

**“Green Schools 2.0 - Energy Smart”**  
**Support Scheme on Replacement of Inverter Air-Conditioners, LED**  
**Lighting and Installation of Real-time Energy Monitoring Systems**  
**for Schools**

**Guide to Application**

**1. Introduction**

- 1.1. Green Schools 2.0 - Energy Smart is introduced by the Government of the Hong Kong Special Administrative Region (“Government”) to subsidise and assist primary and secondary schools (except Government and profit-making schools) to replace existing air-conditioners with variable-speed air-conditioners (VSAC), convert existing lighting into LED lighting, and install real-time energy monitoring systems (“RTEMs”) at their premises.
- 1.2. Green Schools 2.0 - Energy Smart will last for five financial years from 2020-21 to 2024-25.
- 1.3. This Guide provides guidance on application for joining Green Schools 2.0 - Energy Smart and sets out the basic requirements and responsibilities of participating schools.

**2. Eligibility**

- 2.1 The following schools which have the ownership of existing air-conditioning units (AC), lighting fixtures and floodlights, as well as the legal right to use their premises for installing VSAC / LED lighting / RTEMs are eligible to apply for joining Green Schools 2.0 - Energy Smart:
  - (a) Non-Government primary, secondary and special schools which are non-profit-making, including aided, caput, Direct Subsidy Scheme, and non-profit making private schools.

**3. Scope of Green Schools 2.0 - Energy Smart**

- 3.1 Green Schools 2.0 - Energy Smart is a Government programme with

various new initiatives to foster an environment where teachers and staff can cultivate a positive and green school culture by adopting energy efficient systems and innovative technologies that would be coupled with environmental education programme to encourage the development of environmentally awareness. Major scope of works of the energy saving project includes (i) replacing existing air-conditioners with VSAC<sup>1</sup>; (ii) converting existing florescent / incandescent lighting and outdoor floodlights into LED lighting / floodlights; and (iii) installing RTEMs at the premises of non-profit-making non-government primary and secondary schools (hereafter as “primary and secondary schools”). EMSD will provide subsidy and one-stop services for primary and secondary schools to implement the said energy saving projects in their premises. Under Green Schools 2.0 - Energy Smart, the Electrical and Mechanical Services Department (“EMSD”) will follow through the entire process of the energy saving projects, including conducting site visits and technical assessments, drawing up design of RTEMs, procuring equipment, installation and commissioning, etc. All the expenses in relation to the installation of the energy saving projects (installation costs and costs of professional services, etc.) will be fully covered by the Government under Green Schools 2.0 - Energy Smart.

- 3.2 Under Green Schools 2.0 - Energy Smart, associated works such as construction or upgrading of concrete / metal platforms / support frame for accommodating outdoor units of VSAC, replacement of lighting fixtures and associated electric wirings, re-wiring of power supply circuits, etc. are not covered.
- 3.3 Only existing air-conditioners and lighting equipment under the school’s full ownership and in compliance with the provision under the Schedule of Accommodation, if applicable, will be considered under Green Schools 2.0 - Energy Smart, having regard to the prioritising criteria set out in paragraph 4.1 below.
- 3.4 Applications for installation of new RTEMs, as well as replacement

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<sup>1</sup> If VSAC cannot be installed due to site constraint, AC unit with Grade 1 energy label under the MEELS (Mandatory Energy Efficiency Labelling Scheme) and higher performance, i.e. higher CSPF (Cooling Seasonal Performance Factor), etc, will be considered for replacement.

of some of the existing AC units and lightings for schools where some AC units and lightings have already been upgraded in recent years, will be considered under Green Schools 2.0 - Energy Smart having regard to the prioritising criteria set out in paragraph 4.1 below.

- 3.5 As a general principle, the scope of works will include all the three types of energy saving projects stated replacement of VSAC / LED lighting / installing of RTEMs as a whole package. Depending on the specific circumstances of individual schools, partial implementation of the scope of works will also be considered having regard to the merit of individual cases, but will be accorded with lower priority.
- 3.6 Selected schools will be the owner of the VSAC / LED lighting / RTEMs installed under Green Schools 2.0 - Energy Smart. They will need to bear the costs of the on-going operation and maintenance of the VSAC / LED lighting<sup>2</sup> / RTEMs, as well as the eventual removal of the VSAC / LED lighting / RTEMs at the end of their service lives. Upon completion of the installation of the VSAC / LED lighting / RTEMs, EMSD's Contractor(s) will provide maintenance service within the one-year defects liability period; thereafter schools shall self-finance for supporting the on-going operation and maintenance costs of their VSAC / LED lighting / RTEMs.
- 3.7 Under no circumstances shall the Government and its employees or agents be held liable for any loss or damage or liabilities arising from the VSAC / LED lighting / RTEMs installed under Green Schools 2.0 - Energy Smart howsoever caused.

#### **4. Prioritising Criteria**

- 4.1 As a general principle, we aim to benefit as many eligible schools as possible under Green Schools 2.0 - Energy Smart. Other criteria to be taken into account when prioritising applications received include

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<sup>2</sup> For aided schools, the newly replaced VSAC and retro-fitted LED light will be covered under EDB's prevailing emergency repairs and major repairs mechanism in accordance with the Schedule of Accommodation.

but are not limited to the following:

- (a) cost effectiveness of the VSAC / LED lighting / RTEMs (e.g. cost of installation of RTEMs and one-off replacement of existing AC and lighting retro-fitting (i.e. service years of existing air-conditioners and lighting, equipment types, payback period) and estimated energy savings, etc.);
- (b) site accessibility and safety issues (e.g. access platform to and condition of support frame for existing AC and lightings, etc.);
- (c) conditions of the existing AC and lightings (e.g. service years, cooling performance and lighting level, number of faults, etc.) and site readiness for VSAC / LED lighting / RTEMs installation works (e.g. need to reconfigure existing electrical supply network or modification to existing building structure etc.);
- (d) availability of supporting documents and supplementary information (e.g. building records and schematic of electrical wiring diagrams, inventory information on the existing AC and lightings etc.);
- (e) ability of the eligible schools to operate and maintain the VSAC / LED lighting / RTEMs to be installed under Green Schools 2.0 - Energy Smart for the entire lifetime of the equipment concerned; and
- (f) whether the eligible schools have received / will receive alternative sources of funding<sup>3</sup> for VSAC / LED lighting / RTEMs installations.

## **5. Processing of Applications**

5.1. We will process applications according to the following steps:

- (a) eligible schools may submit expression of interest (EOI)

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<sup>3</sup> Eligible schools shall keep EMSD updated of the latest status of alternative sources of funding.

forms together with supporting documents and supplementary information (if available) to EMSD;

- (b) based on the information provided in the EOI forms, supporting documents and supplementary information (if available), preliminary assessment will be conducted by EMSD on eligible schools with good potential in accordance with the prioritising criteria set out in paragraph 4.1 above, and may seek EDB's views;
- (c) Consultant(s) to be engaged by EMSD will conduct site surveys at the shortlisted schools, based on the application sequence, to assess the technical feasibility of VSAC / LED lighting / RTEMs installations, taking into account factors including existing electrical provisions, loadings and distribution network, condition of support frame for existing air-conditioners and lighting, etc. Preliminary design of the VSAC / LED lighting / RTEMs will also be developed by the Consultant(s) to be engaged by EMSD;
- (d) Based on the site survey and assessment findings as well as the prioritising criteria set out in paragraph 4.1 above, EMSD will select around 70 schools for installation of VSAC / LED lighting / RTEMs at their premises in the financial year 2022-23 according to steps (e) to (g) below<sup>4</sup>. For the remaining schools which are not selected, their applications will be rolled over and considered alongside with other fresh applications to be received in financial year 2023-24 and subsequent years up to 2024-25;
- (e) school supervisors of selected schools will need to nominate a contact person to liaise with EMSD and its Contractor(s) on the installation works, and will give consent to the installation of VSAC / LED lighting / RTEMs and grant access to EMSD and its Contractor(s) to undertake relevant works, and the timeframe for the installation works and any other terms and conditions set by the Government, etc.;

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<sup>4</sup> Subject to the passage of the Appropriation Bill 2021 in the Legislative Council.

(f) Contractor(s) to be engaged by EMSD will install the VSAC / LED lighting / RTEMs at the selected schools, if authorised; and

(g) Contractor(s) will only provide maintenance service within the one-year defects liability period.

5.2. Eligible schools which submit applications **on or before 22 April 2022** (Batch 1 applications) will be handled with priority. For eligible schools which submit applications **on or before 30 June 2022** (Batch 2 applications), their applications will be considered within 2022 if not enough suitable sites are selected from Batch 1 applications in 2022-23.

5.3. A tentative processing timetable for 2022-23 is set out below:

Batch 1 Applications	Batch 2 Applications	Activities
On or before 22 April 2022	On or before 30 June 2022	Submission of EOI forms, supporting documents and supplementary information (if available) by eligible schools
From March 2022	From May 2022	Preliminary assessment on eligible schools with good potential for VSAC / LED lighting / RTEMs installations based on the EOI forms, supporting documents and supplementary information received; conduct site surveys at schools
From April / May 2022	From July / August 2022	Notification of application results through letters

## **6. Undertaking to Operate the VSAC / LED lighting / RTEMs Installed under Green Schools 2.0 - Energy Smart**

6.1. Selected schools will be required to continue to operate the VSAC / LED lighting / RTEMs installed under Green Schools 2.0 - Energy

Smart for the entire lifetime of the VSAC / LED lighting / RTEMs concerned.

- 6.2. VSAC / LED lighting / RTEMs installed under Green Schools 2.0 - Energy Smart are not transferrable.
- 6.3. In case selected schools fail to comply with paragraphs 6.1 and 6.2 above and no prior notification with reasonable explanation has been given to the Government, the Government reserves the right to consider possible redeployment of the capital items and other materials funded under Green Schools 2.0 - Energy Smart, including asking selected schools to, at their own cost, remove and return the VSAC / LED lighting / RTEMs installed to the Government.

## **7. How to Join Green Schools 2.0 - Energy Smart**

- 7.1. Interested schools which have not submitted their applications before should return the completed EOI forms (at **Annex A**), supporting documents and supplementary information **on or before 22 April 2022 (Batch 1 applications) or 30 June 2022 (Batch 2 applications)**.

### **Original copy of the completed EOI should be returned by post.**

We encourage participating schools to submit other supporting documents and supplementary information through electronic means as far as practicable in order to reduce the use of paper (though submission of the relevant documents and information in hard copy will also be accepted). Postal and email addresses are set out below:

Postal address: Energy Efficiency Office, 7/F., Electrical and Mechanical Service Department Headquarters, 3 Kai Shing Street, Kowloon, Hong Kong

(Please state Green Schools 2.0 - Energy Smart on the envelope)

E-mail address: [greenschools2@emsd.gov.hk](mailto:greenschools2@emsd.gov.hk)

(Please state the name of participating school)

For enquiry, please contact the Event Secretariat of EMSD by telephone at 3155 3977 or by e-mail ([greenschools2@emsd.gov.hk](mailto:greenschools2@emsd.gov.hk)).

## **8. Important Points to Note**

- 8.1. During the EOI stage, eligible schools should provide the supporting documents and supplementary information as set out in the EOI form as far as possible, so that their applications can be processed more quickly. Applications without the necessary documents or information in full will still be considered but will be accorded with lower priority.
- 8.2. Selected schools will be the owner of the VSAC / LED lighting / RTEMs and they will have to bear the costs of the on-going operation and maintenance of the VSAC / LED lighting / RTEMs. Upon completion of the installation of the VSAC / LED lighting / RTEMs, EMSD's Contractor(s) will provide maintenance service within the one-year defects liability period, and thereafter the schools concerned shall self-finance for supporting the on-going operation and maintenance costs of their VSAC / LED lighting / RTEMs.
- 8.3. Whether VSAC / LED lighting / RTEMs can be installed at a premise under Green Schools 2.0 - Energy Smart will be subject to the specific conditions of individual sites. Below are some examples of major issues which may render a site not readily suitable for installation of VSAC / LED lighting / RTEMs under Green Schools 2.0 - Energy Smart:
  - (a) Ownership of existing air-conditioners and lighting, e.g. non-compliance with the provision under Schedule of Accommodation;
  - (b) Service years of existing air-conditioners and lighting, e.g. existing air-conditioners or florescent lighting have been put into operation for just a short period of time;



- (c) Limitation of the existing electricity supply network in supporting the proposed VSAC / LED lighting / RTEMs;
- (d) Safety and accessibility concerns, e.g. installation at high level, no access platform to or undesirable support frame for existing air-conditioners and lighting, etc.;
- (e) Insufficient space for VSAC / LED lighting / RTEMs installations;
- (f) The site is on a declared monument or graded historic building<sup>5</sup>; and
- (g) Any restrictions set out in the land lease / tenancy agreements (if applicable) in relation to participation in Green Schools 2.0 - Energy Smart.

8.4. Upon completion of the project (i.e. installation of VSAC / LED lighting / RTEMs are completed) and handover of the VSAC / LED lighting / RTEMs to the school concerned, the latter will be required to submit a progress report each year (e.g. no later than 1 month after the cut-off date) for the entire lifetime of the VSAC / lighting / RTEMs concerned. Information to be included in the progress report includes but is not limited to electricity used breakdown recorded by the RTEMs and the respective educational activities if any within the reporting period. Template of the progress report will be provided by the Government to selected schools to provide further information in relation to the installed VSAC / LED lighting / RTEMs upon request by the Government.

8.5. Except for any third party materials, all intellectual property rights<sup>6</sup> in all results, findings, compilations of data and information and any

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<sup>5</sup> The list of declared monument or graded historic building can be found from the following websites:  
<https://www.amo.gov.hk/en/monuments.php>  
<https://www.amo.gov.hk/en/built2.php>

<sup>6</sup> “Intellectual property rights” means patents, trademarks, service marks, trade names, design rights, copyright, domain names, database rights, rights in know-how, new inventions, designs or processes and other intellectual property rights whether now known or created in future (of whatever nature and wherever arising) and in each case whether registered or unregistered and including applications for the grant of any such rights.

other materials provided in the EOI form, supporting documents, supplementary information and materials, progress reports and other publications and publicity materials created by participating schools under Green Schools 2.0 - Energy Smart (collectively referred to as “Materials”) shall belong to the participating schools. Participating schools shall grant unconditionally and irrevocably to the Government and its authorised users the right to copy, publish, issue and make available to the public copies of, and make an adaptation of the Materials.

- 8.6. Unless otherwise stated, all intellectual property rights in the VSAC / LED lighting / RTEMs (including the design of the VSAC / LED lighting / RTEMs) provided or installed under Green Schools 2.0 - Energy Smart shall belong to the Government immediately upon creation.
- 8.7. Eligible schools are reminded to take note of any relevant circular(s) / circular memorandum(s) or documents as issued by EDB from time to time.

## **9. Enquiries**

- 9.1. For enquiries, please contact the Event Secretariat of EMSD by telephone at 3155 3977 or by e-mail ([greenschools2@emsd.gov.hk](mailto:greenschools2@emsd.gov.hk)).

**Environment Bureau**  
**Electrical and Mechanical Services Department**  
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