BEAM Plus
Existing Schools

Technical Guidebook

Version 1.0

(Beta 0)

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HKGBC
香港綠色建築議會

BEAM
建築環保評估協會

Disclaimers of BEAM Plus Existing Schools V1.0 (Beta 0)

The BEAM Plus Existing Schools V1.0 (Beta 0) is released as a beta version for pilot use. This must not be taken as an official launch of the final version which is subject to changes in due course.

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1. Introduction

1.1 General

This Technical Guidebook (hereafter "Guidebook") is developed together with the BEAM Plus Existing Schools Assessment Manual to provide a comprehensive guidance for schools pursuing BEAM Plus Existing Schools V1.0 certification.

Schools should refer to this Guidebook when preparing the submission materials. This Guidebook provides further interpretation of the assessment requirements of credit heads. For specific credit head, step-by-step calculation is also provided for the Applicant as reference. Furthermore, documentation requirements are also provided for each required submittal.

1.2 Submission Process

The submission process is streamlined under BEAM Plus Existing Schools to facilitate the Applicant throughout the certification process. The following figures depict the submission arrangement:

1. Summary Checklist   +   2. Required Documentations   +   3. Standard File Structure

The Applicant is required to complete a Summary Checklist comprising the following information:

i.   General project information;
ii.   Summary of score point; and
iii. Attempted credit heads.

The Applicant shall provide all required documentations as specified in each credit head and shall be organised in the standard file structure for submission.

1.3 Documentation Requirements

The documentation requirements are standardised and categorised as follows:

Submittals Category	Description
Drawings	Engineering drawings, layout plan, sketch drawings
Records	Photographs and implementation records
Technical Documents	Calculations, technical reports, technical specifications, catalogues
Management Documents	School top-level management plan, action plan, policy and procedure.
Narratives	Descriptive document

A summary of documentation requirements is provided at the following table as reference.

Summary Table of Documentation Requirements

	Credit Heads	Drawings	Records	Management Documents	Narratives	Technical Documents
01	School Environmental Management		✓	✓	✓	
02	Good Environmental Practices	✓	✓		✓	
03	Staff Awareness		✓			
04	Green Prefect		✓			
05	School Environmental Education		✓		✓	
06	Environmental Activities		✓			
07	Environmental Corner		✓			
08	Environmental Communication		✓		✓	
09	Energy Efficient Equipment	✓	✓			✓
10	Energy Efficient Measures	✓	✓			✓
11	On-site Renewable Energy Application		✓		✓	
12	Water Efficient Fixtures		✓			✓
13	Water Efficient Measures	✓	✓			✓
14	Recycling Facilities	✓	✓		✓	
15	School Environmental Performance	✓	✓			✓
16	Carbon Audit					✓
17	Environmental Data Disclosure		✓			
18	Greening Schools	✓	✓		✓	✓
19	School Agriculture		✓		✓	
20	Low Carbon Transport	✓	✓		✓	
21	Neighbourhood Amenities	✓	✓		✓	
22	Shared Use of Facilities	✓		✓	✓	
23	Extreme Weather Response Measures	✓	✓	✓	✓	
24	Indoor Air Quality	✓	✓		✓	✓
25	Openable Windows for Fresh Air	✓	✓			✓
26	Lighting Quality	✓	✓			✓
27	Background Noise	✓	✓			✓
28	Drinking Water Quality	✓				✓
29	Healthy Lifestyles		✓		✓	
30	Pandemic Response Measures		✓	✓	✓	
-	Innovative Green Features and Green Ideas	✓	✓		✓	✓

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1.4 Summary of Credit Points

Performance Category	Sub-Performance Category	Credit Head Items		Credit Point
Sustainable Leadership and Learning	Top Management Involvement	01	School Environmental Management	6
		02	Good Environmental Practices	15
	Environmental Education	03	Staff Awareness	1
		04	Green Prefect	1
		05	School Environmental Education	2
		06	Environmental Activities	5
	Engagement	07	Environmental Corner	2
		08	Environmental Communication	1
Efficient Use of Resources	Eco-Friendly Facilities	09	Energy Efficient Equipment	4
		10	Energy Efficient Measures	6
		11	On-site Renewable Energy Application	2
		12	Water Efficient Fixtures	4
		13	Water Efficient Measures	5
		14	Recycling Facilities	3
	Monitoring and Benchmarking	15	School Environmental Performance	9
	Decarbonisation	16	Carbon Audit	1
	Data Disclosure	17	Environmental Data Disclosure	1
Sustainable Campus Environment	Biodiversity	18	Greening Schools	5
		19	School Agriculture	1
	Low-carbon Transport	20	Low Carbon Transport	2
	Amenities	21	Neighbourhood Amenities	1
		22	Shared Use of Facilities	1
	Climate Resilience	23	Extreme Weather Response Measures	5
Health, Comfort & Happiness	Indoor Environmental Quality	24	Indoor Air Quality	1
		25	Openable Windows for Fresh Air	1
		26	Lighting Quality	2
		27	Background Noise	1
	Healthy Living	28	Drinking Water Quality	1
		29	Healthy Lifestyles	6
	Pandemic Response	30	Pandemic Response Measures	5
Enhancements and Innovations	Enhancements and Innovations	-	Innovative Green Features and Green Ideas	10 B
			Total Credit Points	**100 + 10 B**

2   General Documentation

In addition to the specified documentations under each credit head, the following information should also be submitted:

    2.1. School layout plan;
    2.2. School site area (m^2);
    2.3. School total floor area (m^2);
    2.4. Summary Checklist;
    2.5. School occupancy; and
    2.6. School operation schedule.

Sustainable Leadership and Learning

01   School Environmental Management

Assessment Criteria

Environmental Policy

1. The Applicant shall provide an environmental policy endorsed by the school top management to demonstrate the commitment.

2. School top management refers to the Principal or his/ her delegates.

3. The scope of the enviornmental policy is not confined. The following aspects are listed for consideration, i.e. energy, water, waste and recycling, carbon reduction, etc.

Environmental Targets

1. The Applicant shall provide the environmental objectives and targets endorsed by the school top management.

2. School top management refers to the Principal or his/ her delegates.

3. The targets could be in the form of descriptive statement or metric KPIs, for example:

    3.1. Reducing at least 5% of energy consumption by Year 2025; or
    3.2. To promote environmental awareness of students through organising different types of activities.

4. There is no specific requirement for schools in terms of the objectives and targets. Schools can set up their own environmental objectives and targets in accordance with their own operational mode and development plan.

Environmental Management Plan

1. The Applicant shall provide an environmental management plan endorsed by the school top management.

2. School top management refers to the Principal or his/ her delegates.

3. One (1) credit point for providing an environmental management plan covering one of the listed aspects, and maximum two (2) credit points could be achieved:

    3.1. Energy;
    3.2. Water;
    3.3. Waste & recycling; and
    3.4. Carbon footprint reduction.

4. The Applicant shall provide the environmental management plan having the following elements as a minimum:

    4.1. Objectives and Targets;
    4.2. High level commitment;
    4.3. Strategies in improving the environmental performance of the claimed aspect;
    4.4. Monitoring of performance;
    4.5. Feedback channels; and
    4.6. Reporting to the top management on progress.

5. There is no specific requirement for schools in terms of the environmental management plan. Schools can set up their own plan in accordance with their own operational mode and development plan.

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Green Purchasing Plan

1. The Applicant shall provide a green purchasing plan endorsed by the school top management.

2. School top management refers to the Principal or his/ her delegates.

3. The Applicant shall make reference to the following listed items in developing their own plan:

 3.1. Durable materials, goods, products and equipment;
 3.2. Materials with low embodied energy;
 3.3. Locally produced materials where available;
 3.4. Wood products from well-managed sources;
 3.5. Products which do not use CFCs, HCFCs, halons;
 3.6. Finishes; paints, adhesives, etc., with low levels of emissions;
 3.7. Minimal packaging and/or recyclable packaging;
 3.8. Products having high recyclable contents;
 3.9. Products that are recyclable;
 3.10. Energy efficient appliances and equipment; and
 3.11. Water efficient appliances.

4. The above list is not exhaustive, and it is served as a reference for schools, and it is not necessary to include all items in their own green purchasing plan. The Applicant shall compose their green purchasing plan which adequately covers the materials with respect to their own operational needs.

5. There is no specific requirement for schools in terms of the green purchasing plan. Schools can set up their own plan in accordance with their own operational mode and development plan.

Electronic Operation and Maintenance Facility

1. The Applicant shall provide a narrative to describe the electronic operation and maintenance ("O&M") platform adopted in the school.

2. The electronic O&M platform could be in the form of following:

 2.1. School intranet;
 2.2. Share drive; and
 2.3. Cloud storage.

3. Screenshots shall be provided to demonstrate that the following documents are uploaded to the O&M platform for easy retrieval:

 3.1. School layout plan;
 3.2. Engineering drawings and;
 3.3. O&M instructions.

Documentation Requirement

Environmental Policy

1. *Management Documents - **Environmental Policy***

 1.1. School's environmental policy endorsed by the school top management.

Environmental Targets

1. *Management Documents - **Environmental Target Narrative***

 1.1. School's environmental objectives and targets endorsed by the school top management.

Environmental Plan

1. *Management Documents - **Environmental Plan***

    1.1. School's environmental management plan endorsed by the school top management.
    1.2. The plan should document at least one environmental objective and target for schools, demonstrates high level commitment, outlines strategies that to be adopted to improve the environmental performance of the claimed aspect, monitoring of performance, providing feedback channels and reporting to top management on progress.

Green Purchasing Plan

1. *Management Documents - **Green Purchasing Plan***

    1.1. School's green purchasing plan endorsed by the school top management.
    1.2. The plan should document school procurement procedures on purchasing green product.

Electronic Operation and Maintenance (O&M) Facility

1. *Narratives - **Electronic O&M Facility Narrative***

    1.1. One-page narrative describing the format and details of the Electronic O&M Facility.

2. *Records - **Screenshot Record***

    2.1. Screenshots showing that the following documents are uploaded to the electronic O&M platform:
    - School layout plan;
    - Engineering drawings; and
    - O&M instructions.

Sustainable Leadership and Learning

02   Good Environmental Practices

Assessment Criteria

Energy Conservation

1. The Applicant could achieve one (1) credit point for implementing each of the following listed strategies.

2. Maximum five (5) credit points could be achieved for demonstrating the implementation of good environmental practices from energy conservation aspect.

3. Below are some recommended good environmental practices under energy conservation, recommended evidence are also provided below for reference:

   3.1. Setting up guidelines for the operation of air-conditioning system in classrooms (*i.e., guidelines showing only switch on A/C at certain outdoor temperatures*);
   3.2. Turn off lights, computers and other electrical equipment when not in use (*Photographs showing equipment is switched off*);
   3.3. Display energy saving reminder signs, stickers/ posters for power-off action (*Photographs showing the displayed reminder signs, stickers/ posters*);
   3.4. Adopt natural ventilation (i.e., open windows and doors) and use fans when the outdoor air temperature under prescribed conditions (*Classroom guideline or photographs*);
   3.5. Maintain indoor temperature between 24°C to 26°C for all air-conditioned rooms (*Classroom guideline or photographs*);
   3.6. Turn on the fan together with the air conditioner to increase the airflow distribution, so a higher temperature set-point of air conditioner temperature can be set, i.e., beyond 26°C (*Classroom guideline or photographs*);
   3.7. Remove lighting tubes at over-lit areas (*Photographs showing lux measurement and de-lamping*);
   3.8. Regular cleaning of air-conditioner filters and lighting tubes (*Cleaning schedule/ records/ photographs showing the regular cleaning*);
   3.9. Standby electrical appliances need to be switched off via the wall socket (*Onsite Photographs*);
   3.10. Ensure the computers are in sleep mode and switch off the screen when they are not in use *Onsite Photographs*); and
   3.11. Staff and students to report failing lamps for maintenance when possible (*Provide extract of reporting logbook or instructions*).

Water Conservation

1. The Applicant could achieve one (1) credit point for implementing each of the following listed strategies.

2. Maximum five (5) credit points could be achieved for demonstrating the implementation of good environmental practices from water conservation aspect.

3. Below are some recommended good environmental practices under water conservation, recommended evidence are also provided for reference:

   3.1. Turn off all taps, drinking fountains and water dispensers off use (*Onsite photographs*);
   3.2. Display water saving reminder signs, stickers/ posters to encourage water saving action (*Photographs showing the displayed reminder signs, stickers/ posters*);
   3.3. Staff and students to report all water leakage (*Provide extract of reporting logbook or instructions*);
   3.4. Avoid using running water for cleaning purpose (*Onsite photographs*);
   3.5. Check water meters or water bills regularly to locate irregular water consumption (*Water meter records or water bills*);
   3.6. Regular inspection of water fixtures (*Inspection records or site photographs*); and
   3.7. Avoid watering the plants between 11:00 to 14:00 of the day to minimise evaporation loss (*Irrigation records/ logbook/ timer setting of irrigation/ site photographs*).

Waste and Recycling Practices

1. The Applicant could achieve one (1) credit point for implementing each of the following listed strategies.

2. Maximum five (5) credit points could be achieved for demonstrating the implementation of good environmental practices from waste and recycling aspect.

3. Below are some good environmental practices with respect to the waste and recycling aspect for reference:

    3.1. Display recycling reminder signs / posters to encourage recycling *(Photographs showing the displayed reminder signs, stickers/ posters)*;
    3.2. Adopt electronic-notice system (*Screen capture of the electronic-notice system*);
    3.3. Use of electronic teaching materials and assignments (*Softcopy of the electronic teaching materials/ assignments*);
    3.4. Utilise reuse/ refillable office and classroom stationaries when possible rather than buying new (*On-site photographs*);
    3.5. Provide a recycle box for paper in every classroom (*On-site photographs*);
    3.6. Photocopying on both sides of paper(*On-site photographs*);
    3.7. Use of printing credit system (*On-site photographs*);
    3.8. Reuse of festive decoration resources (*On-site photographs*);
    3.9. Regularly organise recycling campaign for "school materials" such as school blazers, school jackets, textbooks, musical instruments etc. (*On-site photographs*);
    3.10. No single-use plastics in school, such as straws, tea and coffee cup etc. (*On-site photographs*);
    3.11. Use of refillable water bottle (*On-site photographs*);
    3.12. Encourage students to bring their lunch boxes in reusable containers (*On-site photographs*);
    3.13. Provision of reusable containers and encourage staff/ students to use when buying take-away (*On-site photographs*);
    3.14. Surplus lunch boxes ordered can be shared with the community in need (*Photographs showing the surplus lunch boxes are shared with the community*);
    3.15. Implementation of measures on Food Waste Reduction Good Practice Guide (*Photographs showing the implemented measures*); and
    3.16. Adopt upcycling practices (*Photographs of the upcycling products*).

Documentation Requirement

1. *Narratives - **Good Environmental Practices Narrative***

    1.1. A short narrative describing the implemented good environmental practices; and
    1.2. The narrative should include a summary table summarising the adopted good practices.

2. *Records - **Implementation Record***

    2.1. Implementation records of the adopted good environmental practices.

Sustainable Leadership and Learning

03   Staff Awareness

Assessment Criteria

1.   The Applicant shall provide training records, i.e., attendance list or photographic records of the training, etc., for the teachers and relevant staff members in the past school calendar year.

2.   The Applicant shall provide copy of training materials for assessment.

3.   The themes and topics of the training shall be related to environmental and sustainability issues.

4.   There is no requirement on the number of teachers/ staff members to attend the training. However, the teachers or staff members who are responsible for school environmental affairs shall attend the training.

5.   There is no minimum training hour requirement for the assessment.

Documentation Requirement

1.   *Records - **Staff Training Records***

    1.1.   Attendance list showing the staff training records for the past school calendar year (counted from the 1st submission); and/ or
    1.2.   Photographs of the training sessions.

2.   *Records - **Training Materials Record***

    2.1.   Softcopies of the training materials used for each training session.

Sustainable Leadership and Learning

04   Green Prefect

Assessment Criteria

1. The Applicant shall appoint at least one (1) student from each class as Green Prefect.

2. The Applicant shall appoint at least one (1) student as the Head of Green Prefect.

3. The Applicant shall provide a list of appointed green prefects and the responsible teacher advisor(s) for the assessment.

4. The following implementation records of the past school calendar year shall be provided for assessment:

    4.1. Inspection checklists; and
    4.2. Photographic records of the briefing and training to the green prefects and inspection.

Documentation Requirement

1. *Records - **School Green Prefect Record***

    1.1. A summary table listing the appointed green prefects and the responsible teacher advisor(s).

2. *Records - **Inspection Checklist Record***

    2.1. Samples of completed inspection checklist.

3. *Records - **Photographic Record***

    3.1. Photographs of the briefing/ training session to green prefects and inspection.

Sustainable Leadership and Learning

05   School Environmental Education

Assessment Criteria

1.   The Applicant shall provide a narrative/ teaching plan, describing the teaching contents are beyond the requirements of Education Bureau's ("EDB's") teaching syllabus.

2.   The teaching plan shall cover different levels of students in school.

3.   The Applicant shall provide the copy of the teaching materials for the assessment. There is no specific requirement on the teaching format and contents of the teaching materials. The teaching themes shall cover the listed topics in item 5 below.

4.   There is no minimum teaching hour requirement. The extended teaching materials shall cover at least two (2) or four (4) topics as stated in item 5 below to achieve 1 or 2 credit points, respectively.

5.   The environmental topics include:

    5.1. Energy conservation;
    5.2. Water conservation;
    5.3. Environmental protection;
    5.4. Resource management;
    5.5. Biodiversity & nature conservation;
    5.6. Sustainable Development Goals;
    5.7. Climate change;
    5.8. Fair-trade; or
    5.9. Other environmental/ sustainability aspects proposed by the Applicant.

Documentation Requirement

1.   *Narratives - **School Environmental Education Narrative***

    1.1. A narrative/ teaching plan describing the adopted teaching materials.

2.   *Records - **Teaching Materials Record***

    2.1. Softcopies of the teaching materials, including teaching notes, presentation slides, worksheets, and assignments (if applicable).

Sustainable Leadership and Learning

06 Environmental Activities

Assessment Criteria

1. Schools shall regularly organise activities to promote environmental and sustainability awareness among students and staff members.

2. For the first part, one (1) credit point for organising at least **10 hours** of environmental activities in the past school calendar year.

3. For the second part, one (1) credit point for organising each type of the following activities and a maximum of four (4) credit points can be achieved. Recommended evidence are also provided for reference:

  3.1. Education talks (*Photographs*);
  3.2. In-class training course by teachers (*Training materials and/or photographs*);
  3.3. Environmental competitions (*Promotion materials and/or photographs*);
  3.4. Participation in BEAM Plus submission (*Photographs*);
  3.5. Green building tours (*Promotion materials and/or photographs*);
  3.6. Training videos (*Softcopy of the videos*);
  3.7. Education digital games (*Softcopy of the videos*);
  3.8. Field trip study (*Promotion materials and/or photographs*);
  3.9. Environmental week (*Promotion materials and/or photographs*);
  3.10. Sharing sessions by students (*Photographs*); and
  3.11. Other environmental/ sustainability activities proposed by the Applicant (*Narrative and photographs*).

4. The context of the activity must be related to environmental and sustainability.

5. The Applicant shall provide a summary table to list out the environmental activities organised in the past one school calendar year. A template of the summary table is included in the submission package for reference.

6. The participation rate is not assessed.

7. The Applicant shall provide photographic records of the activities for assessment.

Documentation Requirement

1. *Records - **Environmental Activities Summary Record***

  1.1. A summary table (in MS Excel format), summarising the details of the environmental activities in the past school calendar year.

  1.2. The summary table should include the following information:
   • Organiser;
   • Name of the activities;
   • Description of the activities;
   • Type of the activities; and
   • Number of hours.

2. *Records - **Implementation Records***

  2.1. Provide records of the organised actives, i.e., promotional materials, photographic records, video records (if applicable).

Sustainable Leadership and Learning

07   Environmental Corner

Assessment Criteria

1. Schools shall have an Environmental Corner/ Board at prominent location/ electronic platform, with adequate environmental information and learning materials covered.

2. The format of the Environmental Corner/ Board is not regulated. It could be a notice board at prominent location in the school campus or an electronic platform, i.e., school intranet, social media, or mobile applications.

3. For the first credit point, the Applicant is required to provide photographic records showing the following items are displayed at the Environmental Corner:

    3.1. School environmental policy and targets; **AND**
    3.2. At least **two** of the following school environmental performance:
    - Annual electricity consumptions;
    - Annual fresh water consumptions;
    - Energy Utilisation Index ("EUI");
    - Water Efficient Index ("WEI");
    - Resource Recycling Index ("RRI"); or
    - Carbon footprint.

4. For the second credit point, the Applicant is required to share news bulletins or learning materials on the Environmental Corner, the information must cover at least **two** of the following the environmental topics:

    4.1. Energy conservation;
    4.2. Water conservation;
    4.3. Biodiversity/ Biophilia;
    4.4. Climate change;
    4.5. Carbon reduction;
    4.6. Other topics proposed by the Applicant.

5. Photographic records are required to demonstrate the required information are displayed at the Environmental Corner/ Board.

Documentation Requirement

1. *Records - **Photographic Records***

    1.1. Photographs of the environmental corner; **and/ or**

    1.2. Screen captures of the electronic platform.

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Sustainable Leadership and Learning

08   Environmental Communication

Assessment Criteria

1. The Applicant shall setup at least two of the following communication channels for exchanging and sharing knowledge/ feedback on school environmental issues. Recommended evidence proof is also provided for reference:

    1.1. Suggestion box (*Photographs*);
    1.2. Assembly talk (*Photographs*);
    1.3. Recess/ lunch break sharing session (*Photographs*);
    1.4. Open day (*Photographs*);
    1.5. Sharing on joint-school or outside event (*Photographs*);
    1.6. Environmental related programmes organised by Parent-Teacher Association (*Promotion materials/ photographs*); or
    1.7. Other channels proposed by the Applicant (*Narratives and photographs)*.

2. One (1) credit point for adopting at least **two (2)** of the above communication channels.

3. The Applicant shall provide a narrative to describe the communication channel adopted.

4. Photographic records of the event are required to provide for assessment.

Documentation Requirement

1. *Narratives - **Environmental Communication Narrative***

    1.1. One-page narrative describing the communication channel adopted.

2. *Records - **Photographic Records***

    2.1. Photographs and/or promotional materials of the environmental communication channels.

Efficient Use of Resources

09   Energy Efficient Equipment

Assessment Criteria

Air Conditioning Units

For schools equipped with window-type and split-type air conditioning (A/C) units:

1. One (1) credit point for all A/C units, including both window-type and split-type units, retrofitted within the past 3 years, shall be certified under EMSD **Grade 1** Energy Efficiency Label at the time of retrofitting works. Alternatively, if no retrofitting works were carried out the in the past 3 years, credit point can also be achieved if 80% of the A/C units installed in the school are certified with Grade 1 Energy Efficiency Label.

2. The Applicant shall provide a summary table showing the following information of the A/C units:

    2.1 Quantity;
    2.2 Year of installation;
    2.3 Brand and model number;
    2.4 EMSD Registration Number; and
    2.5 Area of serving.

3. Supporting documents shall include photographs and equipment catalogues.

For schools equipped with central A/C equipment:

1. Central A/C equipment refers to the following types of A/C equipment:

    1.1. Variable refrigerant flow ("VRF") system;
    1.2. Air-cooled chiller;
    1.3. Water-cooled chiller; and
    1.4. Chilled water provided from District Cooling System ("DCS").

2. One (1) credit point for demonstrating compliance of the following paths where applicable:

    Path 1:

    2.1. For VRF/ chiller systems, the minimum coefficient of performance ("COP") should be **2%** better than the specified requirement under the applicable version of the Building Energy Code at the time of installation works; **and**
    2.2. **All** the associated A/C water pump(s) and cooling tower(s) (if water-cooled chiller system is adopted) are variable speed drive ("VSD") driven.

    OR

    Path 2:

    2.3. Schools with chilled water that is provided from District Cooling System (DCS) plant.

3. The Applicant shall provide a summary table showing the following information of the central A/C equipment:

    3.1 Quantity;
    3.2 Year of installation;
    3.3 Brand and model number;
    3.4 COP showing the compliance of the credit requirement; and
    3.5 Area of serving.

4. Supporting documents shall include photographs and equipment catalogues.

5. The Applicant shall also provide equipment schedule, catalogues and photographic records to demonstrate the AC water pumps and cooling tower(s) are VSD driven.

School Equipment

1. One (1) credit point for demonstrating the following listed equipment procured within the past 3 years are with EMSD Energy Label or ENERGYSTAR certified, including:

    1.1. Photocopiers;
    1.2. Multifunction Devices;
    1.3. Printers;
    1.4. LCD Monitors;
    1.5. Fax Machines;
    1.6. Hot/Cold Bottled Water Dispensers;
    1.7. Refrigerators;
    1.8. Televisions; and
    1.9. Computers.

2. Alternatively, if the above listed equipment were not procured in the past 3 years, credit point can be achieved if 80% of the school equipment are certified with EMSD Energy Label or ENERGYSTAR.

3. The Applicant shall provide a summary table showing the following information:

    3.1. Quantity;
    3.2. Year of installation;
    3.3. Brand and model number;
    3.4. EMSD/ ENERGY STAR registration number; and
    3.5. Area of serving.

4. Supporting documents including photographs and equipment catalogue.

Efficient Lighting System

1. Demonstrate that LED lighting fixtures are installed serving **at least 30%** of school areas.

2. Supporting documents including calculation summary, lighting layout with area indication, lighting catalogue, photographs shall be submitted.

Documentation Requirement

Air Conditioning Units

For school equipped with window-type and split-type air conditioning (A/C) units:

1. *Technical Documents – **A/C Summary Schedule***

    1.1. A summary schedule showing information of all the A/C units retrofitted within the past 3 years, including:
    - Quantity;
    - Year of installation;
    - Brand and model number;
    - EMSD Registration Number; and
    - Area of serving.

2. *Records - **Photographic Records***

    2.1. Photographs of the installed A/C units with EMSD Grade 1 energy label.

For school equipped with central A/C equipment:

1. *Technical Documents – **Central A/C Equipment Summary Schedule***

    1.1. A summary schedule showing information of all the A/C units equipment retrofitted within the past 3 years, including:
    - Quantity;
    - Year of installation;
    - Brand and model number;
    - COP showing the compliance of the credit requirement; and
    - Area of serving.

2. *Technical Documents – **Central A/C Equipment Summary Schedule***

    2.1. A summary schedule showing the information of all the A/C water pumps and cooling tower:
    - Quantity;
    - Types of the pump motors/ fan motors; and
    - Area of serving.

    2.2. Catalogues of the A/C water pumps and cooling tower.

3. *Records - **Photographic Records***

    3.1. Photographs of name plate of the installed central A/C units, A/C water pumps and cooling tower.

    3.2. Photographs of the DCS sub-station at school.

School Equipment

1. *Technical Document – **School Equipment Summary Schedule***

    1.1. A summary schedule showing information of all the school equipment procured within the past 3 years, including:
    - Quantity;
    - Year of installation;
    - Brand and model number;
    - EMSD/ ENERGY STAR registration number; and
    - Area of serving.

2. *Records - **Photographic Records***

    2.1. Photographs of the installed school equipment with energy label.

Efficient Lighting System

1. *Technical Document - **Lighting Summary Calculation***

    1.1. A summary table showing at least 30% of the school areas are served by LED lighting.
    1.2. The summary table shall include the following information to demonstrate the compliance:
    - School total floor area;
    - Space areas installed with LED lighting; and
    - Percentage of calculation of the LED lighting by area.

2. *Drawings – **As-fitted School Lighting Layout***

    2.1. As-fitted school lighting layout drawings showing the provision of LED lighting.

3. *Technical Document* – **Lighting Catalogues**

    3.1. Catalogues of the installed LED lighting.

4. *Records* – **Photographic Records**

    4.1. Photographs of the installed LED lighting.

Efficient Use of Resources

10   Energy Efficient Measures

Assessment Criteria

Energy Audit

1. The Applicant shall engage a competent professional to conduct a walk-through energy audit for school within the past 5 years from the date of submission.

2. The Applicant shall provide an energy audit report to be endorsed by the competent professional for assessment.

3. The report shall include the energy consumption in the past 3 years, findings and energy management opportunities ("EMOs").

Energy Efficient Measures

1. The Applicant shall implement different energy efficient measures to enhance the school energy performance through the following approaches.

2. One (1) credit point for implementing each of the following energy efficient measures. Maximum five (5) credit points can be achieved.

    2.1.   At least 30% of all not normally occupied areas including break rooms, copy rooms, corridors, entrance lobby, toilets, staircases, lift lobbies, and plant room areas, etc., are installed with lighting control, such as photo and/or occupancy sensors;

    2.2.   Install timer control for lighting and air conditioning systems and cover at least 80% of the classrooms and special rooms;

    2.3.   Replacing ≥80% T8 lighting fixtures to T5, CFL and LED lightings;

    2.4.   Having zoning controls for interior lighting. Lightings at the window perimeter can be turned down or off on a sunny day;

    2.5.   Use light reflectors such as, mirror reflectors and nano- technology reflector;

    2.6.   50% of window areas facing East or West with direct access to daylight are applied with solar window film;

    2.7.   AC outdoor units should be shielded from direct sunlight by louvres or located under canopies;

    2.8.   Install power meters for energy monitoring;

    2.9.   Conduct retro-commissioning; and

    2.10. Regular inspection and maintenance of air-conditioning units and insulation of pipe works and window glazing.

3. The following table summarises the evidence of schedule to be submitted for assessment for each energy efficient measures:

Items	Drawings	Calculation	Records/ Report	Equipment Catalogue	Photo Records
1	✓	✓	X	✓	✓
2	X	✓	X	X	✓
3	✓	✓	X	✓	✓
4	X	X	X	X	✓
5	X	X	X	X	✓
6	✓	✓	X	X	✓
7	X	X	X	X	✓
8	X	X	X	✓	✓
9	X	X	✓	X	✓
10	X	X	X	X	✓

4. The Applicant shall provide a report describing the listed energy saving measures adopted in school within the past 3 school calendar year.

5. The report shall include the following elements as a minimum:

   5.1. A narrative to describe the adopted energy efficient measures within the past 3 school calendar year;
   5.2. A summary table showing the energy efficient measures adopted/ installed and the date of implementation; and
   5.3. The required evidence of schedule for each of the claimed energy saving measures.

Documentation Requirement

Energy Audit

1. *Technical Document – **Energy Audit Report***

   1.1. A walk-through energy audit report complies with the requirement.

Energy Efficient Measures

1. *Technical Document – **Energy Efficient Measures Report***

   1.1. A detailed report describing the listed energy saving measures adopted in school within the past 3 years;
   1.2. The report shall include the following items:
   - A summary table showing the energy efficient measures adopted/ installed and the date of implementation;
   - A narrative describing the adopted energy efficient measures; and
   - The required evidence of schedule for each of the claimed energy saving measures, including but not limited to, calculation, drawings and equipment catalogue; and photographs of the implemented energy saving measures.

Efficient Use of Resources

11   On-site Renewable Energy Application

Assessment Criteria

On-site Renewable Energy Application

1.   The Applicant shall demonstrate **at least one** renewable energy feature is installed within the school campus.

2.   The quantity and power output of the installed renewable energy feature(s) will not be assessed.

Education and Learning

1.   The Applicant shall make use of the installed renewable energy feature(s) for education purpose.

2.   The Applicant shall provide a narrative/ teaching plan summarising how to make use of the installed renewable energy feature(s) for education purpose.

3.   There is no minimum teaching hour requirement and regulation on the context, format and style of the teaching.

Documentation Requirement

On-site Renewable Energy Application

*1.   Narratives - **Renewable Energy Application Narrative***

1.1.   A narrative describing the provision and details of the on-site renewable energy feature(s) in school.

*2.   Records - **Photographic Records***

2.1.   Photographs of installed on-site renewable energy feature(s).

Education and Learning

1.   *Narratives - **Renewable Energy Education Narrative***

1.1.   A narrative/ teaching plan describing how to make use of the installed renewable energy feature(s) for education purpose.

2.   *Records - **Teaching Material Records***

2.1.   A copy of teaching materials.

3.   *Records - **Photographic Records***

3.1.   Photographs of teaching (if applicable).

Efficient Use of Resources

12 Water Efficient Fixtures

Assessment Criteria

Water Efficient Devices

1. Install water efficient devices that are certified under Water Supplies Department's (WSD's) Water Efficiency Labelling Scheme ("WELS") of Grade 1 for the following types of water fixtures:

   1.1. Basin taps and mixers;
   1.2. Shower heads;
   1.3. Kitchen/ Pantry sink taps; and
   1.4. Flow controllers.

2. Maximum two (2) credit points for installing water efficient devices under WELS issued by WSD:

Number of Credit Points	1	2
Total number of water devices are certified under WELS Grade 1 or fitted with flow controllers of WELS Grade 1	30%	≥50%

3. The Applicant shall provide a schedule of all water devices installed in schools.

4. The schedule shall include the following items for assessment:

   4.1. Quantity;
   4.2. Brand and model number;
   4.3. WSD WELS registration number;
   4.4. Area of serving; and
   4.5. Calculation showing the provision of water efficient devices fulfil the requirement.

5. The Applicant shall also provide the following document for assessment:

   5.1. Manufacturer specification or catalogue of the water efficient devices;
   5.2. Registry of the WELS products extracted from WSD's website or registration certificate of WELS issued by WSD showing the WELS Grade of the water efficient devices; and
   5.3. On-site photographs of the installed water efficient devices.

Water Efficient Flushing Devices

1. Install water efficient flushing devices that are certified under WSD's WELS Grade 1 for the following types of water flushing fixtures:

   1.1. Water closets; and
   1.2. Urials;

2. Maximum two (2) credit points for installing water efficient flushing devices under WELS Grade 1.

Number of Credit Points	1	2
Total number of water efficient flushing devices are certified under WELS Grade 1	30%	≥50%

3. The Applicant shall provide a schedule of all water flushing devices installed in the school.

4. The schedule shall include the following items for assessment:

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    4.1. Quantity;

    4.2. Brand and model number;

    4.3. WSD WELS registration number;

    4.4. Area of serving; and

    4.5. Calculation showing the provision of water efficient devices fulfil the requirement.

5. The Applicant shall also provide the following document for assessment:

    5.1. Manufacturer specification or catalogue of the water efficient devices;

    5.2. Registry of the WELS products extracted from WSD's website or registration certificate of WELS issued by WSD showing the WELS Grade 1 of the water efficient flushing devices; and

    5.3. On-site photographs of the installed water efficient flushing devices.

Documentation Requirement

Water Efficient Devices

1. *Technical Documents – **Water Efficient Devices Schedule***

    1.1. A summary schedule summarising the required information of all water devices installed in schools and the provision of water efficient devices fulfils the requirement.

2. *Records - **Supporting Records***

    3.1 Supporting documentation that verify the compliance:
- Manufacturer specification or catalogue;
- Registry of the WELS products extracted from WSD's website or registration certificate of WELS issued by WSD; and
- On-site photographs of the installed water efficient devices.

Water Efficient Flushing Devices

1. *Technical Documents – **Water Efficient Flushing Devices Schedule***

    1.1. A summary schedule summarising the required information of all water flushing devices installed in schools and the provision of water efficient flushing devices fulfils the requirement.

2. *Records - **Supporting Records***

    3.1. Supporting documentation that verify the compliance:

- Manufacturer specification or catalogue;
- Registry of the WELS products extracted from WSD's website or registration certificate of WELS issued by WSD; and
- On-site photographs of the installed water efficient flushing devices.

Efficient Use of Resources

13　Water Efficient Measures

Assessment Criteria

Water Efficient Measures

1. The Applicant shall implement different water efficient measures to enhance the water saving through the following approaches.

2. One (1) credit point for implementing one of the following water efficient measures. Maximum five (5) credit points can be achieved.

    2.1. Install water sub-metering systems;
    2.2. Install water leakage detector;
    2.3. Install rainwater recycling facility;
    2.4. Install greywater recycling facility;
    2.5. Use tap timers or a controlled water irrigation system;
    2.6. Recycling and reuse of air conditioning condensate water;
    2.7. Planting with native species to reduce irrigation water use;
    2.8. Develop and maintain water use inventory; and
    2.9. Conduct annual water audit.

3. The following table summarises the evidence of schedule to be submitted for assessment for each water efficient measure:

Items	Drawings	Records/ Report	Equipment Catalogue	Photo Records
1	✓	X	✓	✓
2	✓	X	✓	✓
3	✓	X	✓	✓
4	✓	X	✓	✓
5	X	X	X	✓
6	✓	X	X	✓
7	X	✓	X	✓
8	X	✓	✓	X
9	X	✓	X	X

4. The Applicant shall provide a report describing the listed water saving measures adopted in the school.

5. The report shall include the following elements as a minimum:

    2.1. A summary table showing the water efficient measures adopted/ installed; and
    2.2. The required evidence of schedule for each of the claimed energy saving measures.

Documentation Requirement

Water Efficient Measures

1. *Technical Documents – **Water Efficient Measures Report***

    1.1. A detailed report describing the listed water efficient measures adopted in the school;

    1.2. The report should include the following items:
    - A summary table showing the adopted water efficient measures adopted/ installed;
    - A narrative describing the adopted water efficient measures; and
    - Implementation records of the claimed water efficient measures.

Efficient Use of Resources

14   Recycling Facilities

Assessment Criteria

Basic Recycling Facilities

1. On-site basic recycling facilities for paper, plastic and metal shall be provided at prominent locations, such as canteen, tuck shop, playground/ covered playground and classrooms etc.

2. The size and quantity of the recycling facilities as well as the collection frequency will not be assessed.

3. The Applicant shall provide the following supporting documents for assessment:

    3.1. Location plan to indicate the recycling facilities; and
    3.2. On-site photographs of the recycling facilities.

Enhanced Recycling Facilities

1. One (1) credit point for providing one of the following on-site recycling facilities. Maximum two (2) credit points can be achieved:

    1.1. Glass bottles;
    1.2. Clothes;
    1.3. Fluorescent lamp (CFLs and fluorescents tubes);
    1.4. Rechargeable battery;
    1.5. Beverage carton;
    1.6. Composter for organic wastes, including food waste and organic landscape waste; and
    1.7. Other recyclables proposed by Applicant.

2. For each waste stream, provide at least one storage bin/ storage area for recycling;

3. The location of the enhanced recycling facilities will not be assessed.

4. The size, and quantity of the recycling facilities as well as the collection frequency will not be assessed;

5. The Applicant shall provide the following supporting documents for assessment:

    5.1. Location plan to indicate the recycling facilities; and
    5.2. On-site photographs of the recycling facilities.

Documentation Requirement

Basic Recycling Facilities

1. *Drawings – **Recycling Facilities Location Plan***

    1.1 Annotated school layout drawing indicating the location of the recycling facilities.

2. *Records – **Photographic Records***

    2.1. On-site photographs of the basic recycling facilities.

Enhanced Recycling Facilities

1. *Drawings – **Enhanced Recycling Facilities Location Plan***

    1.1. Annotated school layout drawing indicating the location of the enhanced recycling facilities.

2.   *Records* – ***Photographic Records***

   2.1. On-site photographs of the enhanced recycling facilities.

Efficient Use of Resources

15   School Environmental Performance

Assessment Criteria

Performance Index

1. The Applicant shall calculate the below listed annual environmental performance for assessment. One (1) credit point for reporting each of the items. Maximum three (3) credit points can be achieved.

    1.1. Energy Utilisation Index ("EUI");
    1.2. Water Efficient Index ("WEI"); and
    1.3. Resource Recycling Index ("RRI").

2. The EUI shall be calculated based on the following equation:

$$EUI = \frac{Annual\ school\ electricity\ consumption}{School\ total\ area}$$

Annual school electricity consumption is the total electricity consumption in the past school calendar year.

School total area is the Internal Floor Area of the school.

The unit is kWh/m²/year.

3. The WEI should be calculated based on the following equation:

$$WEI = \frac{Annual\ school\ fresh\ water\ consumption}{School\ total\ population}$$

Annual school freshwater consumption is the total freshwater consumption in the past school calendar year.

School total population is the total number of student and staff of the school.

The unit is m³/person/year.

4. The RRI should be calculated based on the following equation:

$$RRI = \frac{Total\ amount\ of\ recycleables\ (kg)}{Total\ amount\ of\ Municipal\ Solid\ Waste\ disposed\ of\ (kg) + Total\ amount\ of\ recycleables\ (kg)}\ X\ 100\%$$

5. The following table summarises the evidence of schedule to be submitted for each performance index:

Performance Index	Spreadsheet Calculation	Utility Bills	Others
EUI	✓	✓	School Total Area
WEI	✓	✓	School Population
RRI	✓	X	Waste and recycling records

Self-improvement

1. The number of credit point(s) to be achieved shall be determined by referencing the reduction percentage using the electricity bill, water bill or waste & recycling records. (Baseline year can be any years in the past three (3) school calendar years):

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Number of Credit Points	1	2
Annual energy use reduction	≥3%	≥5%

Number of Credit Points	1	2
Annual freshwater use reduction	≥1%	≥3%

Number of Credit Points	1	2
Annual waste reduction **or** Annual RRI enhancement	≥2%	≥5%

2. Data/ records in the past school calendar year shall be used to compare with the performance with the baseline year. Baseline year can be any years in the past three (3) school calendar years.

3. School shall provide spreadsheet showing the performance data extracted from the bills/ records and the calculation showing the waste reduction or increase of the resource recycling rate.

4. The following table summarises the evidence of schedule to be submitted for each environmental performance:

Performance	Spreadsheet Calculation	Utility Bills	Others
Energy Use	✓	✓	X
Water Use	✓	✓	X
Waste reduction/ RRI	✓	X	Waste/ recycling records

Documentation Requirement

Performance Index

1. *Technical Documents – **Annual Performance Calculations***

    1.1. A spreadsheet calculation showing the annual EUI/ WEI/ RRI.
    1.2. The spreadsheet should also include monthly (if applicable) and annual data.

2. *Records - **Consumption Records***

    2.1. Consumption records of the past school calendar year including utility bills, waste disposal and/or recycling records.

Self-improvement

1. *Technical Documents – **Consumption Calculations***

    1.1. Spreadsheet showing the consumption records extracted from the bills/ metering data/ records and calculation of percentage reduction.

2. *Records - **Supporting Records***

    2.1. Utility bills/ Waste disposal/ recycling records of the baseline and reduction years.

Efficient Use of Resources

16 Carbon Audit

Assessment Criteria

1. The Applicant shall engage a competent professional to conduct carbon audit to account for and report on annual GHG Emissions and Removals for the school;

2. School shall provide a carbon audit or GHG emissions audit report of the school for assessment.

3. The boundary of the GHG accounting and reporting process shall be based on the "physical boundary" of school.

4. School shall reference to the following credible GHG accounting standards/ guidelines, or equivalent:

   4.1. Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Intuitional Purposes) in Hong Kong, issued by Electrical & Mechanical Services Department ("EMSD") and Environmental Protection Department ("EPD");
   4.2. Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition), issued by World Business Council for Sustainable Development and World Resources Institute; or
   4.3. International Organization for Standardisation (ISO) 14064-1 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

5. The report shall be endorsed by a Qualified Service Provider ("QSP") or equivalent (e.g., qualified person recognised by the Carbon Reduction Certificates Scheme under the Type I category).

Documentation Requirement

1. *Technical Document – **Carbon Audit Report***

   1.1. A carbon audit or GHG emission audit report endorsed by a QSP outlining the scope, methodologies, emissions from different scopes and recommendation of potential measures on carbon footprint reduction.

Efficient Use of Resources

17   Environmental Data Disclosure

Assessment Criteria

1.   The Applicant shall disclose **at least any three** of the following performance indices/ data to public via school webpage or other means.

   1.1.   Annual energy consumption for the past 2 school calendar years;
   1.2.   Annual water consumption for the past 2 school calendar years;
   1.3.   Energy Utilisation Index ("EUI");
   1.4.   Water Efficient Index ("WEI");
   1.5.   Waste disposal for the past 2 school calendar years;
   1.6.   Resource Recycling Index ("RRI"); or
   1.7.   GHG emissions and removals values.

2.   The Applicant shall provide supporting document, such as screen capture (if electronic platform is used) or copy of school newsletter to demonstrate the claimed performance index/ data is/are disclosed to public.

Documentation Requirement

1.   *Records - **Disclosure Records***

   1.1.   Screen capture/ School annual report to demonstrate the claimed performance indices/ data are disclosed to public.

Sustainable Campus Environment

18   Greening Schools

Assessment Criteria

1. One (1) credit point for implementing each of the following greening strategies to expand the greenery and promote biodiversity within school campus. Maximum five (5) credit points can be achieved. Recommended evidence are also provided below for reference:

    1.1. Greenery such as soft landscape areas, vertical green walls, planters, etc., that covers at least 10% of the school site area (covers at least 20% for 2 credit points) (*School layout plan showing greenery coverage*);
    1.2. Provide pot planting in classrooms, staff rooms and corridor etc. (*On-site photographs*);
    1.3. Provision of green roof (*On-site photographs*);
    1.4. Have 5-metre tall tree in place within school campus (*On-site photographs*);
    1.5. Have native plant species/ Butterfly or bee friendly plants in school greening (*Descriptions on the species and On-site photographs*);
    1.6. Provision of Plant ID Sheet (*On-site photographs*);
    1.7. No petrochemical fertiliser or pesticide shall be used for the maintenance of the landscape areas (*Maintenance procedure*); and
    1.8. Other strategies proposed by the Applicant.

2. The Applicant shall provide a report describing the implemented greening strategies.

Documentation Requirement

1. *Technical Document – **School Greening Report***

    1.1. A short report describing the implemented greening strategies.
    1.2. The report shall include the following items:
       - A summary table showing the adopted greening strategies;
       - A narrative describing the adopted greening strategies; and
       - Implementation records of the claimed greening strategies.

Sustainable Campus Environment

Assessment Criteria

1. One (1) credit point for demonstrating at least **one** of the following listed provisions is available in school:

    1.1. Organic farm;
    1.2. Eco-Garden/ Eco-Pond;
    1.3. Aquaponics facility; or
    1.4. Hydroponic farming.

2. The quantity and area of the provision(s) are not assessed.

3. The Applicant shall also demonstrate the use of agricultural facility(ies) for education purpose. However, there is no requirement on the format of the training, it could be a formal class or extracurricular activities.

4. The Applicant shall provide a narrative to describe the provision(s) and how to make use of the agricultural facility(ies) for education purpose.

Documentation Requirement

1. *Narratives - **School Agriculture Narrative***

    1.1. A narrative describing the provision and how to make use of the agricultural facility(ies) for education purpose.

2. *Records - **Supporting Records***

    2.1. On-site photographs of the agricultural facility(ies) and on-site training; and
    2.2. A copy of teaching materials.

Sustainable Campus Environment

20 Low Carbon Transport

Assessment Criteria

Accessibility of Public Transport

1. The Applicant shall provide a narrative to summarise the availability of public transportation facilities within 500m walking distance from the school main entrance.

2. The operating frequency of the public transport between 07:00 to 19:00 hours shall be 10 minutes or less.

3. The Applicant shall provide a survey map (i.e., Hong Kong Geo-Info Map), showing following information to demonstrate the compliance:

   3.1. Walking distance between the school main entrance and public transportation station/ stop; and

Bicycle Parking

1. The bicycle parking area shall be located within the school campus area.

2. Clear signage shall be provided for the bicycle parking area.

3. There is no requirement on the size and quantities of the bicycle parking area.

Documentation Requirement

Accessibility of Public Transport

1. *Narratives - **Public Transport Narrative***

   1.1. A narrative summarising the availability of public transport within a 500m walking distance from the school entrances.
   1.2. The narrative should also include the operating schedule of the claimed public transportation facilities.

2. *Technical Documents - **Public Transport Survey Map***

   2.1. A survey map showing the information including the walking distance between the school main entrance and public transportation stations/ stops.

3. *Records - **Photographic Record***

   3.1. On-site photographs of the public transport stations/ stops

Bicycle Parking

1. *Technical Documents – **School Layout Drawings***

   1.1. A school layout drawing showing the designated bicycle parking area

2. *Records - **Photographic Record***

   2.1 On-site photographs of the bicycle parking area with clear signage.

Sustainable Campus Environment

21 Neighbourhood Amenities

Assessment Criteria

1. The Applicant shall provide a narrative to summarise the availability of neighbourhood amenities within 500m walking distance from the school main entrance.

2. One (1) credit point for having at least five (5) of the following neighbourhood amenities listed as follows:

   2.1. Restaurant/ cafe/ food & beverage outlet;
   2.2. Convenience/ grocery store;
   2.3. Supermarkets/ wet market;
   2.4. Retail shops;
   2.5. Banks or Automated Teller Machine;
   2.6. Pharmacy (with registered license and for retail purpose);
   2.7. Public arts venue;
   2.8. Places of worship;
   2.9. Medical/ health facilities (including dental clinic);
   2.10. Public library;
   2.11. Post office / postal facility;
   2.12. Community centre; or
   2.13. Public recreational facilities or open spaces

3. The Applicant shall provide a survey map (i.e., Hong Kong Geo-Info Map), showing following information to demonstrate the compliance:

   3.1. Walking distance between the school main entrance and neighbourhood amenities.

Documentation Requirement

1. *Narratives - **Neighbourhood Amenities Narrative***

   1.1. A narrative summarising the availability of neighbourhood amenities within a walking distance of 500m from the school main entrance.

2. *Technical Documents - **Neighbourhood Amenities Survey Map***

   2.1 A survey map showing the information including the walking distance between the school main entrance and neighbourhood amenities.

3. *Records - **Photographic Record***

   3.1. On-site photographs of the neighbourhood amenities.

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Sustainable Campus Environment

22   Shared-Use of Facilities

Assessment Criteria

1. The Applicant shall formulate a shared-use policy and collaborate with local authorities, community organisations, school partners so that its facilities as illustrated at below table can be used by others:

    1.1. Auditorium;
    1.2. School hall;
    1.3. Classrooms;
    1.4. School playground/ Sport facilities;
    1.5. Canteen;
    1.6. Religious premises; and
    1.7. Others proposed by Applicant.

2. The Applicant shall develop policy or establish a joint agreement of usage and communications to the authorises, organisations or public.

3. The Applicant shall also provide a summary table and floor plan summarising and highlighting the shared-use facilities for assessment.

Documentation Requirement

1. *Narratives - **Shared-Use Facilities Narrative***

    1.1. A summary table listing the facilities that can be used by others.

2. *Technical Documents – **Layout Drawings***

    2.1. A layout plan highlighting shared-use spaces in school.

3. *Management Documents – **Policy/ Joint Agreement***

    3.1. The shared-use policy/ joint agreement.

Sustainable Campus Environment

23   Extreme Weather Response Measures

Assessment Criteria

1.   One (1) credit point for implementing each of the following strategies in response to extreme weather conditions. Maximum five (5) credit points can be achieved. Recommended evidence are also provided below for reference:

    1.1.   Top management, i.e., the Principal, to develop action plan (*Action Plan*);
    1.2.   Regular practice and review the action plan (*Meeting minutes*);
    1.3.   Provision of covered playground (*On-site photographs*);
    1.4.   Provision of weather protection facilities/ features, such as covered walkway, hanging devices (*On-site photographs*);
    1.5.   Use of pervious materials for hard landscaped areas (*On-site photographs*);
    1.6.   Regular maintenance of rainwater channel at playground to prevent over-flow during heavy rain (*Inspection records/ photographs*);
    1.7.   Provision of free-standing shading structures to intercept sunlight (*On-site photographs*);
    1.8.   Identify a safety zone as a shelter-in-place plan within school campus for at least 24 hours (*Policy*);
    1.9.   Fix and anchor trees before the potential hoisting of typhoon signal (*On-site photographs*);
    1.10.   Post-typhoon inspection (*Inspection records/ photographs*);
    1.11.   Regular maintenance of trees, slopes and retaining walls (*Inspection records/ photographs*); and
    1.12.   Others as proposed by the Applicant (*Narrative and photographs*).

2.   The Applicant shall provide a narrative describing the implemented strategies.

Documentation Requirement

1.   *Narratives - **Extreme Weather Response Narrative***

    1.1.   A narrative describing the implemented strategies in response to extreme weather conditions.
    1.2.   The narrative shall include the following items:
- A summary table showing the adopted strategies; and
- Implementation records of the claimed strategies.

Health, Comfort & Happiness

24   Indoor Air Quality

Assessment Criteria

1. One (1) credit point for installing real-time Indoor Air Quality ("IAQ") sensors to fulfil the following requirement in terms of parameters to be monitored, location and quantity:

    1.1. IAQ parameters to be monitored:

IAQ Parameters	Technical Specification Requirements			
	Range	Accuracy	Resolution	Interval
$PM_{2.5}$	1-1,000 µg/m³	25% at 50 µg/m³	0.1 µg/m³	≤ 1 hour
CO_2	400-5,000 ppm	10% at 750 ppm	1 ppm	≤ 10 minutes
Total VOCs	1-2,000 µg/m³	25% at 500 µg/m³	1 µg/m³	≤ 1 hour

    1.2. Required spaces:

Spaces	Requirement
General office	All
Staff rooms	All
Classrooms	At least 50%

2. The sensors shall be installed at 1.0 – 1.7 meters above the floor level and away from doors, windows and air supply/ exhaust outlets.

3. The Applicant shall provide narrative summarising the information of the installed IAQ sensors.

Documentation Requirement

1. *Narratives - **IAQ Sensors Narrative***

    1.1. A narrative describing the information of the IAQ sensors including:
    * Summary table showing the installation location; and
    * Calculation to demonstrate the compliance of the requirement.

2. *Technical Documents – **Layout Drawings***

    2.1. A layout plan showing the locations of the installed IAQ sensors.

3. *Technical Document – **IAQ Sensors Catalogue***

    3.1. Catalogue of the installed IAQ sensors the compliance of technical specification requirements.

4. *Records - **Photographic Records***

    4.1. Photographs of the installed IAQ sensors.

Health, Comfort & Happiness

25   Openable Windows for Fresh Air

Assessment Criteria

1. One (1) credit point for demonstrating the following spaces are equipped with openable window area of a minimum of 4% of the net occupiable floor area:

    1.1. Required spaces:

Spaces	Requirement of the openable window area
General office	At least 4% of the net occupiable floor area for each room
Staff room	
Classroom	
Special teaching rooms	

2. The Applicant shall provide a narrative with calculation to demonstrate the area of the openable window area at each specified spaces fulfil the requirement.

$$\frac{Total\ area\ of\ the\ openable\ window\ area\ at\ the\ spaces}{Net\ occupiable\ floor\ area\ of\ the\ spaecs} \times 100\% \geq 4\%$$

Documentation Requirement

1. *Technical Documents - **Openable Window Report***

    1.1. A report describing the information of the openable window including:
    - Summary table showing the window schedule with information of sizing and locations;
    - Summary table showing the occupiable floor area of each of the specified indoor spaces; and
    - Calculation showing the size of openable window area to demonstrate the compliance.

2. *Technical Documents – **Window Drawings***

    2.1. Elevation drawings showing the size and locations of the openable window; and
    2.2. Layout plan showing the size of the indoor spaces.

3. *Records - **Photographic Records***

    3.1 Photographs of the openable window at the specified indoor spaces.

Health, Comfort & Happiness

26   Lighting Quality

Assessment Criteria

Lighting Performance

1. One (1) credit point for demonstrating the average illuminance levels of the following spaces meeting the Lux requirement

    1.1. Required spaces:

Spaces	Lux Requirement
General office	300 Lux (for mainly screen based work)
Staff room	500 Lux (for mainly paper based work)
Classroom	500 Lux
Special teaching room	

2. The Applicant should provide illuminance measurement result as per the following requirements:

    2.1. At least one measurement location for each type of space;
    2.2. All the lighting fixtures should be switched on during the measurement;
    2.3. The lux meter shall be calibrated;
    2.4. The average illuminance levels should be calculated from a minimum of 16 measurement points, evenly distributed at each room; and
    2.5. The measurement point should be located at the working level, i.e., lux meter shall be placed on the working desk.

3. The Applicant shall provide a report summarising the measurement results for assessment.

Provision of Task Lighting

1. One (1) credit point for providing task lights (i.e., portable desk lamp) for the staff and teachers.

2. The Applicant should demonstrate at least 80% of the workstations in the staff rooms and general offices are equipped with desk lamp.

Documentation Requirement

Lighting Performance

1. *Technical Report – **Lux Measurement Report***

    1.1. A lux measurement report summarising the illuminance measurement result, the following element shall be included:
    *   Summary table showing the measurement locations and corresponding results;
    *   Layout plan showing the measurement points; and
    *   Photographs of the measurement.

Provision of Task Lighting

1. *Records - **Supporting Records***

    1.1. Annotated layout plan showing the at least 80% of the workstations in General Office and Staff rooms are equipped with task lights; and
    1.2. On-site photographs showing the provision of task lights.

Health, Comfort & Happiness

27   Background Noise

Assessment Criteria

1.   One (1) credit point for measuring the maximum background noise levels at the following spaces.

1.1. Required spaces:

Spaces	Maximum Background Noise Levels
General office	45 dB (A)
Staff room	45 dB (A)
Classroom	40 dB (A)
Special teaching room	40 dB (A)

2.   The Applicant should provide noise measurement result as per the following requirement:

2.1. At least one measurement point for each type of space;
2.2. The measurement shall be taken during the normal operation hour of school;
2.3. The sound level meter shall be calibrated;
2.4. All the window and doors shall be closed during the measurement; and
2.5. All air-conditioners shall be switched on during the measurement.

3.   The Applicant shall provide a report summarising the measurement results for assessment.

Documentation Requirement

1.   *Technical Report – **Background Noise Measurement Report***

1.1. A report summarising the background noise measurement result, the following element should be included:
   • Summary table showing the measurement locations and corresponding results;
   • Layout plan showing the measurement points; and
   • Photographs of the measurement.

Health, Comfort & Happiness

28   Drinking Water Quality

Assessment Criteria

1. Engage accredited laboratory to test the water quality at all drink water points regularly, i.e., at least once a year to ensure the drinking water meets thresholds as stipulated by Water Supplies Department ("WSD").

2. One (1) credit point for demonstrating the water samples collected from all drinking water points fulfil the following requirement:

Tested Parameter		Acceptance Criteria
Chemical and Physical Parameters	Turbidity (NTU)	≤ 3.0
	Colour (HU)	≤ 5.0
	pH at 25ºC	≥ 6.5 and ≤ 9.2
	Free Residual Chlorine (mg/L)	> 0 and ≤ 1.5
	Conductivity at 25ºC (µS/cm)	≤ 300
Metal Parameters	Iron (mg/l)	≤ 0.3
	Lead (µg/l)	≤10
	Chromium (µg/l)	≤ 50
	Nickel (µg/l)	≤ 70
	Cadmium (µg/l)	≤ 3
	Copper (µg/l)	≤ 2000
	Antimony (µg/l)	≤ 20
Bacteriological Parameters	E.coli (cfu/ 100mL)	0

3. Drinking water points refers to all drinking fountains and water dispensers.

4. The Applicant shall provide water sampling test result issued by accredited laboratory to demonstrate the compliance.

Documentation Requirement

1. *Technical Report – **Water Sampling Report***

    1.1. A water sampling report issued by accredited laboratory summarising water sampling test result.

2. *Technical Documents – **Water Sampling Point Location Drawings***

    2.1. Annotated drawings showing the water sampling points.

Health, Comfort & Happiness

29   Healthy Lifestyles

Assessment Criteria

Promotion of Healthy Eating

1. One (1) credit point for demonstrating at all dining areas, the following messages are provided to convey tips/ messages on healthy lifestyles by posters/ or other means:

    1.1. Promote balanced diet;
    1.2. Drink adequate amount of water;
    1.3. Promote adequate physical exercise;
    1.4. Promote mindfulness and wellness; and
    1.5. Others proposed by the Applicant.

2. The Applicant shall provide a copy of the promotional materials and on-site photographs for assessment.

Healthy Lifestyles Ideas

1. One (1) credit point for implementing each of the following strategies to promote healthy lifestyles. Maximum five (5) credit points can be achieved. Recommended evidence are also provided for reference:

    1.1. Adequate drinking water points are provided (*Drawings and on-site photographs*);
    1.2. Fruits and vegetables are available at tuck-shop/ canteen (*On-site photographs*);
    1.3. Low sugar food and beverage choice at tuck-shop/ canteen (*On-site photographs*);
    1.4. Organic food choice at tuck-shop/ canteen (*On-site photographs*);
    1.5. Provision of healthy snack vending machines (*On-site photographs*);
    1.6. Provision of storage and steam cooker facilities to encourage home-made lunch box (*On-site photographs*);
    1.7. Participate Green Monday School Programme (*Poster and on-site photographs*);
    1.8. Lunch provider shall provide healthy lunch choices (*Monthly menu/ on-site photographs*);
    1.9. Promote daily physical exercise (*Poster and on-site photographs*);
    1.10. Promote daily leisure exercise for mental healthiness (*Poster and on-site photographs*);
    1.11. Daily eye care exercise (*Poster and on-site photographs*);
    1.12. Meat-free day (*Poster and on-site photographs*); and
    1.13. Monthly fruit day (*Poster and on-site photographs*).

2. The Applicant shall provide a narrative describing the implemented strategies.

Documentation Requirement

Promotion of Healthy Eating

1. *Records* - **Supporting Records**

    1.1. A copy of the promotional materials; and
    1.2. On-site photographs showing the displayed/ distribution of promotional materials.

Healthy Lifestyle Ideas

1. *Narratives* - **Healthy Lifestyle Ideas Narrative**

    1.1. A narrative describing the implemented healthy lifestyle ideas.
    1.2. The narrative shall include the following items:
    - A summary table summarising the adopted ideas; and
    - Implementation records of the claimed strategies.

Health, Comfort & Happiness

30   Pandemic Response Measures

Assessment Criteria

1. One (1) credit point for implementing each of the following preventative measures in response to pandemic. Maximum five (5) credit points can be achieved. Recommended evidence proof is also provided for reference:

    1.1. Provide training to school staff, students and parents about disease transmission, prevention, control & measures and improving hygiene (*Training materials/ photographs*);
    1.2. Display posters to share preventive measures/ tips, such as close the toilet lid before flushing (*Poster and photographs*);
    1.3. Promote and provide vaccines information (*Poster and photographs*);
    1.4. Installation of fixed body temperature measuring station (*On-site photographs*);
    1.5. Provision of plastic partitions in classrooms, dining areas or other areas if appropriate (*On-site photographs*);
    1.6. Provision of air purification device(s) (*On-site photographs*);
    1.7. Installation of contactless devices/ designs such as touchless lift buttons, automatic door(s) etc. (*On-site photographs*);
    1.8. Identify areas within the school that can be used for isolation and quarantine (*Policy and on-site photographs*);
    1.9. Provide indication/ mark to ensure sufficient space between students in the queueing line (*On-site photographs*);
    1.10. Adopt crowd control strategy(ies) to increase the social distancing between people within school campus(*Policy/ on-site photographs*);
    1.11. Increase the frequency of cleaning & sanitation, especially for frequently contacted areas/ surfaces/ objects, air-conditioner filters, plumbing & drainage systems etc. (*Records and on-site photographs*);
    1.12. Regularly apply anti-virus coating spray within school campus (*On-site photographs*);
    1.13. Ensure adequate hand washing stations are provided in school campus (*On-site photographs*);
    1.14. Provision of hand sanitiser (*On-site photographs*);
    1.15. Use general refuses bins/ recycling bins with lid or pedal to minimise contact (*On-site photographs*); and
    1.16. Develop plans for stockpiling and distributing infection-control, cleaning, and disinfection supplies (*Action Plan*).

2. The Applicant shall provide a narrative describing the implemented strategies.

Documentation Requirement

1. *Narratives - **Pandemic Response Measures Narrative***

    1.1. A narrative describing the implemented pandemic response measures.
    1.2. The narrative shall include the following items:
        *   A summary table summarising the adopted measures;
        *   A descriptions highlighting the adopted strategies; and
        *   Implementation records of the claimed strategies.

Enhancements and Innovations

Innovative Green Features and Green Ideas

Assessment Criteria

1. Schools are encouraged to adopt innovative green features and green ideas to uplift the school environmental performance.

2. Maximum ten (10) Bonus credit points for implementing innovative green features and green ideas in school. Below is a non-exhaustive list of examples for reference:

    2.1. Install High Volume Low Speed ("HVLS") Fan(s) in large space;
    2.2. Recognition and appreciation awarded from other environmental campaign(s);
    2.3. Machine Learning Energy Consumption Monitoring and Forecast;
    2.4. Smart-metering systems;
    2.5. Provision of EV charging facility;
    2.6. Adopt environmentally friendly school bus;
    2.7. Engagement of BEAM Professional to facilitate the submission process;
    2.8. Student initiated DIY environmentally friendly product(s);
    2.9. Achievement of IAQ Certificate; and
    2.10. Other innovative features/ ideas proposed by Applicant.

3. The Applicant shall provide a narrative describing the implemented innovative green features and green ideas.

Documentation Requirement

1. *Narratives - **Innovative Green Features/ Ideas Narrative***

    1.1. A narrative describing the implemented innovative green features and green ideas.
    1.2. The narrative shall include the following items:
       * A summary table summarising the adopted features/ ideas; and
       * A description of the adopted strategies and the corresponding benefits.

2. *Records - **Implementation Records***

    2.1. Implementation records, including supporting photographs, videos, and/or related documentation demonstrating the actual implementation in school.