

# Serving Hong Kong

We

Provide  
a Reliable  
Electricity  
Supply

Deliver  
World-class  
Customer  
Service

Ensure Safety  
for Customers  
and the  
Community

At HK Electric, we strive to earn the trust of our customers and the community by providing them with world-class electricity service, while giving back to society. This commitment is upheld in our Quality, Customer Services, and Health and Safety Policies, as well as in our caring culture.

Our goal is to exceed customer expectations and achieve total customer satisfaction. As a customer-focused, service-oriented company, we integrate quality considerations into all aspects of our business under quality and asset management systems that conform to ISO 9001 and ISO 55001 standards. Through these systems, we aim for continuous improvement in the way we serve customers.

All health and safety aspects are under the governance of our Health and Safety Board chaired by the Managing Director. We operate under health and safety management systems in line with OHSAS 18001 standard and strive to achieve an accident-free operation. We also do our utmost to operate safely and minimise risks to the community, as well as advising our customers on the safe use of electricity.

As part of our commitment to the community, we engage a variety of stakeholder groups and build social capital through the programmes we offer. The community investment strategy we have adopted helps us monitor key social issues and concerns, set priorities and allocate resources to address these issues. For this reason, we have chosen green education and elderly care as the focuses of our community service initiatives. The former has been discussed in the “Sharing the Same Planet” chapter and the latter is elaborated in this chapter.



Care for the  
Community



## Shared Concerns

### Reliable Electricity Supply

- A reliable supply of electricity is essential to daily life as well as the economic development of Hong Kong.
- Providing a reliable supply of electricity, however, can be challenging. These challenges include the complexity of developing and maintaining stable generation, transmission and distribution systems, the congested underground infrastructure in Hong Kong and severe weather.

### Customer Service

- Customers expect excellent products and services at reasonable rates.
- HK Electric recognises the importance of providing a safe, reliable, clean and affordable electricity supply, as well as outstanding customer service.
- In meeting customer expectations, HK Electric must acknowledge and serve their needs in a spirit of mutual understanding.

### Safety for Customers and the Community

- Health and safety is a key focus for all.
- To achieve the goal of zero accidents, preparing to meet unforeseeable risks and minimising human errors are essential.
- HK Electric has to make a concerted effort to ensure the safety of its customers and the community at large.

### Care for the Community

- As a responsible corporate citizen, HK Electric recognises the need to contribute to the community.
- HK Electric needs to work with partners in the community to bring in the skills and expertise required to tackle complex social issues such as the ageing population and benefit those in need.

## Provide a Reliable Electricity Supply

Electricity powers our homes, businesses and infrastructure 24 hours a day, every day of the year. In order to provide an uninterrupted supply of electricity to customers, HK Electric has developed a stable transmission and distribution network with advanced control and monitoring features. We also make strategic investments in people, processes, equipment and technology that keep our power system robust and capable of operating under any contingency.

Our reputation for providing a world-class supply of electricity is well founded. In 2016, we achieved a reliability rating of over 99.999%, a record we have maintained since 1997. We have also managed to reduce the average duration of unplanned supply interruptions per customer to less than one minute a year since 2009.

The key to this outstanding performance is the preventive and prudent approach we take in network design, maintenance, upgrades and repairs. To prevent problems from occurring, we monitor our networks around the clock and utilise early detection and advanced diagnostic techniques. Should a high voltage fault occur, we can restore power promptly through remote control facilities.



We make every effort to prevent faults in our network components.

We also monitor the “health” status of critical network components, such as switchgears, transformers, cables, protection relays and remote terminal units. With the specific health indexes we have formulated, we are able to identify components that are likely to break down and carry out timely repairs or replacements.

In particular, we have applied an advanced online partial discharge detection system to all 275 kV and 132 kV gas insulated switchgears at switching stations and continued



Our System Control Centre is equipped with sophisticated computer systems to ensure supply reliability.

to expand the system to our major apparatuses in primary stations. In 2016, we extended the detection system to monitor the conditions of the switchgears in seventeen 11 kV zone substations, and also reviewed and improved the detection system.

During the year, two potential transmission switchgear faults were averted and 16 potentially faulty 11 kV cables were replaced.

To further increase supply reliability and power quality, we continued to upgrade or replace aged network components, including cables, transformers, capacitor switches, circuit breakers and a shunt reactor.

In our computer systems, we began upgrading the sophisticated Energy Management System (EMS) and Distribution Management System (DMS) that control our power facilities. The upgrade, which includes enhanced smart grid features, is expected to be completed in 2017. With the new EMS and DMS, we will be able to maintain a safe, reliable and efficient system operation with lower emissions and a smaller carbon footprint. Also in 2016, we conducted drills for our backup EMS and backup DMS to test their control and monitoring functions.

Other operational improvements are being considered through the Strategic Asset Management and Operational Support Applications (SAMOSA) project commenced in January 2016, which is expected to be completed by 2019. SAMOSA is a strategic, business-led initiative that will help us increase productivity through the optimisation and standardisation of our end-to-end asset management processes, from planning, acquisition and installation to decommissioning.

To strengthen our fuel handling capabilities at Lamma Power Station, we upgraded the fire and gas-leak detection system of the gas receiving station during the year. In 2017, we will segregate the gas supply route to the two existing gas-fired combined-cycle units to enhance supply reliability. For the coal bunkers, we adopted a carbon



monoxide detection system and portable infrared thermal image cameras to identify unwanted coal smouldering that may impose a safety risk and jeopardise our generation capabilities.

We have also been taking a proactive approach to ensure a stable electricity supply under severe weather conditions. Details can be found in the “Sharing the Same Planet” chapter.

## Deliver World-class Customer Service

In a sophisticated city such as Hong Kong, customers expect a reliable, high-quality supply of electricity at reasonable prices. To deliver the service standards our customers deserve, engagement with them is key – it is vital that they feel they are being heard.

### Serving our Customers

To develop a more targeted strategy for serving our customers, we upgraded our Customer Services Department into a new Division in July 2016, as we believe this adds greater value to the expertise we offer in customer relationship management.

In 2016, we continued to meet or surpass all 18 pledged customer service standards. The average waiting times for telephone enquiry services and counter services at our Customer Centre were less than 9 seconds and 3.5 minutes respectively.

Our 24-hour Customer Emergency Services Centre continued to respond in a timely manner to customer requests through voice calls or SMS. In order to provide a more efficient, coordinated service, all customer calls and job records are computerised and made available immediately with the aid of a Service Call Information System. The average waiting time for telephone calls to the Centre in 2016 was 1.5 seconds, surpassing our pledged service standard of 9 seconds.



We provide a one-stop service for SMEs.



Delivering excellent customer service is our mission.

In addition, we made our website, services and publications more widely available for our customers. This included the launch of a mobile-friendly version of our corporate website and online customer service delivery platform, Account-On-Line, in response to the rapid adoption of smartphones and tablets.

For ethnic minorities living in Hong Kong, we added a new language – Hindi – to our existing suite of service pamphlets in Bahasa Indonesia, Tagalog, Urdu, Japanese, Thai, Nepali and Korean.

For hearing-impaired customers, we engaged The Hong Kong Society for the Deaf to produce a series of sign-language videos on energy efficiency, electrical safety and handling power supply interruptions, which are now available on our corporate website and YouTube channel.

Facilities at the Customer Centre were refurbished to provide better service for different customers in need. The enhancement included a dedicated wheelchair-friendly counter and automatic door for building access. Additionally, we continued to welcome visually-impaired customers to visit us with their guide dogs.

In another service enhancement during the year, we joined the Electronic Bill Presentment and Payment platform to provide one more convenient e-channel for customers. Through this channel, customers are able to receive e-bill summaries and pay their electricity bills using their internet banking accounts.

Since customer privacy is a high priority for us, we provide guidelines for our employees on handling personal data. To raise their awareness of the protection of personal data, we supported Privacy Awareness Week 2016 in May and organised a seminar on personal information collection statements and data access requests.



For enhanced security, we implemented a data loss prevention IT platform to strengthen our ability to prevent the unauthorised disclosure of confidential and sensitive personal data.

During the year, we reviewed our Supply Rules and published a new version that aligns with current business practices. We are also revamping our Guide to Connection of Supply to help customers plan and build data centres, as well as EV charging infrastructure. The new version will be published in 2017.

In April 2016, HK Electric once again participated in IT Fest and exhibited at the International ICT Expo to promote our service to the data centre industry. The merits of setting up data centres on Hong Kong Island were featured under four themes: Agile, Reliable, Customised and All-round.

These and other initiatives were widely appreciated by customers. The number of service commendations we received during the year reached a record 1,803, with no complaints on the quality of our electricity supply or related services, reflecting a high level of customer satisfaction.

HK Electric's service excellence was also recognised through a number of awards, such as the 2016 Excellence Award of the Mystery Shopper Programme organised by the Hong Kong Retail Management Association and two Gold awards in the Mystery Caller Assessment Award organised by the Hong Kong Call Centre Association. In the 2016 Web Accessibility Recognition Scheme co-organised by the Office of the Government Chief Information Officer and the Equal Opportunities Commission, our corporate website received the Gold Award in April 2016 for its easy accessibility by the disabled.

## Communication with Customers

To understand and address customer needs, we listen to the feedback and suggestions of our customers through channels including after-service satisfaction surveys, "We Meet on Friday" sessions and the Give-Me-5 customer survey. The average customer satisfaction index in our after-service surveys during 2016 was 4.5 on a 5-point scale.

On an ongoing basis, customers are welcome to give us their opinions through the Customer Suggestion Form on our corporate website, as they are updated about our developments through the quarterly newsletter, HK Electric On-line.

Our Customer Care Managers (CCM) offer account assistance on matters such as billing issues, tariff advice, supply reliability, power quality, demand management and energy efficiency. Through the CCM programme, we also convey the latest service information and collect direct feedback from customers. In 2016, CCMs paid visits to 40 customer sites.

Our Customer Liaison Group comprising 50 members, including customers, district councillors, community leaders and NGO representatives from Hong Kong and Lamma Islands, met with our management representatives in January 2016 to get an update on HK Electric's developments, and share their views and suggestions with us. They also took part in a Green Hong Kong Green eco-heritage tour at Tai Tam in September to understand how HK Electric supports environmental protection and education through promoting eco-tourism.



Orientation meeting for new members of the Customer Liaison Group.

## Affordable Energy

We are committed to keeping our tariffs at a stable and reasonable rate over the long term. Due to lower-than-expected fuel costs, and government refunds for the rent and rates overcharged in the past, we are able to offer two special rebates to all customers and reduce the net tariff for 2017 by 17.2%. This is despite rising operating costs, a drop in electricity sales and an increase in capital expenditure.

With the tariff reduction in 2017, we have frozen our tariff for the two years since 2014 and have also reduced our tariff for a further two years, surpassing our 2013 pledge to freeze tariffs for five years until the end of 2018. However, to help achieve a low-carbon society we will increase the use of natural gas in our power generation from about 33% of the total electricity output at present to around 50% in three years' time. This will substantially increase our fuel costs from 2020, which will create significant pressure on the tariff we charge. Recognising this, we must prepare to minimise the impact of increases in fuel costs on our customers. The proposed offshore LNG terminal will be an option that helps alleviate such impact.

To help make electricity affordable for everyone in the community, we continue to provide concessionary tariff schemes for the elderly, the disabled, single-parent families and the unemployed. We will also continue to provide the Super Saver Discount to encourage energy conservation.

## Ensure Safety for Customers and the Community

Any interruptions to the supply of electricity can have potentially serious knock-on effects in the community. Moreover, with Hong Kong's limited space and dense population, utility infrastructures will inevitably be located close to the community. Accordingly, HK Electric makes a concerted effort to maintain a reliable electricity supply, avoid incidents caused by our operations and limit risks to the nearby community. We also advocate the safe use of electricity. This includes the provision of advice and guidance to customers and other stakeholders on safeguarding power supplies and minimising the risk of electrical incidents.

### A Safe and Dependable Service

Since interruptions to the electricity supply can pose a threat to community facilities such as road traffic control systems, hospitals and building lift systems, we make every effort to deliver a reliable source of power. Please read the previous section, "Provide a Reliable Electricity Supply", for more details.



The Customer Emergency Services Centre provides necessary support for our customers through a 24-hour hotline.

For customers who depend on life support equipment, we can register their individual accounts and take care of their special power supply needs and notify them in advance of carrying out any planned supply suspensions. Drills are also carried out on our supply contingency plans for specific customers. In 2016, we conducted drills for six hospitals.

### Minimising Risks

To minimise safety risks, Lamma Power Station is governed by a Safety Management System conforming to OHSAS 18001 standard. Since the introduction of gas power generation in 2006, we have had a Natural Gas Safety Management System in place that ensures the safe operation and maintenance of the gas facilities and gas-fired generating units.

In addition, we make use of oil-free distribution substations and zone substations that were introduced in the early 1980s and 1990s respectively. Oil-free facilities such as these greatly reduce potential fire hazards related to electrical apparatus, particularly those installed on the upper floors of a building.

We also completed the replacement of two ageing 132/33 kV oil-immersed transformers at our Admiralty Substation with gas-insulated transformers in June 2015 and June 2016. These new transformers have greatly reduced the fire risk in the substation building and surrounding public area.

All contractors and other organisations undertaking construction works near our electricity supply lines can receive relevant information to avoid damaging supply lines that might cause power interruptions or safety incidents. We maintain a dedicated section on our website for this purpose.



For our own facilities, we conduct drills to test our responses to emergency situations such as oil and chemical spills, fire, gas leakages and explosions.

We also arrange public tours of our Lamma Power Station and make home visits to the nearby villagers to foster mutual understanding and alleviate safety concerns.

### Safe Use of Electricity

We continued to promote electrical safety and energy efficiency among our stakeholders in 2016. These included organising 45 mini energy efficiency workshops at our Smart Power Centre for stakeholders such as students, professional institutions, academia, business partners and NGOs. We also held four electrical safety and energy efficiency talks at community centres.

During a half-day energy efficiency event for the visually-impaired students of Ebenezer School in July 2016, we played host to 25 visitors at the Smart Power Centre and Home Management Centre. Our presentations included tips on using electricity efficiently and safely, as well as dealing with power interruptions. In one demonstration, the students could feel how radiant heat was dissipated through the use of low-emissivity window glass that reduces solar heat gain. Other demonstrations included the application of residual-current devices and intelligent power strips.

Throughout the year, we held 15 group tours of our Power Quality Centre to help participants better understand power quality and learn how to safeguard power supply for their critical facilities.

On the Electricity@Home and Electricity@Office sections of our website, we provide virtual energy surveys, as well as useful information on energy efficiency, power quality and safe use of electricity.



Students visit the Smart Power Centre to learn more about electrical safety and energy efficiency.

## Care for the Community

As a company with a strong CSR mission, we work with the local community to put our expertise to good use and lend a helping hand to those in need.

We engage stakeholders on community issues and have established close relationships with many leading NGOs in Hong Kong. Our partnerships with NGO groups enable us to benefit from their social service expertise, while we in turn contribute our professional and technical know-how.



Training is provided for CAREnJOY ambassadors and volunteers to enrich their skills.

### Care for Single Seniors

Other than green education activities mentioned in the "Sharing the Same Planet" chapter, we have chosen elderly care as our other focus for community investment since ageing population is one of the most pressing social issues in Hong Kong. We work with elderly service agencies and community leaders to extend care to the elderly through various programmes.

One of these, "CAREnJOY for the Elderly", promotes mutual support in the community. Senior citizens are recruited and trained to be ambassadors to encourage other elders to join local service centres. The aim of CAREnJOY is to reduce the risks faced by the elderly with limited or no access to community support.

With the continued support of three District Councils on Hong Kong Island, eight NGOs and two Rural Committees on Lamma Island, CAREnJOY kicked off its second year of service in February 2016. The Eastern District Council subsequently joined the CAREnJOY programme, extending our coverage to all districts in our service territory.



Selecting suitable daily necessities for the elderly is an exciting task for volunteers.

Under this programme, two visits are organised every month for HK Electric volunteers, elderly ambassadors and district councillors to care for single elders. During these visits, the volunteers purchased heavy and bulky daily necessities, such as rice and oil, carried out simple electrical inspections and provided tips on electrical safety and efficient energy use at home.

During the year, we visited about 1,000 single seniors on Hong Kong and Lamma Islands, and delivered talks on electrical safety and green electric living to more than 400 elders.

### Learning as a Lifelong Experience

Founded in 2006 by HK Electric and The Hong Kong Council of Social Service, the University of 3<sup>rd</sup> Age (U3A) continued to promote lifelong learning and volunteerism among retirees in Hong Kong.

U3A advocates the principles of self-initiating, self-learning, self-teaching and self-administering for pursuing knowledge, while advocating more social participation to care for community issues. Classes are taught and run by seniors for seniors.

The 10<sup>th</sup> anniversary of U3A was celebrated in March 2016, with nearly 800 U3A students, families and friends attending the ceremony. In May, we organised an orientation day camp under the theme of the "Age-Friendly City", during which we encouraged U3A students to become more involved in social engagement and other elderly-related matters. A seminar was organised on 11 November with guest speakers from Taiwan and Singapore to discuss how creativity and technology can help alleviate social problems. We also took the

opportunity to roll out the fifth Outstanding Third Age Citizens Award recognising retired people for their dedication to lifelong learning, leading a healthy lifestyle and serving the community.

As it enters its second decade, U3A will offer more innovative courses, establish additional outreach projects and become more engaged with different community groups.



Chinese dance performance by U3A students.

### Support for our Volunteers

The HK Electric Volunteers Team continued to contribute to the community in 2016 through a wide range of community services and fund-raising initiatives.

In April 2016, the team celebrated its 12<sup>th</sup> anniversary where outstanding volunteers and Divisions were recognised for their active participation in serving the community. Throughout the year, the team provided 5,647 volunteer hours, involving 1,602 participants. Services included electrical inspections, home visits to single elders, fall prevention guidance for the elderly, environmental services, a mentorship programme and an English interview workshop.

For the purpose of continuously improving our volunteer programmes, we conducted a survey to gauge colleagues' views on our volunteer service in mid-2016. The survey results showed that service for the elderly and green activities were the most popular service categories. Colleagues' interest and talent were also gathered for diversifying our service scope.





Our volunteers actively support various green services.

Our Graduate Trainees were also invited to take part in volunteer work. During the year, 13 of them who had joined The HKIE Professional Volunteers Service Accreditation Programme received two Grand awards, one Gold award and 10 Silver awards in recognition of their contribution.

Besides corporate volunteering, our Good Neighbour Fund programme encourages and supports employees to initiate their own community care projects.

In 2016, we provided funding for two employee volunteer projects. Under “Care for HK Electric Retirees”, home visits and tea gatherings were organised to care for retired employees, while giving new employees the opportunity to learn from their predecessors while working at HK Electric.

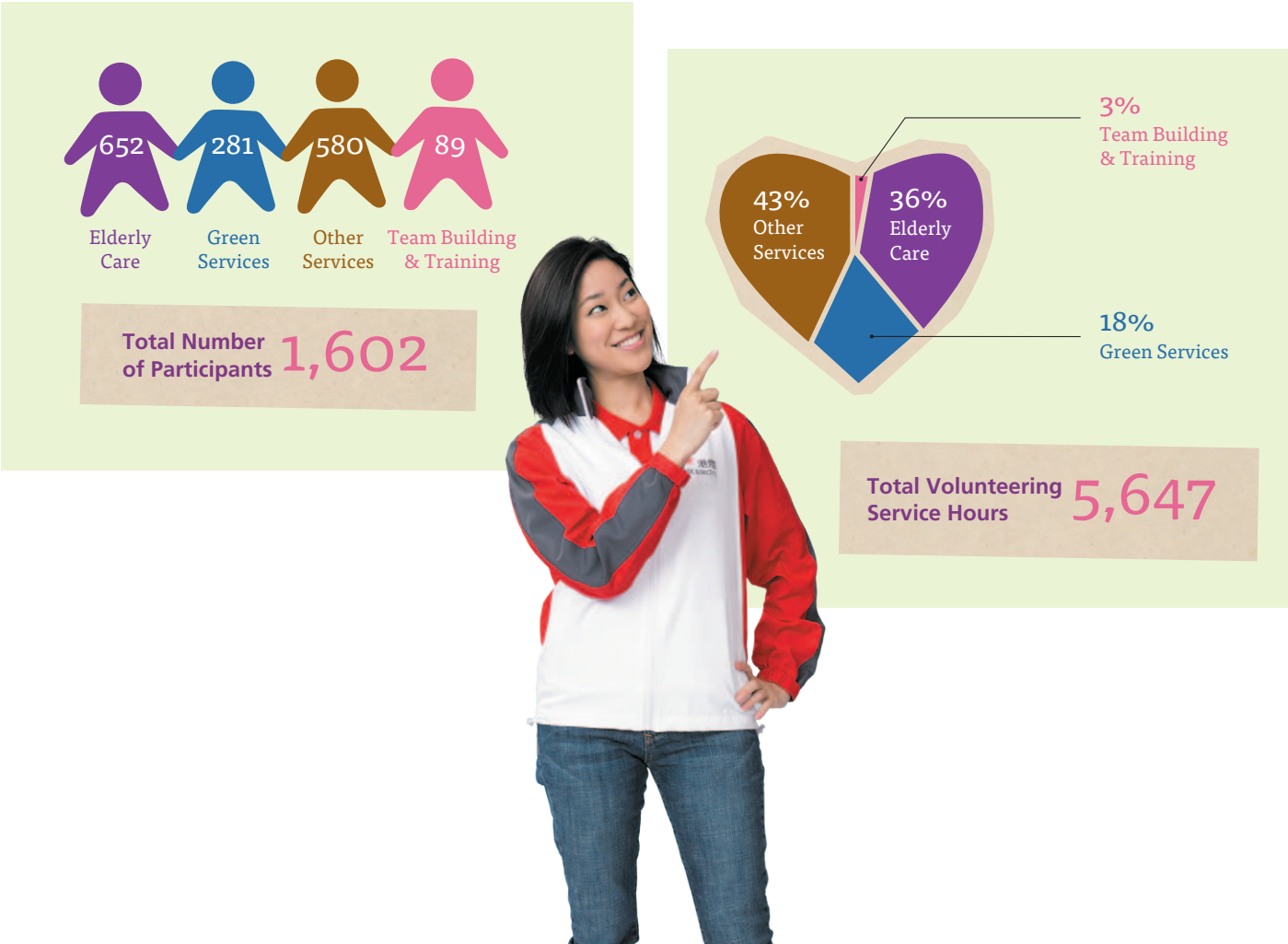
The “Creative Workshop” is a collaborative project with a local NGO, in which our colleagues produced videos on the rehabilitation journeys of stroke patients and the challenges faced by their families. Student volunteers were recruited to take wedding and family photos for elderly couples and underprivileged groups.

Support for Meaningful Causes

Beyond volunteering, HK Electric supports meaningful and charitable causes through donations and sponsorships.

Among these is the Centenary Trust, which has been supporting the development of U3A while providing scholarships to secondary school students with financial needs. In 2016, HK Electric sponsored 112 projects related to our business, the community and the environment.

Under the Electric Appliances Donation Programme and Used Computer Recycling Programme, we donated over 900 items including electric water heaters, bathroom air controllers and computer equipment to the underprivileged.





香港第三齡學苑  
University of 3<sup>rd</sup> Age

## Case Story

# Learning is for Life



U3A students share experience with the TVB Volunteers Team in serving the elderly.

It is often said that the process of learning is a lifelong journey. If anyone can be said to exemplify that philosophy, it is a man affectionately known as Uncle Chiu, who celebrated his 100-year-old birthday in 2016.

After retiring in 1974, Uncle Chiu developed an interest in photography, took up singing, and learned how to use a computer and play the erhu. Today, he blogs regularly about his life, making him the oldest blogger in Hong Kong.

He has been a volunteer teacher since the age of 90 with the University of 3<sup>rd</sup> Age (U3A) established by HK Electric and The Hong Kong Council of Social Service (HKCSS) back in 2006.

Funded by the HK Electric Centenary Trust and administered by HKCSS, U3A is in its 10<sup>th</sup> year of encouraging local retirees to pursue their interests, fulfil their dreams and contribute to the community.

Uncle Chiu is only among the many who have joined U3A. Since U3A was set up, over 5,000 courses have been

organised for local retirees offering a total of more than 86,000 learning opportunities.

Living out U3A's motto of "learning for pleasure", students enrol in courses for the sake of learning new subjects or skills rather than gaining qualifications. Many of the students also take up the role of teachers, sharing their knowledge and experience with others.

U3A courses are largely inspired by the interests of U3A students. They range from the use of mobile phone applications to lion dancing and Tai Chi, all aimed at building knowledge or encouraging exercise. U3A students have also been contributing to different social discussions over the years, putting forward their views on topics including the development of the "silver hair" market, protection of elderly consumer rights and cardiovascular fitness.

At a seminar hosted by HK Electric and HKCSS to commemorate the 10<sup>th</sup> anniversary of U3A, one of the recipients of the Outstanding Third Age Citizens Award a few years ago – Ms. Tsang Wun-ping – shared her journey of active ageing. She found that some of her fellow senior citizens were bored with their retired lives and did not know how to spend their time.

"That's why I received volunteer training and learned how to teach others new things," she said. "Lifelong learning can inject energy into your life after retirement."

Looking ahead, U3A will develop more innovative courses, engage in more partnership projects and become more involved in community issues. Consequently, we expect U3A will continue to be an important platform for local retirees to care for and serve the community.

