



From the Editor

Thanks to your continued support, E&M Safety Newsletter has come to its 31st issue with a rich variety of contents to offer, including regulation on the safety of LPG filling stations, engagement of independent registered lift and escalator engineers, expansion and enhancement of the Lift Modernisation Subsidy Scheme, residual current devices, third phase of Mandatory Energy Efficiency Labelling Scheme, and the 10th anniversary celebration activities for E&M Young Ambassador. Besides, mobile applications were launched by the Electrical and Mechanical Services Department (EMSD) on 20 December this year, which enable members of the public to access electronic services with ease and obtain latest updates from the EMSD anytime, anywhere with functions on their smart phones, thereby enhancing communication.

Regulation on the Safety of LPG Filling Stations



Expand and Enhance the Lift Modernisation Subsidy Scheme



Engage Independent Registered Lift and Escalator Engineers



Full Implementation of the Third Phase of Mandatory Energy Efficiency Labelling Scheme

Electrical Leakage Residual Current Device (RCD) Regular Maintenance of Household

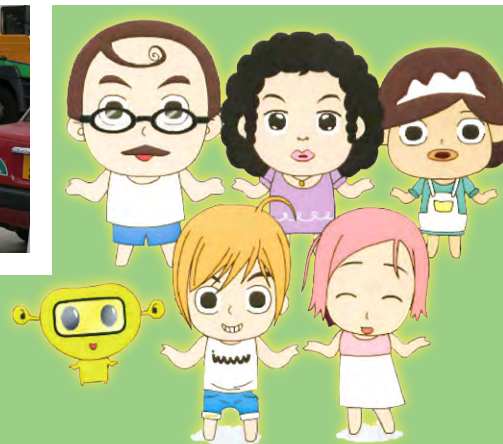


10th Anniversary Celebration Activities for E&M Young Ambassador Programme





Regulation on the Safety of LPG Filling Stations



In order to reduce emissions from local vehicles, the Government announced the introduction of LPG Vehicle Scheme in the 1999 Policy Address. At present, nearly all taxis and over 4 500 light buses in Hong Kong use LPG.

As the regulatory body for gas safety in Hong Kong, the Electrical and Mechanical Services Department (EMSD) has been actively participating in the scheme, including approving LPG filling stations. An LPG filling station is classified as a notifiable gas installation under the Gas Safety Ordinance (Cap. 51). According to regulations 3 to 6 of the Gas Safety (Gas Supply) Regulations (Cap. 51B), construction approval and approval of use by the Gas Authority (i.e. Director of Electrical and Mechanical Services) are required for LPG filling stations.

Construction approval and approval of use of LPG filling stations

The Gas Authority will examine in detail the design, installation, operation and maintenance procedures of LPG filling stations, including quantitative risk assessment reports for LPG filling stations, design drawings of LPG storage tanks,

fire-fighting equipment, testing and commissioning procedures of LPG installations, and test reports/certificates of various systems, etc., to ensure compliance with all safety regulations and standards as stipulated by himself.

Routine repair and maintenance of LPG filling stations

The repair and maintenance of LPG installations of LPG filling stations shall be undertaken by qualified persons. The owners of LPG filling stations shall establish a systematic routine maintenance plan to ensure that their LPG installations operate in a safe condition.

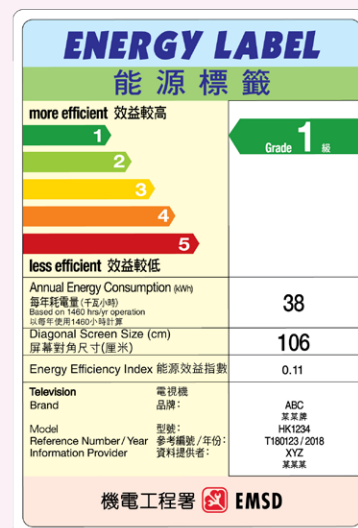
After an LPG installation is put into operation, the owner of the LPG filling station shall employ a competent person to inspect the safety condition of the LPG filling station every year and submit an annual inspection report to the Gas Authority. Besides, each LPG storage tank shall be revalidated once by a competent person within the first ten years and then every five years thereafter in accordance with the requirements of the law, and its test certificate shall also be submitted to the Gas Authority.

Full Implementation of the Third Phase of Mandatory Energy Efficiency Labelling Scheme

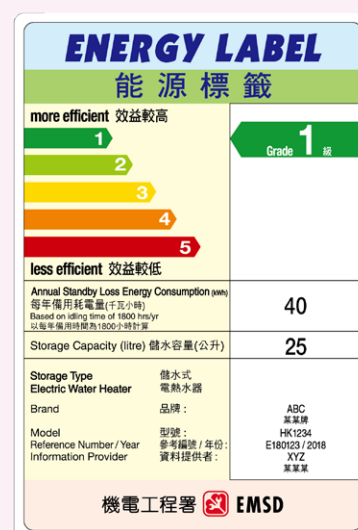
The third phase of Mandatory Energy Efficiency Labelling Scheme (MEELS), which was fully implemented on 1 December 2019, covers three types of new electrical products, namely televisions, storage type electric water heaters and induction cookers, and the coverage of two types of existing products under MEELS has been extended, namely room air conditioners (from cooling function only to both heating and cooling functions) and washing machines (with a washing capacity from not exceeding 7 kg to not exceeding 10 kg). It is estimated that the potential annual electricity saving under the third phase of MEELS will be around 150 million kWh, which is equivalent to an annual reduction of carbon dioxide emissions of 105 000 tonnes. On the whole, MEELS with extended coverage can save up to about 600 million kWh of electricity per year. This not only further encourages members of the public to save energy by adopting highly energy-efficient products, but also helps protect the environment and save money for users in the long run.

Since the third phase of MEELS came into effect on 1 June 2018, many local manufacturers and importers have successfully applied for reference numbers for their prescribed products and attached energy labels on the products. As the 18-month grace period for the third phase of MEELS expired on 30 November 2019, local manufacturers or importers are now required to attach energy labels in the specified format on the prescribed products, while retailers and wholesalers shall ensure that their products bear energy labels before they can be supplied in Hong Kong. Any person who contravenes the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) by, for example, supplying a prescribed product without an energy label or of a non-listed model is liable to a maximum fine of \$100,000. Therefore, local manufacturers or importers shall attach energy labels on their prescribed products to avoid contravention of the law.

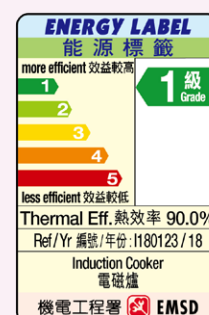
For more information regarding the application for energy labels, please visit the EMSD's "Energy Label Net" at <https://www.emsd.gov.hk/energylabel>. Local manufacturers or importers can also refer to the Code of Practice on Energy Labelling of Products 2018 to ensure that their electrical products meet the testing standards and requirements under MEELS.



Energy Label of Television



Energy Label of Storage Type Electric Water Heater



Energy Label of Induction Cooker



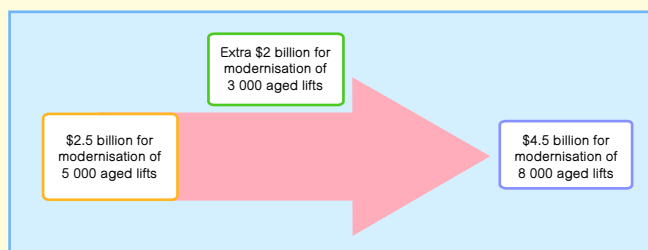
Expand and Enhance the Lift Modernisation Subsidy Scheme

In the 2018 Policy Address, the Chief Executive stated that the Government planned to launch the Lift Modernisation Subsidy Scheme (LIMSS) with a provision of \$2.5 billion to provide financial incentives and appropriate professional support to building owners in need for modernisation of about 5 000 aged lifts. The LIMSS was launched in the first quarter of 2019 and the response was very encouraging, with a total of about 1 200 applications received involving about 5 000 eligible lifts. Applicants were informed of the results of the first-round applications for the LIMSS in the fourth quarter of 2019.

In view of the overwhelming response from the society to the LIMSS, the Government plans to inject an additional \$2 billion into the LIMSS to expand its coverage by subsidising 3 000 more aged lifts on top of the original target of modernising 5 000 lifts. In other words, the expanded LIMSS will modernise a total of about 8 000 aged lifts with a provision of \$4.5 billion. This can not only benefit more building owners in need, but also speed up the modernisation of aged lifts so as to enhance lift safety. We plan to invite second-round applications in early to mid-2020 with a view to informing the eligible applicants of their priority in the fourth quarter of 2020. For details, please visit: <https://brplatform.org.hk/en/subsidy-and-assistance>

On the other hand, as the residents' entry to and exit from the buildings will inevitably be affected during lift modernisation works especially for buildings with single lift or floors served by one lift only, building owners may step back from carrying out modernisation works. In view of this, the Government proposes that the LIMSS be enhanced through provision of outreach services to needy residents (e.g. the aged and the disabled) by social welfare organisations engaged by the Urban Renewal Authority, such as delivery of food and meals, purchasing daily necessities on their behalf, provision of stair-climber services, etc. so as to reduce the inconvenience caused by the modernisation works to them.

At the same time, the EMSD will collaborate with the Construction Industry Council (CIC) to include the lift trade in the existing Intermediate Tradesman Collaborative Training Scheme for the construction sector. The EMSD will discuss with the CIC the details of the training scheme for the lift trade in the hope that the training scheme will attract new blood to join the lift trade so as to increase the labour force of the industry for handling additional modernisation works.



優化升降機資助計劃
Lift Modernisation Subsidy Scheme

舊粒齊優化 安全最無價
Lift Modernisation Sets Your Mind At Ease

- 每部較最高可享50萬元資助**
Maximum subsidy of \$500,000 per lift
- 長者自住業主最高可享5萬元資助**
Maximum subsidy of \$50,000 per unit for elderly owner-occupier

Engage Independent Registered Lift and Escalator Engineers

At present, the Electrical and Mechanical Services Trading Fund (EMSTF) is responsible for inviting tenders for services of qualified registered lift and escalator contractors relating to provision of maintenance services for lifts and escalators of various government departments and public organisations, as well as management of relevant maintenance contracts. As required in the contracts, contractors shall engage a registered lift/escalator engineer to carry out periodic examinations of lifts/escalators, and apply to the Director of Electrical and Mechanical Services for a use permit on behalf of the responsible persons (RPs) for the lifts/escalators.

To further enhance the effectiveness of contract management and the safety of lifts and escalators, the EMSTF has planned to adopt improvement measures to ensure the independence of periodic examinations. A pilot scheme will be implemented by phases, under which the EMSTF will engage independent registered engineers, or contractually require the contractors to appoint independent registered engineers, to replace the registered engineers employed by the contractors to carry out periodic examinations for some lifts and escalators maintained by the contractors, and apply to the Director of Electrical and Mechanical Services for a use permit.

Like other projects, the pilot scheme aims to facilitate registered lift and escalator engineers in carrying out periodic examinations for lifts and escalators independently and offering professional and independent judgement on their condition and operational safety, thereby effectively promoting recognition of the examination results by RPs and members of the public, alleviating public concern about lift and escalator safety as well as enhancing the professional image of registered lift and escalator engineers. The EMSTF has successively liaised with various contractors to discuss the implementation details with a view to achieving a win-win situation.

At the same time, in order to assist the RPs for lifts/escalators in engaging independent registered lift/escalator engineers to provide relevant professional services, the EMSD uploaded the contact information of the registered lift/escalator engineers concerned onto the "Other Reference Information" section in the "Responsible Persons' Corner" webpage (https://www.emsd.gov.hk/en/lifts_and_escalators_safety/responsible_persons_corner/index.html) in May 2019 and will update the information as appropriate.

Regular Maintenance of Household Electrical Appliances

In daily life, failure in household electrical appliances often creates inconvenience to users and may even cause fire or electric shock hazards. Therefore, members of the public are advised to arrange proper maintenance for their household electrical appliances and take note of the following:

1. Ensure that the electrical appliances operate in an environment (e.g. temperature and humidity) which meets the requirements specified in the user manual.
2. Unplug the electrical appliances before cleaning. Adhere to the instructions in the user manual in cleaning and maintaining the electrical appliances.
3. Arrange regular inspection and maintenance of the electrical appliances by an experienced technician.
4. Check the electrical appliances before use to ensure that they are not damaged, especially when they have not been used for a prolonged period of time.
5. Switch off the power if the electrical appliances are not to be used for a long time.
6. In case of any abnormalities (e.g. abnormal sounds, smell or any sign of overheating, etc.) during operation, stop using the electrical appliances and arrange inspection and repair by an experienced technician.



For enquires about the safety of electrical products, please call the government hotline 1823 or e-mail to info@emsd.gov.hk.

Electrical Leakage Residual Current Device (RCD)

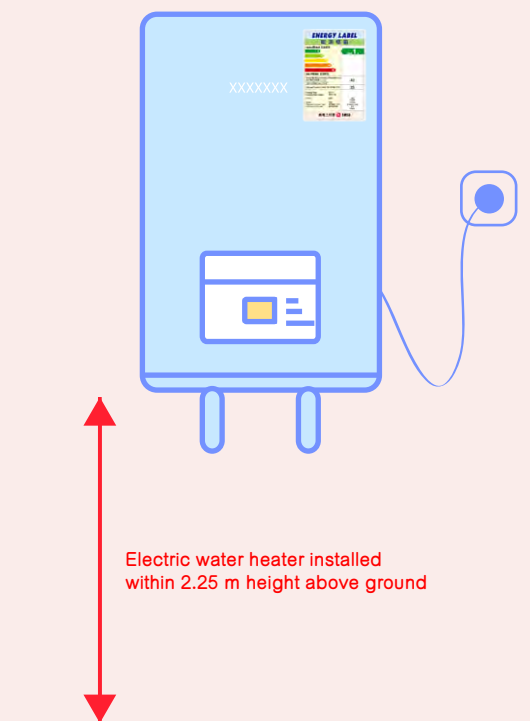
Residual current device (RCD) is a common household electrical safety protection device, which will automatically cut off power supply when it detects earth leakage.

Since as early as 1985, it has been a requirement in Hong Kong that socket outlet circuits must be protected by RCDs. Therefore, generally speaking, all domestic sockets should be equipped with RCDs. To enhance electrical safety, the Code of Practice for the Electricity (Wiring) Regulations (2009 Edition) further stipulates the requirements for electrical equipment in bathrooms. All circuits supplying electrical equipment with exposed conductive parts within 2.25 m height above finished floor level should be protected by RCDs with a residual operating current not exceeding 30 mA.

For example, if your bathroom is installed with an electric water heater with a metal case and its height above ground does not exceed 2.25 m, then its supply circuit must be equipped with an RCD for protection.

Besides, in view of the electrical leakage incidents involving the lack of effective RCDs occurred in village houses in recent years, owners of village houses are encouraged to install a main circuit breaker equipped with overcurrent and leakage protection to enhance protection and prevent accidents.

For domestic premises installed with RCDs, the householders or users should arrange periodic testing for the RCDs to ensure their normal operation. Generally speaking, there is a test button on every RCD. Householders or users may press the test buttons quarterly to test their RCDs. As the press-button test is not electrical work, it can be performed by any persons including registered electrical workers, householders or users. However, if an RCD is found not functioning properly during the test, arrangement should be made immediately for detailed inspection and repair by a registered electrical contractor.



10th Anniversary Celebration Activities for E&M Young Ambassador Programme

To celebrate the 10th anniversary of the E&M Young Ambassador (EMYA) Programme, the Electrical and Mechanical Services Department (EMSD) organised two tailor-made events during the summer vacation in 2019, namely the "Star" Ambassador Training Class and STEM Workshop.

"Star" Ambassador Training Class

The "Star" Ambassador Training Class (Training Class) was targeted at ambassadors from Primary Four to Secondary Three. Engineers from the EMSD were invited to serve as instructors to teach the participants basic knowledge of E&M engineering and legislation. Besides, the instructors led the participants on site visits after class to let them learn about the related facilities in person so as to facilitate them in promoting E&M safety and energy efficiency in the community in future. According to the requirements of the Training Class, participants were required to submit work reports for record, and would be issued a certificate and a star badge of the relevant module and become a "star" ambassador if their work reports passed the assessment.



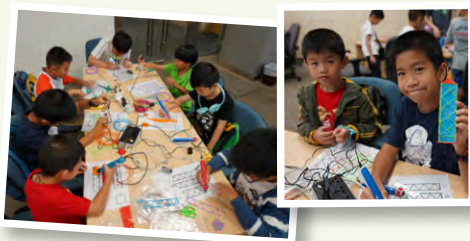
After being briefed by the engineers from the Gas Standards Office on fuel supply and gas safety in Hong Kong during the Training Class, the participants visited the headquarters of the Hong Kong and China Gas Company Limited.



Engineers from the Railways Branch took the participants to visit the railway systems at MTR Tsing Yi Station and Kowloon Station respectively to learn more about the regulatory work of the EMSD on the railway systems.

STEM Workshop

STEM education has become a hot topic in the education sector in recent years. The EMSD organised five STEM workshops for the participants to let them make mechanical gadgets such as robots, four-wheel drive vehicles, etc. and understand the principles of machinery and electric energy, thereby enhancing their interest in STEM.



Based on the structural drawings, the participants used 3D printing pens to draw the distinctive and colourful buildings in Hong Kong.

Young people aged 6 to 21 are welcome to join the EMYA Programme to participate in a variety of fascinating activities! Please scan the QR code below and like the Facebook page of the EMYA Programme to keep posted of the latest information!

Highlights of Activities



Engineers from the Electricity Legislation Division briefed the participants on the source of power supply in Hong Kong and the key points for safe use of electricity and took them to visit the Castle Peak Power Station.



Engineers from the General Legislation Division took the participants to attend classes at the lift maintenance training centre of the Vocational Training Council, where they experienced the lift maintenance procedures through virtual reality technology in addition to simulated failure of a lift used for teaching.



To promote energy efficiency and emission reduction, engineers from the Energy Efficiency Office explained the application of renewable energy to the participants and took them to visit the Kai Tak District Cooling System.

Highlights of Activities



The participants had great fun making E&M gadgets on their own.



E&M Young Ambassador 機電青少年大使

機電工程署
EMSD



E & M Safety Quiz

Please fill in the reply slip below with **the most appropriate answer** for each question and send it by post or by fax to the Editor, E&M Safety Newsletter (contact information is shown at the bottom of this page). The first 500[1] of the quiz participants answering all questions correctly will receive a souvenir (on a first-come-first-served basis).

- As at May 2019, the contact information of how many registered lift/escalator engineers did the EMSD upload onto the "Other Reference Information" section in the "Lifts and Escalators Safety – Responsible Persons' Corner" webpage?
 - Over 20
 - Over 40
 - Over 60
 - Over 80
- How popular are LPG vehicles in Hong Kong at present?
 - Nearly all taxis and over 4 500 light buses use LPG
 - All private vehicles use LPG
 - All taxis and light buses use LPG
 - All commercial vehicles use LPG
- Who can perform the periodic press-button test for an RCD?
 - Registered electrical workers
 - Experienced artisans
 - Householders or users
 - All of the above
- After 1 December 2019, local manufacturers or importers who fail to attach energy labels in the specified format on products covered under the third phase of Mandatory Energy Efficiency Labelling Scheme are liable to a maximum fine of _____.
 - \$30,000
 - \$50,000
 - \$70,000
 - \$100,000
- Which of the following should members of the public take note of when arranging maintenance for household electrical appliances?
 - Adhere to the instructions in the user manual in cleaning and maintaining the electrical appliances.
 - Arrange regular inspection and maintenance of the electrical appliances by an experienced technician.
 - In case of any abnormalities (e.g. abnormal sounds, smell or any sign of overheating, etc.) during operation, stop using the electrical appliances and arrange inspection and repair by an experienced technician.
 - All of the above.

REPLY SLIP ^[2]				
Name:			Tel:	
Hong Kong Address:				
Answers:				
Q1	Q2	Q3	Q4	Q5

[1] Only the first 500 of the quiz participants sending in the Reply Slip with all answers correct will be notified.

[2] The personal data provided in the Reply Slip will only be used for the E & M Safety Quiz purpose. It will be kept confidential and will not be disclosed to any third party. You have the right to request in writing to check whether the EMSD is keeping your personal data, to access or correct it, and to enquire about our policy and procedures in the use of such data as well as the types of personal data we are keeping. The above terms do not affect your rights as set out in the Personal Data (Privacy) Ordinance.

Answers to last issue's quiz: 1. D 2. D 3. B 4. A 5. C 6. D

Feedback

Both the English and Chinese versions of this *E&M Safety Newsletter* are available on our web page at www.emsd.gov.hk. Your enquiries and comments are most welcome. Please write to:

The Editor, E&M Safety Newsletter
Electrical and Mechanical Services Department
3 Kai Shing Street, Kowloon

Tel 電話 : 1823 (Call Centre 電話中心)

Fax 傳真 : 2576 5945

E-mail 電郵 : info@emsd.gov.hk

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Comparing energy efficiency of
household electrical appliances



尋找註冊電業承辦商/
瓶裝石油氣分銷商

Locating registered electrical contractors/
LPG cylinder distributors



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