政府總部環境局

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ENVIRONMENT BUREAU GOVERNMENT SECRETARIAT

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10 December 2012

本函檔號 Our Ref.:

來函檔號 Your Ref.:

By Email

Mr Derek Lo Clerk to Panel Legislative Council Complex 1 Legislative Council Road Central Hong Kong

Dear Mr Lo,

Panel on Economic Development Follow up to meeting on 26 November 2012 SCA 2013 Interim Review

I refer to item 10(b) in the List of Follow-up Actions (position as at 27 November 2012) and attach the replies from the two power companies on the steps and initiatives that they have taken to encourage and assist the private sector in saving energy. They are set out in Annexes A and B for HKE and CLP respectively, for your further action please.

Yours sincerely,

(Ms Vyora Yau)

for Secretary for the Environment

HK Electric's Energy Saving Initiatives 港燈節約能源計劃

<u>Customer Services and Support</u> <u>客戶服務及支援</u>

Energy Audit Service 能源審核服務

• Since 2009, HK Electric has provided free energy audit services to help commercial and industrial customers identify energy saving potentials for improving energy efficiency at their business premises.

自 2009 年起,港燈提供免收費能源審核服務,協助工商業客戶尋找節省能源的潛力,改善其營業場所的能源效益。

• From 2009 to 2011, HK Electric carried out over 170 free energy audits. 在 2009 至 2011 年間,港燈共完成超過 170 宗免收費能源審核。

Energy Efficiency Loan Scheme 能源效益貸款計劃

- Since 2009, HK Electric has collaborated with banks to setup an interest-subsidized loan plan to help non-Government commercial and industrial customers implement energy saving initiatives identified in energy audits. 港燈自 2009 年起與銀行合作設立利息補貼貸款計劃,協助非政府工商業客戶取得融資渠道,以便落實在能源審核中確定之節能建議。
- All HK Electric's non-Government commercial and industrial customers with energy savings potential identified in the energy audits provided by HK Electric are eligible to apply.

所有港燈非政府工商業客戶,經港燈能源審核後被確定具備節能潛力之項目均可 申請。

One Stop Service for Small and Medium Enterprises (SME) 中小企全方位增值服務

• HK Electric provides an "Enterprise Advisor Service", assisting SMEs with business start-up and energy management. The service provides advice on new or additional supply, energy efficiency, safety and power quality, and account matters.

ED Panel Meeting (26 Nov 2012) – Follow-up Actions Response from HK Electric

港燈的「商企一站通」爲中小企提供開業支援及能源管理的服務。港燈亦爲客戶提供對電力供應、能源效益、電力安全、電力質量以至處理賬戶事宜的建議。

Education 教育

HK Electric's Smart Power Campaign 港燈智「惜」用電計劃

- An annual event to promote energy efficiency and conservation messages to the public, in particular the younger generations. 每年透過不同類型的活動主題,爲公眾人士(尤其向年青一代)推廣珍惜能源、節能效益的訊息。
- Thematic activities are tailor-made every year and up to date, more than 230,000 students and members of the public have taken part in a wide array of activities including open days, competitions, school talks and roving exhibitions, and award programmes.
 每年悉心設計專題活動類型包羅萬有,包括開放日、創意比賽、學校講座及巡迴展覧等。多年來合共吸引超過二十三萬名學生及公眾人士參與。
- HK Electric's Smart Power Centre was opened in April 2011 to promote smart use of electricity by showcasing various energy conservation measures for domestic and small and medium sized enterprise customers.
 港燈的「智惜用電中心」在二零一一年四月啓用,推廣以不同節能範例,向家居及中小企客戶提供節能措施的資訊。

HK Electric Clean Energy Fund 港燈清新能源基金

• The HK Electric Clean Energy Fund was established in February 2006 to commemorate the commissioning of Lamma Winds and to foster environmental education in Hong Kong by promoting better understanding and application of renewable energy (RE) in Hong Kong. Since its inception, 77 local schools including kindergartens, primary and secondary schools, and tertiary institutes have received sponsorship to implement various RE projects. The scope of the projects ranges from study and application of solar, wind and hydro power to wave energy.

標誌著南丫風采發電站的正式落成和啓用,港燈於2006年2月成立清新能源基金,旨在增強香港學界對可再生能源及其應用的認識和了解。自基金成立以來,港燈已跟77間幼稚園、小學、中學及大專院校一起攜手推動環保教育。我們資助的項目包括太陽能、風力、水力、海浪等應用。

- Application for the HK Electric Clean Energy Fund is open to all local registered schools including kindergartens, primary and secondary schools, tertiary institutes, and special schools. Schools are invited to submit smart ideas to promote and apply renewable energy or low carbon initiatives on campus.
 凡於香港註冊認可的幼稚園、中小學、大專院校及特殊學校均可申請「基金」, 提交可再生能源概念,締造綠色低碳校園。
- We have also launched the "Clean Energy iShare" networking platform to promote environmental education and share knowledge on RE with Hong Kong youths through seminars and school visits.

公司早前特別設立「清新能源·愛分享」網上平台,並舉辦講座及參觀活動,讓 師生就可再生能源及 其應用交流意見和經驗。

Collaboration with NGOs 與非政府組織合作

LOOP Labelling Scheme LOOP 標籤認證計劃

• We engaged with WWF to conduct verification for the participants of WWF's Low-carbon Office Operation Programme (LOOP) Labelling Scheme. LOOP has been established to enable Hong Kong companies and organizations to reduce their greenhouse gas emissions generated from office operations via the adoption of best management and technological practices and staff behavioral adaptation regarding energy efficiency.

作爲與不同持份者保持密切聯繫,港燈協助世界自然基金會,爲其辦公室低碳營運計劃參加者進行標籤認證。這計劃透過採用管理和技術方面的守則、員工在行爲上作出改變,令香港的公司和機構能夠減少由辦公室營運操作所產生的溫室氣體排放。

CLP: Our Commitment to Energy Efficiency and Conservation

Four Steps to Saving Energy

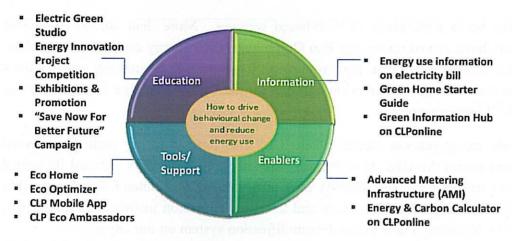
CLP is firmly committed to energy efficiency and conservation (EE&C). We encourage our residential and business customers and the Hong Kong community at large to use energy more efficiently and change their behaviour so that they save energy and help create a better environment.

We adopt a four-step approach to changing people's habits and helping them to reduce their energy consumption. These steps are:

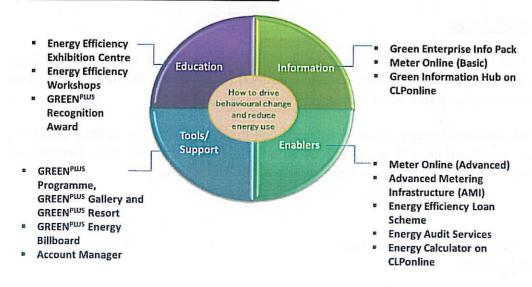
- Educating the public
- Providing customers with information and energy-saving tips
- Equipping customers with tools and technical support
- Helping with enablers to make greater energy efficiency possible

We are committed to doing everything we can to help our customers and our city move towards a low-carbon lifestyle that will improve our environment for future generations.

Energy-Saving Support for Homes



Energy-Saving Support for Businesses



Delivering the Benefits of Behavioural Change

Business and residential customers have welcomed our energy efficiency and conservation initiatives, which have not only helped to reduce their energy use but save them money too.

Our exhibitions, workshops, community programmes and campaigns have encouraged people of all ages and social backgrounds to get involved in a change that is critical to Hong Kong and its environment.

In the Annex attached, we provide details for 26 initiatives launched by CLP, designed & implemented to support energy efficiency & conservation. A summary of each initiative is provided, as well as links to further information and the positive results these programmes have delivered.

Many thousands of people have visited our CLP Eco Home or attended one of a host of themed exhibitions, tours and workshops to highlight energy-saving ideas. Meanwhile, residential customers have stronger awareness on home energy saving by using our Green Home Starter Guide and getting more energy information and green tips from their electricity bill.

CLP now has a wide range of web-based services. More than 26,000 residential customers have signed up for our Eco Optimizer online energy assessment tool since it became available last year, and around 1,000 business & community organizations have cut their energy consumption by 10 to 20 per cent on average after joining our GREEN PLUS programme.

There are many success stories where CLP has been working with Commercial customers across the city. As examples, one shopping centre has reduced its annual electricity consumption significantly after adopting our recommendation for a chiller optimization energy-saving solution and a tertiary education institute has made more savings by installing a heat pump dehumidification system on our advice.

The Road Ahead

CLP is determined to play its part in building a better future for the Hong Kong environment. The energy efficiency and conservation initiatives we have launched so far are important steps towards that goal.

We will continue to support our residential and business customers in their efforts to reduce consumption, and we will look to seek out new ways to take forward our mission for a greener, more environmentally-aware Hong Kong.

CLP Power Hong Kong Limited December 2012

Annex:

CLP: Our Commitment to Energy Efficiency and Conservation (4 December 2012)

For Residential Customers Educating the public

• Electric Green Studio, A Mobile Classroom

The 10-ton electric truck, a mobile environmental education classroom, was newly refurbished in September 2012 and provides zero roadside emissions. It is a new version of the original Green Studio launched in 2009 which aims to encourage children to adopt green living and energy saving in their daily lives through interactive activities including the 3D movie "Earth Hero"



Results: Since the roll-out of the Green Studio mobile classroom in 2009, it has visited more than 100 schools and made 75 community visits, helping to spread the green message to over 50,000 children.

• Energy Innovation Project Competition

Jointly organised with The Hong Kong Institution of Engineers, the Energy Innovation Project Competition has been held since 2009. The Competition aims to encourage secondary school students to develop innovative ideas on energy efficient applications and promoting the concept of energy efficiency to the community.



Results: Since the launch of the Energy Innovation Project Competition in 2009, it has sponsored over 140 projects.

• Exhibition & Promotion

Organise exhibitions to enhance public awareness on energy efficiency.

Results: Exhibitions on energy efficiency have been held in Telford Plaza in Kowloon Bay and Maritime Square in recent years, attracting over 11,000 visitors.

• "Save Now For Better Future" Campaign

The Campaign comprises our energy saving competition and sharing of successful cases using Eco Optimizer. The "Save Now For a Better Future" saving competition is divided into 2 categories and the saving period lasts for 4 months. The first 150 participating household families which save the most will get attractive rewards. For details, please visit:

https://www.clponline.com.hk/MyHome/EcoLivingIdeas/Documents/defaulten.html



Results: Over 14,000 household families have enrolled in the competition.

Providing customers with information and energy-saving tips

Energy use information on electricity bill

Since 1998, CLP has provided customers with bar charts of their past electricity consumption on their electricity bills. Starting from 1 June 2012, customers are able to understand even more about their consumption patterns with extra information on the bar charts on their bills, a comparison to the per capita consumption of CLP customers and the CO2 per unit of electricity.



Results: Enables customers to have a clear understanding of their electricity consumption and enhanced awareness of their carbon footprint.

• Green Home Starter Guide

The Starter Guide, which comprises comprehensive information on creating a Green home is prepared for residential customers when they open a new CLP account. It provides tips on the choice and installation of electrical appliances, as well as energy saving. For details, please

visit: https://www.clponline.com.hk/Documents/CLP_GreenHome_ Eng.pdf



Customers can also make reference to the readily available green tips online; for details please

visit: https://www.clponline.com.hk/MyHome/EnergyEfficiencyIdeas/MyPowerWise Home/EnergySavingTips/Pages/Default.aspx

Results: Over 10,000 booklets have been distributed.

• Green Information Hub on CLPonline

An online holistic roadmap provides customers with vivid and comprehensive information on how to lead a green life and save energy at home.

Please visit:

https://www.clponline.com.hk/Pages/InformationHub.aspx



Equipping customers with tools and technical support

• CLP Eco Home

The first of its kind, Eco Home is a one-stop green service store which provides energy efficient information and high-tech eco home appliances demonstrations. Exhibitions showcase the latest energy efficient technologies and products. **Results:** Over 12,000 visitors have visited CLP Eco Home, seen its different themed exhibitions and joined talks, workshops& guided tours.



• Eco Optimizer

Provided on-line for residential customers, this web-based energy assessment tool features 3 major components – Benchmarking, Analysis and Customized Solutions. The tool also provides customers with tailor-made energy solutions for their daily lives and offers customised green tips within 8 minutes. The Eco Optimizer Smartphone App was launched in October 2012.



For more details about Eco Optimizer, please log on: https://www.clponline.com.hk/EAS/?langzh-HK

Results: Since the launch in 2011, over 26,000 users have registered to useEco Optimizer.

CLP Mobile App

Customers get handy energy saving tips and other information from the mobile application at anytime. The Green Walker tool in the application can calculate the calories burnedin walking. For more details about the app, please

visit: https://www.clponline.com.hk/MyHome/EcoLivingIdeas/eco AmbCorner/EcoPromotion/Pages/mobileApps201108.aspx?lang=en



Results: Over 29,000 users have downloaded the mobile application.

CLP Eco Ambassadors

Eco Ambassadors offer energy efficiency tips and introduce eco products to our customers. They also share in talks organised by Government or business organisations, as well as on their Eco Ambassador's blog.



Eco Ambassador's blog address:

http://www.clponline.com.hk/myHome/EcoLivingIdeas/EcoAmbCorner/EcoAmbBlog/Pages/Default.aspx

Results: Over 15,000visitors read the Eco Ambassador's blog. 23 talks have been held by Eco Ambassadors since March 2012.

Supplying enablers to make greater energy efficiency possible

• Advanced Metering Infrastructure (AMI) Pilot Scheme

The 18-month pilot scheme is due to launch in the first half of 2013 and targets 3,000 residential customers in both private and public housing. Customers can proactively control their daily energy usage through the Smart Meters installed in this pilot scheme, and manage their energy usage smartly to pave the way for greener living.



• Energy & Carbon Calculator on CLPonline

A user-friendly online calculator, enabling customers to calculate their own home energy usage and an individual's carbon footprint.



For more details, please visit:

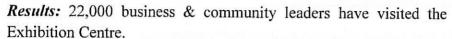
https://www.clponline.com.hk/ourEnvironment/MeasureOurImpact/Pages/Default.asp

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For Business Customers Educating the public

• Energy Efficiency Exhibition Centre

The exhibition centre showcases the latest innovative energy efficiency technologies for various trades and industries. Customers can learn about the relevant energy efficiency technologies through demonstrations of energy efficient products and appliances.





Energy Efficiency Workshops

CLP organises energy efficient workshops for people from diverse industries.

Results: Enhance the energy efficiency awareness in the Commercial & Industrial sector. Over 600 people have participated in the workshops.



• GREEN^{PLUS} Recognition Award

The first GREEN^{PLUS} Recognition Award was held in 2012, aiming to assist customers to adopt green solutions and to acknowledge their concerted efforts on energy saving.

Results: Over 400 organisations have participated. Amongst them, 29 received awards.

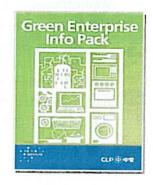


Providing customers with information and energy-saving tips

• Green Enterprise Info Pack

A handy green info pack is prepared for customers who open a new business electricity supply account. *For details, please visit*: https://www.clponline.com.hk/Documents/CLP GreenHome Eng.pdf

Customers can also make reference to the readily available green tips online, *details please*visit: https://www.clponline.com.hk/myBusiness/EnergyManageme



nt/InformationHub/EnergySavingTips/Pages/Default.aspx

Results: Assists customers to set up their green enterprise by providing tips on the application of energy efficiency appliances and sharing successful cases.

• Meter Online (Basic)

After installing smart meters, business customers can have a better understanding of the energy consumption of their operation via thisfree and easy to useplatform.

For more details, please visit: https://www1.clpgroup.com/myws/tc/flogin.do

Results: Meter Online helps businesses analyse their energy use, to reduce consumption and enhance energy efficiency. More than 1,300 customers are already using the service.



• Green Information Hub on CLPonline

An online holistic roadmap provides customers with vivid and comprehensive information on how to lead a green life and save energy in their working environment.

Please visit:

https://www.clponline.com.hk/Pages/InformationHub.aspx



Equipping customers with tools and technical support

• GREEN^{PLUS} Programme, GREEN^{PLUS} Gallery and GREEN^{PLUS} Resort

Our GREEN^{PLUS} Programme assists SMEs, non-profit organisations and schools to implement customised energy efficient applications. The GREEN^{PLUS} Gallery offers real-life demonstrations of energy efficient applications for areas including heating, lighting, electric cooking and renewable energy, as well as showcasing the effectiveness of the applications. CLP's GREEN^{PLUS} Resort showcases energy efficiency applications for outdoor settings and renewable energy for business customers.



Results: The GREEN^{PLUS}programme was launched in 2010. 1,000 organisations have benefitted from CLP's energy efficiency recommendations and this has helped them save 10-20% on their energy consumption.

• GREEN^{PLUS} Energy Billboard

New industry-wide energy benchmarking tool to enable business customers across different trades to have an understanding of their energy consumption and to compare against their industry norm, as well as to provide customised energy efficiency solutions.



Results: Over 2,700 organisations have signed up to the Energy Billboard within just a few months of launch.

Account Managers

Dedicated account servicing personnel for large business customers who provide professional support on energy efficiency and offer practical advice on energy efficiency and conservation, tailored to each organisation's needs.



Supplying enablers to make greater energy efficiency possible

• Meter Online Services (Advanced)

The advanced version of the meter online service provides customers with more comprehensive information on energy management including interactive benchmarking and analysis.

For more details, please visit:

https://www1.clpgroup.com/myws/tc/flogin.do

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Results: The services cut down expenditure for energy consumption and enhance energy efficiency awareness. Over 500 customers are using the advanced service to look at their energy consumption patterns in detail.

Advanced Metering Infrastructure (AMI) Pilot Scheme

Apart from residential customers, the 18-month pilot scheme to be launched in the first half of 2013 will also targets 1,400 SMEs across 15 different trades. SME customers can proactively control their daily energy usage through the Smart Meters installed in this pilot scheme, and manage their energy usage smartly to pave the way for greener business operation.



• Energy Efficiency Loan Scheme

An interest-free Energy Efficiency Loan Scheme to subsidise nongovernmental business customers to install energy efficient applications.



• Energy Audit Services

CLP provides energy audit services for medium to large businesses to evaluate, analyse and improve their energy efficiency and thus help them to reduce both energy useand the cost of business operations.

Results: CLP has provided energy audit services to 1,300 Commercial & Industrial customers since 1990s. Since 2009, CLP has assisted these customers to save around 60 GWhs of electricity - equivalent to supplying almost 20,000 typical homes in CLP's area.

• Energy Calculator on CLPonline

A user-friendly online calculator, enabling customers to calculate energy use in the office.



For more details, please visit:

 $\underline{https://www.clponline.com.hk/ourEnvironment/MeasureOurImpact/Pages/Default.asp} \underline{x}$