

As we increase gas-firing capacity we also move forward with plans to strengthen the security of our gas supply and secure more competitive prices.

# PROGRESS TOWARDS A GREENER ENERGY FUTURE

In 2016, HK Electric maintained its excellent track record in customer service, supply reliability and environmental performance. At the same time, it made systematic investments to move towards greener fuels to further reduce emissions in the future.

During the year, we met our promise to provide affordable power to our customers by reducing tariffs in response to soft fuel prices, after freezing them for the two preceding years. We fulfilled our obligations to the holders of our Share Stapled Units by achieving steady returns and stable distribution.

# **OPERATION REVIEW**

In 2016, our customer base increased slightly from 572,000 in 2015 to 575,000, driven by the residential and commercial sectors though electricity sales decreased by 0.8% from 10,879 million kWh in 2015 to 10,792 million kWh. As a result of a decline in international fuel prices, combined with operating efficiencies, we were able to reduce net tariffs for all customers by an average of 1.1% or 1.5 cents per unit of electricity in 2016.

The reduction in electricity consumption in Hong Kong in 2016 was partly due to milder weather compared to the record-breaking temperatures during the summer of 2015, as well as the result of various energy efficiency and conservation efforts undertaken across the community.

Oil prices reverted the falling trend in the preceding years and started to rebound in 2016. Coal prices on the other hand underwent significant adjustments. We are planning ahead to minimise the impact any potential long-term increase in the price of natural gas will have on tariffs, at a time when our dependence on this fuel will also increase.

We actively engaged with the Government on discussions through the year to determine the future development of the electricity sector in Hong Kong after the expiry of the current regulatory period. Respondents to a 2015 public consultation exercise shared our view that the current Scheme of Control arrangement had generally worked well to achieve the energy policy objectives, enabling reliable power supply at an affordable price. Respondents agreed that going forward, the current contractual agreement should be maintained with rate of return at the current level of 9.99% to provide the necessary incentive for power companies to make investments. The community did not see a need to introduce competition for the sake of bringing in choices.

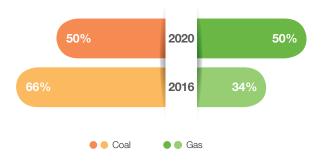
# REALIGNING THE FUEL MIX TO YIELD LONG-TERM EMISSIONS BENEFITS

In 2016, HK Electric progressed with several key initiatives in support of the Government's fuel mix target, which mandated that the proportion of natural gas in the fuel mix should increase to about 50% in 2020.

The first of these was the installation of the new L10 gasfired combined cycle generating unit, which has entered the construction stage. Combined cycle generation technology is one of the cleanest, most popular and efficient ways available in the world today to generate electricity with fossil fuels. The new L10 unit, with a high efficiency, can generate more power and reduce fuel costs when compared with the older gas-fired unit at Lamma Power Station (LPS).

In September 2016, the Government approved the construction of L11, another new gas-fired combined cycle generating unit with an installed capacity of 380 MW to replace an ageing gas-fired unit. The two new units are scheduled for completion in 2020 and 2022 respectively and will jointly improve HK Electric's gas-firing generation capacity to about 55% of total output by 2022.





The city's carbon intensity will continue to be tightened as Hong Kong joins the worldwide move against climate change following China's signing of the Paris Agreement made at the UN Climate Change Conference (COP 21). In this context we will continue to accelerate our adoption of natural gas-firing capacity and reduce our use of coal, as we plan ahead for the long-term development of LPS.

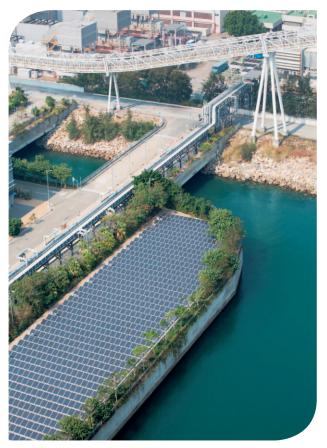
# UPGRADING THE RELIABILITY AND AFFORDABILITY OF NATURAL GAS SUPPLY

As we increase gas-firing capacity we also moved forward with plans to strengthen the security of our gas supply and secure more competitive prices. Importing gas via oceanic routes is a practical and attractive option.



Plans are in place for Lamma Power Station to increase its gas-firing capacity progressively.

In 2016, HK Electric and CLP jointly began an Environmental Impact Assessment (EIA) as part of the overall feasibility study to construct an offshore liquefied natural gas (LNG) terminal using floating storage and regasification unit technology, to receive LNG from overseas. The terminal will provide HK Electric with direct access to and enhance bargaining



HK Electric's solar power system helps reduce carbon footprint.

power in the international market for gas supplies. The EIA is scheduled to be completed at the end of 2017 and subject to timely Government approvals the terminal will be constructed and commence operations in 2020.

# ACHIEVING OPTIMISED GENERATION PERFORMANCE

Gas-fired generation accounted for over 33% of HK Electric's total electricity output in 2016 with coal-fired generation accounting for the remainder. Natural gas was sourced mainly from Australia and Qatar while low-sulphur coal came from Indonesia, Russia and Australia. During the year, plant availability at LPS stood at 85.6%.

LPS operates eight coal-fired units, two gas-fired combined cycle units and five oil-fired open cycle gas turbine units. This is supplemented by Lamma Winds, a commercial-scale wind turbine and a solar power system consisting of 8,662 thin-film photovoltaic panels.

Emissions reduction is a strong focus area for the Government and targets are constantly being tightened. Our performance continued to achieve or surpass statutory requirements. In October 2016 the Government published Technical Memorandum no. 6 (TM6), which set more stringent emission allowances for the electricity sector from 2021 onwards. As compared with the emission allowances for 2020 set under the Technical Memorandum no. 5, TM6 will further tighten emissions of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and respirable suspended particulates (RSP) by 8%, 2% and 10% respectively for HK Electric. We

#### THERMAL IMAGING SYSTEM AND CARBON MONOXIDE DETECTION AT COAL BUNKER

An infrared thermal imaging system comprising 15 infrared cameras and 15 normal vision cameras was installed at the coal bunker floor at Lamma Power Station for online monitoring of the area. The system will provide early warning of any incipient fire incidents and also monitor the coal bunkers and conveyors for any anomalies. Additionally, a carbon monoxide detection system was installed at the coal bunkers for early detection of any smouldering coal inside the bunker. These early warning alarm signals allow for timely and appropriate actions to tackle the "hot spots" inside the coal bunkers, significantly enhancing safety.



# **OPERATION REVIEW**



Acoustic sensors installed to enhance the safety infrastructure of Lamma Power Station.

are confident of achieving these targets with the increased gas-firing capacity now under construction, as well as through our range of emissions control equipment and measures.

The fire and gas-leak detection system of the gas receiving station at LPS was upgraded to enhance security of supply to the two existing gas-fired combined cycle units, including the installation of open-path gas-leak detectors, acoustic sensors, thermal image cameras and closed circuit television. Further modifications will be carried out in 2017. The modernisation of the water supply systems initiated in 2014 were progressing according to schedule.

The company's 1-MW solar power system and the iconic Lamma Winds generated 979 MWh and 492 MWh of electricity respectively in 2016. These two renewable energy systems together cut carbon dioxide emissions by 1,230 tonnes in 2016.

# WORLD-CLASS STANDARDS OF NETWORK RELIABILITY

To deliver electricity from LPS, the wind turbine and solar power system to customer premises, HK Electric operates a transmission and distribution network of 6,233 km of underground and submarine cables. The system is monitored and controlled by a state-of-the-art computer system at the System Control Centre. The company operates a year-round programme of proactive maintenance and upgrades to ensure safe, secure and affordable power supply for customers.

In 2016 HK Electric once again attained a supply reliability rating of over 99.999%, a record maintained for the 20th consecutive year. The average unplanned customer minutes lost per year has been less than one minute since 2009. We successfully achieved a better performance in average supply availability, appointment punctuality and connection and supply performance compared with the set benchmarks, qualifying for financial incentives under the Scheme of Control arrangement.

We continued to expand the application of an advanced online partial discharge detection system to monitor equipment performance in primary stations and cable diagnostic techniques to identify weak components in the cable network, successfully averting two potential transmission switchgear faults and detecting 16 potentially faulty 11 kV cables.



Proactive network upgrade and maintenance is key to HK Electric's high reliability rating.

Two sophisticated real-time computer systems, namely, the Energy Management System (EMS) and the Distribution Management System (DMS) with smart grid features control and monitor the company's generation, transmission and



MTR's new South Island line runs on HK Electric's power infrastructure.

distribution systems. A comprehensive system upgrade including the integration of next generation features was conducted on both EMS and DMS. User acceptance testing is under way and the upgrade will go live in 2017.

The Hong Kong Mass Transit Rail (MTR), an important customer of HK Electric, is steadily expanding its rail network to support the economic and social development of the community. An important milestone in this regard was the launch of the South Island line in December 2016, for which we provided the requisite power supply infrastructure. In addition, we are on schedule with a number of electric infrastructural projects associated with the upcoming Shatin to Central Link (North-South line), with energisation set for 2020. 2016 also saw the completion of staged replacement of two 132/33 kV 40 MVA old oil-immersed transformers at Admiralty Substation with modern 50 MVA gas-insulated transformers. The upgrade increased transformer capacity, bolstered supply reliability and enhanced operational safety. Proactive maintenance and a calendar of replacement of network equipment is an essential part of our approach to uphold supply standards. During the year, older gasinsulated switchgear was replaced with new compact switchgear, along with associated cabling work, at the North Point 132 kV Switching Station. An aged shunt reactor at Nam Fung Road was replaced with a new 275 kV 100 MVAr shunt reactor in April 2016.



North Point Switching Station is upgraded with new compact switchgear.

# BUILDING AUTHENTIC CONNECTIONS WITH CUSTOMERS

HK Electric has pledged itself to a comprehensive set of 18 customer service standards. All of these were once again achieved or surpassed in 2016. The average waiting times for telephone enquiries and counter services at the

# CUSTOMER SERVICE RECOGNITION THROUGH "MYSTERY SHOPPER" AWARD





HK Electric places great importance on understanding its customer service performance. We participate in the Mystery Shopper Programmes organised by Hong Kong Retail Management Association and Hong Kong Call Centre Association to gauge our frontline service level and benchmark our position in the service industry.

In 2016, HK Electric attained the highest score among all participating brands in the Mystery Shopper Programme for the second year running and won the highest honour of the programme.

# **OPERATION REVIEW**

Customer Centre were less than 9 seconds and 3.5 minutes respectively. Customer commendations once again reached a record high.

Listening carefully to customer feedback and acting on it is central to creating authentic connections with customers. To do this, HK Electric gathered data throughout the year through a range of satisfaction surveys. In 2016 the average satisfaction index after a service interaction was 4.5 on a 5-point scale. We also ran Mystery Shopper and Mystery Caller programmes to gauge frontline performance and benchmark ourselves against other organisations, with encouraging results.

To address the needs of technology and mobile-savvy consumers, the customer web portal was revamped, incorporating smartphone and tablet friendly designs. We also launched the Electronic Bill Presentment and Payment Service, allowing customers to receive e-bill summaries and pay their bills through internet banking. A QR code was incorporated into e-bills to enable customers to pay conveniently at popular convenience stores. Online accessibility was enhanced with a webpage with important publications in eight regional languages as well as a series of videos with sign language for the benefit of those with hearing impairments.

Facilities at Customer Centre were refurbished to provide better service for different customers in need. The enhancement included a dedicated wheelchair friendly counter and automatic door at building access.

Convenient mobile payment options launched for the convenience of tech-savvy customers.





The "Smart EV, Smart Charging" seminar encourages electric vehicle use.

# ELECTRIC VEHICLES FOR A CLEANER COMMUTE

The use and promotion of electric vehicles (EVs) have been an important focus for HK Electric. 2016 saw a significant increase in the broad-based use and promotion of EVs across Hong Kong. To encourage and facilitate this trend, we launched a series of initiatives including an online tool that generates tailor-made preliminary proposals on the installation of EV charging facilities at multi-storey buildings, real-time updates on the occupancy of HK Electric's charging stations and a trial system to book slots at EV charging stations. During the year, 39 buildings used the company's services to install charging infrastructure on their premises.

Free charging at HK Electric's charging stations has been extended to end 2017. The company's EV standard charging stations at Star Ferry Car Park and Tin Hau Car Park were upgraded to medium charging stations with dual-mode chargers in December 2016 to provide consumers with shorter charging times. The other four EV standard charging stations will also be upgraded progressively to quick charging stations in 2017. Three new multi-standard quick charging stations are being erected progressively in 2016/2017 to further expand the quick charging network in Hong Kong.

HK Electric is committed to increasing its use of EVs to help improve roadside air quality and we give priority to EVs when expanding or upgrading our own fleet. At end of 2016, we operate 107 EVs, representing over 37% of the fleet. EVs accounted for 36% of the company's total mileage during the year, and helped reduce fuel consumption by 19% or 35,979 litres.

## **OFFICIAL ENERGY PARTNER FOR FORMULA E**

Zero-emission EVs are gaining widespread acceptance across Hong Kong. This interest culminated at the first Hong Kong ePrix, staged at the Central Harbourfront on 8 and 9 October 2016. The event provided a unique opportunity for Hong Kong people to appreciate both the speed and performance of zero-emission EVs powerful enough to make it to the racing circuit.

As the official energy partner, HK Electric provided Hong Kong ePrix with safe, reliable and clean electricity supply as well as power-related technical advice. We also offered electricity-related technical support and free charging for EVs taking part in the event. The success of the event increased recognition for HK Electric's consistent support of EVs to curb roadside emissions.



# MINIMISING OUR IMPACT ON THE ENVIRONMENT

We firmly believe that our long-term commercial success and our ability to preserve the environment and living conditions of our community go hand in hand. In our efforts to conserve the environment we educate, engage and empower our employees, promote public environmental awareness, provide a platform for green innovation, and strive to introduce positive environmental changes in the Hong Kong community.



Reservoir for recovered waste water and rain water at Lamma Power Station.

We run a green operation at every step of the energy value chain.

On the generation front, the reliability of the generation units stood at a very high level. Emissions were monitored and controlled by state-of-the-art pollution combating equipment, including flue gas desulphurisation plants, low  $NO_x$  burners and high-efficiency electrostatic precipitators. Data of flue gases'  $SO_2$ ,  $NO_x$  and opacity were monitored and reported real-time to the Government.

Ash and gypsum are by-products of electricity generation and are reused for industrial use. More than 250 m<sup>3</sup> of garden waste was converted into nutrient-releasing mulch during the year and over 102,000 m<sup>3</sup> of rainwater and wastewater was reused, cutting down on water consumption. 93 LED lights were retrofitted and the heating, ventilation and air-conditioning systems were upgraded at LPS, saving about 404,360 kWh of electricity over the year.

Across the transmission and distribution network we once again achieved excellent performance under our Environmental Management System, which received ISO 14001:2015 certification. The implementation of 21 environmental management programmes including fuel savings and the Wastewi\$e Scheme enabled savings of over HK\$2 million in 2016 as compared with baseline figures.

## **OPERATION REVIEW**

We continued to provide free energy audit services to non-residential customers to help them identify energy-saving opportunities at their business premises. Over 50 audits were carried out in 2016, identifying opportunities to reduce energy consumption and cut costs.

The Smart Power Fund was launched in 2014 to encourage and help improve the energy efficiency of Hong Kong's older buildings by offering subsidies to help implement energy efficiency projects. In 2016, eight applications for energy efficiency improvement were approved, including replacements of lift driving systems, public lightings and air-conditioners with more efficient types. This brings the

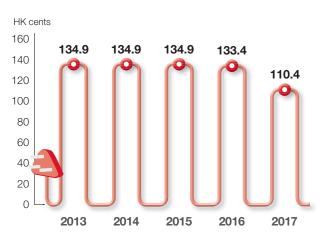


Improving old residential buildings' energy efficiency with the support of the Smart Power Fund.

total number of approved applications to 29 since fund inception. We have doubled the upper limit of the subsidy to HK\$400,000 from 1 January 2017, in order to help more eligible premises implement energy efficiency initiatives.

As a result of a reduction in the fuel clause charge following lower than expected fuel costs as well as Government refunds on rents and rates, we are pleased to be in a position for the second year to reduce tariffs for all our 575,000 customers. With effect from 1 January 2017, net tariff has been reduced by 17.2% to reach 110.4 cents per unit of electricity. We have been steadily making electricity even more affordable for our customers over the past few years: tariffs were frozen for two years in 2014 and 2015, and successive reductions implemented in 2016 and 2017.

#### Net tariffs 2013-2017



Our top priorities in the immediate term are to engage with the Government to bring the Scheme of Control review to a successful conclusion, the smooth completion of our two major infrastructural projects, L10 and L11, and to secure an affordable alternative supply of natural gas. Over the longer term we will press ahead with a phased programme of replacement of ageing equipment at LPS.

Our strong financial footing, expertise, customer relationships and focus on delivering value, position us well for success in the coming years.



Construction in full swing for the new L10 gas-fired generating unit.



# A SUSTAINABLE FUTURE

As a major player in Hong Kong's business scene whose activities touch the lives of half a million customers, HKEI is extremely sensitive to the effect its activities have on the community and the environment. With sustainability at the heart of our values, we take care not only of our SSU holders, but also of our employees, customers, the vulnerable in society as well as the environment, helping to create a better community for future generations.

Our values and efforts on this are spearheaded by the Corporate Social Responsibility (CSR) Committee, a body comprising the Chief Executive Officer and senior management representatives. We set objectives for ourselves, and measure and track our sustainability performance to facilitate continuous improvement.

# ENGAGING WITH OUR STAKEHOLDERS

The Customer Liaison Group (CLG) is our primary channel for customer interaction. During the year, one meeting and one visit were held to inform members of the company's latest developments while forging stronger ties with them.

Communication with employees is formalised through the Joint Consultation Committee which held 20 meetings in 2016 for management to hear views and suggestions from employees. Besides, 54% of employees participated in an online employee engagement survey on a voluntary basis and 29 focus group meetings were held involving a total of 12% of employees to further understand their specific concerns and to gather their opinions.

Our five District Liaison Teams comprising representatives from various divisions in the company continued to lead our presence at the community level, participating in local activities organised by various District Councils, welfare organisations and stakeholder groups. We also engaged elected representatives to the Legislative Council and District Councils on an ongoing basis.

SUSTAINABILITY REVIEW

HKEI

# SUSTAINABILITY REVIEW



Filming in progress at LPS for a National Geographic documentary on climate change, with Mr. Wan (right) introducing to Hollywood actress Sigourney Weaver (3rd from right) HK Electric's plans to reduce emissions.

Our stakeholders appreciate the opportunity to visit our facilities to experience first-hand how electricity is generated and supplied to our customers. During the year, more than 250 visits were organised for various stakeholders including representatives from Government and NGOs, SSU holders, professional bodies, schools, community leaders and media. This included 24 visits to LPS, our primary generation facility, for more than 1,100 HKEI SSU holders and friends. These visits allowed us to share information about our operations and sustainability initiatives with our stakeholders.

# OUR PEOPLE, CULTURE AND POLICIES

We are proud to be an equal opportunity employer. We recruit, recognise and reward individuals based only on merit, performance, skill and contribution.

We have 1,790 permanent employees across management and operational roles of which 17% are female. We are proud of the long average tenure of our employees, with a voluntary turnover rate of 3.4% in 2016.

HK Electric ranked seventh in Randstad's Top 10 Most Attractive Employers and was listed as one of the "Happy Companies" in Hong Kong. Apart from receiving the Caring Company Logo by The Hong Kong Council of Social Service, the company also received three awards under the 2015/16 Family-Friendly Employers Award Scheme organised by the Home Affairs Bureau and the Family Council as well as the Employer of Choice Award and the Employee Engagement Award from JobMarket of Sing Tao News Corporation Ltd.

#### Attracting the best talent

We strive to recruit candidates who are talented, passionate and share our values through a process that is fair and reflects our commitment to equality. Working with local universities we recruited 15 graduate trainees during the year, offering them not only employment but also well-rounded training and orientation. To better support their learning and development we initiated a new support mechanism comprising buddying and mentorship.

Our industrial placement and attachment schemes allow students of relevant degree and diploma courses to gain on-the-job experience to better prepare them for a career in the industry. The schemes offered opportunities to 20 students during the year. An internship programme was introduced to Form 5 students from secondary schools in Yuen Long to stimulate their interest in engineering.



Graduate trainees show off their creative skills.

To remain an employer of choice, we review remuneration annually and benchmark against comparable organisations in relevant industries. In 2016, we continued our "pay-for-performance" policy that appraises and rewards our employees on the basis of overall performance including initiative, effort and achievements.

The opportunities we provide during recruitment, training, career progression, compensation, and benefits are completely indifferent to age, gender, physical or mental state, marital or family status, race, colour, nationality, religion, political affiliation or sexual orientation. Discrimination, harassment, vilification and victimisation are not tolerated under any circumstances.

## Enhancing the skills and abilities of our team

We offer systematic and lifelong career development encompassing personal, professional and managerial skills. A range of development opportunities is offered to all staff, with an average of 43.1 training hours for each employee in 2016.

#### Type of employee training provided in 2016



Our successful trainee technician programme became the first such initiative to gain the accreditation of The Hong Kong Institution of Engineers, meeting the requirements of the Formal Training Scheme to Associate Membership of Electrical Engineering. The successful accreditation has enhanced the employer brand and is likely to attract more promising candidates in future.



HK Electric's trainee technician programme receives industry accreditation.

We offered learning and development opportunities to 37 young graduates under our graduate trainee and trainee technician programmes. These included technical training, team building, site visits, personal effectiveness and other soft skills.

Our workforce spans over five decades in age and young recruits have a different approach when compared to more senior staff members. To bridge the gap a multi-generation communication series was launched in 2016, including workshops for 256 managerial and supervisory staff as well as 120 trainees and young engineers to enable them to work in close partnership with one another.



Team building activities are part of soft skills training.

# SUSTAINABILITY REVIEW

To fill the leadership pipeline, we have in place a programme which offers development initiatives for high-potential employees including project exposure, job rotation, coaching and mentorship as well as classroom training.



Subject experts share their knowledge with students of the HK Electric Institute.

# HK Electric Institute: from strength to strength

2016 was another fruitful year for the HK Electric Institute. 46 training modules amounting to 5,652 training hours were delivered to 1,764 participants by subject experts including retired colleagues and other external and internal lecturers. 22 modules were delivered by overseas experts. Apart from technical topics, commercial topics were also covered. To further fine-tune course contents a comprehensive review of the syllabus of modules was conducted and new courses were introduced.

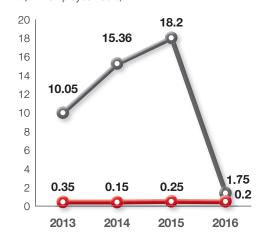
Following the Memorandum of Understanding between HK Electric Institute and The Hong Kong Polytechnic University in end 2015, lecturers from the two institutions jointly taught a subject on High Voltage Engineering in two consecutive semesters in 2016 to over 140 master degree students of the university. Encouraged by this success the HK Electric Institute will continue to explore opportunities with other educational institutions to prepare students for a possible career in the power industry. The Institute further formalised its structure with the appointment of office bearers including the Chancellor, Steering Committee Chairman and Dean. The formal structure will add further weight to the curriculum and teaching of the Institute.

# EMPLOYEE HEALTH, SAFETY AND WELLNESS

We take a whole-person perspective to employee welfare as happy, healthy individuals make productive, motivated employees. We make it a priority to ensure the well-being and safety of everyone working for us and with us. "Health and Happiness" formed the theme of our wellness campaigns in 2016, emphasising the importance of physical and emotional wellness through various approaches including a variety of seminars, health talks, physical fitness training and recreational activities.

LPS achieved 156 days of continuous operation without lost time injuries in the year. Employees working on the transmission and distribution network completed the entire year without lost time injuries and have now achieved a record six consecutive years with zero lost time injuries.

#### Lost Time Injury Frequency Rate and Lost Time Injury Severity Rate (per 200,000 employee-hours)



Lost Time Injury Frequency Rate
Lost Time Injury Severity Rate

LPS continued to identify areas to further improve workplace safety, broadening the scope of its on-site hard hat and safety goggles policy. Its annual "Health and Safety Week" was held in September 2016, with the participation of not only staff and management but also key contractors. During the year, LPS and the transmission and distribution unit secured the OHSAS 18001: 2007 Occupational Health and Safety Management System Certificates issued by the Hong Kong Quality Assurance Agency.



*Employees participate in a "Health and Happiness" wellness campaign activity.* 

A range of health and safety training and promotion campaigns ran throughout the year in various parts of the company. A Health and Safety Forum was held in March 2016 to heighten the safety awareness of our employees. Safety Excellence Scheme awards were distributed to recognise and encourage employees' collective contribution to safety.

The findings of a 2015 company-wide survey to assess our Safety Climate Index formed the basis of an action plan to further enhance our safety culture. These were successfully implemented in 2016. We also conducted a review of the current health and safety policy in 2016 and had revised and further improved the policy. We continued to follow the principles of the 55 Good Housekeeping programme for the workplace, expanding its scope within the company. The successful Work Safe Behaviour programme, which has been implemented since 2011, identified and rectified 31 safety observations in 2016 with "Electrical Work Safety" as one of the themes during the year covering both employees and contractors.

It is those who work with us every day who are most aware of our ups and downs. A Good Neighbour Club with over 100 employees received training and support to help colleagues cope with emotional or stress issues. Talks on physical and psychosocial well-being were conducted for more than 440 participants. "Let's Exercise", an initiative to get employees building their physical strengths was launched.

# INVOLVEMENT IN THE COMMUNITY

We understand that meaningful changes cannot be brought about overnight, nor by the efforts of just a few. It is the result of patient, systematic efforts over the long term by a committed team of people. With this in mind we run a calendar of corporate social responsibility activities across the year, supporting selected causes over the long term.

In 2016, HK Electric's team of volunteers celebrated its 12th anniversary. The 1,120-strong team provided 5,647 service hours across 85 services supporting vulnerable groups and promoting environmental awareness. In its 12 years the team has provided 54,285 service hours in total.

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#### **GOOD NEIGHBOUR FUND PROGRAMME**

The Good Neighbour Fund Programme encourages employees to reach out and care for the needy in the community with their own community initiatives. In 2016, funding was provided for two project teams. Under the Programme, home visits were paid and tea gatherings were organised by a project team for retired employees. This was also an opportunity for them to learn from the stories of their seniors. For another project team, "The Inspiration", initiated a collaborative project with a local NGO to support the stroke patients by creating short videos of their rehabilitation journeys. In addition, student volunteers were recruited to take wedding and family photos for the elderly couples and the underprivileged groups.



## Participation in volunteering activities



We remain focused on our community efforts by caring for the environment and supporting the elderly, while diversifying our scope to serve the under-privileged and minority groups in mentorship and mock interview programmes; carnivals, sports and music events and camping activities.

# **Caring for the elderly**

With more people living longer lives there is an increasing need for the community to support the frail and elderly who are less able to manage their daily lives independently, while also offering them opportunities to pursue meaningful activities.



Volunteers provide practical support to single elderly through CAREnJOY visits.

Thanks to the partnership from the four District Councils on Hong Kong Island, eight NGOs and two rural committees on Lamma Island the CARENJOY programme entered its second year of service. CARENJOY ambassadors visited about 1,000 elderly individuals living on their own, WORLD ENVIRONMENT DAY – STEPPING UP TO THE CHALLENGE





HK Electric involved employees and their families in the 43rd anniversary of the United Nations' World Environment Day on 5 June 2016. A one-month campaign encouraged participants to take a pledge to go green concerning the four basic necessities of life: apparel, diet, living and transport. Employees were encouraged to take the stairs rather than elevators, and to use public transport as much as possible to cut carbon emissions. More than 1,000 colleagues participated in the event.

helping them out with shopping for bulky essentials. The programme expanded to offer talks on fire safety and tips on the safe and efficient use of electricity at home. Six sessions were held for more than 400 participants during the year.

Co-founded by HK Electric and The Hong Kong Council of Social Service, the University of 3rd Age (U3A) celebrated its 10th anniversary of bringing senior citizens together to pursue lifelong learning. Since its founding in 2006 the network has organised more than 5,000 courses, providing more than 86,000 learning opportunities. The network now comprises 48 self-learning centres throughout the territory.

In this milestone year U3A took the opportunity to evaluate its performance and achievements over the past decade and plan for improvements in the future. Overseas experts addressed the organisation at a seminar and shared their views on how retirees could continue serving the community through creative platforms.

## **GREEN HONG KONG GREEN**





The Green Hong Kong Green programme continued to provide monthly eco-tours of eight eco-heritage routes on Hong Kong and Lamma Islands, running 111 tours for about 1,400 participants. The tours aim to engender an appreciation for the wild flora and fauna of Hong Kong. A series of training activities were conducted for ecotour leaders to enhance the standard of the tours, while conservation activities such as mikania removal, tree caring and "No Hill Fire" appeals were organised to protect the natural greenery. Green Hong Kong Green Eco-tour Festival 2016 was a day-long event with tours on all eight routes, as well as a carnival featuring workshops, performances and talks to enhance environmental awareness.

In May 2016, the Green Hong Kong Green programme was named an "Outstanding Partnership Project" by The Hong Kong Council of Social Service in recognition of its positive impacts on the environment and society.

HK Electric continued to promote energy efficiency and safety in the community with the support from Hong Kong Housing Authority and Hong Kong Housing Society, visiting vulnerable elderly to inspect fixed electrical installations and replace any substandard plugs, sockets and wirings. A half-day "Energy Efficiency" programme was conducted for the visually-impaired students of Ebenezer School in the Smart Power Centre and Home Management Centre (HMC) at Electric Centre.

# ENVIRONMENTAL STEWARDSHIP

We are committed to protecting the environment and supporting sustainable development in every aspect of our day-to-day and major business activities. We comply fully with all applicable laws and regulations and endeavour to integrate environmental considerations into all aspects of our business operations. To do this, we put great emphasis on conservation and invest substantially to resolve, alleviate and minimise the impact arising from our operations on the environment.

As an energy consumer ourselves, we conducted carbon audits for our main office buildings to ensure responsible energy consumption. In accordance with our pledge in the Energy Saving Charter on Indoor Temperature, in 2016 we continued to maintain average indoor room temperature of our office buildings at 24-26°C in summer. Electricity consumption reduced by 2.2% in 2016 compared to 2015 levels.

We also consistently use the 4R (reduce, reuse, recover and recycle) model to minimise our use of resources. Initiatives in this area included promoting paperless billing and payment to reduce paper consumption, rainwater/wastewater reuse in power station, and recycling of industrial, commercial and office waste. Consumption of water and paper in our main office buildings reduced by 0.9% and 10.7% respectively from 2015 levels. LPS has been running an annual Environmental Management Programme (EMP) suggestion scheme for 12 years. In 2016, six EMPs suggested by employees were selected for implementation or follow-up.

We participate in Hong Kong wide initiatives to recycle waste, including the "Program on Source Separation of Commercial and Industrial Waste" and the "Hong Chi Jockey Club Glass Bottle Recycling Project". We reduce food waste at source in our canteens by a system of advance booking of meals. We also encourage waste separation and the use of food waste eliminators to minimise disposal volume.

## SUSTAINABILITY REVIEW

#### **Energy-smart and green campaigns**

We continued to educate the public in particular younger generation on energy efficiency and low-carbon lifestyle under the annual Smart Power Campaign whose theme in 2016 was "Be Green, Be Happy". To engage Hong Kong's children the campaign reached out to about 350 schools under the "Happy Green School" scheme. Talks, visits to the HK Electric Smart Power Centre, LPS and the Lamma Winds, green reporters training classes and eco tours were offered during the year. A new "Happy Green Community Ambassador" programme was launched to offer selected students with opportunity to shadow our engineers in performing environmental protection work.

In 2016, a total of 45 mini energy efficiency workshops were conducted to promote smart and efficient use of electricity to various stakeholders including hospitals, professional institutions, business partners, financial institutions and academia. Four energy-efficiency and electrical safety talks were also conducted for community centres in the year.

Twelve proposals were selected to receive up to HK\$50,000 in funding along with expert advice under the 2016 "Green Energy Dreams Come True" competition. The competition encouraged students to submit green energy project proposals to encourage energy efficiency and the application of renewable energy.

HK Electric supported various programmes organised by local green groups including WWF's Earth Hour 2016; Green Walk and Green Heroes 2016 organised by World Green Organisation, Green Power Hike organised by Green Power; Eco Rangers by The Conservancy Association and International Coastal Clean-up by Green Council.



Volunteers participating in "Clean Up the World in Hong Kong".



Smart Power talks help spread the green message to schools.

In its last year of operation, the HMC conducted 943 cooking and special interest courses for 10,108 students and arranged 7 school visits to promote electric living as a greener and healthier choice for consumers. The HMC suspended operation in end December 2016 in order to make better use of company resources.

# SUSTAINABILITY PERFORMANCE AND DISCLOSURE

HKEI published its 2015 Sustainability Report on 6 April 2016. The report was prepared in accordance with GRI's G4 Sustainability Reporting Guidelines and the associated Electric Utilities Sector Disclosures as well as Hong Kong Stock Exchange's ESG Reporting Guide, with external independent assurance. HKEI was included in the Euronext Vigeo World 120 Index.

HK Electric implements proactive business strategies to combat climate change and enhance transparency in information disclosure. As a participant in the Carbon Disclosure Project, HK Electric has been reporting greenhouse gas emissions along with our efforts in reducing them on an annual basis.

We are encouraged by the results of our sustainability initiatives in past years but believe that sustained efforts are still needed to continue to effect meaningful change in the long term. We remain steadfast in our commitment to sustainable business practices going forward.

#### Wan Chi Tin

Chief Executive Officer Hong Kong, 21 March 2017