

# 2024 HONG KONG AWARDS FOR ENVIRONMENTAL EXCELLENCE



## GUIDEBOOK FOR MANUFACTURING AND INDUSTRIAL SERVICES SECTOR

( for non-SMEs )

2024

# 1. INTRODUCTION

## 1.1 Background

The Hong Kong Awards for Environmental Excellence (the HKAEE) is led by the Environmental Campaign Committee (ECC) alongside the Environment and Ecology Bureau 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 is an annual award which aims to encourage companies and organisations to adopt green management, benchmark their performance with the best practices within their sectors, and recognise the achievements of the best-performing companies and organisations.

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 2024 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 2024 Hong Kong Awards for Environmental Excellence

2024 Hong Kong Awards for Environmental Excellence			
11 Sectors (for non-SMEs)			
			
Construction Industry <sup>^</sup>	Environmental Industry	Hotels and Recreational Clubs	Manufacturing and Industrial Services <sup>@</sup>
			
Property Management (Commercial & Industrial / Residential)	Public and Community Services	Restaurants	Schools (Pre-school / Primary / Secondary)
			
Servicing and Trading	Shops and Retailers	Transport and Logistics	
5 Sectors (for SMEs) *			
			
Construction, Manufacturing and Industrial Services <sup>@</sup>	Environmental Industry		
			
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.

<sup>^</sup> 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.

<sup>@</sup> 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).

\* 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 or its affiliated company (if applicable) or itself should not be a listed company (ownership of a 50% of interest or more will be classified as an affiliated 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.

2024 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.



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 2022 and 2023 HKAEE will not be eligible for entering 2024 HKAEE, and Gold Award winners of 2024 HKAEE will not be eligible for entering 2025 and 2026 HKAEE.

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

### 1.4 Eligibility for the Manufacturing and Industrial Services Sector for non-SMEs



All the manufacturing companies in Hong Kong are eligible to apply for the Manufacturing and Industrial Services Sector. All the Hong Kong-based manufacturing companies with their factories in the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) are also eligible to participate in the HKAEE. Greater Bay Area covers the two Special Administrative Regions of Hong Kong and Macao, and the nine municipalities Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing in Guangdong Province.

Besides, companies which provide industrial services for the manufacturing and service industry in Hong Kong, such as vehicle maintenance, vehicle cleaning, laundry services, and dish washing services, etc., are also eligible to apply for the Manufacturing and Industrial Services Sector.

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

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

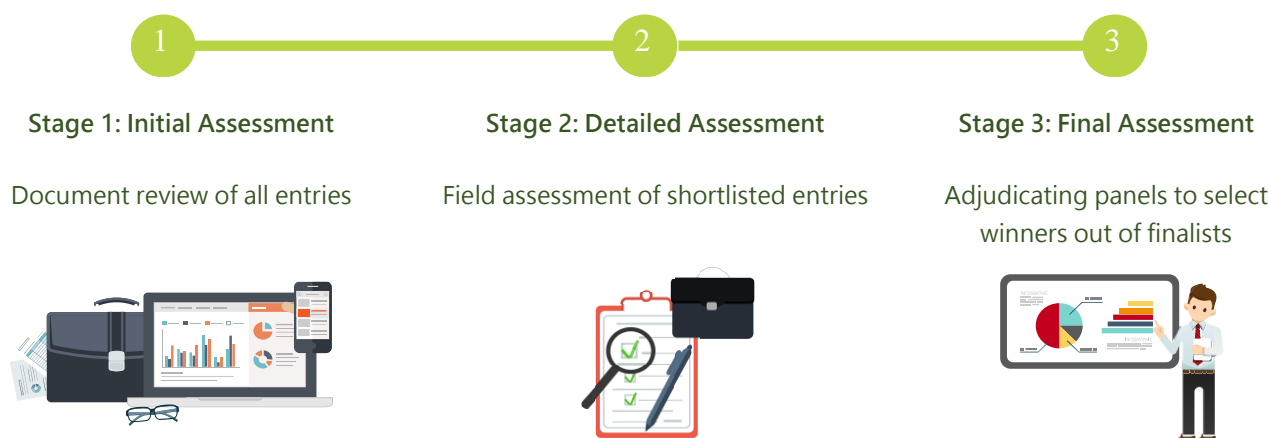
### 1.5 Purpose of this Guidebook for Manufacturing and Industrial Services Sector

The purpose of this Guidebook is to explain the application procedures and assessment criteria for the Manufacturing and Industrial Services Sector under the HKAEE.

For reference, a general 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 Manufacturing and Industrial Services 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 **Manufacturing and Industrial Services** 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 board of directors and senior management to environmental protection will steer the accomplishment 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 fulfill 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

In order to drive green culture within an organisation, commitment and participation of the management would encourage more staff to participate in green actions, hence achieving a greater success in environmental excellence. The greater extent of senior management commitment and participation to pursuing environmental management efforts within any business, the greater success of the environmental measures will be. Senior management should take the leading role in demonstrating their commitment to the company's environmental programme by getting involved in various environmental programmes and activities. In order to foster green culture within an organisation, the management is also recommended to encourage all staff members to participant various green activities to drive for greater success in environmental excellence.

### 3.1.2 Policy and Commitment

Commitment to environmental protection can be formally declared through a written policy. Signing environment-related charters launched / supported by the Government (e.g. Carbon Reduction Charter, Waste Reduction and Recycling Charter, Carbon Neutrality (Waste 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 with 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; and
- ✿ 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 measures taken (e.g. monitor the organisation's performance through establishing management systems such as ISO 14001 Environmental Management Systems). 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 work with reference to the requirements of BEAM Plus Interiors) to manage for continual improvement.



## 3.2 Programme and Performance









### 3.2.1 Regulatory Compliance

Manufacturing and industrial services companies in Hong Kong or Hong Kong-based companies with their production lines located in the Greater Bay Area are governed by a number of legal environmental requirements. Companies should ensure that they are aware of all relevant environmental legislation by establishing suitable procedures for identifying such requirements. Companies should also ensure that key staff members have knowledge to access the regulatory requirements and update the requirements when necessary.

### 3.2.2 Environmental Programme Implementation

Once the management has formalised its commitment to environmental conservation measures, the environmental programme that defines objectives, targets and schedule of various environmental initiatives can be formulated. Setting up your own environmental programme makes good business sense, and your environmental programme should be designed to meet your organisation's specific needs. Implementation of environmental programme can streamline operations, cut operating costs, and improve environmental performance. This will improve your corporate image and enhance your market competitiveness.

The following outlines the approach you can take to create your own environmental programme(s):

-  **Understand Your Needs** – Carry out an environmental review to determine the status of your organisation in relation to protection of the environment (Self-Assessment Checklist in Appendix I can be a starting point). The checklist is designed to help identify the strengths and weaknesses of your organisation and assist you in prioritising the actions that you need to take.
-  **Define Your Objectives** – Once you have identified the key areas that need improvement, you can prioritise the areas that you intend to make improvement and set objectives.
-  **Define Your Targets** – According to the objectives, define specific, practicable and measurable targets for implementation.
-  **Formulate Your Action Plan** – Formulate in detail the measures that will be taken to achieve the targets and the implementation timeframe. At the same time determine the staff representatives for undertaking different measures.
-  **Monitor Your Programme** – Keep track of the progress of the programme defined.
-  **Review the Results** – Review monitoring data to identify room for improvements.

Now you understand how to develop an environmental programme within your establishment, you can begin to determine the measures that suit yours.

### 3.2.3 Energy Conservation and Progressing towards Carbon Neutral

Energy conservation is the practice of decreasing the quantity of energy used. It may be achieved through efficient energy use, and reduced consumption of energy services. Effective usage of energy has often been a prime concern for manufacturing industries. Large-scale factories, occupying large premises with a considerable number of machinery and equipment in operation, often consume significant amounts of energy. There are a great variety of measures which can be adopted to reduce the use of energy and progress towards carbon neutral in your establishment. Most of the measures involve simple and effective practices that require minimal time and effort for implementation.



The following are some suggestions on how energy reduction can be started with:

- ✦ Conduct energy audit to define main sources of energy use and energy loss;
- ✦ Conduct carbon audit to account for the carbon footprint of the factory or the products;
- ✦ Establish a total energy and carbon footprint reduction target for your entire establishment as well as for individual energy using components;
- ✦ Establish energy reduction programmes, focusing on effective usage of energy for specific manufacturing processes or operation of machinery;
- ✦ Review energy bills regularly to monitor your achievements of energy reduction and formulate improvement measures;
- ✦ Establish real-time energy management system to identify abnormalities in energy consumption and poor energy performance;
- ✦ Choose energy efficient equipment or machines;
- ✦ Consider adopting renewable energy in supporting business operations;
- ✦ Switching to hybrid or electric vehicles; and
- ✦ Purchase carbon offsets to offset the carbon emissions related to business operations.

### 3.2.4 Water Conservation and Wastewater Control

For organisations with effluent discharge, efforts should be made to reduce discharge by measures such as minimisation at source and installation of water treatment facilities, etc. In addition, the organisations should try to explore the feasibility of using greywater in the production. Organisations are also encouraged to conduct water footprint audit and implement water-saving measures.



- ✦ Consider using flow-control water fixture/ install flow controllers to reduce wastage;
- ✦ Regularly monitor water usage to evaluate effectiveness of water reduction efforts; and
- ✦ Treat and reuse grey water for the manufacturing processes.

### 3.2.5 Waste Management

A variety of waste materials including packing waste, industrial waste, chemical waste and general waste will be generated from the operations of organisations in this sector. Improper management of waste can lead to adverse impact to the environment. In addition, with the increasing costs for disposal of waste, it makes business sense to minimise waste generation. The following are suggestions to minimise waste:



- ✦ Compile a holistic Waste Management Plan to manage the waste issues;
- ✦ Place waste collection boxes for paper, plastics, metals and other recyclables in your establishment to enhance source separation of waste for recycling;
- ✦ Keep record and review the amount of waste and recyclables generated during operations;

- ✻ Reduce/avoid the use of disposable items, e.g. single-use plastic packaging / wraps;
- ✻ Make use of recycled, biodegradable, or compostable materials for production manufacturing; and
- ✻ Collect and recycle food waste.

### 3.2.6 Housekeeping

In general, the condition of the workplace that you manage will determine the working environment for your employees and the public perception of your organisation. You can enhance your workplace environment by ensuring that your establishment is cleaned on a regular basis (e.g. regular cleaning and maintenance of walls, ceilings, floors and equipment).

Furthermore, the methods you use to handle and store your products and potentially harmful substances will also affect your work environment. Items including chemical, spray-paint, solvents and pesticides can be sources of environmental pollution and some of them can contribute to the depletion of the ozone layer.

### 3.2.7 Noise and Vibration Control

Excessive noise can be an irritation to distract people when they are conducting works. Vibration can be another nuisance to employees and manufacturers should take measures to minimise it.

### 3.2.8 Air Pollution / Indoor Air Quality / Odour Control

Control of air pollution from manufacturing and industrial services companies can be achieved by choosing better quality of fuels, optimising operating practices and adopting suitable end-of-pipe emission controls. Your establishment should adopt the best combination of these measures in handling emissions to suit operational needs.

### 3.2.9 Green Procurement

You can contribute to environmental protection by purchasing products that will result in pollution reduction.

Every product / raw material that you purchase, whether it is used by staff or for production, has the impact

on the environment. You can reduce the amount of waste that you produce by making careful decisions when you are purchasing goods and raw materials. Products that biodegrade or can be reused several times before they are disposed of.

This action will reduce stress on landfills. Furthermore, the organisations can refer to the green specifications published by the Environmental Protection Department or other green procurement guidelines when practising green procurement.



## 3.3 Partner Synergy



### 3.3.1 Communication and Motivation

Once you have adopted environmental conservation measures in managing your business, you should share with others. Your suppliers, customers, workers, and other business partners 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 policy 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 world. You can also refer to Appendix 2 to learn the best practices in your sector.

### Influence your Suppliers / Contractors

A sound environmental programme will demand that you purchase and use environmentally friendly products whenever possible. Therefore, it is important that your suppliers and other relevant partners are made aware of your programme requirements and can meet your needs. There are several activities that you can undertake to clearly communicate your requirements to your suppliers.

- ✱ You should inform suppliers of your environmental policy and provide them with your mission statement.
- ✱ State environmental requirements in tender documents.
- ✱ Work with suppliers to help capture the type of products that you seek at a competitive price. Ask suppliers to identify environmentally friendly products that can substitute items that you are currently using (at a comparable price).
- ✱ Encourage suppliers to provide you with documentation that guarantees the 'environmentally friendly' authenticity of the products while you are purchasing.
- ✱ Encourage suppliers to use recyclable / biodegradable packaging materials.
- ✱ Invite your suppliers / contractors to participate in any community support programme(s) or environmental partnership programme(s) with the public / private sector / NGOs.

### Influence your Customers

Just as you appreciate your suppliers for providing you with various environmentally friendly products, your customers will appreciate your efforts in offering them with quality goods. It is therefore a good practice to supply your customers with information regarding the environmental measures that you are taking and the nature of the products that they are purchasing. There are many ways in which you can help your customers be aware of your efforts and support your environmental programme.

- ✱ Listen to your customers when they identify those areas requiring improvement and how you could be of help.
- ✱ Provide incentives (e.g. discounts) to your customers for their support of your environmental initiatives.
- ✱ Involve your customers / clients in your environmental initiatives.

### Influence on the Community




Everyone in Hong Kong experiences the effects of pollution. Many people would like to help improve environmental quality, however, not everyone knows how to get involved. As a green business operator, you deal with environmental management issues on a daily basis. You are in a strong position to help the community to implement green measures. It is important for you 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 your community, you can improve the environment and enjoy good standing within the community. Furthermore, taking simple initiatives including efforts to report the lessons learnt in setting up your programme(s) and other useful information can raise community awareness. There are a number of ways that you can get involved.

- ✱ Publish your environmental initiatives and achievements in other media and publications.
- ✱ Communicate your organisation's efforts on environmental performance with your stakeholders.
- ✱ Establish communication channels with your stakeholders on environmental issues.
- ✱ Get involved and support local green initiatives. Community involvement can range from organising 'Beach clean-up' campaigns to funding projects that aid in the establishment of conservation areas.
- ✱ Proactively initiate more environmental programmes to engage general public (e.g. open day).
- ✱ Collaborate and share experience with other industry players on the implementation of environmental programmes and activities.

## 4. WEIGHTINGS OF ASSESSMENT CRITERIA

As mentioned in Section 3 above, the assessment of eligible entries under the Manufacturing and Industrial Services 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:

 <b>Green Leadership</b>	 <b>Programme and Performance</b>	 <b>Partner Synergy</b>
25%	55%	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 2024 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* / *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<sup>PLUS</sup>)* and *Low Carbon Manufacturing Programme (LCMP)*, *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*, *EEB's Charter on External Lighting* or other schemes recognised by the Organisers will earn 1 bonus point. The Organisers reserve the right to grant bonus points to any applicants.

## 2024 HONG KONG AWARDS FOR ENVIRONMENTAL EXCELLENCE GUIDEBOOK FOR MANUFACTURING AND INDUSTRIAL SERVICES SECTOR (for non-SMEs)

**\*Note:**

1. HKGOC consists of four Certificates, namely "Wastewi\$e Certificate", "Energywi\$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. 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.
10. Green Office Awards Labelling Scheme (GOALS) is a recognition scheme for offices organised by the World Green Organisation (WGO).
11. 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.
12. 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.
13. 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.
14. Charter on External Lighting is a voluntary scheme implemented by EEB to invite owners and responsible persons of external lighting installations to switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment during the preset time (i.e. 10 p.m., 11 p.m. or midnight to 7 a.m. on the following day) to foster a better nighttime environment, which is conducive for the public to rest and energy saving.
15. The presentation of the award to any winning organisation is still subject to further consideration of non-compliance record of environmental regulations, if any, before the date of the Presentation Ceremony.

## 5. APPLICATION FORM (MANUFACTURING AND INDUSTRIAL SERVICES SECTOR)

### SECTION 1 - Organisation Profile

**Application Deadline: 14 Jan 2025**

*(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 Factory (in Hong Kong / Greater Bay Area) / Functional Unit, if applicable:**

in English: \_\_\_\_\_  
in Chinese: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

**Name of Parent Company / Affiliated Company, if applicable:**

in English: \_\_\_\_\_  
in Chinese: \_\_\_\_\_

**Number of employees (under the Business Registration of the applicant organisation / nominated factory)**

Hong Kong:	(Full time)	_____	(Part time)	_____
Greater Bay Area:	(Full time)	_____	(Part time)	_____
Parent Company:	(Full time)	_____	(Part time)	_____

**Is your company or its parent company / affiliated 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 HKAEE Technical Consultant to request access to, and amend your personal data provided by you. If needed, please send an email to: sec@hkaee.gov.hk. The personal data collected from you will be erased and destroyed after 24 months upon the completion of the assessment of HKAEE.

### 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. Environment and Ecology Bureau 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 communication, 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 unacceptable, 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 Environment and Ecology Bureau and / or the Environmental Campaign Committee 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 Environment and Ecology Bureau and / or the Environmental Campaign Committee. Should you find such use of your personal data unacceptable, 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 Environment and Ecology Bureau and / or the Environmental Campaign Committee 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](mailto: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 : <https://aas.hkaee.gov.hk/HKAEE/applicationform/apply>

**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 funding the HKAEE.

### Funded by



Environment and Conservation Fund

### Organisers



中華人民共和國香港特別行政區政府  
環境及生態局  
Environment and Ecology Bureau  
The Government of the Hong Kong Special Administrative Region  
of the People's Republic of China

Environment and Ecology Bureau



ENVIRONMENTAL  
CAMPAIGN COMMITTEE  
環境運動委員會

Environmental Campaign Committee



Advisory Council on the Environment



BUSINESS  
ENVIRONMENT  
COUNCIL  
商界環保協會

Business Environment Council



香港工業總會  
FHKI Federation of  
Hong Kong Industries

Federation of Hong Kong Industries



Hong Kong General Chamber of Commerce  
香港總商會 1861

Hong Kong General Chamber of Commerce



Hong Kong Productivity Council



香港中華總商會  
CGCC The Chinese General Chamber  
of Commerce, Hong Kong

The Chinese General Chamber  
of Commerce



香港中華廠商聯合會  
The Chinese Manufacturers'  
Association of Hong Kong

The Chinese Manufacturers' Association  
of Hong Kong



香港中華出入口商會  
The Hong Kong Chinese Importers' & Exporters' Association

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](mailto:awards@hkaee.gov.hk)



Website: [www.hkaee.gov.hk](http://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 Manufacturing and Industrial Services Sector

### GREEN LEADERSHIP

	Yes	No
<b>Leadership</b>		
➤ 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 the employees to practise green measures.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy and Commitment</b>		
➤ Establish an environmental / sustainability / ESG policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Contain commitment to environmental conservation in environmental / sustainability / ESG policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply the environmental / sustainability / ESG policy company-wide.	<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, Waste Reduction and Recycling Charter, Carbon Neutrality (Waste 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"/>
<b>Organisation and Resources</b>		
➤ 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 involvement in environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish and operate a sound environmental management system.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Environmental Communication</b>		
➤ Publicise the environmental / sustainability / ESG policy, initiatives and accomplishments from time to time.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Encourage staff to give suggestions or feedback on the environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collect ideas from staff members, workers and customers and answer their questions or concerns.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Offer incentives or rewards to staff members and workers for their environmental initiatives.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Communicate the accomplishments of the environmental programme to the community.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Post the environmental / sustainability / ESG policy in a prominent place within the premises.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Involve your workers in your environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide incentives where possible to workers to acknowledge their efforts in participation of environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Promote awareness of environmental protection through events.	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Environmental Training</i></b>		
➤ 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"/>
<b><i>Managing for Continual Improvement</i></b>		
➤ Devise a simple plan to schedule regular checks of the organisation's environmental programme.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Properly document the findings of the checking 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"/>
➤ 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 work with reference to the requirements of BEAM Plus Interiors).	<input type="checkbox"/>	<input type="checkbox"/>

## PROGRAMME AND PERFORMANCE

	Yes	No
<b><i>Regulatory Compliance</i></b>		
➤ Identify and collect legal information from competent sources.	<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 members concerned have continuous access to the legal requirements.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Establish a procedure to ensure relevant information on legal requirements is communicated to employees 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"/>
<b><i>Environmental Programme Implementation</i></b>		
➤ Define your environmental objectives and targets.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Formulate measures to achieve the objectives and targets.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Appoint staff to be responsible for undertaking different measures.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Calculate carbon footprint and establish a reduction plan.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Review the outcome of environmental programme and find ways for improvement.	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Energy Conservation and Progressing towards Carbon Neutral</i></b>		
<b><i>General</i></b>		
➤ Review energy consumption (electricity / fuel) regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Conduct energy and/or carbon audit to find out the main sources of energy usage and carbon emissions and identify the improvement areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish reduction targets on energy consumption and/or carbon emissions.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Set up and implement procedures to reduce energy consumption and carbon footprint.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide energy-saving guidelines for staff members / workers and check if they follow / or encourage them to follow.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Set benchmarks or goals for energy conservation and carbon reduction.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Switching to hybrid or electric vehicles	<input type="checkbox"/>	<input type="checkbox"/>
➤ Purchase carbon offsets to offset the carbon emissions related to business operations	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Lighting System</i></b>		
➤ Employ high luminous efficacy lamp and accessories such as high efficiency lamp, electronic ballast, high reflectance reflector and high transparent diffuser.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ control system (e.g. occupancy sensor, dimming system and zoning) for lighting control.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Utilise daylight (e.g. louvre, glass window) within the premises as far as practicable.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply window film to reduce the amount of solar heat entering indoor area.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
<i>Electrical System</i>		
➤ Maintain proper operating condition and practice of equipment / facilities (e.g. transformers, low voltage switchboards, VAR control etc.)	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ power electronics device such as inverter and soft starter for optimisation of the electrical system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain voltage / phase loading balance for the electrical system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain proper power factor of the electrical system within the premises.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ high efficiency motors for the electrical system.	<input type="checkbox"/>	<input type="checkbox"/>
<i>HVAC System</i>		
➤ Allow fan speed optimisation for the system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Locate the exhaust of the HVAC system in proper locations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Optimise pump speed of the HVAC system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide effective maintenance schedule for air side equipment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Optimise equipment control for chiller plants.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Compressed Air System</i>		
➤ Install properly sized air receivers to minimise pressure demand fluctuations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Properly distribute pipework arrangement (proper sizing and good positioning of compressors) for the compressed air system.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ high efficiency motors for compressors.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install heat recovery system for compressors (e.g. heat exchanger at lubricant cooler to produce hot water).	<input type="checkbox"/>	<input type="checkbox"/>
<i>Steam System</i>		
➤ Use cleaner fuel such as LPG or petroleum.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Employ computer control system to optimise boiler usage.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install sequential boiler control (if more than one boiler are used in the premises)	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install feed-water treatment devices to reduce scale deposits and minimise boiler blowdown (e.g. softeners, decarbonation, demineralisation and de-aeration, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install automated blowdown control system with Total Dissolved Solids (TDS) monitoring and control for boiler to minimise boiler blowdown.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Recover heat from the boiler blowdown.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Pre-heating feedwater using waste heat / economiser.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Others</i>		
➤ Choose energy efficient equipment or machines.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use renewable energy whenever possible.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Stop a portion of escalators or lifts from running during non-peak hours.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Encourage employees and customers to use the stairs whenever possible.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Perform preventive maintenance programmes for machines / equipment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish real-time energy management system to identify abnormalities in energy consumption and poor energy performance.	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Water Conservation and Wastewater Control</i></b>		
➤ Review water consumption regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install flow restrictors and automatic shut-off systems to reduce water use.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Select plumbing fixtures and water-consuming devices with Grade 1 Water Efficiency Label	<input type="checkbox"/>	<input type="checkbox"/>
➤ Remind employees to always turn off faucets completely after use and report any leakage.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a monitoring and maintenance programme to ensure that water pipes are in good working condition.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Carry out watering of plants in the morning or evening.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use environmentally friendly cleaning products.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Abandon the use of pesticides and fertilisers for plantation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collect and treat wastewater for reuse.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Ensure wastewater generated from manufacturing process is adequately controlled.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Reuse greywater generated from wastewater treatment plant if possible.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Treat wastewater regularly to ensure compliance with legal requirements.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain and monitor wastewater treatment plant (if any) regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Conduct water footprint audit.	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Waste Management</i></b>		
➤ Conduct waste audit / checking to identify the types and quantities of waste generated.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish waste reduction plan for better waste management.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Streamline operation procedures and eliminate unnecessary forms / records.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use double-sided photocopying.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage the use of E-mail for both internal and external communication. Use of e-filing, e-tendering and paper-less purchasing.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Minimise the use of tape and strapping when sealing packages.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Choose proper sized packages and avoid using fillers in packaging.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Avoid breakage and spillage of materials when handling to minimise wastage.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Keep reusable cloth rags on hand to wipe up spills.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Choose solar powered appliances to avoid battery disposal.	<input type="checkbox"/>	<input type="checkbox"/>



	Yes	No
➤ Encourage employee to use re-useable containers, dishes, cups and coffee filters in the pantry / canteen. Reduce food waste generated from canteen or introduce food waste treatment facilities if relevant.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use refillable containers for cleaning products.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Replace raw materials by eco-friendly (recycled or non-toxic or less toxic than existing) materials with longer service time.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Modify working procedures, process record keeping, machine-operating instructions or production equipment and utilities in order to run the processes at higher efficiency with less waste generated.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Adopt reusable carriers for goods distribution.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Reuse wasted materials in the same process or for another useful application within the industry.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish collection bins for used packaging, cord binding, envelopes and other materials that can be reused.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Donate surplus products to charitable or non-profitable organisations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Modify the waste generation process so that the waste produced can be transformed to a reusable / recyclable material for another application within or outside the premises.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Return used products, corrugated cardboard, paper boxes, plastic containers, wooden pallets and shrink-wrap to suppliers if possible.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collect waste materials (paper, plastic, metal, furniture, electronic equipment, food waste, wooden pallets, chemical waste etc.) for recycling or proper treatment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Educate staff and cleaning staff for proper and clean recycling.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Reduce and reuse festive / promotional decorations.	<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"/>
➤ Ensure that chemical wastes generated are properly labelled, packaged and temporarily stored in a designated chemical waste storage area and collected by a licensed chemical waste collector.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Housekeeping</b>		
➤ Establish an orderly and clean workplace environment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use the 'First-In-First-Out' principle to avoid expiry of materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Post signs to inform employees to maintain good practices when handling and storing materials.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Keep an inventory of the substances that are potentially harmful to the environment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Designate an area for storage of potentially harmful substances to prevent leakage to the environment.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Exercise procedures during the handling and storing of potentially harmful substances to prevent leakage to the environment.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Noise and Vibration Control</b>		
➤ Reduce noise by modification of workflow and equipment set up.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Isolate noisy work facilities.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply noise control measures such as acoustic enclosure, noise barrier and noise absorption materials, etc.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Schedule noisy activities at appropriate times to minimise nuisance.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain equipment and machinery regularly to reduce noise.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Mount vibrating machinery on vibration isolators or on separate foundations.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Isolate or reduce the vibration of vibrating surfaces or apply damping materials to machinery.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Air Quality / Odour Control</b>		
➤ Ensure that there is sufficient fresh air within the premises.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Clean air outlets, ducts, filters and cooling coils in the air-conditioning system regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Clean carpet, upholsteries and working area regularly.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Place air emitting processes / equipment / machineries in properly ventilated areas and provide treatment to the exhaust if necessary.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Locate odour sources (e.g. wastewater treatment plant) away from employees or install odour control devices.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Maintain power generator properly to avoid emission of dark smoke.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Cover or wet cement, sand, debris or other dusty materials. Instruct contractors to use materials with low volatile organic compound (VOCs) content during renovation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Use eco-friendly / ozone-friendly refrigerators, air-conditioners and chiller equipment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Install control devices for cooking fumes from kitchens.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish indoor air quality monitoring programme for production areas.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a vehicle maintenance programme for company vehicles.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Deploy vehicles with lower greenhouse gases emission (e.g. Euro-VI or above).	<input type="checkbox"/>	<input type="checkbox"/>
<b>Green Procurement</b>		
➤ Purchase products that are reusable, recyclable and contain less toxic (e.g. recycled paper, recycled toner cartridges).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Establish a guiding policy that favours staff to purchase environmentally friendly products.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Encourage staff to conduct simple research on frequently used items and find out if they can be substituted by other more environmentally friendly options.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Encourage staff to examine the possibility of repairing items instead of purchasing new ones.	<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"/>
➤ Encourage ethical purchasing (the practice of avoiding products that would bring adverse effect to the ecosystem).	<input type="checkbox"/>	<input type="checkbox"/>
➤ Buy goods in bulk quantities to avoid wastage.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Support the purchase of products with environmentally friendly logos or eco-labels.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Adopt green menus at 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"/>

## PARTNER SYNERGY

	Yes	No
<b>Communication and Motivation</b>		
<i>Influence your Suppliers / Contractors</i>		
➤ Inform suppliers of your environmental / sustainability / ESG policy.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Work with suppliers to identify environmentally friendly products to substitute those less friendly in the operations.	<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"/>
➤ Adopt green specification in tendering to select suppliers offering sustainable green products.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Give preference to environmentally friendly products or environmentally responsible suppliers / contractors.	<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 your Customers</i>		
➤ Label products that are made of recycled or reusable materials or are not harmful to the environment.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Provide customers with incentives to purchase environmentally friendly products by offering discounts.	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
➤ Encourage customers to share their comments and suggest them to purchase products that are more environmentally friendly.	<input type="checkbox"/>	<input type="checkbox"/>
<i>Influence on the Community</i>		
➤ Share experiences in setting up environmental programme with the community.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Identify your impact on the society and communicate the impact with the community.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Get involved in and support local environmental initiatives.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Set up donation boxes and give proceeds to local environmental charities.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Donate surplus raw materials / finished goods to non-governmental organisations (NGOs) to minimise waste generation.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Report your environmental achievements in newsletters, magazines and other publications.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Apply for relevant awards or labels to gain formal recognition for your efforts.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Publish environmental / sustainability / ESG report to communicate your performance with stakeholders.	<input type="checkbox"/>	<input type="checkbox"/>
➤ Collaborate with other organisations to promote environmental protection.	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 2 – Highlights of Best Practices for the Manufacturing and Industrial Services Sector

- ✻ In line with the local and global trend in environmental protection, company establishes long term goals and plans in carbon reduction and sustainability with reference to local and global initiatives such as government's "Long Term Decarbonisation Strategy", "Hong Kong's Climate Action Plan 2050", United Nations' "Sustainable Development Goals", etc.
- ✻ Allocate sufficient resources (e.g. budget for donations and sponsorships) for environmental programme implementation and establish environmental communication channels both internally and externally.
- ✻ Establish Environmental Management Taskforce to have regular meeting and coordinate environmental programmes.
- ✻ Establish Environmental Management System and attained ISO 14001 certificate to effectively manage the significant environmental aspects in the operation and reduce the impact to the environment.
- ✻ Provide appropriate levels of environmental training to all employees in order to enhance their environmental awareness.
- ✻ Carry out energy and carbon audit to identify areas for improvement and implement practical energy saving measures in the operations. Conduct retro-commissioning, especially for old building facilities and machineries of significant energy consumption, to recondition the equipment performance and optimise the equipment operation efficiency.
- ✻ Adopt ISO 14064 to tract the direct and indirect carbon emissions of the company in a systematic manner.
- ✻ Establish Energy Management System and achieve ISO 50001 certification to monitor the energy performance of the operation and help identify room for improvement. Incentivise the department or user when energy reduction is observed.
- ✻ Adopt the following energy saving measures within the premises where practical:
  - Use motion sensors, carbon dioxide sensors, timers and intelligent control devices to control the lighting and air conditioning system;
  - Divide site office into different zones for better arrangement of lighting and air conditioning in order to reduce electricity consumption; and
  - Utilise renewable energy in the production and daily operation to reduce electricity consumption.

- ✱ Adopt the following energy saving measures for machinery operation where practical:
  - Install energy saving devices in some existing motor driven equipment and machines, such as frequency inverter for air compressors or plastic injection machines, variable speed drive for water pumps and variable frequency drive for heating, ventilating and air conditioning system;
  - Use electrical appliances with Energy Efficiency Labels; and
  - Install a heat exchange system for boilers or dryers to recover excess heat and reuse.
- ✱ Promote water conservation programme at manufacturing facilities, such as installing foot operated faucet and rainwater harvest system.
- ✱ Adopt innovative technologies to enhance the overall efficiency of the manufacturing processes.
- ✱ Repair or reuse product packaging, containers, carriers of the product whenever possible.
- ✱ Use reusable cups and cutleries when organising events or meetings. Do not provide bottled water.
- ✱ Develop environmental policy, guidelines and provide environmental programmes and trainings for staff members to raise the overall awareness on environmental protection related to their daily production (i.e. recycling food waste, uniforms, defective products, etc.).
- ✱ Collect surplus material from the production and operation for reuse or recycling, such as collecting food waste for recycling or collecting uniform for upcycling.
- ✱ Donate surplus raw materials / finished goods to non-governmental organisations (NGOs) to minimise waste generation.
- ✱ Offer incentives or rewards to staff for the environmental initiatives they suggested.
- ✱ Organise competition on environmental themes such as energy and water saving across departments to improve the environmental performance of the factory.
- ✱ Deploy vehicles with lower greenhouse gases emission (e.g. Euro-VI or above). Adopt electric vehicle or hybrid vehicle to reduce direct emission (if applicable).
- ✱ Establish a green corner or green notice board in the office and in the warehouse to post various topics related to environmental protection.
- ✱ Publish company's green initiatives in website, public forum, annual report, online corporate responsibility report and tendering contract.

- ✱ Improve the product design so that the product is more environmentally friendly throughout the whole product life cycle. For instance, adopting product design that reduce or avoid the use of materials that are harmful to the ecosystem; adoption of environmentally friendly alternatives; design for easy dismantling / material segregation and close the recycling-loop.
- ✱ Provide support for up-stream suppliers to improve their overall environmental performance.
- ✱ Develop green procurement guideline and communicate the requirement to vendors. Evaluate the environmental performance of suppliers and update the approved vendor list accordingly.
- ✱ Participate in international / regional recognition / certification schemes such as Hong Kong - Guangdong Cleaner Production Partners Recognition Scheme, Low Carbon Manufacturing Programme, BOCHK Corporate Low-Carbon Environmental Leadership Awards Programme, the Wastewi\$e, Energywi\$e, IAQwi\$e and Carbon Reduction Certificates of the Hong Kong Green Organisation Certification (HKGOC), etc.
- ✱ Engage stakeholders within the industry actively to exchange ideas so as to enhance the environmental performance of the entire industry.
- ✱ Work with non-governmental organisations (NGOs) to organise environmental activities for staff or the community.
- ✱ Collaborate and share experience with other industry players or trade associations on the implementation of environmental programmes and activities.
- ✱ Proactively organise more environmental programmes to engage general public (e.g. open day).
- ✱ Motivate staff members 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.) by granting voluntary work leave.