

20 April 2017

Education Bureau Circular No. 4/2017

Environmental Policy and Energy Saving Measures in Schools

[Note : This circular should be read by –

- (a) Supervisors / Heads of all schools – for necessary action; and
- (b) Heads of Sections – for information.]

SUMMARY

This circular aims to remind schools of the importance of formulating a school-based environmental policy and implementing measures for energy saving, and provide updates on the related information and resources. It supersedes the Education Bureau (EDB) Circular Nos. 7/2006 and 12/2006 dated 26 May 2006 and 22 November 2006 respectively.

DETAILS

(I) Environmental Policy for Schools

2. Climate change is now a great global challenge. As in other places, Hong Kong should get ready to take collaborative actions to rise to this challenge. In this connection, all schools are urged to formulate and put in place their school-based environmental policy which aims to enhance students' environmental awareness, develop their environmentally friendly attitude, and promote green practices and environmental education as a whole so as to prepare students for making well-informed, justifiable and practical decisions and taking actions in response to the impact of climate change. The environmental policy, which should be endorsed by the School Management Committee (SMC) / Incorporated Management Committee (IMC) of schools, is expected to be reported regularly at the SMC / IMC meetings for ongoing review and sustainable development.

3. The environmental policy should, inter alia, lay down (i) schools' commitments to regulatory compliance, prevention of pollution and continual improvement on environmental management, such as in waste reduction and energy saving, and the promotion of environmental protection to all members of the school; (ii) their mission, vision and beliefs towards the environment; and (iii) strategies to

enhance environmental education through developing school curriculum, managing school facilities and resources, organising learning activities, etc. For details on the formulation of a holistic school environmental policy, schools may make reference to, among others, “Green School Environmental Management” which is provided for participating schools under the “Hong Kong Green School Award” and available at the Environmental Campaign Committee (ECC) website via the following hyperlink or path:

<http://school.ecc.org.hk/eccschool/uploadfiles/english/File/Green%20School%20Environmental%20Management.pdf>

(ECC Schools Go Green website > Hong Kong Green School Award > Resource materials > Green School Environmental Management)

School Curriculum and Educational Projects / Activities on Environmental Education

4. EDB encourages schools to adopt a cross-curricular and whole-school approach to the promotion of environmental education. Elements of environmental education are covered in various Key Learning Areas (KLAs) / subjects, including General Studies at primary level; and Personal, Social and Humanities Education KLA, Science Education KLA and Liberal Studies at secondary level. Schools can also incorporate relevant learning elements in school-based curriculum and organise life-wide learning activities on climate change and green lifestyle with a view to arousing students’ environmental awareness as well as providing students with the opportunities to develop and apply related knowledge, skills and positive values and attitudes in facing the challenges of climate change.

5. A diversified range of support measures and resources are provided by EDB to facilitate the implementation of environmental education. Professional development programmes for teachers as well as learning and teaching resources such as ETV programmes, booklets, exemplars, web-based Environmental Education Learning Package and CD packages are provided to schools to enhance learning and teaching effectiveness.

6. To formulate a school environmental policy and implement an environmental management plan towards a green school, schools are invited to join the “Hong Kong Green School Award”. Furthermore, schools are also encouraged to participate in the “Student Environmental Protection Ambassador Scheme” to develop students’ sense of responsibility towards the environment, nurture students’ leadership and encourage them to take positive initiatives in improving the environment. Both schemes are jointly organised by ECC, Environmental Protection Department (EPD) and EDB. Please visit the following websites for details:

- (i) “Hong Kong Green School Award”
http://school.ecc.org.hk/english/highlights/highlights_1.html
- (ii) “Student Environmental Protection Ambassador Scheme”
http://school.ecc.org.hk/english/student_environmental/student_environmental.html

7. Schools may also submit applications to the Environment and Conservation Fund, Quality Education Fund, etc. for funding support to organise education programmes or activities to enhance students’ awareness, knowledge, and attitude related to environmental issues, for example, implementing projects on the use of environmental facilities to reduce environmental impact, or conducting research and development studies on how to adapt and take positive action to mitigate climate change. Please visit the following websites for details:

- (i) Environmental Education and Community Action Projects
<http://eeca.ecc.org.hk/english/index.html>
- (ii) Quality Education Fund
http://www.qef.org.hk/e_index.html

(II) Energy Saving

8. Energy consumption is closely related to greenhouse gas (GHG) emissions. Promoting energy saving is a linchpin of our efforts in combating climate change. Not only do energy efficiency and conservation contribute to a better environment for the community but also help reduce unnecessary spending on energy bills. Given the large number of schools in Hong Kong and the considerable amount of recurrent expenditure on electricity, schools are urged to accord the first priority, among various areas under their environmental policy, to the issue of energy saving.

Air-conditioning (A/C) Temperature in Schools

9. Electricity generation is the major source of air pollutant emissions in Hong Kong. Reducing the consumption of electricity can directly improve the air quality and help combat the problem of global warming. A/C accounts for about one-third of the total power consumption of Hong Kong, costing some \$14 billion per annum. An increase of one degree in A/C temperature can reduce electricity consumption by as much as 3%. If the whole of Hong Kong turns the A/C temperature up by one degree, we can altogether reduce the emission of GHG by some 250,000 tonnes a year.

10. To adopt best practices for energy savings, heads of schools are reminded to set and maintain an average indoor temperature between 24-26°C during the summer

months as far as practicable. For the other months, especially those during the cool seasons, schools are encouraged to use ventilation or fans instead of A/C system as far as possible.

Green Hong Kong · Carbon Audit

11. In Hong Kong, buildings account for about 90% of our electricity consumption, representing over 60% of GHG emissions. To reduce GHG emissions arising from electricity consumption in buildings, important and appropriate steps could be taken by schools to reduce such emissions. Schools are encouraged to join the “Green Hong Kong · Carbon Audit” campaign as the “Carbon Audit · Green Partners” by signing the “Carbon Reduction Charter” with EPD and undertaking to carry out activities in support of GHG emission reduction. For more information on the “Carbon Audit · Green Partner”, please visit the Environment Bureau’s “Climate Ready @ HK” website via the following hyperlink:

<https://www.climate-ready.gov.hk/page.php?id=133&lang=1>

School Facilities and Equipment for Energy Saving

12. To create a green campus, schools are encouraged to carry out energy saving initiatives in developing or managing their school facilities and equipment. To comply with the latest Building Energy Code promulgated under the Buildings Energy Efficiency Ordinance (Cap. 610), which sets out the technical guidelines and details in respect of the minimum energy efficiency requirements of building services installations, schools may, for instance, replace damaged / deteriorated light fittings by energy-efficient ones (like T5 fluorescent tubes or light emitting diode (LED) lamps), and apply automatic lighting control, where applicable. Schools undergoing major retrofitting and/or renovation works should seek opportunities in its design to enhance energy performance, such as maximising the use of day lighting and natural ventilation, and focusing on heat gain control and heat dissipation.

Procurement of Energy Efficient Appliances

13. Upon replacement of old appliances or procurement of new appliances, schools are reminded to purchase energy efficient appliances, such as:

- (i) appliances covered by the Mandatory Energy Efficiency Labelling Scheme (MEELS), which currently covers 5 types of prescribed products, namely room air conditioners, refrigerating appliances, compact fluorescent lamps, washing machines and dehumidifiers (Grade 1 energy label being the most energy efficient); and

- (ii) appliances covered by Voluntary Energy Efficiency Labelling Scheme (VEELS), which currently covers 22 types of household appliances and office equipment, such as photocopiers, LCD monitors and computers.

14. For details of MEELS / VEELS, please visit the following websites:

- (i) Mandatory Energy Efficiency Labelling Scheme (MEELS)
<http://www.energylabel.emsd.gov.hk/en/about/background2.html>
- (ii) Voluntary Energy Efficiency Labelling Scheme (VEELS)
http://www.emsd.gov.hk/en/energy_efficiency/voluntary_energy_efficiency_labelling_scheme/index.html

Switching Off Electrical Appliances When Not in Use

15. Schools are reminded to switch off electrical appliances when not in use to avoid waste of energy. Please visit the Electrical and Mechanical Services Department (EMSD) website via the following hyperlink for more information:

<http://www.energysaving.gov.hk/esc2016/en/tips/index.html>

Resources and Information on Energy Saving

16. Schools are requested to implement energy saving measures in school premises and, as a good housekeeping practice, appoint a designated staff member to follow up on the implementation of these measures. Please refer to the following resources materials for measures on energy saving:

- (i) “Energy Saving for All – Energy Saving Tips” by the Environment Bureau and EMSD
http://www.energysaving.gov.hk/en/energy_saving_tips/index.html
- (ii) “Effective Use of Resources in Schools” by EDB
<http://www.edb.gov.hk/en/sch-admin/admin/about-sch/effective-use-sch-resources/index.html>

17. Schools are encouraged to visit the EDB website on “Effective Use of Resources in Schools” from time to time to access the latest resources / reference materials on the environmental policy and energy saving measures as well as updated hyperlinks to the above-mentioned non-EDB websites.

ENQUIRY

18. For enquiries on formulating an environmental policy and implementing measures for energy saving and conservation, please contact the respective Senior School Development Officers.

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for Secretary for Education