

2022 HONG KONG AWARDS FOR ENVIRONMENTAL EXCELLENCE



GUIDEBOOK FOR CONSTRUCTION INDUSTRY SECTOR

(for non-SMEs)

2022

1. INTRODUCTION

1.1 Background

The Hong Kong Awards for Environmental Excellence (the HKAEE) is led by the Environmental Campaign Committee (ECC), together with the Environmental Protection Department and in conjunction with nine organisations, in alphabetical order, the Advisory Council on the Environment, the Business Environment Council, the Chinese General Chamber of Commerce, the Chinese Manufacturers' Association of Hong Kong, the Federation of Hong Kong Industries, the Hong Kong Chinese Importers' & Exporters' Association, the Hong Kong Council of Social Service, the Hong Kong General Chamber of Commerce and the Hong Kong Productivity Council. The HKAEE aims to encourage businesses and organisations to implement environmental managements; measure organisations' performance and their commitment to environmental management within the industry; and recognise organisations with excellent performance on environmental management.















As an environmental award that aims for excellence, the **HKAEE** takes the pyramidal shape as the form of its logo to show the commitment of different sectors of society for reaching excellence in environmental performance. At the apex of the logo is a tender leaf that symbolises the growth of environmental awareness in the community. The white ribbon that wraps around the pyramid forms the letter "Q" to represent both quality and qualified environmental performance of the awarded organisations.



1.2 Overview of 2022 HKAEE

The HKAEE has been recognised by the community as one of the most prestigious and reputable award schemes in Hong Kong. Information of this award scheme is summarised in the table below and full details can be found in the individual Guidebooks.

Table 1: Awards category under 2022 Hong Kong Awards for Environmental Excellence

2022 Hong Kong Awards for Environmental Excellence			
10 Sectors (for non-SMEs)			
			
Construction Industry [^]	Hotels and Recreational Clubs	Manufacturing and Industrial Services [@]	
			
Property Management (Commercial & Industrial / Residential)	Public and Community Services	Restaurants	Schools (Pre-school / Primary / Secondary)
			
Servicing and Trading [#]	Shops and Retailers	Transport and Logistics	
4 Sectors (for SMEs) *			
			
Construction, Manufacturing and Industrial Services [@]	Servicing Industry	Shops and Retailers	Trading

The Organisers reserve the final right to make the final decision in the event of dispute over the eligibility of an applicant.

[^] The nominated construction project should have at least one-third of the project work completed (according to the contract period) at the time of assessment.

[@] Hong Kong based manufacturing companies with their factories in the Greater Bay Area will also be eligible to join the HKAEE under the Manufacturing and Industrial Services Sector (for non-SMEs), or Construction, Manufacturing and Industrial Services Sector (for SMEs).

[#] Starting from 2022 HKAEE, the "Media and Communication" sector will be subsumed under the "Servicing and Trading" sector.

* Under the HKAEE, an SME is an organisation that (i) meets the definition of Small and Medium Enterprises (SMEs) adopted by the Government of the Hong Kong Special Administrative Region; (ii) has substantive business operation in Hong Kong; and (iii) its parent company (if applicable) or itself should not be a listed company. An SME under the definition of HKSAR Government is a manufacturing business which employs fewer than 100 persons in Hong Kong; or a non-manufacturing business which employs fewer than 50 persons in Hong Kong. The "number of persons employed" includes individual proprietors, partners and shareholders actively engaged in the work of the organisation; and salaried employees of the organisation, including full-time or part-time salaried personnel directly paid by the organisation, both permanent and temporary, at the time of submitting applications.

2022 Hong Kong Awards for Environmental Excellence

Awards Category

The awards to be granted in each of the sector:



or a combination as deemed appropriate by the Final Adjudicating Panel(s).

1.3 Eligibility for the HKAEE

All businesses / organisations and their functional units operating primarily within Hong Kong with their core business fulfilling the definition of respective sector are eligible to apply for the HKAEE. Functional units within an organisation can enter the same or separate sectors but each functional unit is limited to enter into one sector only. If an organisation has multiple functional units intending to join the same sector, each functional unit should demonstrate that it has its own environmental initiatives within its operation before being considered admissible to the HKAEE.



香港環境卓越大獎
Hong Kong Awards for Environmental Excellence

To encourage wider participation, the Gold Award winner of each sector / sub-sector of the previous year will not be eligible for entering the HKAEE within the next **two** years. In other words, Gold Award winners of 2020 and 2021 HKAEE will not be eligible for entering 2022 HKAEE, and Gold Award winners of 2022 HKAEE will not be eligible for entering 2023 and 2024 HKAEE.

The Organisers reserve the right to determine the eligibility of any applicant.



1.4 Eligibility for the Construction Industry Sector for non-SMEs

Construction Industry includes general construction and specialised construction activities for buildings and civil engineering works. The nominated construction project(s) of a construction company should be an active project which have at least one-third of the project work completed (according to the contract period) at the time of assessment.

Construction companies that meet the definition of SMEs defined in the programme booklet shall apply for the HKAEE for **SME – Construction, Manufacturing and Industrial Services Sector**.

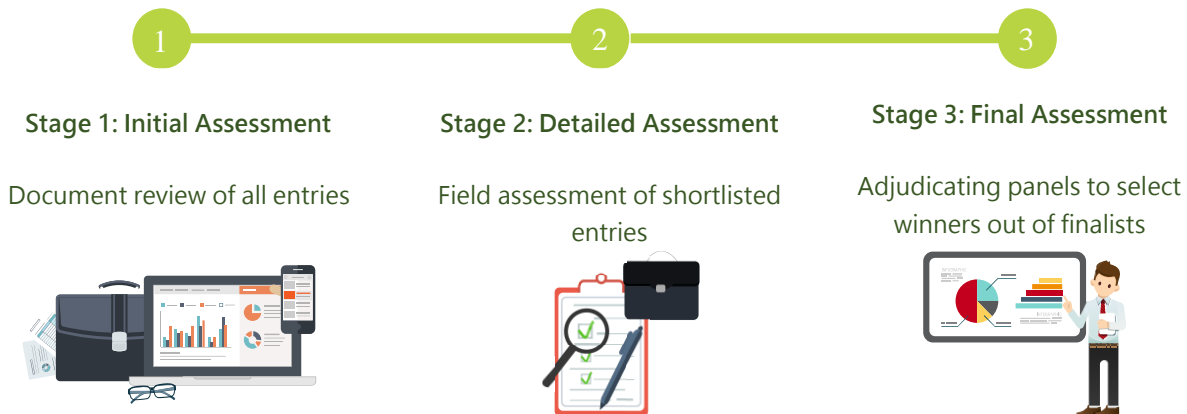
The Organisers reserve the right to determine the eligibility of any applicant.

1.5 Purpose of this Guidebook for Construction Industry Sector

The purpose of this Guidebook is to explain the application procedures and assessment criteria for the Construction Industry Sector under the HKAEE. In addition, self-assessment checklist (Appendix 1) and sector best practices (Appendix 2) are provided to assist organisations in improving their environmental performance.

2. ASSESSMENT PROCESS

The assessment process for Construction Industry Sector is as follows:



Winners will be selected from a rigorous assessment process that comprises three stages:

Stage 1 - Initial Assessment

Upon receipt of the application form, eligible applicants will be invited to submit detailed information on their green policies and practices as well as environmental achievements via an online questionnaire. All information submitted by the applicants will be reviewed according to the assessment criteria of the awards. The Organisers may request additional documents for the purpose of information verification. The Organisers will then select applicants for detailed assessment in Stage 2.

All eligible applicants that have completed Stage 1 assessment and yet do not receive any award will receive a Participation Certificate after the completion of all assessment processes.

Stage 2 - Detailed Assessment

Organisations selected for detailed assessment will be visited by a team of assessors. The visit will include a tour of applicant's facilities and interviews with key representatives of the organisation including top management, department heads and general staff. The applicants should arrange the necessary permits and transportation between the Hong Kong-Shenzhen border and the premises in Mainland China, if necessary, for the assessment visit. During the site visit, applicants are encouraged to introduce their environmental performance to the assessors to provide them with an in-depth understanding of their environmental initiatives and the status of implementation.

The assessors will then prepare the assessment reports for submission to the Organisers for further short-listing into the final adjudication in Stage 3.

Applicants that have successfully completed Stage 2 assessment will receive a complimentary report on their environmental performance. The report will outline the organisation's strengths and highlight areas where improvements in environmental management could be made.

Stage 3 - Final Assessment

Adjudicating Panels will review the environmental performance of applicants. During the final assessment phase, the Adjudicating Panels may invite candidates to further present their achievements in a meeting. Each Adjudicating Panel will comprise representatives from various trade associations, government departments, professional bodies and the like.

3. ASSESSMENT CRITERIA

The assessment criteria for the **Construction Industry** sector are based on the well-established “Eco-Business Model”. This model is designed to exemplify the strong relationship between the internal operation of a business and the surrounding environment. The key factors, including *Green Leadership*, *Programme and Performance* and *Partner Synergy*, are generally considered to be vital in the overall integration of environmental measures within an organisation.

Eco-Business Model



The Eco-Business Model describes the key features that a green business should possess. It lists the criteria for becoming a successful “eco-business” and illustrates the benefits after fulfilling the criteria. If a commitment to environmental management is what you seek for your company, you should consider fulfilling the model criteria that are organised according to the following three key components.

On-going improvement is required to maintain high operational standards. Meeting the demands of clients and maintaining a commitment to environmental management can be achieved easily by following the three component criteria of the Eco-Business Model.

Each criterion focuses on a key aspect of environmental management. They explain to businesses the types of environmental measures that can be adopted, and how these measures can be put into practice. The following sections list the criteria of each component.



3.1 Green Leadership

The commitment from senior management to environmental protection will steer the successfulness of conservation measures taken within any business. This component of the Model suggests that management is to provide leadership in initiating the environmental measures to be taken. The efforts of senior management should involve formally defining the goals and policy of the company's commitment to environmental management, allocating resources to fulfil the requirements of the company's policy, communicating policy goals and involving all levels of staff in the programme. Furthermore, it is important that the senior management establishes channels to train staff members on how to practise environmentally friendly measures.

3.1.1 Leadership

The greater the extent of senior management commitment and participation to pursuing environmental management efforts within any business is, the greater the success of the environmental measures will be.

3.1.2 Policy and Commitment

Commitment to protecting the environment may be formally declared through a written policy. Signing environment-related charters launched / supported by the Government can also demonstrate the company's commitment to environmental protection (For examples, Carbon Reduction Charter, Food Wise Charter, Energy Saving Charter on Indoor Temperature, Energy Saving Charter on "No ILB", Use Less, Waste Less in My Hands, Waste Check Charter, Charter on Proper Operation of Refuse Collection Vehicles, Charter on External Lighting, Energy Saving Charter, 4T Charter, Glass Container Recycling Charter and Bye Bye Microbeads Charter).



3.1.3 Organisation and Resources

Staff should be assigned specific environmental responsibilities. Adequate human and financial resources should be allocated to ensure successful implementation of environmental initiatives within the organisation.

3.1.4 Environmental Communication

Environmental measures to be undertaken internally and externally should be promoted among staff members. Effective promotion on the benefits of environmental management will encourage staff members to develop green initiatives and undertake measures themselves. The following approaches could further foster green culture among staff members:



-  Establish incentives (e.g. certificates or gifts) to motivate staff members adopting environmental conservation measures through daily operations;
-  Nominate and encourage representatives to take part in Environmental Task Forces or environmental-related awards (e.g. HKAEE Outstanding Green Achiever Commendation Scheme)

3.1.5 Environmental Training

All relevant staff members should receive adequate training to implement environmental measures within the organisation.



3.1.6 Managing for Continual Improvement

Regular checks should be undertaken to monitor the progress and review the overall effectiveness of the measures taken. In addition, your company should benchmark your environmental performance with industrial / regional / global standards (e.g. obtain BEAM Plus and LEED certifications or benchmark your interior fit-out, renovation and refurbishment works with reference to the requirements of BEAM Plus Interiors) to manage for continual improvement.

3.2 Programme and Performance



3.2.1 Regulatory Compliance

Construction activities in Hong Kong are under the control of a number of legal environmental requirements. Construction companies must identify and comply with all relevant environmental legislation. Companies should ensure that they are aware of all relevant environmental legislation by establishing suitable procedures for identifying such requirements and ensuring that key staff have the necessary knowledge to access this information. Each construction company will have its own list of relevant environmental requirements which it must comply with. The list varies from company to company depending on its particular operations.

To better understand the status of compliance with environmental requirements, it is suggested that the construction industry should maintain a record of non-compliance and compile a monthly Compliance Report for management review. The areas of regular, repeated or significant non-compliance issues should be identified and thoroughly remedied by taking appropriate corrective and preventive actions.

3.2.2 Environmental Programme Implementation

Once the management has formalised its commitment to environmental conservation measures, an environmental programme that defines the objectives, targets and schedule of various environmental initiatives can be formulated. Your environmental programme should be designed to meet your organisation's specific needs. Setting up your own environmental programme makes good business sense. Such a programme can streamline operations, cut costs, improve environmental performance and improve your image in the eyes of your staff, partners, regulatory authorities and the public.

3.2.3 Air Pollution Control

Construction sites can be significant sources of air pollutants. Such air pollutants may include (1) particulate or dust emissions from blasting, demolition, drilling, crushing, excavation, vehicle movement, stockpiling and concrete production; and (2) emissions of smoke, combustibles and volatile organic compounds (VOCs) from construction site equipment and vehicles or the construction process itself (e.g. welding, painting, gluing), with dust generation being the major concern. The department or staff who is responsible for managing the construction sites should implement appropriate measures in order to reduce air pollution arising from those sites.

3.2.4 Noise Control

Construction sites can also be the significant sources of noise emissions. Noise generating activities may include road laying / breaking / drilling, loading, unloading or handling of rubble, compacting, concrete mixing & pumping, hammering, site clearance, scaffold erection and removal. Excessive noise can be irritating and harmful to human health. The department or staff who is responsible for managing the construction sites should take appropriate measures to minimise the noise impact from the construction activities.

Some construction works may need to be carried out during restricted hours and these construction works may involve different contractors. Construction companies may consider developing a Noise Management Plan which can assist them in managing noisy construction activities and practicing appropriate and effective noise mitigation measures (e.g. identifying major noisy construction activities, noise monitoring, application and management of Construction Noise Permit.).

3.2.5 Water Pollution Control

Construction activities may cause water pollution from various activities such as dredging / filling, washing and cleaning and, run-off discharge. These activities may cause physical, chemical and biological effects to our environment. The physical effects may arise from an increase of suspended solids content in the discharge which can result in blockage of drainage channels. Possible chemical effects include localised increases in turbidity and discolouration, localised elevations in pH and accretion of pH solids. They may also cause biological effects to marine biota due to elevated pH values, reduced decay rates of faecal microorganisms due to decreased light penetration, and a localised increase in the proportion of unionised ammonia.



3.2.6 Waste Management

The disposal of Construction and Demolition (C&D) waste in our landfills each day in Hong Kong includes unwanted concrete, bricks, metals and aggregate, plastic packaging and other plastic products, plasterboard, plaster, paper and cardboard. To ease the pressure on our landfills, a portion of the waste that is generated every day can be reduced through reuse or recycling (for use as another product). Construction companies are encouraged to develop a Waste Management Plan which can assist them in practising possible measures on waste avoidance, reduction, treatment and disposal in the construction sites.



3.2.7 Energy Conservation and Progressing towards Carbon Neutral

Construction projects typically use large quantities of energy resources. A responsible management of energy resources reduces not only operation cost, but also environmental impact. Electricity and diesel are the main forms of energy used in most of the construction sites in Hong Kong. All these forms of energy come from fossil fuel that will eventually run out. Furthermore, fuel combustion can result in the release of undesirable air pollutants and greenhouse gases (GHGs). Actions to reduce the usage of energy such as using energy efficient equipment and adoption of low carbon construction methods will result in preservation of natural resources, lessening air pollution impact and climate change as well as progressing towards carbon neutral.



3.2.8 Housekeeping

In general, the appearance and condition of the construction sites that you manage will determine the working environment for your site staff and public perception of your company. Many construction and associated materials (high emission paints and glues, drywall compounds, fuel for construction plant) have the potential to cause harm, to site workers and the environment, if they are not handled and stored correctly. In view of this, good cleaning, material storage and waste handling and removal procedures are important for maintaining a healthy and safe working environment whilst at the same time reducing your impact on the environment as a whole.

3.2.9 Green Procurement

You can contribute to environmental protection by purchasing products that will result in a reduction in environmental impact. Every product that you purchase, every construction site that you manage and ultimately every resulting building have the potential to pollute the environment. You can make reference to the green specifications published by the Environmental Protection Department or other green procurement guidelines when practising green procurement to reduce the environmental impacts and generate savings by making careful and environmentally responsible purchasing.



Purchasing procedures

- 🌱 If your company has a purchasing department, it should be devoted to purchasing products and materials that are environmentally friendly. If the department does not have any policy guiding the purchase of products, encourage them to design one that favours purchasing environmentally friendly products and inform suppliers your new policy.
- 🌱 You should encourage those colleagues responsible for purchasing goods to conduct simple research for frequently used products and materials that could be substituted by other more environmentally friendly options.
- 🌱 You should encourage staff to suggest products that are known to be more environmentally friendly than what you currently use. You may consider to use “low carbon” construction materials if feasible.
- 🌱 You should encourage ethical purchasing, the practice of avoiding products that would bring adverse effect to the environment and society. For example, do not buy products that have been manufactured out of rainforest wood since the destruction of these forests causing many environmental problems including global warming, deforestation, biodiversity loss and more.

3.3 Partner Synergy



Your relationship with your clients, suppliers, contractors and the community inter-relates to your implementation of environmental programmes. This section provides suggestions on how to develop these relationships with your stakeholders. You can also refer to Appendix 2 to learn best practices in your sector.

3.3.1 Influence your Clients

Clients' Needs

When approaching construction from a sustainable perspective, your client is expected to ensure the construction contract and specifications address the design and construction teams' environmental requirements. Being a construction contractor, many of these issues and practices are typically under your direct control. You are in a strong position to influence your client and therefore you are advised to show them meeting environmental performance standards is very important. You may proactively explore, propose and implement feasible alternative construction methods or arrangement to minimise the environmental impact. When bidding for a project, you should:

- 🌱 Identify the potential environmental impacts clearly and include environmental measures to be employed for budgeting;
- 🌱 Programme your construction work with consideration of time and resources required for the provision of environmental measures; and
- 🌱 Demonstrate your company's environmental commitment, environmental organisation & resources, environmental programmes and your alternative green construction methods, etc. in the tender documents.

Clients' Support

Teamwork is a key ingredient in a successful construction project. Together, a building's or site's owner, architect, engineer and contractor should develop environmental guidelines, plans, goals and practices for the construction process. This joint approach will ensure that all involved parties understand and embrace a project goal before the works begin.

Your environmental programmes will have higher chance of success if they are co-designed with all involved parties whose participation are necessary for the programmes to succeed. You are also suggested to report your environmental performance to your clients, solicit feedback from them and take appropriate actions in response to their feedback whenever appropriate.

3.3.2 Influence your Suppliers / Sub-contractors

Employing Green Sub-Contractors

If you need to employ sub-contractors to undertake specialist work as part of the construction project, you should ensure that their performance standards meet the requirements of your environmental programmes. In the sub-contract tender documents you may require your sub-contractors to comply with environmental regulations and other requirements pertaining to the sub-contract works.

Communication and Motivation

Once you have taken environmental measures in managing your business, you should share your efforts with others. Your green procurement policy should be made known to suppliers and contractors. You should also encourage your contractors to suggest products that are known to be more environmentally friendly than what you currently use, and use recyclable / biodegradable packaging materials.

Your suppliers and sub-contractors deserve to learn about the positive actions that you are now taking. Knowledge of your environmental programme is valuable to others since seeing your accomplishments can motivate them to establish their own programme.

In some instances, your partners may not be aware of the benefits of establishing such a programme. In other instances, they may be interested in starting up their own programme yet they need some initial guidance to kick off. It is therefore important that your experience is made available to interested parties. By assuming a proactive stance you will encourage others to learn about environmental protection and give your organisation more exposure within the business community. In addition, you may also invite suppliers / sub-contractors to participate in community support programme(s) or environmental partnership programme with the public / private sector / NGOs.






3.3.3 Influence on the Community

Joining Hands with the Community

Everyone in Hong Kong experiences the effects of pollution. Many people would like to help to improve environmental quality, however, not everyone knows how to get involved. As a green construction contractor, you are dealing with a considerable number of environmental management issues every day. You are in an advantageous position to help the community practicing green initiatives. It is important to understand the impact of your business and environmental actions and communicate your impact to the society.




You should also act as a role model to demonstrate your effort in environmental protection. By helping the general community, in return, you can gain satisfaction through knowing that your efforts can improve the environment and give you good standing within the community. Furthermore, taking simple initiatives such as to report the lessons that you have learnt in setting up your programme and other useful information can help in raising the community awareness.

There are a number of ways that you can get involved:

-  Visit your site neighbours (e.g. local schools, residential blocks, local groups) and explain them details of the construction project and environmental measures adopted;
-  Establish an Environmental Hotline to handle environmental complaints / enquiries and make suggestions for improvement of environmental performance;
-  Get involved and support local initiatives (e.g. organise tree planting campaigns);
-  Report your environmental initiatives and achievements in a newsletter and other publications; and
-  Apply for awards to gain recognition for your efforts.

4. WEIGHTINGS OF ASSESSMENT CRITERIA

As mentioned in Section 3 above, the assessment of eligible entries under the Construction Industry sector comprises three criteria, namely, *Green Leadership*, *Programme and Performance* and *Partner Synergy*. Specific to this sector, the weighting of each of the assessment criteria is as follows:

 Green Leadership	 Programme and Performance	 Partner Synergy
20%	60%	20%

In order to recognise applicants' efforts to promote in the *HKAEE* as well as their achievements in the Hong Kong Green Organisation Certification (HKGOC) and other recognised certification or award schemes, a maximum of 10 bonus points will be given to the applicants during Stage 2 assessment of the *HKAEE*, as follows:

Bonus Points Awarded for Efforts in Promoting HKAEE (maximum 3 bonus points)

- 🌱 Applicants who have promoted HKAEE through their business network and / or promotional channels / platforms (e.g. display the awarded logos and stickers in premises, website and electronic screens, etc.; imprint the awarded logo in name cards, letterhead; and publish featured articles through media) will earn a **maximum of 1 bonus point**.
- 🌱 Applicants who have successfully referred their business partners (e.g. suppliers) to join the HKAEE will earn a **maximum of 2 bonus points**.

Applicants who have promoted HKAEE through their business network and successfully referred their business partners may also be awarded with the title of "Outstanding HKAEE Promotional Partner" if they have fulfilled certain criteria, please refer to Section 2.6 of 2022 HKAEE Programme Booklet for details.

Bonus Points Awarded for Achievements in Hong Kong Green Organisation Certification (HKGOC) (maximum 4 bonus points)

- 🌱 Applicants who possess valid *Wastewi\$e* / *Energywi\$e* / *IAQwi\$e* / *Productwi\$e* / *Carbon Reduction Certificate* / *recognition of Hong Kong Green Organisation* will earn 1 bonus point per Certificate / recognition.

Bonus Points Awarded for Efforts in Other Schemes (maximum 3 bonus points)

- 🌱 Applicants who possess a valid certificate from environmental schemes such as *ISO 14001*, *ISO 20121*, *ISO 50001*, *IECQ HSPM QC 080000*, *Hong Kong - Guangdong Cleaner Production Partners (Manufacturing) Recognition Scheme*, *Hong Kong Green Mark Certification Scheme*, *WWF-Hong Kong's Low-carbon Operation Programme (LOOP^{PLUS})* and *Low Carbon Manufacturing Programme (LCMP)*, *Quality Restaurant Environmental Management Scheme*, *CLP Smart Energy Award*, *WGO's Green Office Awards Labelling Scheme (GOALS)*, *FHKI's BOCHK Corporate Low-Carbon Environmental Leadership Awards*, *BEAM Plus New Buildings / BEAM Plus Existing Buildings / BEAM Plus Interiors*, *Hong Kong Green Shop Alliance Award* or other schemes recognised by the Organisers will earn 1 bonus point. The Organisers reserve the right to grant bonus points to any applicants.

*Note :

1. HKGOC consists of five Certificates, namely "Wastewi\$e Certificate", "Energywi\$e Certificate", "Productwi\$e Certificate", "IAQwi\$e Certificate" and "Carbon Reduction Certificate". Participants can further obtain the recognition of "Hong Kong Green Organisation" by demonstrating the environmental practices in multiple aspects. Please refer to the HKGOC programme booklet for details.
2. ISO 14001 is an environmental management system standard published by the International Organization for Standardization.
3. ISO 50001 is an energy management system standard published by the International Organization for Standardization.
4. ISO 20121 is an event sustainability management system standard published by the International Organization for Standardization.
5. IECQ HSPM QC 080000 is a standard on hazardous substances process management published by the IEC Quality Assessment System for Electronic Components.
6. Hong Kong - Guangdong Cleaner Production Partners (Manufacturing) Recognition Scheme is jointly operated by the Environment and Ecology Bureau of the Government of the HKSAR and the Department of Industry and Information Technology of Guangdong Province.
7. Hong Kong Green Mark Certification Scheme is a system certification scheme operated by the Hong Kong Q-Mark Council, Federation of the Hong Kong Industries.
8. Low-carbon Operation Programme and Low Carbon Manufacturing Programme are schemes operated by WWF-Hong Kong. The bonus point will only be granted to applicants in applicable Sectors for their operations in Hong Kong or Greater Bay Area (only applicable to Manufacturing and Industrial Services sector (for non-SMEs) or Construction Manufacturing and Industrial Services sector (for SMEs)) .
9. Quality Restaurant Environmental Management Scheme is a voluntary environmental accreditation scheme for the food and beverage trade jointly operated by the Hong Kong Federation of Restaurants & Related Trades and Hong Kong Productivity Council.
10. CLP Smart Energy Award is organised by CLP Power Hong Kong Limited which aims to recognise organisations who have implemented energy conservation measures and achieved outstanding energy saving results.
11. Green Office Awards Labelling Scheme (GOALS) is a recognition scheme for offices organised by the World Green Organisation (WGO).
12. BOCHK Corporate Low-Carbon Environmental Leadership Awards is organised by the Federation of Hong Kong Industries, which aims to promote environmental practices among the manufacturing and services enterprises in Hong Kong and the Pan Pearl River Delta (PRD) region.
13. BEAM Plus is an independent assessment of building sustainability performance. It is certified by Hong Kong Green Building Council Limited (HKGBC) while the assessment is handled by the BEAM Society Limited.
14. Hong Kong Green Shop Alliance Award is organised by the Hong Kong Green Building Council, which aims to foster green shopping environment in Hong Kong. Only winners of the main awards, i.e. "Best Green Practice in Malls", "Best Green Practice in Shops" and "Best Collaborative Effort of Malls and Shops" can earn bonus point in HKAEE.
15. The presentation of the award to any winning organisation is still subject to further consideration of prosecutions for or convictions of non-compliance with environmental regulations, if any, before the date of the Presentation Ceremony.

5. APPLICATION FORM (CONSTRUCTION INDUSTRY SECTOR)

SECTION 1 - Organisation Profile

Application Deadline: 31 Dec 2022

(Please note that the Name of Organisation indicated below refers to "the entity of application", which will be used in the award and publicity and cannot be changed without justifiable reasons.)

Name of Organisation (holding a valid Hong Kong Business Registration Certificate or other legal entities):

in English: _____
in Chinese: _____
Address: _____

Telephone: _____
Website: _____
Description of
Core Business: _____
BR Number: _____

Name of Nominated Construction Project / Functional Unit, if applicable:

in English: _____
in Chinese: _____
Address: _____

Contract period of the Nominated Construction Project*:

from _____ (dd/mm/yyyy) to _____ (dd/mm/yyyy)

* The nominated project should be an active project which have at least one-third of the project work completed at the time of assessment

Contract No.: _____

Name of Parent Company, if applicable:

in English: _____
in Chinese: _____

Number of employees (under the Business Registration of the applicant organisation)

Hong Kong: (Full time) _____ (Part time) _____
Parent Company: (Full time) _____ (Part time) _____

Is your company or its parent company (if applicable) a listed company?

Yes

No

SECTION 2 - Contact Details and Declaration

Please provide the following information about the contact person of your organisation.

Name of Contact Person: _____
Designation: _____
Telephone: _____
E-mail: _____
Postal Address: _____
(If different from Section 1)

Please read the consent statement below before signing and submitting this application form.

Signature: _____
(with Organisation Chop) _____ Date: _____
Name of Signatory _____ Designation: _____

The HKAEE Technical Consultant (Hong Kong Productivity Council, HKPC) has adopted a Personal Data (Privacy) Policy. You may contact HKPC's Personal Data Controlling Officer for further details. You have the right to request access to, and amend your personal data in relation to your application. If you wish to exercise these rights, please send an email to: edm@hkpc.org. The personal data collected from the Contact Person will be erased or destroyed 24 months after the completion of the assessment of HKAEE each year.

CONSENT STATEMENT

I hereby declare that the information given above is accurate to the best of my knowledge, and agree that all decisions made by the Organisers (i.e. Environmental Protection Department and Environmental Campaign Committee and its Secretariat) and adjudicating panels are final and binding in all aspects relating to the HKAEE. I understand that any false or misleading information may lead to disqualification of my application.

I agree that personal data (including name, phone number, correspondence address and email address) provided by me will be used for the purpose of the administration, evaluation and management of my application. I understand if I cannot provide the relevant personal data, processing of my application by the Organisers and the Technical Consultant may be affected.

The HKAEE Technical Consultant (Hong Kong Productivity Council, HKPC) intends to use the personal data (including your name, phone number, correspondence address and email address) that you have provided to promote the latest development, consultancy services, events and training courses of HKPC. Should you find such use of your personal data not acceptable, please indicate your objection by ticking the box below.

I object to the proposed use of my personal data in any marketing activities arranged by HKAEE Technical Consultant (HKPC).

The Environmental Protection Department (EPD) and / or the Environmental Campaign Committee (ECC) and its Secretariat also intend to use the personal data (including your name, phone number, correspondence address and email address) that you have provided to promote the latest development, policies, activities and schemes of the EPD and / or the ECC. Should you find such use of your personal data not acceptable, please indicate your objection by ticking the box below.

I object to the proposed use of my personal data in any marketing activities arranged by the EPD and / or the ECC and its Secretariat.

Is your Company interested in joining the “Outstanding Promotional Partner Commendation Scheme”?

(The HKAEE Technical Consultant will further contact you on the details separately upon receiving this application)

- Yes No

Is/Are employee(s) of your Company interested in joining the “Outstanding Green Achiever Commendation Scheme”?

(The HKAEE Technical Consultant will further contact you on the details separately upon receiving this application.

Please refer to the separate guideline and dedicated application form for details of this commendation scheme.)

- Yes No

How do you know about the Hong Kong Awards for Environmental Excellence? (can select more than one)

- Mass media (e.g. TV and newspaper)
- Social Media (e.g. Facebook, LinkedIn, YouTube and Instagram)
- Roving exhibitions
- Through the Technical Consultant
- Referral from another company / organisation
(Please specify the name of the company / organisation: _____)
- Posters or advertisement
- Official website or eDMs
- Experience Sharing Seminars held by the Organiser
- Through participation in Hong Kong Green Innovations Awards (HKGIA) or Hong Kong Green Organisation Certification (HKGOC)
- Through commerce chambers / trade associations
(Please specify name of chamber / association: _____)
- Others (Please specify: _____)

Please complete the Application Form and send it to the HKAEE Technical Consultant (Hong Kong Productivity Council) by the below channels. Applications can also be submitted directly online –

- Email** : awards@hkaee.gov.hk
- Mailing Address** : HKAEE Technical Consultant, Hong Kong Productivity Council,
HKPC Building, 78 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong
- Online Application** : <http://www.hkaee.gov.hk>

Important Note:

Please immediately call the HKAEE Hotline (Tel: 2788 5903) if no acknowledgement of application is received within 7 working days from the date of application.

6. ACKNOWLEDGEMENTS

The Organisers wish to thank the Environment and Conservation Fund for sponsoring the HKAEE.

Sponsor



Environment and Conservation Fund

Organisers



Environmental Campaign Committee



Environmental Protection Department



Advisory Council on the Environment



Business Environment Council



Federation of Hong Kong Industries



Hong Kong General Chamber of Commerce



Hong Kong Productivity Council



The Chinese General Chamber
of Commerce



The Chinese Manufacturers' Association
of Hong Kong



The Hong Kong Chinese Importers'
and Exporters' Association



The Hong Kong Council of Social Service

7. ENQUIRY



Tel: 2788 5903



E-mail: awards@hkaee.gov.hk



Website: www.hkaee.gov.hk

8. DISCLAIMER

The information contained in this guidebook has been produced for guidance only. While every precaution has been taken to ensure its accuracy, no responsibility for any claims, losses or expenses as a result of any material in this publication can be accepted by the Organisers or any organisations involved in this guidebook.

Appendix 1 –

Self Assessment Checklist for the Construction Industry Sector

GREEN LEADERSHIP

	Yes	No
Leadership		
➤ Demonstrate commitment from management.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Involve management in the environmental programme and activities.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Communicate with employees in a two-way manner.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish incentives by management to encourage employees to practise green measures.	<input type="checkbox"/>	<input type="checkbox"/>
Policy and Commitment		
➤ Establish an environmental or sustainability policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Contain commitment to environmental conservation in environmental policy or sustainability policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply the environmental or sustainability policy throughout the company.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Direct the stated aims and objectives of the policy towards the organisation's activities and procedures.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Sign environment-related charters launched / supported by the Hong Kong SAR Government. (e.g. Carbon Reduction Charter, Food Wise Charter, Energy Saving Charter on Indoor Temperature, Energy Saving Charter on "No ILB", Use Less, Waste Less in My Hands, Waste Check Charter, Charter on Proper Operation of Refuse Collection Vehicles, Charter on External Lighting, Energy Saving Charter, 4T Charter, Glass Container Recycling Charter and Bye Bye Microbeads Charter).	<input type="checkbox"/>	<input type="checkbox"/>
Organisation and Resources		
➤ Appoint a "Green Manager" to coordinate the environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish an Environmental Task Force to steer and facilitate the environmental programme implementation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Allocate sufficient resources for environmental programme implementation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage staff's involvement in the environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish and operate a sound environmental management system	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Communication		
➤ Publicise the environmental or sustainability policy, initiatives and accomplishments from time to time.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage staff to give suggestions or feedback on the environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collect ideas from staff and answer their questions or concerns.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Offer incentives or rewards to staff for their environmental initiatives.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Communicate the accomplishments of the environmental programme to the community.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Environmental Training</i>		
➤ Define environmental training needs and provide appropriate environmental training for individual staff.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain environmental training records.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Managing for Continual Improvement</i>		
➤ Devise a simple plan to schedule regular checks of the organisation's environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Document the findings of the checking properly and implement any corrective actions.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor if appropriate corrective actions are taken and to address any lapses or inadequacies.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Follow Environmental Monitoring and Audit (EM&A) requirements for specific contracts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Benchmark environmental performance with industrial / regional / global standards (e.g. obtain BEAM Plus and LEED certifications or benchmark your interior fit-out, renovation and refurbishment works with reference to the requirements of BEAM Plus Interiors).	<input type="checkbox"/>	<input type="checkbox"/>

PROGRAMME AND PERFORMANCE

	Yes	No
<i>Regulatory Compliance</i>		
➤ Identify and collect legal information from corporate sources, relevant government authorities and industry associations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a register of environmental requirements relevant to your operation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a procedure to ensure that staff concerned has continuous access to the legal requirements.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a procedure to ensure relevant information on legal requirements is communicated to staff effectively.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a procedure to keep track of changes to environmental requirements and to update the environmental requirements accordingly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor the status of compliance with environmental requirements regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Take appropriate corrective and preventive actions for areas of regular, repeated or significant non-compliance.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Environmental Programme Implementation</i>		
➤ Formulate an environmental programme which defines the objectives, targets and actions to address the areas identified.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Appoint staff to be responsible for undertaking different measures in the environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Review the outcome of environmental programme and find ways for improvement.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Conduct environmental audit (e.g. carbon audit, energy audit), or carry out an environmental review to determine areas requiring improvement.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Air Pollution Control</i>		
<i>Site Preparation</i>		
➤ Provide hoarding of not less than 2.4m on height along the entire length of the site boundary, where a site boundary adjoins a road, street, service land or other area accessible to the public.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide effective dust screen, sheeting or netting to enclose any scaffolding built around the perimeter of a building.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Materials Handling</i>		
➤ Use fixed or mobile water sprays for watering of unpaved areas, access roads and construction areas regularly to keep dusty surfaces wet. If necessary, use suitable wetting agents such as dust suppression chemicals during dry seasons.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use effective water sprays during the delivery and handling of all raw sand and aggregate, and other similar materials, to dampen all stored materials during dry and windy weather.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Enclose on three sides all stockpiles of sand, aggregate or any other dusty materials, with walls extending above the pile and 1 meter beyond the front of the pile, and apply water in dry or windy conditions where appropriate.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Fit the conveyor belts within windboards and belt cleaners and enclose conveyor transfer points and hopper discharge areas to minimise dust emission.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Minimise the heights from which excavated materials are dropped in order to limit fugitive dust generation during loading / unloading of these materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide an enclosure with a flexible curtain across the entry where dusty materials are being discharged to vehicles from a conveying system at a fixed transfer point.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do not operate your plant, activity or process when any air pollution control system or equipment has broken down.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Excavation</i>		
➤ Ensure that the working area of any excavation or earth moving operation is sprayed with water immediately before, during, and immediately after the operation in order to maintain the entire surface wet.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Treat exposed earth by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen or other suitable surface stabiliser after the last construction activity on the construction site.	<input type="checkbox"/>	<input type="checkbox"/>
➤ If spoil, silt or debris has been found deposited on adjacent land, remove them immediately and restore the affected land and stream to their natural state.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Store the stockpiles in sheltered areas if spoil cannot be immediately transported out of the site.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Vehicle Movement</i>		
➤ Establish a paved surface which has to be kept clear of loose surface material if there is a regular movement of vehicles.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Restrict all motorised vehicles within construction sites to a maximum speed (e.g. 8 km per hour) and install speed limit signage at appropriate locations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that vehicle engines are turned off when they are not in use.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Confine haulage and delivery vehicles to designated roadways inside the sites.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that vehicles transporting dusty materials are fitted with side and tailboards.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Cover materials transported by vehicles, with the cover properly secured and extended over the edges of the side and tailboards.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Dampen dusty materials before transportation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide wheel washing facilities, including a high pressure water jet, at the exits from work areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide a hard surface road between any washing facility and the public road.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Inspect vehicles regularly to ensure that exhaust emissions are not causing nuisance, such as dark smoke emission.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use electric vehicles.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Demolition Work</i>		
➤ Keep the area at which demolition activities take place wet prior to, during, and immediately after the demolition activities to reduce dust emission.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use impervious dust screens or sheeting to enclose the whole wall to a height of at least 1 meter higher than the highest level of the structure being demolished.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Cover all demolished items that may dislodge dust particles entirely by impervious sheeting or place them in an area sheltered on the top and the 3 sides.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Wet with water any dusty materials remaining after a stockpile is removed and clear them away from the surface of roads or streets.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Follow the “Code of Practice on the Handling, Transportation and Disposal of Asbestos Waste” published by EPD if asbestos containing materials are found in the buildings or structures.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Drilling and Blasting</i>		
➤ Ensure watering is undertaken to reduce dust emission where breaking of rock or concrete is required.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that wire meshes, gunny sacks, sandbags, blast nets and other appropriate covers are used on top of the blast area on each shot to prevent the flying off of rocks and to suppress dust generation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Wet areas with water in the vicinity of blasting operation (e.g. 30m from the blasting area) before blasting is conducted.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do not carry out blasting (or any other dust generating activity) when environmental conditions are such that dust generation will be exacerbated (e.g. when the strong wind signal or tropical cyclone warning signal No. 3 or a higher cyclone signal is in effect).	<input type="checkbox"/>	<input type="checkbox"/>
<i>Control of Smoke and Combustibles</i>		
➤ Do not carry out open burning for the purpose of clearance of a site in preparation for construction work or for the disposal of construction waste.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Consider the use of low emission products and materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain the generator regularly and properly to avoid dark smoke emission if it is used on-site.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Noise Control</i>		
<i>Planning</i>		
➤ Avoid noisy activities at restricted hours (weekdays : 1900-0700 hours or holidays whole day).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Construction Noise Permit (CNP) shall be obtained before carrying out construction activities during restricted hours, and ensure the noise is below the permitted noise level.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Develop a noise management plan for managing noisy construction activities and planning noise mitigation measures.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid simultaneous operation of several noisy activities close to a receiver to reduce cumulative impacts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Schedule noisy activities at times when dwellings are more likely to remain unoccupied.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Implement noise mitigation measures or adopt alternative quieter plants for hammer drive piling equipment, earth-moving plant, compressors and generators.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ off-site concrete batching plant rather than on-site production, whenever appropriate.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Dispose of rubble through plastic (rubber) chutes instead of metal chutes (or use rubber linings in chutes and dumpers to reduce impact noise).	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Use quieter models of powered mechanical equipment (PME).	<input type="checkbox"/>	<input type="checkbox"/>
<i>Control of Noise Propagation</i>		
➤ Use appropriate noise propagation measures (e.g. noise barriers, partial enclosures at sources, full enclosures with sufficient ventilation).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain noise barriers and enclosures properly to ensure that they are free of gaps.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Measure the general construction noise at critical locations at regular intervals with noise monitoring instruments.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Good Site Practices</i>		
➤ Locate equipment away from receivers (doubling distance will result in a 6dB(A) reduction).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Position equipment that emits excessive noise in one direction (e.g. ventilation fan) such that noise is directed away from nearby receivers.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Locate equipment behind large obstruction (e.g. site offices, containers, soil mounds, material stockpiles).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid prolonged operation of noisy equipment close to dwellings and schools	<input type="checkbox"/>	<input type="checkbox"/>
➤ Switch off or throttle down equipment when not required.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Perform regular maintenance of all plant and equipment to avoid noise from abnormal operation (e.g. check efficiency of mufflers, lubricate bearings).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid steep gradients of internal haul routes.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid dropping materials from height.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Start up plant & vehicles sequentially rather than all together.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure engine panels are closed.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Water Pollution Control</i>		
<i>Water Conservation</i>		
➤ Include requirements in the documents that promote water conservation when employing a sub-contractor and holds the sub-contractor financially responsible for resource consumption.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor water usage to identify areas of waste and abuse, then reduce resource consumption and cost.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install flow restrictors, automatic shut-off systems and appliances for reduced water use.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Reuse captured rainwater and / or construction wastewater on the construction site. (e.g. wastewater from wheel washing bay, treatment facilities of the concrete batching plant)	<input type="checkbox"/>	<input type="checkbox"/>
<i>Dredging, Transport and Dumping Of Marine Mud</i>		
➤ Apply for, and comply with conditions of, dumping permits obtained from the Environmental Protection Department.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use silt curtains if practical to limit the dispersion of sediments.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Consider migratory pathways of important fisheries in the underwater blasting schedule.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Pay attention to proximity and condition of nearby shore zones, bulkheads and other structures to ensure that use of explosives in underwater blasting does not pose a threat to their integrity.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Determine whether possible current pattern changes will jeopardise or encourage resettlement of the original bottom life and associated fishery resources.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Design and maintain all equipment to minimise the risk of release of silt and other contaminants into the water column or locations other than designated location.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use properly sized vessels to allow adequate clearance between vessels and the seabed at all states of tide to avoid undue turbidity caused by turbulence from vessel movement or propeller action.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain adequate freeboard on barges to ensure that decks are not washed by wave action.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor all vessels transporting material to avoid deliberate dumping of dredged material outside the approved location or loss of material during transportation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Conduct marine monitoring at the downstream location of the dumping site where applicable.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Follow government requirements if contaminated marine mud is handled.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Consider alternative land-based methods of treatment or disposal to render the matter less harmful for dumping at sea.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Land-based Activities</i>		
➤ Provide information and / or training to all site workers on the effluent discharge routes and points and wastewater management facilities at the site.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Instruct workers to properly collect, handle and dispose of debris and rubbish on site to prevent these wastes from entering into nearby storm drain / watercourse.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collect spent bentonite slurries or other grouts in slurry collection system for reconditioning and reuse wherever practicable.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install secondary containment for hazardous material storage areas (e.g. fuel tanks) with a capacity equal to 110% of the volume of the largest tank.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Minimise exposed soil areas to reduce potential for contamination of run-off due to increased siltation or erosion.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Stabilise all exposed earth as soon as possible after completion of earthworks.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Identify, mark and surround the boundary of any critical areas of earthworks (e.g. relatively low-level areas) by dykes or embankments for flood protection.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Construct dykes along segments of the watercourse to prevent washing of earth into the watercourse where there is a watercourse running through the work area.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide a site drainage system that may comprise temporary ditches, drainage pipes and / or culverts to collect site run-off for treatment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Route wastewater from concrete mixing / batching areas to a properly designated effluent treatment system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide adequate sanitary facilities (e.g. portable chemical toilets, septic tanks for holding discharge from toilets, bathrooms and kitchens) and employ licensed contractor to collect contents of these toilets / septic tanks for disposal.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain all sanitary facilities in good and running conditions (e.g. clean all the sedimentation facilities periodically or after rainstorms).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Implement appropriate precautionary actions whenever a rainstorm is likely or imminent.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Cover open stockpiles of construction materials (e.g. aggregates, excavated materials, sand and fill materials) with tarpaulin or similar fabric during rainstorms or arrange for other measures to prevent the washing away of construction materials, soil, silt or debris into any nearby drainage system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that all manholes are adequately covered and temperately sealed to prevent washing down of silt or debris into the drainage system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide an adequately designed wheel washing bay at every site exit.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that all vehicles be cleaned by the wheel washing bay prior to leaving the construction site.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Waste Management</i>		
➤ Conduct waste audit / checking to identify the types and quantities of waste generated.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Educate staff and cleaning staff for proper and clean recycling.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid the use of bottled water and unnecessary decorations / souvenirs at official events.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Construction & Demolition Waste</i>		
➤ Purchase materials in a manner that minimises waste and avoid unnecessary costs. For example, size of materials purchased should be appropriate with the dimensions of structure to avoid excessive cut-offs.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Implement measures to minimise over-ordering and wastage of materials such as concrete, mortars and cement grouts.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Check consistency of drawings and specifications to avoid unnecessary hacking-off of concrete or unwanted work.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use durable, reusable hoarding to replace timber hoarding.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use precast concrete units produced at a casting yard with high degree of quality control.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use steel formworks as far as possible.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use standard wooden panels for high reuse level if timber formworks are unavoidable.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use interior drywall partition that is easy to install.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Practice effective material control to minimise material loss and ensure the efficient use of resources.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that any waste construction / demolition materials are cleared as quickly as possible after demolition to minimise potential dust and water impacts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use a designated area for temporary waste storage and subsequent segregation for ease of handling.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that waste construction / demolition materials are properly covered to minimise windblown litter and dust during transportation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Develop a waste management plan for an on-site reuse, recovery and recycling system for waste materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Instruct workers to adopt recycling and re-use of materials from demolition.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Track actual wastes produced from construction and measure waste-generation levels against project guidelines for materials' recycling and reuse.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Deliver inert materials by licensed waste contractors to approved public filling areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain waste disposal records.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Excavated Materials</i>		
➤ Ensure that excavation works are carried out in a controlled manner to avoid excessive excavated materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use excavated materials for backfilling, slope stabilisation and reclamation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Transport excavated materials to other sites for reuse.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain records of the quantity of excavated materials that are reused on-site or off-site.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that contaminated mud generated on-site is disposed of at designated contaminated mud pits.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Chemical Waste</i>		
➤ Research alternative products and practices which generate reduced quantities or less dangerous types of chemical waste.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Ensure that chemical wastes generated by the construction works are properly labelled, packaged and stored in a designated chemical waste storage area.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that storage is in accordance with the EPD's Code of Practice on the Packaging, Handling and Storage of chemical wastes.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Develop and implement a contingency plan to deal with potential spillage or accidents in the chemical waste storage area.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Communicate with your supplier if waste chemicals can be returned for reuse, recovery or recycling.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ a licensed chemical waste collector to collect and dispose of chemical wastes.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain records of chemical waste removed from the site.	<input type="checkbox"/>	<input type="checkbox"/>
<i>General Refuse</i>		
➤ Use products and materials with reduced packaging and / or encourage manufacturers to reuse or recycle their original packaging materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure that general refuse is stored in waste skips and garbage bins with proper covers.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage staff to use reusable dishware.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Reuse single-sided paper.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide recycling bins for paper, metals and plastics if the volumes are large enough to warrant such collection.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ a reputable waste collector to remove general refuse from the site to approved public landfills preferably daily to minimise odour, pest and litter impacts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain delivery or pick-up records.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Contaminated Material</i>		
➤ Implement clean-up works for contaminated land in accordance with the appropriate procedures as stipulated in guidelines.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Appoint authorised or licensed waste hauliers for collection and disposal of contaminated soil only.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Cover vehicles that transport contaminated materials with their tailgates sealed to limit dust emissions.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Dispose of contaminated materials at authorised disposal facilities only.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Asbestos Wastes</i>		
➤ Ensure that the asbestos waste is stored at secured, isolated areas with warning signs to alert people of the presence of asbestos waste.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Appoint appropriately licensed contractors for the collection of asbestos waste.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Transport asbestos waste to disposal sites by enclosed skips on open lorries or enclosed vehicles.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Dispose of all asbestos waste at designated disposal facilities only.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Energy Conservation and Progressing towards Carbon Neutral</i>		
➤ Include requirements that promote energy conservation and hold the sub-contractor financially responsible for energy consumption when employing a sub-contractor.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor energy usage to identify main areas of energy use and loss, then reduce resource consumption and cost.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install temporary lighting so that most other lighting can be turned off during non-construction hours.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install motion sensors for security lighting.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Adopt low carbon construction methods.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Choose energy efficient machinery.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Consider adopting renewable energy in supporting business operations	<input type="checkbox"/>	<input type="checkbox"/>
➤ Purchase carbon offsets to offset the carbon emissions related to business operations	<input type="checkbox"/>	<input type="checkbox"/>
<i>Housekeeping</i>		
➤ Provide dedicated areas on the construction site for storage of materials. This is particularly important for materials with potentials to harm people and the environment. Signage indicating the storage of potentially harmful materials should also be displayed in these areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Store potentially harmful materials in containment to avoid spillage and to minimise contaminated rainwater run-off.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Keep an inventory of all products stored on-site. This is particularly important for products with the potential to harm people and the environment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Obtain Material Safety Data Sheets (MSDS) from material suppliers and keep them on-site where staff can access them.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Post signs to inform site workers about good practices for handling and storage materials.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Green Procurement</i>		
➤ Purchase products that are reusable, recyclable, contain reusable parts, use minimal resources, are designed to last for longer time periods and contain fewer toxic pollutants (e.g. recycled paper, recycled toner cartridges).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a guiding policy that favours staff purchase of environmentally friendly products.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Support the purchase of products that bear recognised environmental logos or eco-labels.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage staff to suggest products that are known to be more environmentally friendly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Adopt construction materials of lower carbon footprint.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Buy goods in bulk quantities to avoid excessive individual packaging.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Adopt green menus at property banquets / functions.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Make reference to the green specifications published by the Environmental Protection Department or other green procurement guidelines when practising green procurement.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other Environmental Considerations</i>		
➤ Inform appropriate authorities if any objects suspected to be antiquities, archaeological remains or deposits are discovered.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Instruct workers to avoid disturbing any flora, fauna and habitats outside site areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Control night time lighting properly to minimise nuisance to neighbouring residents.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Erect screen hoarding and fencing around the site boundary.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Follow relevant requirements on height of temporary structures.	<input type="checkbox"/>	<input type="checkbox"/>

PARTNER SYNERGY

	Yes	No
<i>Influence your Clients</i>		
<i>When Bidding for a Project</i>		
➤ Include potential environmental items in budgeting.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Programme your construction work practically with consideration of time and resources required for environmental provisions.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Express your company's environmental commitment, environmental organisation & sources, environmental programmes and initiatives in tender documents.	<input type="checkbox"/>	<input type="checkbox"/>
<i>After Award of Contract</i>		
➤ Communicate with your client about your environmental guidelines and practices for the construction process.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Report your environmental performance to your client.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Solicit feedback or suggestion from your client on your environmental performance.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Take prompt and appropriate actions in response to client's environmental feedback.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Propose alternative construction arrangement that can minimise the environment impact that will bring to the affected area during the construction process.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
<i>Influence your Suppliers / Contractors</i>		
<i>Employing Green Sub-contractors</i>		
➤ Indicate your environmental requirements in the sub-contract tender documents.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Include environmental commitment of a sub-contractor as part of the selection criteria when evaluating sub-contractor bids.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Monitor the environmental performance of your sub-contractors regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Give preference to environmentally friendly products or environmentally responsible suppliers / contractors.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Communicating with Sub-contractors and Suppliers</i>		
➤ Encourage suppliers to suggest products that are known to be more environmentally friendly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Inform sub-contractors and suppliers of your environmental policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Educate sub-contractors and suppliers about environmentally preferable practices.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Work with suppliers to identify environmentally friendly products that can be substituted for those currently used.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage suppliers to provide documentation that guarantees the "environmentally friendly" authenticity of the products.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Invite suppliers / contractors to participate in community support programme(s) or environmental partnership programme with the public / private sector / NGOs.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Influence on the Community</i>		
➤ Visit your neighbours (e.g. local schools, residential blocks, local groups) and explain to their representatives details of the construction project and environmental measures to be adopted.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish an Environmental Hotline to handle environmental complaints, enquiries and suggestions for improvement of environmental performance.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Get involved and support local initiatives. Community involvement can range from helping out with community construction projects (e.g. supply expertise and manpower or donating excess building materials) to organising tree planting campaigns.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Identify your impact to the society and communicate the impact with the community.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Report your environmental initiatives and achievements in magazines and other publications.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply for awards or labels to gain formalised recognition for your efforts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Publish environmental report or sustainability report to communicate your performance with stakeholders.	<input type="checkbox"/>	<input type="checkbox"/>

Yes

No

➤ Collaborate with other organisations to promote environmental protection.

Appendix 2 –

Highlights of Best Practices for the Construction Industry Sector

- ✦ Form an environmental committee at site operation level that meet regularly to guide relevant focuses and priorities in environmental protection. Cultivate staff members and sub-contractors to proactively participate and adopt environmental measures.

- ✦ Demonstrate commitment to environmental protection by:
 - top management’s involvement;
 - signing of charters;
 - recruitment of adequate qualified professionals;
 - maintenance of organised systems such as environmental management system and energy management system referencing to ISO 14001 and ISO 50001 international standards;
 - conduct Greenhouse gases (GHG) accounting referencing to ISO 14064 international standards;
 - calculate and benchmark the GHG emissions on different construction work types and construction methods;
 - research, record and regular update of international and local environmental trends and policies;
 - participation in international and/or local green building and/or green construction certification schemes; and
 - adoption of internal auditing and environmental guidelines and procures for continual improvement.

- ✦ Establish policies, regulations, plans and/or guidelines to control and guide site operations on minimising environmental impacts, which include but not limited to:
 - environmental policy;
 - green procurement guidelines;
 - environmental management plan;
 - waste management plan;
 - noise management plan; and
 - health and safety guidelines.

- ✦ Devise long-term environmental strategies, set annual specific and measurable environmental targets and review the progress on a regular basis to better control and monitor carbon intensity, energy consumption, water consumption, food waste and other environmental aspects.

- ✦ Improve long-term operation efficiency by appropriate adoption of digitalisation strategies, which include but not limited to:
 - use of mobile applications for progress tracking and internal communications;
 - use of Radio-frequency identification (RFID) for progress monitoring;
 - use of bar code and/or QR code for equipment checking and recording;
 - use of digital platform for project meetings; and
 - use of artificial intelligence (AI) system for prediction of weather and other emergency issues.

- ✦ Provide regular trainings to staff members and sub-contractors, which include but not limited to:
 - induction environment, health and safety training;
 - environmental toolbox talk;
 - training on sustainability trends and new technologies;
 - training on particular environmental topics, such as waste management, water efficiency and wastewater treatment, noise and vibration control, green building, dust monitoring, building information modelling (BIM), prefabrication, etc.;
 - training on project management; and
 - sharing sessions on successful cases.

- ✦ Provide incentives as encouragement to motivate staff members and sub-contractors to contribute and support environmental activities.

- ✦ Develop, implement and regularly evaluate strategies to control, minimise and mitigate impacts on air pollution, which include but not limited to:
 - regularly monitoring the levels of total suspended particulates (TSP) and respirable suspended particulates (RSP) at construction site and at sensitive receivers both by third-party professionals and by in-house environmental team;
 - adoption of dust shields around areas with significant dust generating works and installation of dust barriers at appropriate level of height at the site boundary;
 - installation of real-time TSP and/or RSP sensors and indicators at site boundary or other appropriate location(s) for real-time monitoring;
 - adoption of appropriate water spraying by automatic sprinkler system or manual spraying for dust suppression;
 - installation of smoke detectors and scrubbers to control and dilute black smoke generated from generator sets;
 - regularly monitoring of indoor air quality (IAQ) at site office with reference to the IAQ

guideline issued by Environmental Protection Department (EPD);

- use of paints and adhesives with low or zero volatile organic compounds (VOC);
- installation of air purifiers at site office;
- provision of vacuum dust collectors and exhaust fans for smoke control during welding works; and
- adoption of prefabrication to avoid in-situ works with significant dust generation.

✿ Develop, implement and regularly evaluate strategies to control, minimise and mitigate noise and vibration impacts, which include but not limited to:

- monitoring the noise levels at construction site and at sensitive receivers both by third-party professionals and by in-house environmental team regularly;
- adoption of noise shields for piling works;
- installation of noise barriers at site boundary;
- use of quality powered mechanical equipment (QPME) with lower level of noise generation;
- adoption of demolition methods with lower level of noise generation, such as saw-cut;
- carefully arrange positions and orientations of equipment and noise barriers to minimise noise impacts to sensitive receivers;
- adoption of modular integrated construction (MiC) method / design for manufacturing and assembly (DfMA) approach to shorten on-site construction period and minimise noise impact; and
- adoption of vibration absorbers at major powered mechanical equipment and particularly during demolition works.

✿ Develop, implement and regularly evaluate strategies to enhance fresh water conservation, which include but not limited to:

- installation of humidity sensors to control water sprinkler system for dust suppression to operate only when needed;
- installation of rainwater collection tank and relevant pipework for water reuse for general cleansing, irrigation, dust suppression, etc.;
- reuse of treated water from wastewater treatment plant for wheel-washing or other purposes;
- collection of condensation water from air-conditioners for general cleansing, irrigation, dust suppression, etc.;
- installation of water efficient faucets and sanitary fittings; and
- distribution and/or circulation of reminders or notices for encouragement on water conservation.

- ✦ Develop, implement and regularly evaluate strategies to minimise water pollution impacts, which include but not limited to:
 - installation of multi-layer sedimentation tanks and corresponding wastewater treatment systems;
 - setting up of U-channels or other measures to prevent wastewater from leaking out of the site;
 - monitoring on pH, suspended solids and chemical oxygen demand (COD) of discharge water by third-party certified body on a regular basis; and
 - installation of real-time pollution level sensor and alarm system at discharge point.

- ✦ Develop, implement and regularly evaluate strategies to minimise energy consumption and carbon emission, which include but not limited to:
 - adoption of BIM in advance to more accurately predict and plan for the best construction methods and scheduling, to avoid unnecessary energy use on equipment;
 - adoption of energy simulation modelling to facilitate the optimal arrangement on energy consuming equipment;
 - conducting of regular energy audits and carbon audits to check and monitor the intensity and pattern of energy use;
 - installation of sub-meters to identify energy consumption by different building services equipment and by different teams or sub-contractors;
 - adoption of life-cycle assessment (LCA) tools to evaluate corresponding embodied energy and select the optimal construction methods, material origins and transportation ways;
 - adoption of renewable energy systems, such as wind turbines and solar panel, providing energy for non-essential facilities / lighting;
 - adoption of timer control systems and motion sensor systems to minimise energy use at unnecessary areas during unnecessary periods;
 - installation of air-conditioners, refrigerators, printers and other office equipment with grade 1 energy labels or equivalent;
 - installation of LED or other types of energy efficient lightings on-site, especially for areas at which 24-hour lighting is required;
 - use of electric vehicles; and
 - selection of regional materials to minimise carbon emissions due to transportation.

- ✦ Develop, implement and regularly evaluate strategies to minimise impacts due to resources use and waste generation, which include but not limited to:
 - proper zoning for designated areas for waste collection, waste separations and recycling of

metals, concretes, chemicals, papers, plastics, etc.;

- collection and reuse of excavated materials;
- adoption of recycled materials with specified recycled content;
- apply metal mould method for construction to reduce the use of timber formwork;
- reuse of timber formwork;
- selection of rapidly regenerated materials, such as bamboos;
- encouragement of upcycling;
- installation of food decomposers to treat food waste;
- provision of water dispensers to minimise the use of plastic bottles;
- adoption of eco-block and/or eco-paver;
- adoption of digital means to minimise the use of paper;
- use solar powered traffic lanterns to reduce battery use;
- conducting regular waste audit; and
- maintenance of a monthly or weekly waste flow table.

- ✿ Consider other environmental measures whenever possible, which include but not limited to:
 - maximising site greening, such as installation of green roof at site office, to minimising visual impacts and conserve energy use for space cooling;
 - engaging professional arborists and ecologists to conduct relevant studies on the ecosystem surrounding to minimise potential adverse impacts; and
 - conducting of cultural heritage study and implementation of relevant protection measures if needed.
- ✿ Be proactive to propose alternative construction arrangement to stakeholders that can minimise the environmental impact on the affected area during the construction process, even if the original construction method is permitted under the contractual requirements.
- ✿ Interact and communicate with the community proactively, which include but not limited to:
 - regular visits to neighbouring community to share with stakeholders the construction progresses and corresponding impacts;
 - establishment of a complain, report and feedback system with clear indication of channels;
 - arrangement of social events, such as technical visits and community engaging tree planting programmes, to raise public awareness on sustainable development and environmental protection; and
 - engagement with the government or academic institutions to support long-term development of sustainability via policies and researches.

- ✦ Interact and communicate with clients and customers proactively, which include but not limited to:
 - regular knowledge sharing sessions to share advanced environmental friendly construction methods or other considerations with industry partners;
 - establishment of site-specific or non-site-specific sustainable development groups to facilitate the green concept at project level, involving both design and construction; and
 - adoption of a real-time digital platform for prompt report and progress monitoring to avoid delay in synchronising expectation which might lead to waste in effort.

- ✦ Interact and communicate with suppliers and sub-contractors proactively, which include but not limited to:
 - establishment of a reward and punishment system to incentivise sub-contractors with good site environmental behaviours;
 - establishment of a supply chain monitoring guideline that requires suppliers and sub-contractors to fulfil a certain environmental performance criteria so as to be engaged;
 - maintenance of a performance review system for regular evaluation on the environmental performance of suppliers and sub-contractors; and
 - inclusion of suppliers and sub-contractors in any site-specific environmental awareness programmes.

- ✦ Publish the company's green initiatives to the public through its website, events, annual report, corporate sustainability report, and tendering contract.

- ✦ Motivate staff member and stakeholders to support and participate in various community activities (e.g. tree planting, beach clean-up, barbers, carbon reduction programmes and biodiversity conservation programmes, etc.).