

Tender for Supply, Installation and Maintenance Services of Smoke Control Systems for Joss Paper Burning 2019-2021

(Ref: EM00057)

August 2019

Part I – General Specification

1. Introduction

Hong Kong Productivity Council (hereinafter referred to as “HKPC”) is a statutory organization established in 1967 to promote productivity excellence and enhance the value-added content of products and services.

HKPC currently offers three types of systems to its client namely “Smoke Controlled Paper Artifact” (patent number #HK1166930), “‘Qing Yan’ Eco-Joss Paper Furnace” (patent number #HK1062768) and “Mobile Eco-Joss Paper Furnace” (patent number #HK1174188) (hereinafter referred to as “the Systems”) as solutions to tackle air pollution caused by burning of traditional Chinese paper offerings.

HKPC is now looking for qualified supplier(s) (hereinafter referred to as “the Supplier” / “Tenderer”) to work as HKPC’s contractor for the execution of the supply, installation and maintenance of the Systems (hereinafter referred to as “the Service / the Item / the Works”) within HKSAR area for a period of 24 calendar months starting from the date of Tender Award. The tentative tender appointment period will be from 15 Oct., 2019 to 14 Oct., 2021. The actual tender appointment period will be subject to final confirmation of HKPC via the Tender Appointment Letter.

HKPC will go through an open tender to invite qualified Suppliers and will enter into contract with the selected Supplier based on the terms and conditions of this tender document (hereinafter referred to as “the Tender”).

Within the 24 calendar months tender appointment period, HKPC will issue Purchase Orders based on the quantities required for individual projects appointed by HKPC’s clients and the unit rated committed in the awarded Tender. However, HKPC will not guarantee the number of purchase orders to be issued to the Supplier within the tender appointment period and will not commit the quantities of works/services to be purchased from the Supplier during the tender appointment period.

2. Tender Procedures

2.1. Clarification of Tender

For enquiries, please contact the following person:

Ms Alice Chan, (Officer, Procurement)
Finance and Procurement Division
Tel: (852) 2788 5362
Email: alicechan@hkpc.org

Mr Timothy To, (Manager, Procurement)
Finance and Procurement Division
Tel: (852) 2788 5643
Email: timothyto@hkpc.org

Any clarification questions must be sent by using the Annex 1 – Clarification Question from Tenderer via email to alicechan@hkpc.org **on or before 6 September 2019 (HK Time)**. The questions with the answers will be posted on HKPC's website www.hkpc.org. In this event anonymity will be maintained. Late enquiries may not be considered.

2.2. Submission of Tender Proposals

Based on “Part II – Technical Specification” and “Part III – Fee Specification”, your tender should be completed in two proposals, namely “Technical Proposal” and “Fee Proposal” with **one set of original document**, **one set of duplicate document** and **one soft copy on CD ROM/USB Drive for each Proposal**, which should be:

- sealed and returned by hand in two plain envelopes with the provided Cover Sheet stuck on each of the two envelopes;
- marked with “Technical Proposal” or “Fee Proposal” on the envelopes;
- marked with the tender reference and closing date on the envelopes; and
- submitted not later than **12:00 noon, 20 September 2019 (HK Time)**.

Both the hard copies and soft copy of the documents must be submitted in their separate envelopes of Technical and Fee Proposal respectively.

Late tenders may not be accepted.

2.2.1. The Technical Proposal should include at least the following:

- Tender Submission Form
- Copy of valid Business Registration Certificate or equivalent documents
- Copy of insurance certificates such as Public Liability, Employee Compensation listed on Section 5
- Annex 2 - Confirmation Letter for Compliance with Anti-Collusion Clauses
- Documents and information required in “Part II – Technical Specification”
- Copy of audited financial statements for the last three financial years, such as income statement and balance sheets, directors and auditors reports, cash flow statements
- Application Form for Inclusion in HKPC Suppliers List (if you are not registered to HKPC suppliers list), the form can be download from HKPC website: <https://www.hkpc.org/en/corporate-info/tender-information/supplier-registration>
- NO PRICE OR COST should be included in “Technical Proposal”, otherwise the tender may not be considered

2.2.2. The Fee Proposal should include at least the following:

- Schedule and Offer Form
- Reply to “Part III – Fee Specification”

3. General Requirements

3.1. Terms of Payment

Payment will be made by electronic means (e.g. bank transfer with 30 days credit against invoice) after completion of goods / services delivery supported by HKPC’s acceptance, unless otherwise specified.

3.2. Validity of Quoted Fees

The fees provided by the Supplier in “Part III - Fee Specification” shall be valid from date of tender submission to the end of the tender appointment period. No change shall be made without the prior consent of HKPC.

3.3. Termination Policy

The appointment may be terminated by HKPC on giving one month prior written notice to the Supplier.

Without prejudice to any other remedy HKPC may have against the Supplier, HKPC shall have the right to terminate the contract immediately if the Supplier:

- (a) is wound up or is petitioned to be wound up, commits an act of bankruptcy or compound or arrange with its creditors or have a receiving order made against it or being a limited supplier enters into compulsory or voluntary liquidation (except for the purposes of amalgamation or restructure only).
- (b) refuses or prevents the furnishing of services / goods under the contract.
- (c) breaches or violates any of the terms and requirements contained in the contract.

3.4. Confidentiality

The Supplier shall at all times keep confidential (and to procure that its respective employees shall keep confidential) any confidential information which it may acquire in relation to HKPC, its clients, business or affairs and shall not use or disclose such information except with the consent of HKPC or in accordance with the order of a court of competent jurisdiction provided that the obligations of the Supplier contained in this clause shall cease to apply to any information coming into the public domain otherwise than by breach by the Supplier of its obligations contained in this clause and that nothing herein shall prevent the Supplier from disclosing any such information to the extent required in or in connection with legal proceedings arising out of the agreement / contract between the Supplier and HKPC.

4. Statutory Obligations

4.1. Working hours, rates of wages etc.

The Supplier shall comply with any current legislation or regulations regarding working conditions, working hours, or rates of payment to employees and accept the risk of any impending legislation or other conditions, which alters any obligations or imposes new obligations.

4.2. Compliance with Laws and Regulations

The Supplier shall ensure full compliance in accordance with the laws and regulations of the Hong Kong Special Administrative Region (“Hong Kong”).

- 4.3. Where applicable, the Supplier (and its sub-contractors, if any) shall ensure that all staff, labour and workers employed and engaged in the supply of the Services to HKPC are legally entitled to be so employed and engaged, and that all necessary qualification, registration, visas, licenses and permits have been obtained. The Supplier shall indemnify HKPC on demand from any losses, liabilities, costs and claims resulting from violation of or failure to comply with any terms or conditions of any qualification, registration, permits, licenses or visas or any applicable requirements of Hong Kong laws, ordinances, rules and regulations by staff, labour or workers (e.g. the “Designated workers for designated skills” provision under the Construction Workers Registration Ordinance). From time to time HKPC may require the Supplier (and its sub-contractors) to demonstrate that all necessary qualification, registration, visas, licenses and permits have been obtained for the lawful employment and engagement of staff, labour and workers in connection with the supply of the Services.

4.4. Safety precautions

The Supplier shall comply with the Labour Department's regulations for safety and health. The Supplier shall be liable for, and shall indemnify HKPC against, any expense, liability, loss, claim or proceedings whichever arising under any statute or at the common law in respect of personal injury to or death of any person, or in respect of any injury or damage whatsoever to any real or personal property in so far as such injury or damage whomever arising out of or in the course of or caused by the carrying out of the works.

HKPC premises operate an Occupational Health & Safety Management System (OHSMS) that complies with OHSAS 18001 / ISO 45001 standard.

HKPC is implementing the ‘Hong Kong Productivity Council Occupational Health and Safety Policy’ which can be viewed at the following link. Supplier is welcomed to contact HKPC for any queries or feedback regarding to the Policy as well as the OHSMS.

[English Version: https://www.hkpc.org/images/stories/corp_info/hkpc_ohs_en.pdf]

OR

[Traditional Chinese Version:

https://www.hkpc.org/images/stories/corp_info/hkpc_ohs_hk.pdf]

OR

[Simplified Chinese Version:

https://www.hkpc.org/images/stories/corp_info/hkpc_ohs_cn.pdf

The Supplier shall be deemed to be aware of the ‘Hong Kong Productivity Council Occupational Health and Safety Policy’ and shall use its reasonable endeavour to prevent injury and ill health resulting from our operations and services,

HKPC manages its various processes fully in accordance with the requirements of the OHSAS 18001/ISO45001 standard, whilst controlling subcontractors’ work processes that affect HKPC’s own services conformity with requirements.

- Comply with safety and environmental related legislatives at all times
- Segregate or enclose the workplace from the public area or office area with warning notice displayed; Hoarding shall be erected if applicable or as requested by HKPC
- Maintain good housekeeping in the workplace; Keep the main access free from obstruction
- A proper working platform or scaffold should be used for work at 2m or above height. Ladder is only be used for work with nature of light duty and short duration; No substandard ladder is allowed to be used and stored inside HKPC Building
- All lifting appliances and lifting gears shall be thoroughly examined with valid certificate
- Assign competent person to check the temporary structures or equipment like scaffold, lifting appliances and suspended working platform if applicable; record shall be properly kept for inspection
- The storage and use of dangerous goods shall not exceed the legal exempted quantity or licensed quantity
- Apply hot work permit from HKPC if hot work is involved
- Only qualified registered electrical worker can carry out electrical work
- All structures or panels or partitions being constructed or erected shall be structurally safe without the risk of collapse
- The materials used for construction shall be free from defect and good in nature
- All workers shall wear proper personal protective equipment while at work, if applicable

5. Insurance

5.1. Employees’ Compensation Insurance

HKPC shall not be liable for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any person in the employment of the Supplier, save and except an accident or injury resulting from the negligence of HKPC,

its agents or servants. The Supplier shall indemnify and keep indemnified HKPC against all such damages and compensation save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Compliance with the insurance provisions of this clause shall not limit or modify the Supplier's liability under the indemnity aforesaid.

The Supplier shall insure against such liability with an authorized Insurer in Hong Kong and shall continue such insurance during the whole of the time that any persons are employed by him on the works and shall, when required produce to HKPC such policy of insurance and the receipt for payment of the current premium.

The Supplier's insurance under this clause shall take the form of an Employees' Compensation Insurance Policy complying with the latest requirements of the Hong Kong Employees' Compensation Ordinance and covering this Common Law liability for an unlimited amount during the period of insurance. The policy shall be in the Supplier's name with an endorsement to cover HKPC's liability under the Employees' Compensation Ordinance as "Principals" (HKPC as the Insured Principal or "Indemnity to Principal" Clause).

5.2 Contractors' All Risks Insurance

The Supplier shall indemnify and keep indemnified HKPC against all losses and claims in respect of injuries to any person or damage to any property whatsoever that may arise out of or in consequence of the provision of the Services and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Compliance with the insurance provisions of this clause shall not limit or modify the Supplier's liability under the indemnity aforesaid.

The Supplier shall insure against such liability with reputable Insurer in Hong Kong and shall continue such insurance during the whole of the time against any loss, damage or personal injury howsoever caused by or arising out of the works or any of its employees, contractors, sub-contractors, consultants, representative or agents and shall, when required produce to HKPC such policy of insurance and the receipt for payment of the current premium.

The limit of liability in respect of such Contractors' All Risks Insurance shall not be less than HK\$20,000,000 any one occurrence and unlimited during the period of insurance.

6. Protection of properties

- 6.1. The Supplier shall take every precaution necessary to protect the public from injury or death during the course of works.
- 6.2. The Supplier shall maintain and protect all public properties of public utility companies and bear all costs incurred in making good any damage caused thereto.
- 6.3. The Supplier shall take every precaution necessary to protect adjoining properties from damage and shall bear all costs incurred in remedying damage caused through lack of proper care on its part.
- 6.4. Special precautions should be taken to protect properties of HKPC and its client(s) from damage and the Supplier shall bear all costs incurred in making good all damages caused through lack of proper care on its part.
- 6.5. The Supplier shall maintain all existing roads, footpaths, steps, etc. and reinstate any damage caused by any reason whatsoever during the progress of the works.
- 6.6. It will be the Supplier's responsibility to ensure that the roads leading to and around HKPC and its client(s) premises shall be kept free from obstruction brought about by the works on the site and in no way shall cause any hindrance to traffic or ancillary works either by its own vehicles or by its workpeople, materials, etc.
- 6.7. The Supplier shall be responsible for repairing damage to private streets and access roads if deterioration occurs during the contract period.
- 6.8. The Supplier shall take all necessary steps to restrict the nuisance of dust and noise.

7. Handling of Materials and Garbage

7.1. Loading and unloading of materials

The Supplier shall take every care in the loading and off-loading of materials for the works, ensure that the streets, roads and footpaths are not obstructed or the traffic impeded and conform with the police regulations therewith.

The Supplier shall take all necessary precautions and care to cause minimal disturbances to the occupants and the usual operations of the existing building.

7.2. Removal of garbage

The Supplier shall remove garbage at frequent intervals during the progress of the works and HKPC premises shall be left clean and tidy to the satisfaction of HKPC on completion.

7.3. Treasure trove, coin, etc.

Any treasure trove, coins or objects of antiquity shall become the property of HKPC and shall be carefully removed by the Supplier and handed to HKPC.

8. Acceptance

HKPC is entitled to accept either the whole or any part of the tender at its sole discretion. HKPC is entitled to select any kind of Services / Items under the tender to meet its requirement and is not obliged to accept the lowest price bidder and to give any reasons.

9. Conditions of Tendering

- 9.1. No unauthorized alteration or erasure to the text of the tender documents will be permitted. Any tender containing such alteration or erasure may not be considered
- 9.2. No liability will be admitted, nor claim allowed, in respect of errors in the Supplier's tender due to mistakes which should have been rectified in the manner described above.
- 9.3. HKPC is not bound to accept the lowest or any tender it may receive.
- 9.4. HKPC reserves the right to withdraw the invitation before the acceptance of any tender.
- 9.5. HKPC will not be liable for any expenses or losses which may be incurred by the Supplier in the preparation of this tender including any alternative offers.

Part II – Technical Specification

1. Obligations of the Supplier

- 1.1. Subcontracting and / or out-sourcing the works to other sub-supplier(s) without the prior consent from HKPC is not allowed.
- 1.2. The Supplier shall meet all the terms and requirements set out in this tender document.
- 1.3 All the Works shall comply with the latest laws, rules and regulations established by Government Authorities and Utilities of the Hong Kong Special Administrative Region, PRC.

2. Scopes of Service

2.1 Scope of Works

There are three major types of joss paper furnace system projects, involving supply, installation or maintenance works for the systems, to be delivered by the Supplier.

2.1.1 System Type A – Smoke Controlled Paper Artifact Furnace

Refer to Appendix I for the standard works to be carried out for each Type A project. Alterations to the standard works, special equipment features and additional works/services may be requested subjected to the project requirement of each project. Works/services to be provided by the Supplier in the project will be specified in the corresponding Purchase Order.

2.1.2 System Type B and Type C – “Qing Yan” Eco-Joss Paper Furnace and Mobile Eco-Joss Paper Furnace

Refer to Appendix II and Appendix III for the standard works to be carried out for each Type B or C project. Alterations to the standard works, special equipment features and additional works/services may be requested subject to the project requirement of each project. Works/services to be provided by the Supplier in the project will be specified in the corresponding Purchase Order.

2.2 System Design and Equipment Performance

System Type A – Smoke Controlled Paper Artifact shall basically follow but not limited to the descriptions detailed in Appendix I while System Type B and Type C – “Qing Yan” Eco-Joss Paper Furnace and Mobile Eco-Joss Paper Furnace shall basically follow but not limited to the descriptions detailed in Appendix II and Appendix III respectively.

The Supplier shall be responsible for carrying out the detailed design of the installation according to the architectural design and actual site condition to cater for the specific characteristics of the equipment/materials offered. Any incompatibility with the original system design shall be brought to the attention of HKPC at the time before the issuance of Purchase Order by HKPC. HKPC shall have the full liberty to accept or reject such incompatibility. Upon HKPC’s request, the Supplier shall submit shop drawings and material specifications for HKPC’s approval before work commencement.

The major materials and equipment shall refer to specification in Appendix IV and V. Reference design drawings of a typical Type A and Type B project will be available at HKPC. Tenderers interested in viewing the reference design drawings are required to make appointment and sign the Non-Disclosure Agreement with the following contact person by 13 September 2019:

Contact Person:	Ms. Alice Cham
Tel:	(852) 2788 5362
Email:	alicechan@hkpc.org

Late request will not be entertained.

2.3 HKPC will specify the Supplier the required works/services and the corresponding quantities on the Purchase Order.

2.4 Delivery of works/services shall be completed on or before the delivery date specified in the Purchase Order. Upon receiving the Purchase Order and upon HKPC’s request, the Supplier shall submit a project programme for execution of the Works to indicate the delivery date can be met.

3. Information to be Provided by the Supplier

The Supplier is mandatory to complete the following table which requires full compliance so as to be considered further in the tendering process.

No.	Description / Requirement	Fully Comply (Yes / No)
3.1	Compliance to General and Technical Specifications – The Supplier shall ensure full compliance to all the terms, requirements and specifications as set out in “Part I – General Specification” and “Part II – Technical Specification” respectively	
3.2	Past Experience – The Supplier must have relevant experience in using “Electrostatic Precipitators” in their previous projects on Air Pollution Control Systems.	

4. Technical Assessment (I) – Information to be Provided by the Supplier

A total score of **80** will be assigned in this Section for the technical evaluation of System Type A as specified in Part II – Technical Specification (2.1.1), as well as System Type B & C as specified in Part II – Technical Specification (2.1.2).

Tender(s) shall complete the Technical Proposal by providing information as required in 4.1 – 4.3. For the evaluation of System Type A, the total score will be the sum of 4.1 and 4.3. For the evaluation of System Type B & C, the total score will be the sum of 4.1 and 4.2.

The passing score of both “System Type A” and “System Type B & C” will be 48. Only tender(s) getting score 48 or above in the technical evaluation (I) will be invited to give presentation at technical evaluation (II).

No.	Technical Assessment Areas	Maximum Score
<u>4.1 Information to be provided for the evaluation of both System Type A, B and C</u>		
4.1.1	Company Profile – Please provide your company information including - i) background information of your company, year of establishment, business nature, scope of key products /services, structure, (i.e. company organization chart) (6%) ii) number of staff, qualification and relevant experiences in air pollution (6%) iii) areas of strengths of your company relevant to this job (8%)	20
4.1.2	Environmental and Safety – - Please advise the environmental management or green element involved both in materials supply and work process, document proof is recommended (i.e. ISO 14001; green certificates, etc) (5%); - Please advise safety and health initiatives conducted by your company including but not limited to the accreditation of OSHAS 18001, the registered safety officer, safety supervisor, etc. Please provide the awards of OSHAD 18001 or equivalents or in-house safety officer and safety policy / plan. (5%)	10
<u>4.2 Information to be provided for the evaluation of System Type B and C</u>		
4.2	Relevant Design / Supply / Installation / Maintenance Experience of Air Pollution Control System Using Electrostatic Precipitators- Please provide <u>at least five relevant projects (10% each)</u> on Air Pollution Control System Using Electrostatic Precipitators in the past 10 years. For each job, please provide information including client name, client's industry, project sum, treatment process, detailed scope of work, service period and copy of reference / complimentary letters from named clients (if any). Tender(s) will be assessed based on the nature and relevancy of the projects.	50
<u>4.3 Information to be provided for the evaluation of System Type A</u>		
4.3	Relevant Design / Supply / Installation / Maintenance Experience of Smoke Control System for Chinese Traditional Joss Paper and Paper Artifact Incineration –	50

No.	Technical Assessment Areas	Maximum Score
	Please provide <u>at least five relevant projects (10% each)</u> on smoke control system for Chinese Traditional Joss Paper and Paper Artifact Incineration in the past 10 years. For each job, please provide information including client name, client's industry, project sum, treatment process, detailed scope of work, service period and copy of reference / complimentary letters from named clients (if any). Tender(s) will be assessed based on the nature and relevancy of the projects.	

5. Technical Assessment (II) – Supplier Interview

Tender(s) with score 48 or more in Section 4 Technical Assessment (I) will be invited to an interview with representatives of HKPC for further evaluation on the technical competency and project experience. The tenderer(s) might be given a project scenario and requested to suggest the method of works, schedule, required resources and other project considerations. Besides the interview, HKPC reserves the right to request tenderer(s) to provide site visits to recent relevant projects when necessary.

A total score of 20 will be assigned in this Section. Tender(s) will be assessed with their understanding on the work scope (6%), the amount and mobility of human resources to handle HKPC account (6%), the scale and quality of work of their relevant project experiences (8%) and other relevant information given by the tender(s). Only tender(s) score 12 or more will be considered further at Fee Evaluation.

6. Tender Evaluation

- 6.1. The Supplier must comply with Section 3 Compliance Requirement above. Supplier fails to fully comply with the mandatory requirement as laid out in Part I of the Technical Proposal will not be considered further.
- 6.2. A total score of 80 is assigned to Section 4 Technical Assessment (I). Tender(s) with total score less than 48 will be regarded as unsuccessful and will not be considered further.

6.3. For tender(s) with scores 48 or more in Section 4 Technical Assessment (I) will be invited to give presentation at Section 5 Technical Assessment (II). A total score of 20 is assigned to this section. The total score of Technical Assessment (I) and (II) is 100.

6.4. Fee Assessment will be divided into two parts namely “Fee Assessment (I) Standard Items of the Systems” and “Fee Assessment (II) Non-standard Items/ Maintenance/Parts of the Systems”.

In Fee Assessment (I), the lump sum price of all standard items of the Systems (Table 2-4 of Fee Proposal) will be weighted 80%. While in Fee Assessment (II), the lump sum price of all non-standard items/equipment parts of the Systems (Table 5-8 of Fee Proposal) will be weighted 20%. The sum of the two weighted prices from Fee Assessment (I) and (II) will be used for tender evaluation.

6.5. The technical to fee assessment weight will be 40% and 60% respectively.

Example of the calculating method is as follows:

	Technical Proposal		Fee Proposal	
	Technical Assessment (I)	Technical Assessment (II)	Fee Assessment (I)	Fee Assessment (II)
Offer	--	--	HK\$50,000,000	HK\$40,000,000
Weighting	--	--	80%	20%
Weighted Offer	--	--	50,000,000 x 80% + 40,000,000 x 20% = 48,000,000 (assume lowest tender: 42,000,000)	
Score Obtained	55 out of 80	15 out of 20	42,000,000/48,000,000 x 100 = 87.5	
Weighting	40%		60%	
Weighted Score Obtained	(55+15) x 40% = 28		87.5 x 60% = 52.5	
Total Score Obtained	28 + 52.5 = 80.5			

6.6. In principle, HKPC may select one tender with the highest total scores from technical proposal and fee proposal. However, HKPC reserves the right to accept the whole or part of the tender and is not bound to accept the highest scores or any tender.

7. All documents / materials submitted to HKPC will not be returned.

APPENDIXES

Appendix I - Scope of Works of a Typical System Type A Project

Appendix II - Scope of Works of a Typical System Type B Project

Appendix III - Scope of Works of a Typical System Type C Project

Appendix IV - Material and Equipment Specification of System Type A

Appendix V - Material and Equipment Specification of System Type B & C

Part III – Fee Specification

Please submit “Fee Proposal” with **one set of original documents, one set of duplicate documents** and **one soft copy on CD ROM/USB Drive**, which should be sealed in separate plain envelope.

The Supplier shall complete the tables below to show the fees for the provision of Supply, Installation and Maintenance of Eco-Furnace Systems for Burning Paper Offerings 2019-2021. All other associated costs shall be specified (if any).

1. Prices

Each table lists out the cost items and the corresponding reference quantity. Please note the reference quantities are for tender evaluation purpose only, no purchase quantity is committed in this tender document.

Table 1: Summary of Prices

	System Type and Description	Lump Sum Price
Fee Assessment (I) - Standard Items of the Systems		
1	System Type A – Smoke Controlled Paper Artifact Furnace Standard Items	
2	System Type B – ‘Qing Yan’ Eco-Joss Paper Furnace Standard Items	
3	System Type C – Mobile Eco-Joss Paper Furnace Standard Items	
Total Price of Fee Assessment (I)		
Fee Assessment (II) - Non-standard Items/Maintenance/Parts of the Systems		
4	System Type A – Smoke Controlled Paper Artifact Furnace Non-Standard Items	
5	System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace Non-Standard Items	
6	System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace Cleaning, Maintenance and Overhaul Works Items	
7	System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace Parts	
Total Price of Fee Assessment (II)		

Table 2: System Type A – Smoke Controlled Paper Artifact Furnace Standard Items (環保紙紮爐安裝工程標準項目)

	項目	單位	參考數量 (按一台標準環保紙紮爐計算)	單價		總價
				供應	供應及安裝	
燃燒室及風喉						
A01	3mm 黑鐵板內扣高溫磚燃燒室 [Burning Chamber]	m²	20 (參考尺寸: 1300 x2600 x2050)	N/A		
A02	3mm 黑鐵板內扣高溫磚風箱	m²	6	N/A		
A03	3mm 黑鐵板內扣高溫磚風喉連承托支架	m²	6	N/A		
A04	1.5mm 不鏽鋼 SS304 風喉(噴淋箱前)連承托支架	m²	50	N/A		
A05	1.5mm 不鏽鋼 SS304 風喉(噴淋箱後)連承托支架	m²	150	N/A		
A06	1mm 不鏽鋼 SS304 風喉(清煙機後)連承托支架	m²	50	N/A		
A07	黑鐵風喉及風箱油高溫漆	m²	12	N/A		
A08	高溫旁通連電閥	個	1	N/A		
A09	高溫帆布 (於風喉接駁位)	組	1	N/A		
環保紙紮爐主要設備						
A10	不鏽鋼 SS304 噴淋箱 [Water Spray Tower] (尺寸: 1800 x3200 x3000)	個	1	N/A		
A11	噴淋箱鍍鋅基礎 (噴淋箱重: 3000kg)	組	1	N/A		
A12	不鏽鋼 SS304 除沫箱連除沫器 [Mist Elimination Chamber] (尺寸: 1600 x1600 x5000)	個	1	N/A		
A13	除沫箱、清煙機鍍鋅設備平台及工作平台 [Galvanised Steel Frame] (尺寸: 3550x2250x1250, 1800x1800x1250, 1650x1700x1250)	個	1	N/A		

	項目	單位	參考數量 (按一台標準環保紙紮爐計算)	單價		總價
				供應	供應及安裝	
A14	2m ³ 玻璃纖維補水缸 (尺寸: 1000 x1000 x2000)	個	1	N/A		
A15	噴淋水泵 (400L/min, 17m) [Circulation Pump]	台	3	N/A		
A16	排水泵 (80L/min, 4m) [Waste Water Drain Pump]	台	1	N/A		
A17	補水泵 (60L/min, 8m)	台	2	N/A		
A18	抽氣扇 [Fan] (Epoxy coating, 4m ³ /s; 1500Pa)	台	3	N/A		
A19	抽氣扇變頻器	台	3	N/A		
A20	不鏽鋼 SS304 主控制箱	個	1	N/A		
A21	遠程控制箱	個	1	N/A		
A22	遠程控制箱控制線路連鐵喉	米	10	N/A		
A23	安裝清煙機 (清煙機尺寸: 1600 x1600 x2000)	次	1		N/A	
A24	各設備電源及控制 (客方提供 63A 三相電源於主控制箱旁)	米	5	N/A		
A25	各設備供水系統 (客方提供 28mm 供水點於噴淋箱旁)	米	5	N/A		
A26	各設備去水系統 (客方提供 100mm 去水接駁於噴淋箱旁)	米	5	N/A		
<u>其他必要項目</u>						
A27	人手物料搬運	人天	30		N/A	
A28	50 噸 RB 吊機物料吊運 (九龍或新界)	次	1		N/A	
A29	外牆企地棚架搭建	m ²	100	N/A		
A30	天台棚架搭建	m ²	100	N/A		
A31	系統調試運行	次	1		N/A	
A32	安排人員現場協助運作(一星期)	次	1		N/A	
A33	環保紙紮爐設備例行清洗及保養	次	12		N/A	

	項目	單位	參考數量 (按一台標準環保紙紮爐計算)	單價		總價
				供應	供應及安裝	
A34	勞工賠償保險及建築全險保險	份	1	N/A	N/A	INCLUDED
一台標準環保紙紮爐總價						

Table 3: System Type B – ‘Qing Yan’ Eco-Joss Paper Furnace Standard Items (‘清煙’環保化寶爐安裝工程標準項目)

	項目	單位	參考數量 (按一台標準環保化寶爐計算)	單價		總價
				供應	供應及安裝	
B01	吊機貨車物料運輸，從國內到港貨櫃到現場車路到達之卸貨點	次	1		N/A	
B02	人手物料搬運	人天	4		N/A	
B03	供電系統 (4mm 兩芯裝甲電纜及水線連承托支架(3 米內))	套	1	N/A		
B04	供水系統 (15mm 保護銅喉連承托支架(3 米內))	套	1	N/A		
B05	排水系統 (40mm 膠喉連承托支架(3 米內))	套	1	N/A		
B06	抽風機連底架及避震 (抽風機功率 1.5kW)	台	1	N/A		
B07	鎖牌及銅鎖	套	6	N/A		
B08	系統調試	次	1		N/A	
B09	化寶爐電場例行清洗及保養	次	12		N/A	
B10	緊急維修服務 (24 小時內到現場)	次	6		N/A	
一台標準環保化寶爐總價						

Table 4: System Type C – Mobile Eco-Joss Paper Furnace Standard Items (流動化寶爐安裝工程標準項目)

	項目	單位	參考數量 (按一台標準流動化寶爐計算)	單價		總價
				供應	供應及安裝	
C01	吊機貨車物料運輸，從國內到港貨櫃到現場車路到達之卸貨點	次	1		N/A	
C02	人手物料搬運	人天	4		N/A	
C03	供電系統 (4mm 兩芯裝甲電纜及水線連承托支架(1 米內))	套	1	N/A		
C04	供水系統 (15mm 保護銅喉連承托支架(1 米內))	套	1	N/A		
C05	排水系統 (40mm 膠喉連承托支架(1 米內))	套	1	N/A		
C06	抽風機連底架及避震 (抽風機功率 1.5kW)	台	1	N/A		
C07	系統調試	次	1		N/A	
一台標準流動化寶爐總價						

Table 5: System Type A – Smoke Controlled Paper Artifact Furnace Non-Standard Items (環保紙紮爐安裝工程其他非標準項目)

	項目	單位	參考數量	單價		總價
				供應	供應及安裝	
D01	50 噸RB 吊機物料吊運 (香港島、大嶼山)	次	1			
D02	燃燒室頂坑板雨篷及承托支架 (尺寸: 1500 x3200)	個	1	N/A		
D03	設備表面包 25mm 岩綿板	m ²	1	N/A		
D04	改裝及還原紙紮爐	項	1	N/A		
D05	租賃紙紮爐	項	1	N/A		
D06	搬運及使用普通貨車運送紙紮往紙紮爐所在地	5.5 噸	1		N/A	
D07	搬運及使用大貨車運送紙紮往紙紮爐所在地	22 尺	1		N/A	
D08	技術人員實地指導操作紙紮爐	小時	8		N/A	
總價						

Table 6: System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace
Non-Standard Items (‘清煙’環保化寶爐 / 流動化寶爐安裝工程附加非標準項目)

	項目	單位	參考 數量	單價		總價
				供應	供應及安裝	
E01	25 噸 RB 吊機物料吊運	次	1		N/A	
E02	化寶爐現場組裝 (散件運送)	台	1		N/A	
E03	3mm 鍍 鋅 鐵 架 [Galvanised Steel Frame]	米	1	N/A		
E04	供電系統另加電纜連承托支架	米	1	N/A		
E05	供水系統另加保護銅喉連承托支架	米	1	N/A		
E06	排水系統另加膠喉連承托支架	米	1	N/A		
E07	抽風機連底架及避震 (抽風機功率 2.25kW)	台	1	N/A		
E08	1mm 不鏽鋼 SS304 排煙風喉連配件及支架	m ²	1	N/A		
E09	1mm 不鏽鋼 SS316 排煙風喉連配件及支架	m ²	1	N/A		
E10	鋁架/鍍鋅鐵架工作平台連圍欄 (少於 3 米高)	台	1	N/A		
E11	爐身裝飾板 (板材按上環文武廟化寶爐規格)	組	1	N/A		
E12	爐身裝飾板油漆 (油漆色樣按上環文武廟化寶爐規格)	組	1	N/A		
E13	遠程控制系統控制箱	個	1	N/A		
E14	遠程控制系統控制線路	米	1	N/A		
E15	室內抽氣扇聯動控制	組	1	N/A		
E16	故障訊號顯示板 (按和合石火葬場項目規格)	個	1	N/A		
E17	故障訊號顯示燈 (按哥連臣角火葬場項目規格)	個	1	N/A		
E18	緊急停止掣及警告字牌	組	1	N/A		
E19	燃燒室旁控制箱	個	1	N/A		
E20	燃燒室旁排渣喉	組	1	N/A		
E21	高溫旁通閥連控制元件	組	1	N/A		
E22	熱電偶連自動開關線路接駁	組	1	N/A		

	項目	單位	參考 數量	單價		總價
				供應	供應及安裝	
E23	化寶爐機座添加可調升降機腳 (每台 5 個)	台	1	N/A		
E24	更換化寶爐內電源電線及添加 保護接地導線	台	1	N/A		
E25	控制箱內添加保護膠片	台	1	N/A		
E26	翻修或更換水喉軟接	台	1	N/A		
E27	304 不鏽鋼儲水箱連水喉配件 (20L)	個	1	N/A		
E28	304 不鏽鋼排水系統集水箱 (250L) 連配件	個	1	N/A		
E29	500L 玻璃纖維補水缸連水喉配 件	個	1	N/A		
E30	抽風機變頻器、更改電源線及 控制線路	組	1	N/A		
E31	爐口鋼門內扣高溫磚	組	1	N/A		
E32	機架水泵位加裝不鏽鋼網板	台	1	N/A		
E33	補水泵加裝銅掣及鋼喉	組	1	N/A		
E34	提供 10 m ² 臨時 鍍 鋅 風 管 (300x300)、承托支架及協助測 試，完成測試後拆除並清走	次	1	N/A		
E35	高溫磚燃燒室 (1100 x 1400 x 1200) 連承托支架 (高 1950) (按礮石山火葬場項目規格)	個	1	N/A		
E36	燃燒室底下流動不鏽鋼乘灰車 (1100x 1000x 500) (按礮石山火 葬場項目規格)	個	1	N/A		
E37	安排人員現場協助運作(12 小 時)	次	1		N/A	
E38	塑膠污水箱一個(2 噸)及木地板	組	1	N/A		
E39	安排合資格污水收集商到現場 以吸水車收集污水 2 噸	次	1		N/A	
E40	技術人員實地操作化寶爐	小時	8		N/A	
總價						

Table 7: System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace Cleaning, Maintenance and Overhaul Works Items (‘清煙’環保化寶爐 / 流動化寶爐清洗、維修及翻新工程項目)

	項目	單位	參考數量	單價		總價
				供應	供應及安裝	
F01	化寶爐電場例行清洗及保養	次	1		N/A	
F02	化寶爐電場維修服務	次	1		N/A	
F03	二級靜電除塵機電場清洗	次	1		N/A	
F04	緊急維修服務 (24 小時內到現場)	次	1		N/A	
F05	拆除原有化寶爐裝飾板及鐵架連清走	項	1		N/A	
F06	拆除原有化寶爐 U 型風喉連清走	項	1		N/A	
F07	拆除原有化寶爐燃燒室連清走	項	1		N/A	
F08	拆除及還原原有各水泵、水缸及配件	項	1		N/A	
F09	原有機架及裝飾板鐵架除銹油、鉛水油及銀油	項	1	N/A		
F10	供應及更換化寶爐燃燒室	項	1	N/A		
F11	供應及更換 U 型風喉	項	1	N/A		
F12	更換水泵出、入水水喉	項	1	N/A		
F13	修整電場路軌、支架、電場	項	1		N/A	
F14	更換風機前 304 不鏽鋼風喉	項	1	N/A		
F15	更換風機避震彈弓及電線	項	1	N/A		
F16	化寶爐搬移及復位	項	1		N/A	
F17	電場內隔灰網板	個	1	N/A		
F18	風喉外包 50mm 岩棉板水泥批盪	m ²	1	N/A		
F19	風喉表面油漆	m ²	30	N/A		
F20	供應及更換化寶爐燃燒室的鋼格柵	項	1	N/A		
F21	緊急搬運、維修及儲存化寶爐	年	1	N/A		
總價						

Table 8: System Type B/C – ‘Qing Yan’ Eco-Joss Paper Furnace / Mobile Eco-Joss Paper Furnace Parts (‘清煙’環保化寶爐/流動化寶爐零件供應)

	零件名稱 / 規格	單價		總價
		供應	供應及安裝	
G01	風機 Centrifugal Exhaust Fan / 0.75kW	N/A		
G02	風機 Centrifugal Exhaust Fan / 1.5kW	N/A		
G03	風機 Centrifugal Exhaust Fan / 2.25kW	N/A		

	零件名稱 / 規格	單價		總價
		供應	供應及安裝	
G04	水泵(清水注入系統) Water Pump for Fresh Water System / 0.33kW	N/A		
G05	水泵(噴淋系統) (半開式) Water Pump for Water Spraying System / 0.55kW	N/A		
G06	水泵(自動清洗系統)Water Pump for Self-Cleaning System / 0.37kW	N/A		
G07	水泵(清水注入系統)Water Pump for Fresh Water System / 0.55kW	N/A		
G08	水泵(換水系統)Water Pump for Recirculating Water System / 0.37kW	N/A		
G09	水泵(噴淋系統) Water Pump for Water Spraying System / 0.37kW	N/A		
G10	潛水泵(污水系統) Submersible Pump for Waste Water System / 0.15kW	N/A		
G11	電磁閥 Electric Solenoid Water Valve / 3/4"	N/A		
G12	電磁閥 Electric Solenoid Water Valve / 1"	N/A		
G13	防堵噴咀 Anti-clog Water Spraying Nozzle	N/A		
G14	變壓器 Electric Transformer	N/A		
G15	電路板 Electronic Circuit Board	N/A		
G16	主電源絕緣子 Main Power Ceramic Isolator	N/A		
G17	電場絕緣子(一套四只)Ceramic Isolator for Dust Collector	N/A		
G18	溫控器 / Temperature Sensor / 0-400°C	N/A		
G19	自動控制器 Programmable Logic Controller	N/A		
G20	磁感掣 Magnetic Switch	N/A		
總價				

All prices should be made Delivered Duty Paid (DDP-HK).

Note: The currency should be Hong Kong Dollars.

2. Payment Terms

Payment will be made by electronic means (e.g. bank transfer with 30 days credit against invoice) after completion of goods/ services delivery supported by HKPC's acceptance, unless otherwise

specified.

3. Validity of Quoted Prices

The offer provided above shall be valid for 90 days from the date of tender closing. No change shall be made without the prior consent of HKPC.

4. Fee Assessment

Fee Assessment will be divided into two parts, “Fee Assessment (I) – Standard Items of the Systems” and “Fee Assessment (II) - Non-standard Items/Maintenance/Parts of the Systems”.

In Fee Assessment (I), the total price of all standard items of the Systems (Table 2-4 of Fee Proposal) will be weighted 80%. While in Fee Assessment (II), the total price of all non-standard items/maintenance works/parts of the Systems (Table 5-8 of Fee Proposal) will be weighted 20%. The sum of the two weighted prices from Fee Assessment (I) and (II) will be used for tender evaluation. Please refer to Technical Specification Section 6 for the tender evaluation procedures and example.

Remarks:

The submitted fee proposal must comply with the submitted technical proposal in accordance with those requirements set by HKPC in “Part I – General Specification” and “Part II –Technical Specification”.

In principle, HKPC may select one tender with the highest total score from technical proposal and fee proposal. However, HKPC reserves the right to accept the whole or part of the tender and is not bound to accept the lowest price or any tender.