Business category.

Powercor Network Services, the business unit that provides project management and engineering services to markets across Australia, achieved outstanding results in both operational performance and customer satisfaction. Projects commissioned in 2011 included station rebuilds in Tasmania, wind farm connection in New South Wales, zone substations in Queensland. The transmission line maintenance services teams in Queensland and Victoria also had a successful year. Powercor Network Services opened an office in Tasmania in 2011.



Powercor Network expands our project management and engineering services to Tasmania.

In 2011, the third annual greenhouse gas emissions review for the Commonwealth Department of Climate Change was completed and submitted, and an Environmental Relationship Management Strategy was also implemented. CitiPower and Powercor's head office in Melbourne was re-certified as a WasteWise workplace.

Group Managing Director's Report Growing Markets

Mainland China

Dali and Laoting Wind Farms

Power Assets owns 45% stakes each in a 48MW wind farm in Dali, Yunnan Province, and a 49.5MW wind farm in Laoting, Hebei Province.

In 2011, the two wind farms continued to operate smoothly and sold a total 202 GWh of electricity, comparable to the 2010 level.

Both wind farms are registered for the Clean Development Mechanism (CDM) under the Kyoto Protocol and received Certified Emissions Reductions issued by the CDM Executive Board.

The Laoting Wind Farm, nominated by China Electric Power Construction Association, was accredited with the prestigious 2011 China Electric Power Quality Engineering Award, the highest for the electric power industry in the country. The award aims to promote continuous improvement in quality management.

Zhuhai and Jinwan Power Plants

Other than wind farms, Power Assets also owns a 45% interest in three power stations in mainland China, namely the Zhuhai and Jinwan plants in Guangdong Province and Siping Cogeneration Plant in Jilin Province.



Dali Wind Farm produces clean energy and reduces carbon emissions.



Our Zhuhai and Jinwan plants power industries in the manufacturing hub of Mainland China.

In 2011, the 1,400 MW Zhuhai Plant achieved an 11% growth in electricity sales. Despite an extended annual outage for major equipment upgrade, the plant enjoyed a high loading period from May to October due to hot weather and a double-digit increase in power demand in Guangdong Province.

The 1,200 MW Jinwan Plant recorded very high loading factors and electricity sales rose by 7% as compared with 2010. Some of the old superheater and reheater tubes in its Unit 4 Boiler were replaced with new ones made of better material. Operation efficiency and reliability of the unit have improved significantly upon adoption of advanced combustion technology. In view of the success with Unit 4, Jinwan Plant plans to conduct a similar exercise to its Unit 3 Boiler in 2012.

Both plants are fitted with advanced flue gas desulphurisation equipment and effective electrostatic precipitators with flue gas emissions meeting all the current environmental requirements. Selective



Operation efficiency of both power plants improves significantly during the year.

catalytic reduction devices will be installed in the plants to reduce the nitrogen oxides emissions further in 2012 and 2013. The dust removal equipment and existing flue gas desulphurisation equipment installed at the Zhuhai Plant will be upgraded to fulfil the new environmental protection standards that will come into effect in 2014.



We strive to achieve world-class performance in electricity and heat generation.

Siping Cogeneration Plant

In 2011, both electricity and heat sales from Siping Cogeneration Plant fell respectively by 7% and 12% from 2010 because of the low utilisation of coal-fired power plants in Jilin Province and warmer weather. The power market in Jilin remains very challenging and competitive. Nevertheless, the Company continued to maintain the basic generation plan under the off-take contract.

An independent contractor had completed a performance test on the flue gas desulphurisation (FGD) plants fitted to Unit 1 and Unit 2 Boilers in 2010 and the results were satisfactory. By 2011, all the three boilers of Siping Plant were equipped with fully operational FGD plants.

Growing Markets

New Zealand Canada Thailand

New Zealand

Wellington Electricity Lines Limited

Power Assets became a shareholder in Wellington Electricity Lines Limited (WELL) in July 2008 and holds a 50% stake. WELL owns and operates the fourth largest electricity distribution network in New Zealand, distributing power to more than 164,000 customers in the Wellington and Hutt Valley regions. The majority of WELL's distribution revenues are regulated by the government.



WELL soldier through the "Big Chill" in August to ensure reliable supply.

WELL's network continued to perform reliably in 2011. The country in August experienced what New Zealand's Metservice described as the "Big Chill", a polar blast that delivered snow to many regions of the country. The snowfall was considered one of the most widespread and prolonged events in more than 50 years. The "Big Chill" affected reliability levels for the month, but WELL's network, however, was restored promptly to minimise customer disruption.

Canada

Stanley Power Inc.

Power Assets holds a 50% interest in Stanley Power Inc. and that company in turn owns a 49.99% share of TransAlta Cogeneration L.P., which operates five power plants in the provinces of Ontario and Alberta.

In addition, Stanley Power in April completed the acquisition of a 100% interest in the 220 MW Meridian Cogeneration gas fired plant in Saskatchewan from TransAlta Cogeneration L.P. and Husky Energy. Electricity and steam from the Meridian plant are sold to SaskPower and Husky Energy respectively under contracts extending to 2024 and gas is supplied by Husky Energy.



The Meridian plant continues to record top notch safety and environmental performance. In 2011, there had been no spills to the environment and no recordable safety incidents. A major maintenance outage on the Meridian plant was completed in September, including a scheduled overhaul of gas turbine Number 1, replacement of some gas turbine blades and condenser parts, and general maintenance for the plant. A major maintenance outage for gas turbine Number 2 is planned for the summer of 2012.

TransAlta Cogeneration L.P. finalised contracts to secure gas supply and transportation for one of its plants in Ontario for 2012 to 2016 due to the expiry of existing arrangements.



The Meridian power plant notches the best scores in safety and environmental performance.

Thailand

Ratchaburi Power Company Limited

Power Assets holds a 25 percent interest in Ratchaburi Power Company Limited (RPCL), which operates a 2 x 700MW gas-fired combined-cycle power plant and sells all of the electricity generated to the Electricity Generating Authority of Thailand under a 25-year power purchase agreement (PPA).

2011 was a successful year for RPCL with both power units having achieved full availability required under the PPA and exceeded their production targets in thermal efficiency. Thailand experienced serious flooding across the country in the fourth quarter of 2011. Although RPCL is located outside the flood-prone areas and was unaffected, the company implemented, as a precaution in early October, its emergency flood plan as stated in the Corporate Crisis Management Manual. RPCL also made donations to the Red Cross and mobilised a team of staff to hand out daily supplies to victims in the Ratchaburi refugee camps.

In 2011, RPCL continued to operate within the confines of its effluent and emission requirements stipulated under its Environmental Impact Assessment Report. Waste water discharge, air and noise emissions have met both the local and international environmental standards.

To ensure compliance of the standards, a Continuous Emission Monitoring System was installed at the plant. The system sends real-time stack emission data to local environmental authorities and is audited by an accredited laboratory every six months. The air quality within the power station is monitored and a consolidated environmental report is delivered to relevant government bodies every six months.

A neighbourhood survey was conducted in 2011. Over 500 people from nine sub-districts around the power plant responded, and 94% of them supported RPCL's operation.



Although RPCL is located outside the flood-prone areas, it still implements emergency flood plan as a precaution.

Home Market

Hong Kong

The Hongkong Electric Company, Limited

Established in 1889, The Hongkong Electric Company, Limited (HK Electric) is a wholly-owned subsidiary of Power Assets, providing an efficient and reliable electricity supply to more than half a million customers in Hong Kong.

Generating Low Emissions Energy

Lamma Power Station

With a total installed capacity of 3,736 MW, Lamma Power Station maintained a high reliability for its generation units, which for the year was 99.93 %, a result of our first-rate operations and maintenance policy.

Even though coal remains the primary fuel source for electricity generation, we have continued to work on increasing the use of cleaner fuels and renewable energy at Lamma Power Station.

Our renewable energy fleet performed well in 2011, with Lamma Winds generating 868 MWh. The unit has generated a total of 5,310 MWh of electricity and thereby has avoided more than 4,400 tonnes of carbon dioxide (CO_2) emissions since it was commissioned in 2006.

In a similar vein, the 550 kW thin-film photovoltaic (TFPV) solar power system generated 691 MWh in 2011, reducing the emission of 576 tonnes of CO_2 . Together with Lamma Winds, our renewable energy fleet has avoided CO_2 emissions in 2011 equivalent to planting more than 56,000 trees.

Renewable Energy Generation

MWH



With the outstanding performance of the solar power system, HK Electric is installing more TFPV panels to expand the system to 1 MW, scheduled for completion in the latter half of 2012. Together with the 100 MW offshore wind farm that is proposed to be constructed in the Southwest Lamma Channel in the near future, there will be more renewable energy supplied to Hong Kong.

Our coal consumption decreased by 700,000 tonnes from 2008 to 2011. As we generate energy to meet the demand of our customers, we also work hard on reducing emissions to combat air pollution. After successfully modifying our generation units over the past few years, we procured and burnt more low-sulphur coal in 2011, helping to reduce emissions of sulphur dioxide (SO₂), nitrogen oxides (NOx), respirable suspended particulates (RSP) as well as ash generated from Lamma Power Station.



Our coal consumption drops by 19% as compared with 2008 as we seek to increase the use of cleaner-burning fuels and renewable energy.

We maintained our gas-fired generation to about 33% of our total output in 2011. We currently source our natural gas supply from Australia and Qatar, receiving it via a regional liquefied natural gas terminal and a submarine gas pipeline. We continue to seek out potential gas resources and suppliers as we work with the Hong Kong Government and the local community toward a low carbon future for Hong Kong.

Efficient Use of Natural Resources

We have continued to expand and diversify the source of our fuel supplies and reserves base, with coal imports from Indonesia, Australia and Russia to minimise the potential impacts of disruption to coal production and delivery from a particular country or region. To strengthen quality control along the supply chain, our coal inspection team paid frequent visits to the mines and loading ports around the world to secure consistent and quality coal supplies to our power station. We will continue the procurement strategy for cleaner fuels to meet the tightening emission cap in the coming years.

Coal Used and Ash Generated

Thousand Tonnes Coal Used Ash Generated 3,750 3,580 3 040 3,050 327 271 225 220 2008 2009 2011 2010

Transmission and Distribution

System Reliability

As a vertically integrated utility, HK Electric transmits electricity it has produced at the Lamma Power Station to load centres and distributes the power to customers on Hong Kong Island and Lamma Island.

Our customer base of more than half a million continued to enjoy a world-class supply reliability rating of over 99.999% in 2011, which surpassed the pledged service standard of 99.998%. The supply reliability performance has been consistently above 99.999% since 1997.

We further improved our reliability with the introduction of advanced cable diagnostic systems to assess the condition of cables and joints for early detection of any weak components.



We are proud to contribute to the glittering glow and warm colours of Hong Kong

Network Expansion and Improvement

We utilise primarily 275 kV and 132 kV underground and submarine cables in our transmission network, while only a few 132kV overhead lines remain in use.



Plans are in the pipeline to phase out all existing overhead lines to further enhance system reliability.

HK Electric's few existing 132 kV overhead lines have been in service for over 40 years and some are installed over beautiful country parks of Hong Kong Island. To eliminate the visual impact of the overhead lines and to improve system reliability, the company is phasing out all the existing overhead lines. As part of the process, a new 275 kV circuit will also be added inside the existing 5.7 km Nam Fung – Parker Cable Tunnel. Unlike the two existing circuits in the cable tunnel, the new circuit will use cross-linked polyethylene insulation, which will be more environmentally-friendly as there is no risk of fluid leakage. The cable circuit will be put in service in May 2012 and the overhead lines will then be dismantled. All work will be completed by the end of 2013.

To enhance the reliability of its 132 kV network, HK Electric also installed four new 132 kV cable circuits from Marsh Road Switching Station to Morrison Hill Zone Substation across Gloucester Road, a major trunk road with 13 traffic lanes and a U-turn flyover leading to the Cross Harbour Tunnel.

Our engineers have utilised "no-dig" construction for this undertaking to minimise the inconvenience to the public and disruption of road traffic. This method of construction typically involves installation of underground cables using trenchless technologies. However, challenges arose with numerous existing underground restrictions and obstructions. During the course of construction, our engineers imposed a stringent procedure to control the ground movement and to remove the large boulders of the abandoned seawall. This is to ensure that there is no undue settlement to the existing land surface which can disrupt traffic flow.

To further expand and strengthen our transmission and distribution network, we also undertook various projects in 2011, including commissioning 49 new distribution substations, installing 128 km of distribution cable, implementing the associated 11 kV network reinforcement work, refurbishing twenty two 275 kV and 132 kV gas insulated switchgear bays in three switching stations to improve supply reliability, and continuing to expand the 22 kV network coverage to the eastern and western areas. In line with the construction of the Mass Transit Railway South Island Line, temporary supply arrangements and cable diversion at various locations are in progress and will be completed as required.



"No-dig" construction is utilised during the new 132KV cable circuits installation across Gloucester Road.



Intelligent Systems

At HK Electric, we utilise sophisticated computer systems, covering energy and distribution management at our System Control Centre, to ensure that we have reliable and efficient system operations. We survey the latest computer systems for a modern power system so as to explore development directions for meeting our future needs, including smart grid functions and low carbon fuel mix.



We use sophisticated computer systems to ensure reliable and efficient system operations.

Cyber security of these computer systems is also important in HK Electric. A biennial review on protection of critical cyber assets was conducted, which indicated that our System Operations Cyber Security Policy meets the requirements of international standards.

Clean & Green

Improving Air Quality

We are committed to supporting the goal of a low carbon Hong Kong and improving air quality by reducing our own carbon footprint, while partnering with the community to reduce emissions. Thanks to the adoption of cleaner energy and the emission reduction facilities, we are meeting the emission caps set by the Hong Kong Government.

Reducing Air Emissions

Thousand Tonnes

- Sulphur Dixode
- Nitrogen Oxides
- Respirable Suspended Particulates



HK Electric has installed several air-quality monitoring stations in various locations, with the latest one at Cheung Chau. Besides, we have fully complied with the updated regulation to reduce the emissions of volatile organic compounds.

In addition to taking actions to help improve the local air quality, we also made efforts to improve the indoor air quality (IAQ) of our office buildings to ensure a healthy working environment for our staff. Our head office building, the Hongkong Electric Centre, has obtained the 'Excellent Class' IAQ certification from the government's IAQ Certification Scheme for seven consecutive years.



Our head office building obtains the "Excellent Class" IAQ certification from the government for seven consecutive years.



Reducing Our Carbon Footprint

To enhance the transparency and disclosure on our greenhouse gas (GHG) emissions inventory, HK Electric commissioned an independent accreditation body to verify the Company's GHG assertion for generation activity based on international ISO 14064 standard, with 2010 as the baseline year.

HK Electric has adopted the Manifesto on Energy Efficiency in Buildings organised by the World Business Council, which aims to reduce energy use and carbon emissions from commercial buildings. A cross-division task force was formed in November 2011 to implement the requirements of the Manifesto.

In the Carbon Disclosure Project (CDP) 2011, Power Assets topped the list of 15 local participating companies for our carbon reduction and public disclosure performance in 2010. A 13% reduction in carbon emissions was recorded in between 2005-2010. Power Assets was also named as one of the two carbon performance leaders out of 109 regional companies that responded, and was the only Hong Kong company qualified for the highest performance band.

Our performance in reducing carbon emissions and waste as well as energy conservation was recognised with various awards including those under 2011 Hong Kong Awards for Environmental Excellence.



We make use of every opportunity to engage the community in carbon reduction.



A dedicated stakeholder liaison group is formed to keep the lines of communication open on our proposed offshore wind farm project.

Renewables - Offshore Wind Farm

Wind measurement for the proposed 100 MW offshore wind farm at Southwest Lamma is underway. The wind farm would enable us to further harness renewable energy for power generation in Hong Kong.

An offshore wind monitoring station (WMS) will collect a minimum of one-year meteorological and oceanographic data that is necessary for detailed design of the wind farm.

The WMS is equipped with a light detection and ranging system to measure the wind speed. Safety features including aviation lights, marine navigation lights, a fog horn and a radar reflector have also been installed. Offsite prefabrication has been adopted as far as practical to shorten the construction time for the WMS platform. To alleviate the underwater noise during percussive piling, bubble jackets have been utilised during the piling operation days.

HK Electric has set up a Stakeholder Liaison Group and a Fisheries Review and Consultation Committee for the project. Regular meetings were conducted during the past year to solicit views from relevant stakeholders and the fishery sector on the proposed offshore wind farm project.



Electric Vehicles

In 2011, HK Electric continued to expand its vehicle fleet with environmentally-friendly electric vehicles (EVs) by adding 21 more EVs. The total number of EVs has increased to 38, representing over 10% of our vehicle fleet.

To support the wider use of EVs to improve roadside air quality, we are building three more EV quick charging stations in public car parks across Hong Kong Island in 2012. These stations are open for use by the public and free charging service has been extended to the end of 2012.



New electric vehicles are added to our operation fleet to protect our blue sky.

Public test drives of the new Nissan LEAF and test rides on the Smith electric light bus were organised in November. The response was enthusiastic with many expressing favourable comments on the performance of the EVs. Meanwhile, to provide our corporate customers with choices of car models, Nissan LEAFs were added to our Mitsubishi iMiEV leasing fleet.

Best Efforts for Our Customers

We achieved and surpassed all the pledged customer service standards in 2011. The number of commendations reached a record of 1,607, reflecting a high level of customer satisfaction.

2011 Customer Service Survery



Customer Support

Customers of HK Electric get quick attention whenever emergency services are needed. In 2011, the average waiting time for telephone calls to our Customer Emergency Services Centre was 1.3 seconds, and the average arrival time to the scene of the problem in urban areas in response to emergency calls was 19 minutes. Both were better than our pledged service standards of less than nine seconds and less than 28 minutes respectively.

We believe that enhancing the efficiency of our electricity generation process and energy management are equally important. HK Electric provides free energy audit services to our customers to help them identify energy-saving opportunities at their business premises. Over 50 audits were carried out in 2011.



HK Electric is ready for emergency service calls, day or night!



Small and medium-sized enterprises (SMEs) have been one of our target customer segments. Currently, there are about 300,000 SMEs in Hong Kong which constitute over 98% of the business establishments. Taking the opportunity along with the launch of Smart Power Centre, a range of new service initiatives for SMEs was launched in 2011. These initiatives are aimed at speeding up the provision of electricity supply to SMEs for the start-up of new business and to help SMEs enhance energy efficiency of their business operations. New services include pre-check on new customer installation before supply connection, exclusive SME email contact, walk-through energy audits, advisory services on load profiles and periodic inspection.

To enrich our frontline colleagues with the customer service skills to meet customer expectations, training on insights of quality services was conducted for all frontline staff in 2011.



Smart Power Centre provides information on smart and efficient use of energy resources.

Customer Engagement

Engaging and listening to our customers is important to improving our services. We launched the "We Meet on Friday" programme in full steam in 2011, soliciting customers' views on a specific service area each time. We also continued to communicate and gauge customer opinions through our Customer Liaison Group (CLG). In January, about 50 CLG members attended the annual meeting where they were briefed on major developments and updates followed by visits to the Smart Power Centre and Electric Domestic Kitchen Centre in August.

In our efforts to reach out to customers who speak minority languages, we expanded our customer publications on the use of electricity account services and the efficient use of electricity to Nepalese in 2011, in addition to existing ones in Indonesian, Tagalog, Urdu, Japanese and Thai.

Another round of e-bill promotion was launched with a one-off incentive of HK\$30 in 2011, which successfully attracted 11,000 new e-bill subscriptions.

With the growing popularity and penetration of smart phones, an iPhone App, "HK Electric Low Carbon App", was launched in 2011. The App provides access to Account-On-Line Service, 24-month consumption records, registration for e-bills, an energy calculator for the home and the office, energy efficiency information as well as low carbon recipes.



We launch a new App for iPhone users to go low carbon, with customer services online and interesting ideas and smart tips to be a green citizen.



Electric Kitchen

We opened an Electric Domestic Kitchen Centre in April 2011, with the aim of promoting the benefits of cooking with electric appliances. The centre displays kitchen models from luxury, superior to standard to suit individual lifestyles.

The luxury kitchen, equipped with an intelligent system, uses the most fashionable and advanced electric appliances and heat pump system. Users can monitor the energy usage of electric appliances and operate them simply with tablet PCs or touch screens. The superior kitchen shows how electric cooking perfectly blends with an open kitchen design, while the standard kitchen demonstrates how electric appliances can easily fit in a home.

Through the "i. e. Kitchen" at the biennial International Exhibition of Food & Drink, Hotel, Restaurant & Foodservice Equipment, Supplies and Service (HOFEX) in May 2011, HK Electric introduced a series of intelligent and eco-electric commercial kitchen equipment to help the local catering industry improve operations and modernise kitchen management.



We showcase an A-list intelligent and eco-electric commercial kitchen at HOFEX that keeps chefs in awe.

The intelligent systems were able to monitor a commercial kitchen's equipment and work environment to improve energy efficiency, assist in food quality control and operational management. The intention was to help the catering industry increase competitiveness, improve employees' occupational health and safety, and upgrade food preparation and kitchen management.

HK Electric's Home Management Centre, in addition to organising cooking and interest classes, has also been active in extending care to the community. Cooking workshops were held at the Centre for ethnic minorities and low income families, and a bazaar booth was set up for the New Life Psychiatric Rehabilitation Association. Contests were held for students and the public to try out electric cooking.



A group of Nepalese ladies learn the skills of making rice dumpling at a workshop organised by the Home Management Centre.

Customer Service Awards

In recognition of our continuous efforts in service excellence and outstanding achievements in the service industry, we received a number of awards from reputable external organisations. These include 2011 Service Retailer of the Retail (Services) Category by Hong Kong Retail Management Association, Best SME's Partner Award by The Hong Kong General Chamber of Small and Medium Business, awards under the Hong Kong Call Centre Association Awards 2011, and Customer Relationship Excellence Awards organised by the Asia Pacific Customer Service Consortium.