

Addendum to the
ENVIRONMENT BUREAU CIRCULAR MEMORANDUM No. 1/2021
(Revised in January 2025)

Original	Amendments	Revision Date
<p>Paragraph 2(a)</p> <p>(a) B/Ds to adopt green specifications for products and services where such specifications have been promulgated by Environmental Protection Department (EPD) in their purchases as far as practicable;</p>	<p>(a) B/Ds to adopt green specifications for products and services where such specifications have been promulgated by Environmental Protection Department (EPD) in their purchases exceeding the B/Ds' Quotation Limit compulsorily and in their purchases within the B/Ds' Quotation Limit as far as practicable;</p>	<p>1 January 2025</p>
<p>Footnote 2</p> <p>²Chapter II of the Stores and Procurement Regulations (SPRs) includes a summary of various types of procurement and the delegated financial limits. The delegated authority to Controlling Officers in procurement of stores, services (excluding services for construction and engineering works) and revenue contracts as stated in SPR 220 is:</p> <p>(i) Quotation Limit: \$1.4 million; and</p> <p>(ii) Departmental Limit: \$10 million</p>	<p>²Chapter II of the Stores and Procurement Regulations (SPRs) includes a summary of various types of procurement and the delegated financial limits. The delegated authority to Controlling Officers in procurement of stores, services (excluding services for construction and engineering works) and revenue contracts as stated in SPR 220 is:</p> <p>(i) Quotation Limit: \$1.36 million; and</p> <p>(ii) Departmental Limit: \$10 million</p>	<p>1 January 2024</p>

Original	Amendments	Revision Date
<p>Paragraph 5</p> <p>5. In exercising the authority under B/Ds' delegated authority⁴, B/Ds are encouraged to adopt the respective green specifications whenever they purchase items on the list in Annex II as far as possible. In doing so, B/Ds are also advised to make reference to the procurement practice currently adopted by GLD for bulk contracts for common user items as stated in paragraphs 6 to 10 below.</p>	<p>5. In exercising the authority under B/Ds' delegated authority⁴, B/Ds are required to adopt the respective green specifications whenever they purchase items on the list in Annex II as stipulated in paragraph 2(a) above. In doing so, B/Ds are also advised to make reference to the procurement practice currently adopted by GLD for bulk contracts for common user items as stated in paragraphs 6 to 10 below.</p>	<p>1 January 2025</p>
<p>Paragraph 20</p> <p>20. General enquiries on this circular can be addressed to Senior Environmental Protection Officer (Waste Reduction and Recycling)⁴ on 3690 7883. Questions on GLD's green procurement practice may be addressed to Principal Supplies Officer (Procurement 1) on 2231 5229 for purchase of stores or Government Transport Manager (Operations) on 2231 5219 for hiring of vehicles arranged by GLD.</p>	<p>20. General enquiries on this circular can be addressed to Senior Environmental Protection Officer (Sustainable Development)² on 3150 8184. Questions on GLD's green procurement practice may be addressed to Principal Supplies Officer (Procurement 1) on 2231 5229 for purchase of stores or Government Transport Manager (Support) on 2231 5935 for hiring of vehicles arranged by GLD.</p>	<p>1 January 2024</p>

Original	Amendments	Revision Date												
<u>Annex II</u> List of 183 items with recommended green specifications Water dispenser & accessories (Category Code – E) Product Code: E01 Product Item: Hot / Cold bottled water dispensers	Water dispenser & accessories (Category Code – E) Product Code: E01 Product Item: Hot / Cold water dispensers	1 January 2025												
<table><tr><td>Recommended Green Specifications</td></tr><tr><td>Mandatory Requirement</td></tr><tr><td><ul style="list-style-type: none">The equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).</td></tr><tr><td>Desirable Requirement</td></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.</td></tr><tr><td>Reminder:<ul style="list-style-type: none">Avoid using single-use disposable cup. Consider “filtered water dispensers connected to water mains” as an alternative to minimise use of bottled water.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">The equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).	Desirable Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.	Reminder: <ul style="list-style-type: none">Avoid using single-use disposable cup. Consider “filtered water dispensers connected to water mains” as an alternative to minimise use of bottled water.	<table><tr><td>Recommended Green Specifications</td></tr><tr><td>Mandatory Requirement</td></tr><tr><td><ul style="list-style-type: none">The water dispenser shall be filtered water dispenser connected to water mains.If filtered water dispenser connected to water mains cannot be installed, the water dispenser shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).</td></tr><tr><td>Desirable Requirement</td></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.</td></tr><tr><td>Reminder:<ul style="list-style-type: none">Avoid using single-use disposable cup.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">The water dispenser shall be filtered water dispenser connected to water mains.If filtered water dispenser connected to water mains cannot be installed, the water dispenser shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).	Desirable Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.	Reminder: <ul style="list-style-type: none">Avoid using single-use disposable cup.	
Recommended Green Specifications														
Mandatory Requirement														
<ul style="list-style-type: none">The equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).														
Desirable Requirement														
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.														
Reminder: <ul style="list-style-type: none">Avoid using single-use disposable cup. Consider “filtered water dispensers connected to water mains” as an alternative to minimise use of bottled water.														
Recommended Green Specifications														
Mandatory Requirement														
<ul style="list-style-type: none">The water dispenser shall be filtered water dispenser connected to water mains.If filtered water dispenser connected to water mains cannot be installed, the water dispenser shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).														
Desirable Requirement														
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.														
Reminder: <ul style="list-style-type: none">Avoid using single-use disposable cup.														

Original	Amendments	Revision Date															
Annex II List of 183 items with recommended green specifications Light fittings (Category Code – H) Product Code: H02 Product Item: Fluorescent tube / Compact fluorescent lamp	Light fittings (Category Code – H) Product Code: H02 Product Item: Fluorescent tube / Compact fluorescent lamp	1 January 2025															
<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label</td></tr><tr><td><ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight</td></tr><tr><td>Reminder:<ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label	<ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.	Desirable Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight	Reminder: <ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.	<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label</td></tr><tr><td><ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight</td></tr><tr><td><ul style="list-style-type: none">The product shall have motion sensor function.</td></tr><tr><td>Reminder:<ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label	<ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.	Desirable Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight	<ul style="list-style-type: none">The product shall have motion sensor function.	Reminder: <ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.	
Recommended Green Specifications																	
Mandatory Requirement																	
<ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label																	
<ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.																	
Desirable Requirement																	
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight																	
Reminder: <ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.																	
Recommended Green Specifications																	
Mandatory Requirement																	
<ul style="list-style-type: none">Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020)ii. The non-integrated compact fluorescent lamp: A Recognition Type Energy Label																	
<ul style="list-style-type: none">Colour Rendering Index (CRI) shall be at least 80.																	
Desirable Requirement																	
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight																	
<ul style="list-style-type: none">The product shall have motion sensor function.																	
Reminder: <ul style="list-style-type: none">Consider using LED Lamp (item H03) as an alternative for energy saving purpose.																	

Original	Amendments	Revision Date													
<u>Annex II</u> List of 183 items with recommended green specifications		1 January 2025													
Light fittings (Category Code – H)	Light fittings (Category Code – H)														
Product Code: H03 Product Item: LED lamp	Product Code: H03 Product Item: LED lamp														
<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).</td></tr><tr><td><ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight	Desirable Requirement	<ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).	<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.	<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).</td></tr><tr><td><ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.</td></tr><tr><td><ul style="list-style-type: none">The product shall have motion sensor function.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight	Desirable Requirement	<ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).	<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.	<ul style="list-style-type: none">The product shall have motion sensor function.	
Recommended Green Specifications															
Mandatory Requirement															
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight															
Desirable Requirement															
<ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).															
<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.															
Recommended Green Specifications															
Mandatory Requirement															
<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight															
Desirable Requirement															
<ul style="list-style-type: none">LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).															
<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.															
<ul style="list-style-type: none">The product shall have motion sensor function.															

Original	Amendments	Revision Date										
<u>Annex II</u> List of 183 items with recommended green specifications Vehicles and spare parts (Category Code – V) Product Code: V01 Product Item: Private cars		8 February 2024										
<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">Private cars with 5 or less seats (including driver)<ul style="list-style-type: none">The vehicle shall be electric vehicle unless good justifications are given and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.Private cars with more than 5 seats (including driver)<ul style="list-style-type: none">The vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">For private cars with 5 or less seats (including driver), if justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.For private cars with more than 5 seats (including driver), the vehicle should be in the order of priority electric vehicles or hybrid electric vehicle.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">Private cars with 5 or less seats (including driver)<ul style="list-style-type: none">The vehicle shall be electric vehicle unless good justifications are given and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.Private cars with more than 5 seats (including driver)<ul style="list-style-type: none">The vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.	Desirable Requirement	<ul style="list-style-type: none">For private cars with 5 or less seats (including driver), if justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.For private cars with more than 5 seats (including driver), the vehicle should be in the order of priority electric vehicles or hybrid electric vehicle.	<table><tr><th>Recommended Green Specifications</th></tr><tr><th>Mandatory Requirement</th></tr><tr><td><ul style="list-style-type: none">The vehicle shall be electric vehicle unless justified by strong operational reasons and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.</td></tr><tr><th>Desirable Requirement</th></tr><tr><td><ul style="list-style-type: none">If justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.</td></tr></table>	Recommended Green Specifications	Mandatory Requirement	<ul style="list-style-type: none">The vehicle shall be electric vehicle unless justified by strong operational reasons and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.	Desirable Requirement	<ul style="list-style-type: none">If justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.	
Recommended Green Specifications												
Mandatory Requirement												
<ul style="list-style-type: none">Private cars with 5 or less seats (including driver)<ul style="list-style-type: none">The vehicle shall be electric vehicle unless good justifications are given and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.Private cars with more than 5 seats (including driver)<ul style="list-style-type: none">The vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.												
Desirable Requirement												
<ul style="list-style-type: none">For private cars with 5 or less seats (including driver), if justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.For private cars with more than 5 seats (including driver), the vehicle should be in the order of priority electric vehicles or hybrid electric vehicle.												
Recommended Green Specifications												
Mandatory Requirement												
<ul style="list-style-type: none">The vehicle shall be electric vehicle unless justified by strong operational reasons and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD.If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.												
Desirable Requirement												
<ul style="list-style-type: none">If justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.												

ENVIRONMENT BUREAU CIRCULAR MEMORANDUM

No. 1/2021

From:	Permanent Secretary for the Environment/Director of Environmental Protection	To: Permanent Secretaries, Heads of Departments
Ref.:	EP1201/8/GP-General pt. 2	
Tel. No.:	3509 8602	
Fax No.:	2838 2155	
Date:	16 July 2021	

Green Procurement in the Government

Introduction

The Chief Executive announced on 22 June 2009 that the Government would take the lead in making Hong Kong a green city through a number of measures including the expansion of green procurement in the Government. In this connection, the Permanent Secretary for the Environment has set up an Inter-departmental Working Group on Green Government Procurement (the Working Group), with membership and terms of reference as set out in **Annex I**, to take the matter forward. This Circular sets out the additional measures to expand green procurement in the Government, as endorsed by the Working Group. It supersedes the Environment Bureau Circular Memorandum No. 6/2015 issued on 17 July 2015.

Government's Green Procurement Policy

2. In 2000, the Government updated its procurement regulations to require bureaux and departments (B/Ds) to take into account environmental considerations when procuring goods and services. Specifically, B/Ds are encouraged, as far as possible and where economically rational, to purchase green products¹ and avoid single-use

¹ These refer to products (i) with improved recyclability, high recycled content, reduced packaging and greater durability; (ii) with greater energy efficiency; (iii) utilizing clean technology and/or clean fuels;

disposable items. In parallel, we continue to monitor the market situation and has expanded the list of green specifications for items commonly used by B/Ds. We have now drawn up additional measures for adoption by B/Ds with a view to further promoting green procurement in the Government as set out below:

- (a) B/Ds to adopt green specifications for products and services where such specifications have been promulgated by Environmental Protection Department (EPD) in their purchases as far as practicable;
- (b) B/Ds to make annual report on green product and services purchase;

Details of these measures are elaborated in the ensuing paragraphs.

To adopt the green specifications

Green specifications for products and services commonly procured by B/Ds

3. EPD has commissioned consultancy studies to develop green specifications for products and services commonly used by B/Ds which are centrally procured by the Government Logistics Department (GLD) (e.g. paper, office stationery etc.). As regards products and services purchased under individual B/Ds' delegated authority², or high-value specific items purchased by GLD as procurement agent on behalf of the procuring B/D, their specifications are drawn up by individual B/Ds having regard to their specific operational requirements.

4. In line with the Government's commitment to promote green procurement, EPD has recently extended its study of green specifications

(iv) which result in reduced water consumption; (v) which emit fewer irritating or toxic substances during installation or use; or (vi) which result in smaller production of toxic substances, or less toxic substances, upon disposal.

² Chapter II of the Stores and Procurement Regulations (SPRs) includes a summary of various types of procurement and the delegated financial limits. The delegated authority to Controlling Officers in procurement of stores, services (excluding services for construction and engineering works) and revenue contracts as stated in SPR 220 is:

- (i) Quotation Limit: \$1.4 million; and
- (ii) Departmental Limit: \$10 million

to include products and services purchased by B/Ds individually. The latest number of products and services on the Government procurement list with green specifications is 183 items (**Annex II**). The green specifications of these items, as well as their verification methods³, have been uploaded to CCGO website at the following address: <http://epd.host.ccgo.hksarg/ERPurchase/index.html>. EPD will continue to review regularly with a view to expanding the list of products and services with green specifications as appropriate.

5. In exercising the authority under B/Ds' delegated authority⁴, B/Ds are encouraged to adopt the respective green specifications whenever they purchase items on the list in **Annex II** as far as possible. In doing so, B/Ds are also advised to make reference to the procurement practice currently adopted by GLD for bulk contracts for common user items as stated in paragraphs 6 to 10 below.

Green Procurement Practice

6. For the purchase of common user items, GLD has adopted green specifications as “mandatory” features in the tender specifications when the products are available on the market with adequate models and quantities in supply. As a rule of thumb, where there are three or more models meeting the green specifications for that product, GLD would consider that there is an adequate supply of that product on the market. In this connection, “mandatory” green requirements are specified in **Annex II** for reference.

7. For new green specifications developed with uncertain market availability, green specifications will be included in the tender specifications as “desirable” features. “Desirable” green requirements are also specified in **Annex II** for reference. Tenderers are invited to indicate in their offers whether their products and services can comply with these green features and, where appropriate, to submit supporting documents for verification. Experience has indicated that tenderers are often more

³ For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

⁴ See Note 2. B/Ds should however note that the procurement of some items, irrespective of their value, is centrally controlled. One example is the procurement of government vehicles which is governed by General Regulation 236.

forthcoming in providing the information in the context of submitting their tenders than in responding to market research enquiries. However, the information should still be cross-checked against and updated by market research as appropriate.

8. The tender assessment panel will evaluate tender offers which can meet the mandatory features and recommend either the lowest conforming offer (for a tender without a marking scheme) or the highest scoring conforming offer (for a tender with a marking scheme) for acceptance. As regards the green desirable features, they are not taken into account in the tender assessment except where there are two or more lowest conforming offers which are identical in all respects, the one which could meet the desirable green specification(s) could be given the preference. These arrangements should be clearly spelt out in the tender document.

9. In order to encourage potential suppliers to offer products that can comply with green specifications, consideration may also be given to adopting a marking scheme with appropriate weighting for green specifications against the price offered. For this purpose, the relevant provisions of SPR350(i) for adopting the marking scheme shall be followed. In drawing up the marking scheme, due weight should be given to whether it will achieve the value for money objective.

10. GLD will keep record of the offers that can meet the “desirable” green specifications and review the market availability of products meeting individual green specifications on a regular basis based on the tender responses and market information, with a view to changing them into “mandatory” or “desirable requirements attracting marks” in future tender exercises when circumstances warrant. Individual “desirable” green specifications without sufficient models or quantities in supply as mentioned in paragraph 7 above will continue to be included as “desirable” features. A flow chart illustrating the practice is attached at **Annex III**.

Encouraging the trial of green products that come to the attention of B/Ds
Three-tier Approach

1st Tier - Trial Stage

11. In view of the fast developing market for green products, it is possible that B/Ds may come across green products which are new to the international or the local markets, and are outside the list of products with green specifications promulgated by EPD. In such circumstances, the number of market suppliers may be less than two, and there may also be a premium in the prices of the green products as compared with that of the conventional products. In order to facilitate B/Ds in trying out new green products where appropriate, the concerned B/D may kick start the trial use of the green products through direct purchase according to the procedures in the Stores and Procurement Regulations if the purchase is within the B/Ds' Quotation Limit. In doing so, the B/Ds concerned should identify the green features of the product identified, and monitor the performance of the green product with a view to assessing if the product can meet the operational requirements on an objective basis. If the purchase of the green products exceeds the B/D's Quotation Limit, prior consultation with EPD should be made so that all relevant factors including environmental benefits, financial implications, future support services, determination of and verifications of green features can be taken into account before a decision can be made on whether a trial use should be initiated.

2nd Tier - Early Phases of Implementation

12. Subject to the outcome of the trial and that the procurement is within the B/D's Quotation Limit, a wider application of the green products may be pursued if the market has more than one supplier for the green product concerned. As in the case of the trial stage, EPD should be consulted if the proposal to extend the trial of the green products will involve procurement exceeding the B/Ds' Quotation Limit.

3rd Tier - Full Implementation

13. Nonetheless, in line with the consideration of value for money, the use of the green products as replacement or alternative to the

conventional products should only be accepted if the rule of adequate market supply in paragraph 6 above (in terms of having no less than three suppliers in the market) can be met amongst others. Where the experience of the trial and early phases of implementation of green products proves to be successful in terms of meeting the operational requirements and fulfilling the identified environmental benefits (footnote 1 refers), the B/Ds are invited to advise the Working Group of the outcomes, with possible financial implications, so that consideration may be given to incorporating the products into the list of products with green specifications for reference by all B/Ds. In the light of the experience and the market situation, the Working Group will also deliberate if the green specifications developed from the green products after trials should be adopted either as “mandatory” or “desirable requirements attracting marks” in future tenders exercises across the board.

Small Amount Purchase

14. Amongst the 183 government procurement items with full green specifications in **Annex II**, there is a total of 109 items which have been identified as products and services with small amount purchase need. Small amount purchase refers to a single purchase order not exceeding \$50,000 regardless the quantity of purchase item(s).

15. In order to facilitate small amount purchase of these 109 items by B/Ds, simple green purchase tips have been developed for easy adoption by frontline procurement staff. The green purchase tips come along with practicable verification methods. They can be easily comprehended and adopted for use at point of purchase. B/Ds should follow the green purchase tips at CCGO website (<http://epd.host.ccgo.hksarg/ERPurchase/index.html>) for small amount purchase. If the purchase amount per order exceeds \$50,000, B/Ds should adopt the full green specifications applicable for bulk purchase at **Annex II**.

Annual Report on Green Product Purchase

16. To establish a system for monitoring the application of green specifications, we have currently classified the 183 products and services with green specifications into 24 categories. Each category and product

item are assigned with a specific category code and product code. Combination of these codes would produce a unique product ID. For example, “notebook computer” is classified under the category of “computer equipment and products” with category code and product code of “D” and “04”, respectively. Thus, the product ID of notebook computer is “D04”. Attached at **Annex IV** is the list of item categories.

17. To monitor the green product purchasing situation, EPD will invite the procurement unit of all B/Ds to make a report on its last calendar year’s purchases within the first two months of each calendar year. Officers initiating the procurement are advised to go through the green product list and check whether the products to be purchased are included on the list. If products to be purchased are listed, the officers initiating the procurement should try to apply the recommended green specifications by making reference to the practice mentioned in paragraphs 6 to 10 above. At the same time, the officers initiating the procurement should inform the procurement units of their B/Ds the product ID and indicate whether the recommended green specifications are adopted when they submit the purchase requisitions. The procurement unit should then cross check the product ID and proceed with the normal procurement procedure. In parallel, the procurement units should consolidate the information of the product ID, purchase values and the information on whether green specifications are adopted or not and whether the final purchases meet such green specifications for incorporation into the annual report to EPD excluding those purchases arranged by GLD. A flow chart regarding the proposed purchase procedure and a template for the annual reporting are attached at **Annex V** and **Annex VI**.

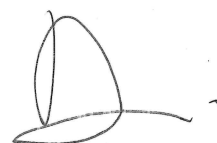
18. In the annual reporting exercise, the procurement unit of all B/Ds shall also make a report on its small amount purchase of green products in the last calendar year, and indicate whether the green purchase tips are adopted or not for the small amount purchase item(s). The reporting of small amount purchase shall be provided in the template at **Annex VI**.

Cost Implication

19. B/Ds should absorb any additional cost incurred in procuring products and services with green specifications. While costs of these products and services may in some cases be higher than those without green features, it is expected that the Government's initiative of taking the lead on green procurement would facilitate the development of the relevant market and the prices of products meeting our green specifications would be lowered over time.

Enquiries

20. General enquiries on this circular can be addressed to Senior Environmental Protection Officer (Waste Reduction and Recycling)⁴ on 3690 7883. Questions on GLD's green procurement practice may be addressed to Principal Supplies Officer (Procurement 1) on 2231 5229 for purchase of stores or Government Transport Manager (Operations) on 2231 5219 for hiring of vehicles arranged by GLD.



(Raymond Wu)

for Permanent Secretary for the Environment

c.c.

Directors of Bureaux

D/CEO

AA/CS

AA/FS


AA/SJ

Director of Administration

JA

**Inter-departmental Working Group
on Green Government Procurement**

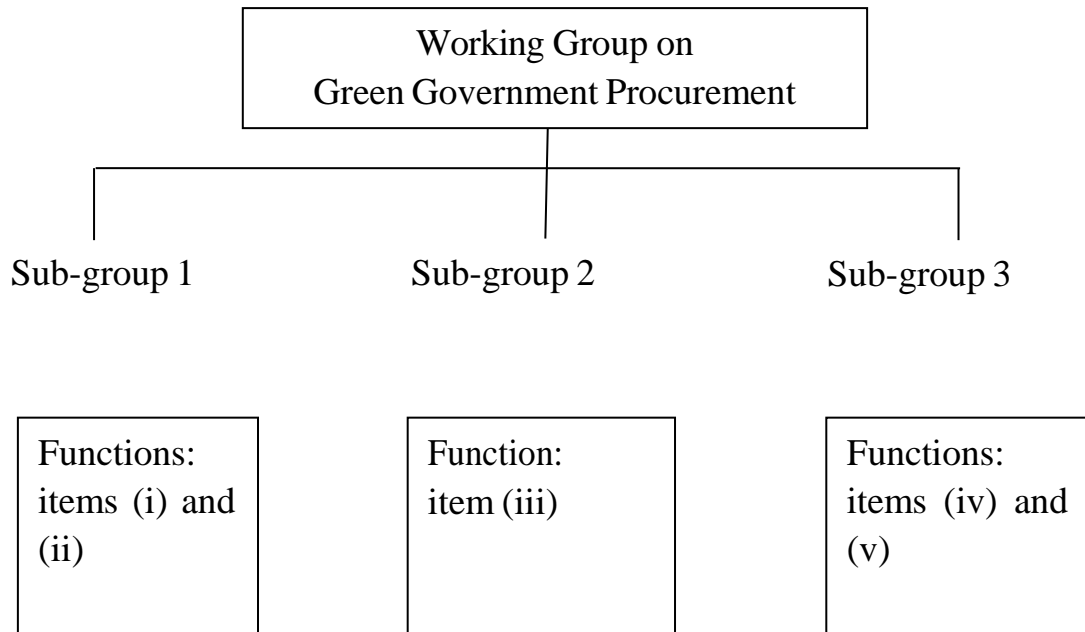
Membership

Permanent Secretary for the Environment	(Convenor)
Permanent Secretary for Development (Works)	
Director of Agriculture, Fisheries and Conservation	
Director of Drainage Services	
Director of Electrical and Mechanical Services	
Director of Government Logistics	
Permanent Secretary for Financial Services and the Treasury (Treasury)	(on a need basis)
Deputy Director of Environmental Protection (2)	
Assistant Director of Environmental Protection (Waste Reduction and Recycling)	(Secretary)

Terms of Reference

- (i) Oversee the adoption of the green specifications that have been developed for government procurement;
- (ii) Oversee a comprehensive review of the common user products and services procured by the GLD with a view to developing more green specifications;
- (iii) Oversee the identification of green materials in public works projects and examine the implications of their use with a view to promoting them in public works projects;
- (iv) As a start, oversee the examination of the departmental purchases of products and services of selected departments with a view to developing guidelines or green specifications as appropriate for adoption and wider application within the Government; and
- (v) Review guidelines for reporting procurement in the Environmental Reports.

In order to carry out these functions, three Sub-groups have been set up under the Working Group as follows:



List of 183 items with recommended green specifications

Agriculture and horticulture (Category Code – A)		
Product Code	Product Item	Recommended Green Specifications*
A01	Garden machinery (lawn mowers)	Desirable Requirement
		<ul style="list-style-type: none"> Noise emissions: The declared sound power level should not exceed the limit of 100 dB(A) during operation.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> The metal content in the individual battery cell should be lower than the values shown below: <ol style="list-style-type: none"> Arsenic ≤ 10.0 ppm Cadmium ≤ 5.0 ppm Lead ≤ 5.0 ppm Mercury < ≤ 0.1 ppm
A02	Pest control (termiticide)	Mandatory Requirement
		<ul style="list-style-type: none"> The active ingredient(s) of the product must be registered in the register under the Pesticides Ordinance (Cap. 133) or allowed to be possessed or used under and in accordance with a permit issued by the Director of Agriculture, Fisheries and Conservation under Cap. 133.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with any substances that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1) carcinogens.
		<ul style="list-style-type: none"> The product should provide formulation test results in accordance with the relevant OECD guidelines complying with the following requirements: <ol style="list-style-type: none"> Acute Oral LD50: ≥ 500 mg/kg Acute Dermal LD50: ≥ 2,000 mg/kg Acute Inhalation LC50: ≥ 1.5 mg/l (Exposure time 4h) Non-irritant to eyes and skin Non-sensitizing
A03	Fertilizers / Compost	<ul style="list-style-type: none"> Product supplier should provide recollection of waste bottles to government departments to ensure proper disposal of the product containers.
		Mandatory Requirement
		Compost <ul style="list-style-type: none"> The product shall be derived from the processing or re-use of organic waste.
		Desirable Requirement
		Fertilizers <ul style="list-style-type: none"> The product should contain no less than 30% by weight of recycled organic matter. In the final product, the content of the following elements should be lower than the values shown below: <ol style="list-style-type: none"> Cadmium < 1mg/kg (dry weight) Chromium < 100mg/kg (dry weight) Lead < 100mg/kg (dry weight) Mercury < 1mg/kg (dry weight)

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

A04	Mulch for horticultural use	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall be 100% composed of organic matters such as leaf litter, tree bark, wood shavings, decomposed sawdust and chopped tree fern.
		Desirable Requirement
		<ul style="list-style-type: none"> The content of pathogens in the product should not exceed below levels: <ol style="list-style-type: none"> E. coli: $\leq 1\,000$ CFU/g fresh weight; Salmonella spp.: absent in 25 g fresh weight The content of heavy metals or their compounds (dry weight) in the product should not exceed below levels: <ol style="list-style-type: none"> Cadmium: 1 mg/kg Chromium total: 100 mg/kg Copper: 100 mg/kg Mercury: 1 mg/kg Nickel: 50 mg/kg Lead: 100 mg/kg Zinc: 300 mg/kg
A05	Growing media	Mandatory Requirement
		<ul style="list-style-type: none"> The organic matter content (dry matter) shall not be less than 30% by weight.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain peat. The product should be free from all kinds of pests, pernicious and/or perennial weeds and roots, grass, clay lumps, non-soil material, brick, cement, concrete and other building materials, foreign matter and contamination. The content of heavy metals or their compounds (dry weight) in the product should not exceed below levels: <ol style="list-style-type: none"> Cadmium: 3 mg/kg Chromium total: 150 mg/kg Copper: 100 mg/kg Mercury: 1 mg/kg Nickel: 90 mg/kg Lead: 150 mg/kg Zinc: 300 mg/kg

Building and construction supplies (Category Code – B)		
Product Code	Product Item	Recommended Green Specifications*
B01	Flooring materials (plastic-, wood-, cork- or bamboo-based)	Mandatory Requirement
		<ul style="list-style-type: none"> Emission of formaldehyde from the product shall not exceed 0.13mg/m^3 air.
		Desirable Requirement
		<ul style="list-style-type: none"> For plastic flooring product, the plastic floor parts should contain no less than 10% by weight of recycled plastic materials against the total weight of plastic contained in the product. For wood-, cork- and bamboo-based flooring products, the material should meet one of the following requirements: <ol style="list-style-type: none"> 40% of the wood, cork and/or bamboo material is from recycled material; or The wood, cork and/or bamboo material should obtain sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent. The product containing paint should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Antimony Arsenic Cadmium Hexavalent chromium

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		v. Lead
		vi. Mercury
		<ul style="list-style-type: none"> Total emission: Discharge of Volatile Organic Compounds (VOCs) should not exceed 2g/m².
		<ul style="list-style-type: none"> Emission rate: Discharge of Volatile Organic Compounds (VOCs) should not exceed 500µg/m²/hr. The product should not contain chlorinated / brominated paraffins, organic tin compounds, phthalates or polybrominated diphenyl ethers (PBDE) content.
B02	PVC pipe and fitting	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not contain heavy metals including cadmium, lead, mercury and tin.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least 30% by weight of waste plastic. The product should not contain phthalates.
B03	Solvent-based / Water-based paint for building finish	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with the VOC content requirements on regulated paints stipulated in the Air Pollution Control (VOC) Regulation of Hong Kong.
		<ul style="list-style-type: none"> The paint or any thinner used shall contain no more than 0.01% by wet weight of formaldehyde.
		Desirable Requirement
		<ul style="list-style-type: none"> The paint should not be formulated with heavy metals including mercury, arsenic, selenium, lead, cadmium, hexavalent chromium, antimony and their compounds. In particular, the level of the above hazardous elements as impurities should not exceed: <ul style="list-style-type: none"> i. Cadmium: 100 ppm ii. Hexavalent chromium: 200 ppm iii. Lead: 200 ppm iv. Mercury: 200 ppm
		<ul style="list-style-type: none"> The product should not contain the substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane, carbon tetrachloride). If the product contains more than 3 % w/w of titanium dioxide, the emissions and discharges of wastes from the production of any titanium dioxide pigment used should not exceed the following (2): <ul style="list-style-type: none"> For the sulphate process: <ul style="list-style-type: none"> > SO_x (SO₂): 7 kg/tonne TiO₂ pigment. > Sulphate waste: 500 kg/tonne TiO₂ pigment. For the chloride process: <ul style="list-style-type: none"> > 103, 179 and 329 kg chloride waste/tonne TiO₂ pigment if natural rutile ore, synthetic rutile ore and slag ore are used.
B04	Carpet	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall include a post-consumer or post-industrial recycled content of at least 5% in the carpet face fiber, primary backing or secondary backing.
		<ul style="list-style-type: none"> Emissions of Total Volatile Organic Compounds (TVOCs) shall not exceed 0.5 mg/m² per hour.
		<ul style="list-style-type: none"> The product shall be sold as removable tiles.
		<ul style="list-style-type: none"> The product shall not be manufactured with topically applied biological inhibitors.
		<ul style="list-style-type: none"> Water-based adhesives or adhesive-free shall be used.
		<ul style="list-style-type: none"> Carpet backings shall be PVC free, and the carpet backings materials shall be cotton, jute, resin or polyurethane.
		<ul style="list-style-type: none"> The product shall be recyclable into either new carpet or other products, or shall be capable of being refurbished.
		Desirable Requirement
		<ul style="list-style-type: none"> Phthalate plasticizers should not be used in the manufacturing process.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Dyes used in the product should not be formulated with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens.
B05	Adhesives and sealants	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with the VOC content limits on regulated adhesives stipulated in the Air Pollution Control (VOC) Regulation of Hong Kong.
		<ul style="list-style-type: none"> The product shall not contain the following substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane and carbon tetrachloride).
		<ul style="list-style-type: none"> The product shall contain no more than 0.01% by wet weight of formaldehyde.
		<ul style="list-style-type: none"> The product shall contain no more than 0.5% by wet weight of the sum total of aromatic compounds, which include benzene, toluene, xylenes, and ethylbenzene.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain phthalates
B06	Concrete	Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least one of the following recycled materials in the cementitious content: <ol style="list-style-type: none"> Ground Granulated Blastfurnace Slag (GGBS); Condensed Silica Fume (CSF); Fly ash (siliceous or calcareous), including pulverised fuel ash (PFA); <p>of which the combination and proportion shall comply with the General Specification for Civil Engineering Works and General Specification for Building for its intended use.</p> <p>The product shall also conform to the technical requirement for its intended use as specified in the General Specifications.</p> The product should contain at least one of the following recycled materials to replace natural aggregates. <ol style="list-style-type: none"> Recycled aggregates; Crushed old concrete; Crushed surplus rocks from local development projects; <p>of which the combination and proportion shall comply with the General Specification for Civil Engineering Works and General Specification for Building for its intended use.</p> <p>The product shall also conform to the technical requirement for its intended use as specified in the General Specifications.</p>
B07	Timber door	Mandatory Requirement
		<ul style="list-style-type: none"> Formaldehyde Emission: All wood panels shall be of Class E1 under EN13986 in respect of formaldehyde emission.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Copper Lead Mercury
		<ul style="list-style-type: none"> The following substances shall not be added during manufacturing: elemental chlorine, fluorine, PCP (pentachlorophenol) and tar oils containing benzo(a)pyrene.
		<ul style="list-style-type: none"> The product shall have no flame retardant of polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs) or short-chain chlorinated paraffins added as formulated components.
		Desirable Requirement
		<ul style="list-style-type: none"> The wood should meet one of the following requirements: <ol style="list-style-type: none"> Minimum 70% of wood material is from recycled/waste wood; The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

B08	Gypsum plasterboard	Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 40% by weight of recycled materials against the total weight of the product. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Building.</p>
		<ul style="list-style-type: none"> The paper in gypsum plasterboard should be made from 100% recycled paper. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Building.</p>
B09	Concrete paving units (use of recycled aggregates only)	Desirable Requirement
		<ul style="list-style-type: none"> The product should contain recycled aggregates, of which the following requirements shall be complied with: <ul style="list-style-type: none"> ➤ The aggregates should contain not less than 70% by weight of recycled aggregates; ➤ The recycled fine aggregates should constitute not less than 40% by weight of the total recycled aggregates. The recycled glass cullet should be included as recycled fine aggregates and should constitute 20% to 25% by weight of the total aggregates; ➤ The recycled aggregates, except recycled glass cullet, should be of crushed inert construction and demolition materials produced from the crushing plant of the Civil Engineering and Development Department or other sources approved by the Engineer. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works and General Specification for Building.</p>
B10	Photovoltaic panel	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, batteries, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The heat transfer medium should not be formulated with halogenated organic substances.
B11	Asphalt pavement	Mandatory Requirement
		<ul style="list-style-type: none"> The roadbase material shall be in a range of 10% to 15% of reclaimed asphalt pavement (RAP) by mass of the total mix. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works.</p>
		<ul style="list-style-type: none"> Bituminous wearing course and base course materials shall be in a range of 20 to 30% of reclaimed asphalt pavement (RAP) by mass of the total mix. RAP shall be incorporated in the bituminous pavement unless there is a shortage of supply of RAP and it is subject to Engineer/ Project Manager's approval. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works</p>
B12	Fill materials	Desirable Requirement
		<p>For earthworks</p> <ul style="list-style-type: none"> The fill material should contain recycled aggregates made from inert construction and demolition material or recycled rock.
		<p>For reclamation</p> <ul style="list-style-type: none"> The fill material should contain recycled aggregates made from inert construction and demolition material or recycled rock. <p>For filling marine structures</p> <ul style="list-style-type: none"> The fill material should contain recycled aggregates made from rock fill materials.

		The fill material shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works and General Specification for Building.
B13	Non-structural steel work (such as steel mesh, steel tubing, steel door and steel louvre)	Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain heavy metals exceeding 1000ppm as listed below: <ol style="list-style-type: none"> Mercury Lead Cadmium Hexavalent chromium
		<ul style="list-style-type: none"> The steel product should not be treated with halogenated organic compound.
		<ul style="list-style-type: none"> The product should contain a minimum of 20% by weight of recycled steel content against the total weight of the product. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works and General Specification for Building.</p>
B14	Sub-base materials	Mandatory Requirement
		<ul style="list-style-type: none"> The layer of recycled sub-base material shall contain crushed rock, crushed concrete, clean crushed inert demolition material or recycled glass cullet. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works.</p>
B15	Rubber mat for playground	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall have no flame retardant of polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs) or short-chain chlorinated paraffins added as formulated components.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Chromium Copper Lead Mercury
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 80% by weight of recycled or recovered rubber materials against the total weight of rubber contained in the product. Supplier should provide product take-back/ recycling services to users at the end of life of the product.
B16	Thermal insulation	Mandatory Requirement
		<ul style="list-style-type: none"> Emission rate: Discharge of Volatile Organic Compounds (VOCs) shall not exceed 500 µg/m²/hr.
		<ul style="list-style-type: none"> The levels of the following hazardous substances as impurities shall not exceed the following: <ol style="list-style-type: none"> Arsenic: 50 ppm Cadmium: 10 ppm Hexavalent chromium: 10 ppm Lead: 300 ppm Mercury: 10 ppm Selenium: 20 ppm PBDEs (polybrominated diphenyl ethers): 100ppm PBBs (polybrominated biphenyls): 100ppm
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain below minimum percentage of recycled content for each type of materials by weight: <ol style="list-style-type: none"> glass wool - 40% mineral wool - 20% rock wool - 40% cellulose - 80%

		<ul style="list-style-type: none"> Emission rate of formaldehyde from the product should not exceed 0.2 mg/m²/hr.
B17	Ceramic tiles	Mandatory Requirement
		<ul style="list-style-type: none"> Where antimony, cadmium or lead (or any of their compounds) are used in the glazes, their content shall not exceed the following specific limits: <ol style="list-style-type: none"> Antimony: 0.25% in weight of the glazes Cadmium: 0.1% in weight of the glazes Lead: 0.5% in weight of the glazes
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 10% by weight of recycled or recovered materials against the total weight of the product. <p>The product shall conform to the technical requirement for its intended use as specified in the General Specification for Civil Engineering Works and General Specification for Building.</p>
B18	Varnish and wax polish	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with the VOC content limits on regulated architectural paints (varnishes) stipulated in the Air Pollution Control (VOC) Regulation of Hong Kong.
		<ul style="list-style-type: none"> The product shall not contain the substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane and carbon tetrachloride).
		<ul style="list-style-type: none"> The product shall contain no more than 0.01% by wet weight of formaldehyde. The product shall contain no more than 0.5% by wet weight of the sum total of aromatic compounds, which shall include benzene, toluene, xylenes, and ethylbenzene.
B19	Window	Mandatory Requirement
		<ul style="list-style-type: none"> The thermal insulation capacity of the window glass shall not exceed the heat transfer coefficient (U-value) of 1.4W/m²K.
		<ul style="list-style-type: none"> The product components (including frame, glass, paint, surface treatment, etc.) shall not be formulated with the following substances or their compounds: <ol style="list-style-type: none"> Arsenic Cadmium Hexavalent chromium Lead Mercury Organic tin Phthalates
B20	Wood panel	Mandatory Requirement
		<ul style="list-style-type: none"> The content of free formaldehyde in adhesives used in the product shall not exceed 0.5 % by weight of the adhesive.
		<ul style="list-style-type: none"> Formaldehyde Emission: All wood panels shall be of Class E1 under EN13986 in respect of formaldehyde emission.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Copper Lead Mercury
		<ul style="list-style-type: none"> The following substances shall not be added during manufacturing: elemental chlorine, fluorine, PCP (pentachlorophenol) and tar oils containing benzo(a)pyrene.
		<ul style="list-style-type: none"> The product shall have no flame retardant of polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs) or short-chain chlorinated paraffins added as formulated components Requirements of wood or wooden materials: the product shall meet one of the following requirement: <ol style="list-style-type: none"> 40% of the wood material is from recycled/waste wood; The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		Forest Certification schemes) or equivalent.
B21	Cement	Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least one of the following recycled materials: <ol style="list-style-type: none"> gypsum produced by the desulfurization process of pollution control equipment waste glass <p>of which the combination and proportion shall comply with the General Specification for Civil Engineering Works and General Specification for Building for its intended use.</p>
B22	Paint and varnish remover	Mandatory Requirement
		<ul style="list-style-type: none"> The VOC content of the product shall be less than 5% by volume.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should be readily biodegradable. The product should not be manufactured or formulated with Methylene Chloride, N-Methylpyrrolidone (NMP) and Trichloroethylene (TCE)
B23	Partition wall block	Mandatory Requirement
		<ul style="list-style-type: none"> The content of heavy metals or their compounds in the product shall not exceed below levels: <ol style="list-style-type: none"> Cadmium: 1 mg/L Lead: 5 mg/L Arsenic: 5 mg/L Mercury: 0.2 mg/L Hexavalent Chromium: 5 mg/L
		Desirable Requirement
B24	Wallpaper	<ul style="list-style-type: none"> The product should contain at least 30% by weight of recycled materials, such as waste ceramic materials, waste plaster and waste glass.
		Mandatory Requirement
		<ul style="list-style-type: none"> The emission rate of formaldehyde shall be less than 0.08 mg/m²/hr. The content of vinyl chloride monomer (VCM) compound in PVC wallpaper shall be less than 1mg/kg.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least 20% by weight of recycled fibers/ papers.
		<ul style="list-style-type: none"> The emission rate of VOCs should be less than 0.4mg/m²/hr. The content of heavy metals or their compounds in the product should be less than below levels: <ol style="list-style-type: none"> Cadmium: 2 mg/kg Lead: 2 mg/kg Hexavalent Chromium: 3 mg/kg Mercury: 2 mg/kg
B25	Heat pump	Mandatory Requirement
		<ul style="list-style-type: none"> No "Controlled Refrigerant", as defined under the Ozone Layer Protection (Controlled Refrigerants) Regulation, Cap 403 of Laws of Hong Kong shall be used in the equipment.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star. The product should comply to the minimum coefficient of performance (COP) at full-load as specified in the Building Energy Code (BEC), promulgated by Electrical and Mechanical Services Department. Any plastic parts should be manufactured without short-chain chlorinated paraffins.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should not contain cadmium, lead, mercury, hexavalent chromium, PBBs and PBDEs.
B26	Chiller	Mandatory Requirement
		<ul style="list-style-type: none"> No "Controlled Refrigerant", as defined under the Ozone Layer Protection (Controlled Refrigerants) Regulation, Cap 403 of Laws of Hong Kong shall be used in the equipment.
		Desirable Requirement
		<ul style="list-style-type: none"> The minimum efficiency of the product with full-load optimized applications should comply to coefficient of performance (COP) at full load as specified in the Building Energy Code (BEC) promulgated by Electrical and Mechanical Services Department.
		<ul style="list-style-type: none"> Airborne noise emission from the appliance, measured as sound power level, should not exceed 90 dB (A) during operation.
		<ul style="list-style-type: none"> The maximum annual system leakage rate of the refrigerant should be equal to or less than 1% of full refrigerant charge.
B27	Water pump / Pool pump	<ul style="list-style-type: none"> The external coating of product should not contain the restricted substances exceeding the following concentrations: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Airborne noise emission from the appliance, measured as sound power level, should not exceed the requirement in IEC 60034-9.
C01	All purpose cleaner	<ul style="list-style-type: none"> The external coating of the product should not contain heavy metals and VOC exceeding the following concentrations: <ul style="list-style-type: none"> i. Cadmium: 0.01% by weight ii. Lead: 0.01% by weight iii. Hexavalent chromium: 0.01% by weight iv. Mercury: 0.01% by weight v. Barium: 0.1% by weight vi. VOC: <500g/L water

Cleansing products (Category Code – C)

Product Code	Product Item	Recommended Green Specifications*
C01	All purpose cleaner	Mandatory Requirement
		<ul style="list-style-type: none"> The pH of aqueous solution of the detergent shall not be higher than 10.5.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs) and ethylenediaminetetraacetic acid (EDTA).
		<ul style="list-style-type: none"> The product shall not contain halogenated substances or solvents, including reactive chlorine compounds.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phosphate or phosphonates.
		<ul style="list-style-type: none"> The product shall not be formulated with ammonia or ammonium compounds.
		<ul style="list-style-type: none"> The product shall be at least 90% biodegradable.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ul style="list-style-type: none"> i. Arsenic ii. Cadmium iii. Cobalt iv. Hexavalent chromium v. Lead vi. Mercury

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		vii. Selenium
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain more than 3% by weight of volatile organic compounds (VOCs).
C02	Laundry detergent / soap	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs) and ethylene diaminetetra acetic acid (EDTA).
		<ul style="list-style-type: none"> The product shall not contain halogenated substances or solvents, including reactive chlorine compounds.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phosphate or phosphonates.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> The product shall be at least 90% biodegradable.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Cobalt Hexavalent chromium Lead Mercury Selenium
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain more than 5 % by weight of volatile organic compounds (VOCs).
C03	Sanitary detergent	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs) and ethylenediaminetetraacetic acid (EDTA).
		<ul style="list-style-type: none"> The product shall not contain halogenated substances or solvents, including reactive chlorine compounds.
		<ul style="list-style-type: none"> The product shall not contain more than 5% by weight of volatile organic compounds (VOCs).
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phosphate or phosphonates.
		<ul style="list-style-type: none"> The product shall not be formulated with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens.
		<ul style="list-style-type: none"> The surfactant used in the product shall be at least 90% biodegradable.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Cobalt Hexavalent chromium Lead Mercury Selenium
		Desirable Requirement
		<ul style="list-style-type: none"> The pH value of product, before dilution, should not be higher than 11.5 or less than 2.
C04	Soap toilet liquid	Mandatory Requirement
		<ul style="list-style-type: none"> Bioaccumulative preservatives shall not be used.
		<ul style="list-style-type: none"> The pH value of 5% solution shall range from 6-10.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The product shall be at least 60% biodegradable.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with alkylphenol ethoxylates (APEOs), ethylenediaminetetraacetic acid (EDTA) or nitrilotriacetate (NTA).
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with phosphate or phosphonates.
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> Fragrance used in the product should comply with international guidelines, e.g. the Code of Practice of the International Fragrance Association (IFRA). The product shall declare any fragrances on the product label in the ingredient line.
		<ul style="list-style-type: none"> The product should not be formulated with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens.
		<ul style="list-style-type: none"> The final products (as sold) should not contain more than 6 % (by weight) of volatile organic compounds (VOCs) with a boiling point lower than 150 °C.
C05	Cleaning rags and cotton waste	Desirable Requirement
		<ul style="list-style-type: none"> Cleaning Rags <ol style="list-style-type: none"> Addition of optical brighteners should not be permitted. The content of detectable formaldehyde in the final product should not exceed 0.15 mg/kg. The content of pentachlorophenol (PCP) in the final product should not exceed 0.15 mg/kg.
		<ul style="list-style-type: none"> Cotton Waste AOX emissions in the bleaching effluent should be less than 100 mg Cl/kg.
		<ul style="list-style-type: none"> For product containing fibres, these fibres should contain recycled content and should take up to at least 70% by weight of the product.
C06	Disinfectant	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with builders belonging to phosphates.
		<ul style="list-style-type: none"> The product shall not be formulated with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with aromatic compounds.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs) and their alkylphenol derivatives (APDs), and ethylenediaminetetraacetic acid (EDTA)
		Desirable Requirement
		<ul style="list-style-type: none"> The disinfectant should not be formulated or manufactured with fragrances and dyes, or only contain food grade dyes that comprise no more than 0.1% by weight of the total, undiluted formulation. The product should not be formulated or manufactured with surfactants belonging to nitrilotriacetate (NTA), diethylenetriaminepentaacetic acid (DTPA) or any of its salts, or reactive chlorine compounds such as sodium hypochlorite or organic chlorinated compounds of chlorine, quaternary ammonium salts that are not readily biodegradable.
C07	Deodorant	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not contain substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs and HCFCs).
		<ul style="list-style-type: none"> The surfactant used in the product shall be readily biodegradable.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs), ethylene diaminetetra acetic acid (EDTA), nitrilotriacetate (NTA), phthalates, and halogenated organic solvents.
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Cobalt

		<ul style="list-style-type: none"> iv. Hexavalent chromium v. Lead vi. Mercury vii. Selenium
		<ul style="list-style-type: none"> The product shall not contain phosphorus content of more than 0.2% by weight.
		<ul style="list-style-type: none"> The sum of benzene, toluene, xylene, ethylbenzene, 1,4- Dichlorobenzene, and styrene contents shall be smaller than 0.1% by weight.
		<ul style="list-style-type: none"> The undiluted product shall not contain any of the following components: <ul style="list-style-type: none"> i. Formaldehyde donors ii. Monoethanolamine, diethanolamine, and triethanolamine alone or in compounds iii. Parabens iv. Triclosan v. Nitromusk and polycyclic musk fragrances.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain more than 1% by weight of volatile organic compounds (VOCs).
C08	Detergent for dishwasher	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated with phosphates, phosphonates or any phosphorus compounds.
		<ul style="list-style-type: none"> The pH value of product shall not be higher than 11 or less than 2
		<ul style="list-style-type: none"> The product shall be at least 90% biodegradable
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs), diethylenetriaminepentaacetic acid (DTPA), ethylene diaminetetra acetic acid (EDTA), nitrilotriacetate (NTA), halogenated organic solvents
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with optical brighteners
		<ul style="list-style-type: none"> The product shall not contain any heavy metals or their compounds as listed below: <ul style="list-style-type: none"> i. Arsenic ii. Cadmium iii. Cobalt iv. Hexavalent chromium v. Lead vi. Mercury vii. Selenium
		<ul style="list-style-type: none"> The product shall not contain halogenated substances or solvents, including reactive chlorine compounds
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain the following substances: <ul style="list-style-type: none"> i. Formalin ii. Triclosan iii. Nitromusks and polycyclic musks iv. Atranol and Chloroatranol v. Hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC) vi. Microplastics vii. Nanosilver viii. Formaldehyde
C09	Hand soap	Mandatory Requirement
		<ul style="list-style-type: none"> The pH value of product shall not be higher than 11 or less than 2.
		<ul style="list-style-type: none"> The product shall not contain nitromusk and polycyclic musk fragrances.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with alkylphenol ethoxylates (APEOs), ethylenediaminetetraacetic acid (EDTA), nitrilotriacetate (NTA), halogenated organic solvents.

		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phosphate or phosphonates.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with optical brighteners.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should be at least 90% biodegradable and not bioaccumulative.
		<ul style="list-style-type: none"> The product should not contain more than 1 % by weight of volatile organic compounds (VOCs).
C10	Personal care products	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phosphorous, phosphates or phosphonate.
		<ul style="list-style-type: none"> Any fragrance added to the product shall be manufactured and handled following the code of practice of the International Fragrance Association (IFRA). The following fragrances and ingredients of fragrance mixtures shall not be included in the product: <ol style="list-style-type: none"> Hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC) Atranol Chloroatranol
		<ul style="list-style-type: none"> The total concentration of the following heavy metals in the product shall not exceed 25ppm: <ol style="list-style-type: none"> Lead Mercury Cadmium Hexavalent Chromium
		Desirable Requirement
		<ul style="list-style-type: none"> All surfactants and organic ingredients in the product should be readily biodegradable.
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with the following substances: <ol style="list-style-type: none"> Alkylphenol ethoxylates (APEOs) Nitrilotriacetate acid (NTA) Ethylenediaminetetraacetate acid (EDTA)
		<ul style="list-style-type: none"> Micro-plastics should not be added in the product. Palm oil used in the product should be from sustainable source certified by internationally recognized standards (such as "Roundtable on Sustainable Palm Oil [RSPO]" and "Roundtable on Sustainable Biomaterials [RSB]").

Computer equipment and products (Category Code – D)		
Product Code	Product Item	Recommended Green Specifications*
D01	Desktop computer	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, batteries, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight The product shall comply with international power consumption standard such as Energy Star.
		Desirable Requirement
		<ul style="list-style-type: none"> The equipment should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> The energy consumption of the product should not be greater than 3W and 1W during sleep mode and off mode, respectively.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants. Component parts should not contain halogenated substances.
D02	LCD & LED monitor	Mandatory Requirement
		<ul style="list-style-type: none"> For LCD monitor, the equipment shall comply with power saving standard stipulated in Energy Star or shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> The energy consumption of the product shall not be greater than 2W and 1W during sleep mode and off mode respectively.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The background illumination for the product should not contain more than 3 mg of mercury per lamp.
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.
D03	Network products (including LAN switches, routers, etc.)	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.
D04	Notebook computer	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, batteries, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> The energy consumption of the product shall not be greater than 3W during sleep mode.
		Desirable Requirement
		<ul style="list-style-type: none"> The equipment should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).

		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants. Component parts should not contain halogenated substances.
D05	Printer	Mandatory Requirement
		<ul style="list-style-type: none"> The equipment shall comply with power saving standard stipulated in Energy Star or shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> The energy consumption of the product shall not be greater than 2W when switched off.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Substances regulated in the Montreal Protocol (particularly CFCs, HCFCs, 1,1,1-trichloroethane, carbon tetrachloride) should not be used in the end production of the machines or in the production of circuit boards. Should not cause an ambient ozone concentration in excess of 0.04mg/m³. Should not cause a dust concentration in excess of 0.25mg/m³.
D06	Server	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		Desirable Requirement
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants. Component parts should not contain halogenated substances.
D07	All-in-one multifunctional devices	Mandatory Requirement
		<ul style="list-style-type: none"> The equipment shall comply with power saving standard stipulated in Energy Star or shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> The energy consumption of the product shall not be greater than 2W when switch off.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight

		vi. PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Plastic parts should not contain halogenated substances.
		<ul style="list-style-type: none"> Should not cause an ambient ozone concentration in excess of 0.04mg/m³.
		<ul style="list-style-type: none"> Should not cause a dust concentration in excess of 0.25mg/m³.
D08	Scanner	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants. Component parts should not contain halogenated substances.
D09	Computer keyboard & mouse	Mandatory Requirement
		<ul style="list-style-type: none"> The plastic parts of the product shall not have metallic coating.
		<ul style="list-style-type: none"> The product (printed circuit boards and plastic components) shall not contain halogenated substances including Polyvinyl Chloride (PVC), Brominated Flame Retardant (BFR) and Chlorinated Flame Retardants (CFR) that the concentrations of halogens shall not exceed the following values under IEC 61249-2-21: <ol style="list-style-type: none"> Total halogens: 1,500 ppm Chlorine: 900 ppm Bromine: 900 ppm
		Desirable Requirement
D10	Tablet computer	<ul style="list-style-type: none"> Any plastic components of the product should be made of recycled materials.
		Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, batteries, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight The product (printed circuit boards and plastic components) shall not contain halogenated substances including Polyvinyl Chloride (PVC), Brominated Flame Retardant (BFR) and Chlorinated Flame Retardants (CFR) that the concentrations of halogens shall not exceed the following values under IEC 61249-2-21: <ol style="list-style-type: none"> Total halogens: 1,500 ppm Chlorine: 900 ppm Bromine: 900 ppm

		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		Desirable Requirement
		<ul style="list-style-type: none"> The equipment should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD). Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight
D11	External hard disk	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The product (printed circuit boards and plastic components) should not contain halogenated substances including Polyvinyl Chloride (PVC), Brominated Flame Retardant (BFR) and Chlorinated Flame Retardants (CFR) that the concentrations of halogens should not exceed the following values under IEC 61249-2-21: <ol style="list-style-type: none"> Total halogens: 1,500 ppm Chlorine: 900 ppm Bromine: 900 ppm Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight

Water dispenser & accessories (Category Code – E)		
Product Code	Product Item	Recommended Green Specifications*
E01	Hot / Cold bottled water dispensers	Mandatory Requirement
		<ul style="list-style-type: none"> The equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight Any plastic parts should be manufactured without chlorinated paraffins flame retardants.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.
		Reminder: <ul style="list-style-type: none"> Avoid using single-use disposable cup. Consider “filtered water dispensers connected to water mains” as an alternative to minimise use of bottled water.
E02	Water carboy for water dispenser	Mandatory Requirement
		<ul style="list-style-type: none"> The product supplier shall provide recollection, recycling and delivery services to various government departments.
		<ul style="list-style-type: none"> The product shall be marked with an appropriate plastic resin identification code.
		Desirable Requirement
		<ul style="list-style-type: none"> Packaging material should contain information on recycling/recollection channel/method.
		Reminder: <ul style="list-style-type: none"> Avoid using single-use disposable cup. Consider “filtered water dispensers connected to water mains” as an alternative to minimise use of bottled water.

Electrical appliances (Category Code – F)		
Product Code	Product Item	Recommended Green Specifications*
F01	Domestic exhaust fan	Mandatory Requirement
		<ul style="list-style-type: none"> The power factor shall not be less than 0.85, or it shall comply with international power consumption standard such as Energy Star.
		Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
F02	Electric fan	Desirable Requirement
		<ul style="list-style-type: none"> The power factor should not be less than 0.8, or it should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
F03	Electric radiator (oil filled)	Desirable Requirement
		<ul style="list-style-type: none"> The power factor should not be less than 0.8.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

15/0

F04	Refrigerator	Mandatory Requirement												
		<ul style="list-style-type: none">The equipment shall have obtained a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).												
		<ul style="list-style-type: none">No "Controlled Refrigerant", as defined under the Ozone Layer Protection (Controlled Refrigerants) Regulation, Cap 403 of Laws of Hong Kong shall be used in the equipment.												
		<ul style="list-style-type: none">The refrigerants and foaming agents used for the insulation of the appliance shall have a global warming potential equal to or lower than 15 (rated as CO₂ equivalents over a period of 100 years).												
		<ul style="list-style-type: none">The product shall not contain the substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane and carbon tetrachloride).												
		Desirable Requirement												
<ul style="list-style-type: none">The following substances should not be used in the production of products:<ul style="list-style-type: none">i. Phthalatesii. Elemental halogens (e.g. fluorine, chlorine, including in-situ precursors from halide salts)iii. APEO, their derivatives (APDs), or linear alkylbenzene sulphonatesProduct components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight														
F05	Room air conditioner	Mandatory Requirement												
		<ul style="list-style-type: none">The equipment shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows:<ul style="list-style-type: none">i. Room air conditioner, with preference on the split type room air conditioner: Energy Label with Grade 1;ii. Single package type ("window type") room air conditioner: Energy Label with Grade 4 or above with preference on higher Grade (from 31 December 2021)												
		<ul style="list-style-type: none">The refrigerant used in the room air conditioners shall be of non-CFCs type.												
		Desirable Requirement												
		<ul style="list-style-type: none">The product should not contain the substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane and carbon tetrachloride).Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight												
F06	Air purifier / cleaner	Mandatory Requirement												
		<ul style="list-style-type: none">Ozone emission of the product shall not exceed 0.01 ppm.												
		Desirable Requirement												
		<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.												
		<ul style="list-style-type: none">Noise emissions: sound pressure level should satisfy the following requirements:												
		<table><tr><td>Air flow (m³/min)</td><td>< 5</td><td>5-10</td><td>10-20</td><td>> 20</td></tr><tr><td>Sound Pressure</td><td>< 45</td><td>< 50</td><td>< 55</td><td>< 60</td></tr></table>					Air flow (m ³ /min)	< 5	5-10	10-20	> 20	Sound Pressure	< 45	< 50
Air flow (m ³ /min)	< 5	5-10	10-20	> 20										
Sound Pressure	< 45	< 50	< 55	< 60										

		<table><tr><td>Level [dB(A)]</td><td></td><td></td><td></td><td></td></tr></table>	Level [dB(A)]				
Level [dB(A)]							
		<ul style="list-style-type: none">The product should have no short-chain chlorinated paraffins added as formulated components.					
		<ul style="list-style-type: none">Plastic parts should not contain halogenated substances.					
		<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight					
F07	Dehumidifier	Mandatory Requirement					
		<ul style="list-style-type: none">The equipment with rated dehumidifying capacity not exceeding 35 litres per day shall have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).					
		Desirable Requirement					
		<ul style="list-style-type: none">The equipment with rated dehumidifying capacity over 35 litres but not exceeding 87 litres per day should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight					
F08	Dish washer	Mandatory Requirement					
		<ul style="list-style-type: none">Water consumption shall not be more than 25 litres per normal wash cycle.					
		Desirable Requirement					
		<ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.					
		<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight					
		<ul style="list-style-type: none">The product should have no short-chain chlorinated paraffins added as formulated components.					
		<ul style="list-style-type: none">Plastic parts should not contain halogenated substances.					
		<ul style="list-style-type: none">The product should have clear volumetric markings on the detergent dispenser to allow adjustment according to degree of soiling.Airborne noise emission from the appliance, measured as sound power level, should not exceed 57 dB (A) on freestanding models and 51 dB (A) on built-in models.					
F09	Electric storage	Mandatory Requirement					

21/7

	water heater	<ul style="list-style-type: none">Water heater with storage capacity not exceeding 300 litres shall have obtained a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).											
		Desirable Requirement											
		<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight											
F10	LCD projector	<div>Mandatory Requirement</div> <ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weight <div>Desirable Requirement</div> <ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.The power consumption should be less than or equal to 0.085 W/lm.Standby power consumption of this equipment should not exceed 1 W.Any plastic parts should be manufactured without chlorinated paraffins flame retardants.Plastic parts should not contain halogenated substances.Noise emissions: sound power level should satisfy the following requirements:<table><tr><td rowspan="2">Classification</td><td colspan="3">Light Output [lm]</td></tr><tr><td>≤1,000</td><td>≤3,000</td><td>>3000</td></tr><tr><td>Sound Power Level [dB(A)]</td><td>≤30</td><td>≤35</td><td>≤40</td></tr></table>	Classification	Light Output [lm]			≤1,000	≤3,000	>3000	Sound Power Level [dB(A)]	≤30	≤35	≤40
Classification	Light Output [lm]												
	≤1,000	≤3,000	>3000										
Sound Power Level [dB(A)]	≤30	≤35	≤40										
F11	Microwave oven	<div>Desirable Requirement</div> <ul style="list-style-type: none">Domestic oven using electromagnetic energy in the ISM frequency band of 2,450 MHz, with rated power input of less than 2,500 Watt should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffin flame retardants.Plastic parts should not contain halogenated substances.											
F12	Television	<div>Mandatory Requirement</div> <ul style="list-style-type: none">The product with a rated visible diagonal screen size exceeding 50 centimeters shall have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).											

22/0

		<div>Desirable Requirement</div> <ul style="list-style-type: none">The product should comply with international power consumption standard such as Energy Star.Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">Lead: 0.1% by weightCadmium: 0.01% by weightMercury: 0.1% by weightHexavalent chromium: 0.1% by weightPBBs: 0.1% by weightPBDEs: 0.1% by weight <ul style="list-style-type: none">The product should be capable of entering a low power-consumption mode (standby mode) automatically when the unit is inactive for a pre-set period of time.						
F13	Vacuum cleaner	<div>Mandatory Requirement</div> <ul style="list-style-type: none">The product shall be such designed that it can be disassembled for recycling. <div>Desirable Requirement</div> <ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">Lead: 0.1% by weightCadmium: 0.01% by weightMercury: 0.1% by weightHexavalent chromium: 0.1% by weightPBBs: 0.1% by weightPBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffin flame retardants.Plastic parts should not contain halogenated substances.Noise emission of the product (sound pressure level or sound power level) should comply with the following requirements.<table><tr><td>Class</td><td>sound pressure level [dB(A)]</td><td>sound power level [dB(A)]</td></tr><tr><td>Requirements</td><td>≤65</td><td>≤76</td></tr></table>	Class	sound pressure level [dB(A)]	sound power level [dB(A)]	Requirements	≤65	≤76
Class	sound pressure level [dB(A)]	sound power level [dB(A)]						
Requirements	≤65	≤76						
F14	Washing machine	<div>Mandatory Requirement</div> <ul style="list-style-type: none">The washing machines shall have obtained a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).The washing machine shall have obtained a Grading Type Water Efficiency Label under the Water Efficiency Labelling Scheme of Water Supplies Department (WSD) and its Grading shall be Grade 1. <div>Desirable Requirement</div> <ul style="list-style-type: none">For washing machines that have a rated washing capacity exceeding 10 kilograms (i.e. not regulated under the Energy Efficiency (Labelling of Products) Ordinance, Cap. 598), it should comply with international power consumption standard such as Energy Star.Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">Lead: 0.1% by weightCadmium: 0.01% by weightMercury: 0.1% by weightHexavalent chromium: 0.1% by weightPBBs: 0.1% by weightPBDEs: 0.1% by weightAirborne noise emission from the appliance, measured as sound power level, should not exceed 60 dB (A) during washing and 76 dB(A) during spinning.						

F15	Audio equipment (stereo system)	Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances
F16	Induction cooker	Mandatory Requirement
		<ul style="list-style-type: none"> The product with rated power consumption ranges from 700W to 3500W for each heating unit, and the total rated power not exceeding 7000W, shall have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants. Component parts should not contain halogenated substances.
F17	Video equipment (video players & recorders)	Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.
F18	Water boiler	Mandatory Requirement
		<ul style="list-style-type: none"> Plastic parts and sealing materials that come into contact with drinking water shall not release bisphenol A.
		Desirable Requirement
		<ul style="list-style-type: none"> The thermal efficiency of the boiler should be at least 80%.

24/0

		<ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:<ul style="list-style-type: none">i. Lead: 0.1% by weightii. Cadmium: 0.01% by weightiii. Mercury: 0.1% by weightiv. Hexavalent chromium: 0.1% by weightv. PBBs: 0.1% by weightvi. PBDEs: 0.1% by weightAny plastic parts should be manufactured without chlorinated paraffins flame retardants.Component parts should not contain halogenated substances.																																																																											
F19	Transformer	<table><tr><th colspan="5">Desirable Requirement</th></tr><tr><td colspan="5"><ul style="list-style-type: none">The power consumption should comply with the percentage of efficiency under IEC60076 as stated in the following table:</td></tr><tr><td rowspan="15">Low-voltage dry-type distribution transformer</td><td colspan="2">Single Phase</td><td colspan="2">Three Phase</td></tr><tr><td>kVA</td><td>Efficiency (%)</td><td>kVA</td><td>Efficiency (%)</td></tr><tr><td>≤15</td><td>98.1</td><td>≤15</td><td>97.5</td></tr><tr><td>25</td><td>98.33</td><td>30</td><td>97.9</td></tr><tr><td>37.5</td><td>98.49</td><td>45</td><td>98.1</td></tr><tr><td>50</td><td>98.6</td><td>75</td><td>98.33</td></tr><tr><td>75</td><td>98.73</td><td>112.5</td><td>98.52</td></tr><tr><td>100</td><td>98.82</td><td>150</td><td>98.65</td></tr><tr><td>167</td><td>98.96</td><td>225</td><td>98.82</td></tr><tr><td>250</td><td>99.07</td><td>300</td><td>98.93</td></tr><tr><td>333</td><td>99.14</td><td>500</td><td>99.09</td></tr><tr><td>500</td><td>99.22</td><td>750</td><td>99.21</td></tr><tr><td>667</td><td>99.27</td><td>1000</td><td>99.28</td></tr><tr><td>833</td><td>99.31</td><td>1500</td><td>99.37</td></tr><tr><td></td><td></td><td>2000</td><td>99.43</td></tr><tr><td></td><td></td><td>2500</td><td>99.47</td></tr></table> <ul style="list-style-type: none">Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations:<ul style="list-style-type: none">i. Cadmium: 2 ppmii. Lead: 2 ppmiii. Hexavalent chromium: 3 ppmiv. Mercury: 2 ppmv. PBBs: 10ppmvi. PBDEs: 10ppmThe coating of the product should not contain the heavy metals exceeding the following concentrations:<ul style="list-style-type: none">i. Cadmium: 2 ppmii. Lead: 2 ppmiii. Hexavalent chromium: 3 ppmiv. Mercury: 2 ppm	Desirable Requirement					<ul style="list-style-type: none">The power consumption should comply with the percentage of efficiency under IEC60076 as stated in the following table:					Low-voltage dry-type distribution transformer	Single Phase		Three Phase		kVA	Efficiency (%)	kVA	Efficiency (%)	≤15	98.1	≤15	97.5	25	98.33	30	97.9	37.5	98.49	45	98.1	50	98.6	75	98.33	75	98.73	112.5	98.52	100	98.82	150	98.65	167	98.96	225	98.82	250	99.07	300	98.93	333	99.14	500	99.09	500	99.22	750	99.21	667	99.27	1000	99.28	833	99.31	1500	99.37			2000	99.43			2500	99.47
Desirable Requirement																																																																													
<ul style="list-style-type: none">The power consumption should comply with the percentage of efficiency under IEC60076 as stated in the following table:																																																																													
Low-voltage dry-type distribution transformer	Single Phase		Three Phase																																																																										
	kVA	Efficiency (%)	kVA	Efficiency (%)																																																																									
	≤15	98.1	≤15	97.5																																																																									
	25	98.33	30	97.9																																																																									
	37.5	98.49	45	98.1																																																																									
	50	98.6	75	98.33																																																																									
	75	98.73	112.5	98.52																																																																									
	100	98.82	150	98.65																																																																									
	167	98.96	225	98.82																																																																									
	250	99.07	300	98.93																																																																									
	333	99.14	500	99.09																																																																									
	500	99.22	750	99.21																																																																									
	667	99.27	1000	99.28																																																																									
	833	99.31	1500	99.37																																																																									
			2000	99.43																																																																									
		2500	99.47																																																																										
F20	Domestic battery charger	<table><tr><th colspan="2">Desirable Requirement</th></tr><tr><td colspan="2"><ul style="list-style-type: none">Any plastic parts should not contain halogenated substances</td></tr></table>	Desirable Requirement		<ul style="list-style-type: none">Any plastic parts should not contain halogenated substances																																																																								
Desirable Requirement																																																																													
<ul style="list-style-type: none">Any plastic parts should not contain halogenated substances																																																																													

		<ul style="list-style-type: none"> The product components (circuit boards, electrical, electronic and plastic components) should not contain following restricted substances: <ol style="list-style-type: none"> Cadmium Lead Hexavalent chromium Mercury PBBs PBDEs Short-chain chlorinated paraffins
F21	Freezer	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> No "Controlled Refrigerant", as defined under the Ozone Layer Protection (Controlled Refrigerants) Regulation, Cap 403 of Laws of Hong Kong shall be used in the equipment.
		<ul style="list-style-type: none"> Manual with information of optimal temperature when using the product shall be provided.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star. Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight
F22	Commercial electric oven	Desirable Requirement
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight The coating of the product should not contain the heavy metals exceeding the following concentrations: <ol style="list-style-type: none"> Cadmium < 2 ppm Lead < 2 ppm Hexavalent chromium < 3 ppm Mercury < 2 ppm

F23	Hand dryer	Mandatory Requirement
		<ul style="list-style-type: none"> The power consumption of product shall not exceed 12Wh per drying process.
		<ul style="list-style-type: none"> Airborne noise emission from the appliance, measured as sound power level, shall not exceed 70 dB (A) during operation.
		<ul style="list-style-type: none"> The product shall have an automatically power off function.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
F24	Cloth drying machine	Desirable Requirement
		<ul style="list-style-type: none"> Standby power consumption of the product should not exceed 0.5Wh.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight
		Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star or EU Energy Label.
F24	Cloth drying machine	<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> Product should have obtained a Grade 3 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ol style="list-style-type: none"> DEHPs: 0.1% by weight BBPs: 0.1% by weight DBPs: 0.1% by weight DIBPs: 0.1% by weight
		<ul style="list-style-type: none"> The coating of the product should not contain the heavy metals exceeding the following concentrations: <ol style="list-style-type: none"> Cadmium < 2 ppm Lead < 2 ppm Hexavalent chromium < 3 ppm Mercury < 2 ppm
F25	Electric kettle	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> • The product shall have an automatically power off function.
		Desirable Requirement
		<ul style="list-style-type: none"> • The thermal efficiency of the product should be at least 80%.
		<ul style="list-style-type: none"> • The product should not be formulated with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens. • Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ul style="list-style-type: none"> i. DEHPs: 0.1% by weight ii. BBPs: 0.1% by weight iii. DBPs: 0.1% by weight iv. DIBPs: 0.1% by weight
F26	Digital camera	Mandatory Requirement
		<ul style="list-style-type: none"> • Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> • The levels of the following hazardous substances in the rechargeable battery should not exceed the following: <ul style="list-style-type: none"> i. Cadmium \leq 20 mg/kg ii. Lead \leq 40 mg/kg iii. Mercury \leq 40 mg/kg • Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ul style="list-style-type: none"> i. DEHPs: 0.1% by weight ii. BBPs: 0.1% by weight iii. DBPs: 0.1% by weight iv. DIBPs: 0.1% by weight
F27	Electric rice cooker	Desirable Requirement
		<ul style="list-style-type: none"> • The product should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).

Gas appliances (Category Code – G)

Product Code	Product Item	Recommended Green Specifications*
G01	LPG hot plate	Mandatory Requirement
		<ul style="list-style-type: none"> • This equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Concentration of NOx in the emission during operation should be ≤ 100ppm. Concentration of CO in the emission during operation should be ≤ 300ppm. The thermal efficiency of the product should not be less than 60%.
G02	LPG water heater	Mandatory Requirement
		<ul style="list-style-type: none"> LPG domestic instantaneous water heater with heat input not exceeding 70kW shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement
		<ul style="list-style-type: none"> NOx emission rate of 60mg/kWh or less should be met. CO emission level of 56ppm or less should be met.
G03	Towngas gas cooker	Mandatory Requirement
		<ul style="list-style-type: none"> This equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement
		<ul style="list-style-type: none"> Concentration of NOx in the emission during operation should be ≤ 60ppm. The thermal efficiency of the product should not be less than 60%. Corrugated cartons used in packaging should be made from recycled paper.
G04	Towngas water heater	Mandatory Requirement
		<ul style="list-style-type: none"> Domestic instantaneous gas water heater with heat input not exceeding 70kW shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		Desirable Requirement
		<ul style="list-style-type: none"> NOx emission rate of 60mg/kWh or less should be met. CO emission level of 56ppm or less should be met.

Light fittings (Category Code – H)		
Product Code	Product Item	Recommended Green Specifications*
H01	Electronic ballast for fluorescent tube / lamp	Mandatory Requirement
		<ul style="list-style-type: none"> The equipment shall have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD). The minimum service life shall be 50,000 lighting hours at the maximum permissible measuring-point temperature (tc) and under standard network conditions.
		Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight The electronic ballast should be easily dismountable into case, insulating foil, printed circuit board and electrolyte-containing components to allow material-specific recycling. Any plastic parts should be manufactured without chlorinated paraffins flame retardants.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

H02	Fluorescent tube / Compact fluorescent lamp	Mandatory Requirement
		<ul style="list-style-type: none"> Product shall have obtained an Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD) as follows: <ol style="list-style-type: none"> The integrated compact fluorescent lamp up to 60W: Energy Label with Grade 1 (before 31 December 2020); or Energy Label with Grade 4 or above with preference on higher Grade, subject to the new grading standards (from 31 December 2020) The non-integrated compact fluorescent lamp: A Recognition Type Energy Label
		<ul style="list-style-type: none"> Colour Rendering Index (CRI) shall be at least 80.
		Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
H03	LED lamp	Reminder:
		<ul style="list-style-type: none"> Consider using LED Lamp (item H03) as an alternative for energy saving purpose.
		Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> LED lamp with a rated lamp voltage of 220V to 240V rated frequency of 50Hz a.c., and a rated lamp wattage up to 60W should have obtained a Grade 2 or above with preference on a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> The product should comply with international power consumption standard such as Energy Star.

Fuel oils and hydrocarbon lubricants (Category Code – I)

Product Code	Product Item	Recommended Green Specifications*
I01	Automotive fuel oil	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall meet the requirements specified in Air Pollution Control (Motor Vehicle Fuel) Regulation of Hong Kong.
		Desirable Requirement
I02	Lubricating oil / Grease	<ul style="list-style-type: none"> The product should contain biodiesel: a fatty acid methyl ester content of 5% by volume in diesel.
		Desirable Requirement
		<ul style="list-style-type: none"> The base oil of the product should contain recycled content/ re-refined content/ renewable ingredients.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The content of halogenated hydrocarbons in the product should not exceed 0.01% by weight. The base oil of the product should be biodegradable at least by 60% or more within 28 days. The value of EC50/ LC50 shall be 100 mg/L or higher in 72-hour acute toxicity test using algae / 48-hour acute toxicity test using Daphnia / 96-hour acute toxicity test using fish. The plastic container should be consisted of at least 25% by weight of recycled content.
I03	Fuel oil for non-road based applications	<p>Mandatory Requirement</p> <ul style="list-style-type: none"> The product shall meet the requirements specified in Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation of Hong Kong. <p>Desirable Requirement</p> <ul style="list-style-type: none"> For diesel oil, the product should contain biodiesel: a fatty acid methylester content of not less than 5% by volume in diesel.

Furniture (Category Code – J)		
Product Code	Product Item	Recommended Green Specifications*
J01	Chair	Desirable Requirement
		<ul style="list-style-type: none"> The wood materials of the product should meet one of the following requirements: <ol style="list-style-type: none"> 40% of the wood material is from recycled/waste wood; or The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent. Formaldehyde emission: All wood panels should be of Class E1 under EN13986 in respect of formaldehyde emission, and the requirements are as follows: <ol style="list-style-type: none"> Unfaced MDF board: free formaldehyde content $\leq 8\text{mg}/100\text{g}$ (by test method ISO 12460–5) or release of formaldehyde $\leq 0.124\text{mg}/\text{m}^3$ air (by test method EN 717-1); Unfaced plywood/ solid wood panels, and coated, overlaid or veneered MDF boards/ plywood/ other wood panels: emission rate of formaldehyde $\leq 3.5\text{mg}/\text{m}^2\text{h}$ (by test method ISO 12460–3) or release of formaldehyde $\leq 0.124\text{ mg}/\text{m}^3$ air (by test method EN 717-1). The plastic component of the product should not contain any heavy metals and hazardous substances as listed below: <ol style="list-style-type: none"> Lead Chromium Cadmium Mercury Phthalates Halogenated organic substances Wood and natural materials used in the product should not be treated or impregnated with preservative (such as fungicides and insecticides) that are classified due to their hazardous nature by the International Agency for Research on Cancer (IARC) as Type 1 or 2A. The product supplier should offer a minimum two-year warranty on the quality of the product effective from the date of delivery, provided that the product is being used in its intended use. This warranty should cover repair or replacement of parts. For the cushioning materials, the formaldehyde emission of foam synthetic resin should be $30\text{mg}/\text{kg}$ (30ppm) or less. For the paint used on the chair surface, the sum of lead, cadmium, mercury, and hexavalent chromium included in the paint should be below the weight percentage of 0.1 (1,000mg/kg).
J02	Mattress	Desirable Requirement

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The following requirements should be met for Latex foam: <ol style="list-style-type: none"> Heavy metals: <ol style="list-style-type: none"> copper < 2ppm chromium, nickel < 1ppm arsenic, lead, antimony, cobalt < 0.5ppm cadmium < 0.1ppm mercury < 0.02ppm Extractable formaldehyde: < 30ppm VOC: < 0.5mg/m³ Metal complex dyes based on copper, lead, chromium or nickel should not be used Chlorophenols (salts and esters): < 0.1ppm; mono, di-chlorinated phenols (salts and esters) < 0.1ppm Butadiene: < 1ppm Nitrosamines: < 0.001mg/m³
		<ul style="list-style-type: none"> The following requirements should be met for Polyurethane (PUR) foam: <ol style="list-style-type: none"> Heavy metals: <ol style="list-style-type: none"> copper < 2ppm chromium and nickel < 1ppm arsenic, lead, antimony and cobalt < 0.5ppm cadmium < 0.1ppm mercury < 0.02ppm Extractable formaldehyde: < 30ppm VOC: < 0.5mg/m³ Metal complex dyes based on copper, lead, chromium or nickel should not be used CFCs, HCFCs, HFCs, methylene chloride should not be used as blowing agents Tin in organic form (tin bonded to a carbon atom) should not be used
		<ul style="list-style-type: none"> Glues used should not contain benzene and chlorobenzenes.
		<ul style="list-style-type: none"> Cushioning material should not contain formaldehyde, aromatic hydrocarbons, phthalates, organic tins, cadmium, lead, hexavalent chromium, mercury and their compounds.
		<ul style="list-style-type: none"> The innersprings used in the product should not be electroplated.
J03	Partition screen	Mandatory Requirement
		<ul style="list-style-type: none"> Formaldehyde emission: All wood panels shall be of Class E1 under EN13986 in respect of formaldehyde emission, and the requirements are as follows: <ol style="list-style-type: none"> Unfaced MDF board: free formaldehyde content ≤8mg/100g (by test method ISO 12460-5) or release of formaldehyde ≤0.124mg/m³ air (by test method EN 717-1); Unfaced plywood/ solid wood panels, and coated, overlaid or veneered MDF boards/ plywood/ other wood panels: emission rate of formaldehyde ≤3.5mg/m²h (by test method ISO 12460-3) or release of formaldehyde ≤0.124 mg/m³ air (by test method EN 717-1).
		Desirable Requirement
		<ul style="list-style-type: none"> The wood materials of the product should meet one of the following requirements: <ol style="list-style-type: none"> 70% of the wood material is from recycled/waste wood; or The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent.
		<ul style="list-style-type: none"> The following substances should not be added during manufacturing: fluorine, pentachlorophenol (PCP), tar oils containing benzo(a)pyrene.
		<ul style="list-style-type: none"> Coatings / Treatments: Furniture and fittings products (or components) should not be impregnated, labelled, coated or otherwise treated in a manner which would prevent post-consumer recycling.
		<ul style="list-style-type: none"> Packaging requirements: Chlorinated or halogenated plastics should not be used in product packaging.

		<ul style="list-style-type: none"> The product should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Lead Mercury
J04	Sofa	Desirable Requirement
		<ul style="list-style-type: none"> Requirements of wood materials: The product should meet one of the following requirements: <ol style="list-style-type: none"> At least 50% of the wood material is from recycled/ waste wood; or The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent.
		<ul style="list-style-type: none"> Requirements of cushioning and filling materials: <ol style="list-style-type: none"> Halogenated flame retardants should not be added Organic bleaching agent should not be used in production Dye stuff should not contain lead, tin, cadmium, hexavalent chromium and mercury
		<ul style="list-style-type: none"> The plastic component of the product should not contain any heavy metals and hazardous substances as listed below: <ol style="list-style-type: none"> Lead Chromium Cadmium Mercury Phthalates Halogenated organic substances
J05	Steel filing cabinet	Desirable Requirement
		<ul style="list-style-type: none"> Colour coating should not contain: <ol style="list-style-type: none"> Formaldehyde or halogenated solvent Any heavy metallic substances such as mercury, lead, cadmium, chromium or their compounds. Aromatic hydrocarbon including solvents of thinner toluene or xylene. Volatile organic compounds (VOCs) over 250g/litre.
		<ul style="list-style-type: none"> The compound of 1, 1, 1-trichloroethane should not be used for the surface preparing process.
		<ul style="list-style-type: none"> The product should contain at least 20% recycled metals. The product should allow easy disassembly for recycling.
J06	Workstation panel	Mandatory Requirement
		<ul style="list-style-type: none"> Formaldehyde emission: All wood panels shall be of Class E1 under EN13986 in respect of formaldehyde emission, and the requirements are as follows: <ol style="list-style-type: none"> Unfaced MDF board: free formaldehyde content $\leq 8\text{mg}/100\text{g}$ (by test method ISO 12460-5) or release of formaldehyde $\leq 0.124\text{mg}/\text{m}^3$ air (by test method EN 717-1); Unfaced plywood/ solid wood panels, and coated, overlaid or veneered MDF boards/ plywood/ other wood panels: emission rate of formaldehyde $\leq 3.5\text{mg}/\text{m}^2\text{h}$ (by test method ISO 12460-3) or release of formaldehyde $\leq 0.124\text{ mg}/\text{m}^3$ air (by test method EN 717-1).
		Desirable Requirement
		<ul style="list-style-type: none"> The following substances should not be added during manufacturing: fluorine, pentachlorophenol (PCP), tar oils containing benzo(a)pyrene. Coatings / Treatments: Furniture and fittings products (or components) should not be impregnated, labelled, coated or otherwise treated in a manner which would prevent post-consumer recycling. Packaging requirements: Chlorinated or halogenated plastics should not be used in product packaging.

		<ul style="list-style-type: none"> The product should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Lead Mercury
J07	Metal furniture	Desirable Requirement
		<ul style="list-style-type: none"> Colour coating should not contain: <ol style="list-style-type: none"> Formaldehyde or halogenated solvent Any heavy metallic substances such as mercury, lead, cadmium, chromium or their compounds
		<ul style="list-style-type: none"> The plastic component of the product should not contain any heavy metals and hazardous substances as listed below: <ol style="list-style-type: none"> Lead Chromium Cadmium Mercury Phthalates Halogenated organic substances
		<ul style="list-style-type: none"> It should be possible to separate out each metal material of the product without the use of special tools. This requirement does not apply to metals used in surface treatments.
		<ul style="list-style-type: none"> The product should contain at least 20% recycled metals.
J08	Wooden furniture	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall allow easy disassembly for recycling.
		Desirable Requirement
		<ul style="list-style-type: none"> The wood materials of the product should meet one of the following requirements: <ol style="list-style-type: none"> At least 50% of the wood material is from recycled/ waste wood; or The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent.
		<ul style="list-style-type: none"> Formaldehyde emission: All wood panels should be of Class E1 under EN13986 in respect of formaldehyde emission, and the requirements are as follows: <ol style="list-style-type: none"> Unfaced MDF board: free formaldehyde content $\leq 8\text{mg}/100\text{g}$ (by test method ISO 12460-5) or release of formaldehyde $\leq 0.124\text{mg}/\text{m}^3$ air (by test method EN 717-1); Unfaced plywood/ solid wood panels, and coated, overlaid or veneered MDF boards/ plywood/ other wood panels: emission rate of formaldehyde $\leq 3.5\text{mg}/\text{m}^2\text{h}$ (by test method ISO 12460-3) or release of formaldehyde $\leq 0.124\text{ mg}/\text{m}^3$ air (by test method EN 717-1).
		<ul style="list-style-type: none"> The following substances should not be added during manufacturing: fluorine, pentachlorophenol (PCP), tar oils containing benzo(a)pyrene.
		<ul style="list-style-type: none"> The product should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Lead Mercury
J09	Outdoor furniture (chair, table & bench)	Desirable Requirement
		<ul style="list-style-type: none"> The wood materials of the product should meet one of the following requirements: <ol style="list-style-type: none"> At least 50% of the wood material is from recycled/waste wood; or The wood material obtains sustainable forest management certification such as Forest Stewardship Council (FSC), PEFC (Programme for the Endorsement of Forest Certification schemes) or equivalent.

		<ul style="list-style-type: none"> If the product contains wooden panels, the panels should be of Class E1 under EN13986 in respect of formaldehyde emission, and the requirements are as follows: <ol style="list-style-type: none"> Unfaced MDF board: free formaldehyde content $\leq 8\text{mg}/100\text{g}$ (by test method ISO 12460-5) or release of formaldehyde $\leq 0.124\text{mg}/\text{m}^3$ air (by test method EN 717-1); Unfaced plywood/ solid wood panels, and coated, overlaid or veneered MDF boards/ plywood/ other wood panels: emission rate of formaldehyde $\leq 3.5\text{mg}/\text{m}^2\text{h}$ (by test method ISO 12460-3) or release of formaldehyde $\leq 0.124\text{mg}/\text{m}^3$ air (by test method EN 717-1).
		<ul style="list-style-type: none"> The product (coatings, sealants, additives, wooden, metal or plastic parts) should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Hexavalent chromium Lead Mercury Nickel Tin
		<ul style="list-style-type: none"> The product should not contain the following substances: <ol style="list-style-type: none"> Pentachlorophenol (PCP) Phthalates Halogenated organic substances Reactive or organic chlorinated compounds (e.g. sodium hypochlorite) Tar oils containing benzo(a)pyrene
		<ul style="list-style-type: none"> It should be possible to separate the metals from other materials in the product without the use of special tools. This requirement does not apply to metals used in surface treatments.
		<ul style="list-style-type: none"> In the case of products composed of more than 10% by weight plastic, at least 50% of the plastic should consist of recycled material.

Containers and collection bins for waste / recyclables (Category Code – K)		
Product Code	Product Item	Recommended Green Specifications*
K01	Plastic rubbish bin	Mandatory Requirement
		<ul style="list-style-type: none"> The product should contain at least 40% recycled plastic content.
		<ul style="list-style-type: none"> The product shall be marked with an appropriate plastic resin identification code.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain cadmium and lead.
K02	Wheeled refuse container	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall contain at least 20% by weight of recycled contents.
		<ul style="list-style-type: none"> The product shall be marked with an appropriate plastic resin identification code.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least 50% by weight of recycled contents.
		<ul style="list-style-type: none"> The product should have no flame retardant of polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs) or short-chain chlorinated paraffins added as formulated components.
		<ul style="list-style-type: none"> The product should not contain phthalates.
		<ul style="list-style-type: none"> The levels of the following hazardous substances as impurities should not exceed: <ol style="list-style-type: none"> Arsenic: 50 ppm Cadmium: 20 ppm Hexavalent chromium: 100 ppm Lead: 100 ppm Mercury: 10 ppm

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

K03	Stainless steel recyclables collection bin	Desirable Requirement
		<ul style="list-style-type: none"> The product should contain at least 60% recycled contents.
		<ul style="list-style-type: none"> The product (Coatings, sealants, additives, metal or plastic parts) should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Hexavalent chromium Lead Mercury Nickel Tin

Wearables (Category Code – L)																
Product Code	Product Item	Recommended Green Specifications*														
L01	Safety helmet	Mandatory Requirement														
		<ul style="list-style-type: none"> The product shall be marked with an appropriate plastic resin identification code. 														
		Desirable Requirement														
		<ul style="list-style-type: none"> The product should contain recycled plastic content. 														
L02	Glove for field work [polythene (disposable), rubber (industrial)]	Desirable Requirement														
		<p>For polythene (disposable) and rubber (industrial) gloves:</p> <ul style="list-style-type: none"> The product should not be impregnated, labelled, coated or otherwise treated in a manner which would prevent post-consumer recycling. 														
L03	Rainboots	Desirable Requirement														
		<ul style="list-style-type: none"> The rainboots should contain at least 20% recycled plastics or rubber. 														
		<ul style="list-style-type: none"> The amount of formaldehyde of the footwear should not exceed 75 mg/kg. 														
		<ul style="list-style-type: none"> The product should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Hexavalent chromium Lead 														
L04	Safety boots / shoes	Desirable Requirement														
		<ul style="list-style-type: none"> The footwear should contain recycled content. The blending ratio of recycled material should satisfy any of the following requirements: <table border="1"> <thead> <tr> <th>Material Classification</th><th>Recycled material</th><th>Reference compounding ratio (mass%) in main material of uppers or soles</th></tr> </thead> <tbody> <tr> <td rowspan="2">Textiles</td><td>Post-/Pre-consumer polymer recycled fibers, chemical recycled fibers</td><td>More than 40%</td></tr> <tr> <td>Organically grown cotton</td><td>100%</td></tr> <tr> <td>Plastics</td><td>Recycled plastics</td><td>More than 20%</td></tr> <tr> <td>Rubber</td><td>Recycled rubber</td><td>More than 20%</td></tr> </tbody> </table> 	Material Classification	Recycled material	Reference compounding ratio (mass%) in main material of uppers or soles	Textiles	Post-/Pre-consumer polymer recycled fibers, chemical recycled fibers	More than 40%	Organically grown cotton	100%	Plastics	Recycled plastics	More than 20%	Rubber	Recycled rubber	More than 20%
Material Classification	Recycled material	Reference compounding ratio (mass%) in main material of uppers or soles														
Textiles	Post-/Pre-consumer polymer recycled fibers, chemical recycled fibers	More than 40%														
	Organically grown cotton	100%														
Plastics	Recycled plastics	More than 20%														
Rubber	Recycled rubber	More than 20%														

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The product should not contain any heavy metals or their compounds as listed below: <ol style="list-style-type: none"> Arsenic Cadmium Hexavalent chromium Lead
		<ul style="list-style-type: none"> The product should not contain Pentachlorophenol (PCP), Tetrachlorophenol (TCP) and its salts and esters.
		<ul style="list-style-type: none"> Halogenated compounds such as PVC should not be used for producing plastic parts weighing 25g or more. Recycled PVC can be used for outsoles however.
		<ul style="list-style-type: none"> The amount of formaldehyde of the footwear should not exceed the following limits: <ol style="list-style-type: none"> textile: 75 mg/kg leather: 150 mg/kg
		<ul style="list-style-type: none"> The levels of dimethyl flumarate (DMF) should not exceed 0.1 mg/kg.

Office equipment (Category Code – M)		
Product Code	Product Item	Recommended Green Specifications*
M01	Facsimile equipment	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		Desirable Requirement
		<ul style="list-style-type: none"> The equipment should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffin flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.
		<ul style="list-style-type: none"> The operation should not exceed the ozone emission rate of 3 mg/h.
		<ul style="list-style-type: none"> Should not cause a dust concentration in excess of 0.25mg/m³.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
M02	Photocopier	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall comply with international power consumption standard such as Energy Star.
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The equipment should have obtained a Recognition Type Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The operation should not exceed the ozone emission rate of 3 mg/h.
M03	Fire extinguisher	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not use halon or its compounds as the fire extinguishing agent.
		<ul style="list-style-type: none"> Fire extinguishing agents shall comply with the following maximum allowable concentrations of heavy metals: <ol style="list-style-type: none"> Cadmium (Cd): < 0.003 mg/L Copper (Cu): < 2 mg/L Lead (Pb): < 0.01 mg/L Mercury (Hg): < 0.006 mg/L Zinc (Zn): < 3 mg/L
		Desirable Requirement
		<ul style="list-style-type: none"> Alkylphenol ethoxylates (APEOs), perfluorooctanesulfonate (PFOS), perfluorohexanesulfonate (PFHxS), perfluorooctanoate (PFOA) and 8:2 fluorotelomer alcohol (8:2 FTOH) should not be used as a surfactant for fire extinguishing materials.
		<ul style="list-style-type: none"> Plastic materials used for packaging should not contain halogenated polymers. The biodegradability of surfactant used for the fire extinguishing agent of portable fire extinguisher should not be less than 90%.
M04	Paper shredder	Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
		<ul style="list-style-type: none"> Component parts should not contain halogenated substances.

Packaging materials (Category Code – N)		
Product Code	Product Item	Recommended Green Specifications*
N01	Food packaging - plastic films	Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain or be manufactured with: <ol style="list-style-type: none"> phthalates; halogenated organic compounds; compounds containing mercury, lead, cadmium, arsenic or hexavalent chromium; and any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A), or possible (Group 2B) carcinogens
		Reminder: <ul style="list-style-type: none"> Reduce packaging as far as possible. Consider simple packaging or using reusable food container to store food to reduce plastic waste generation.
N02	Packaging paper	Mandatory Requirement
		<ul style="list-style-type: none"> The fibre source of the product shall meet one of the following: <ol style="list-style-type: none"> Percentage of recycled fibre in the product shall not less than 65%; or For virgin wood fibers, fibre is originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC or equivalent]
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre:

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> i. Elemental chlorine; and ii. Halogenated bleaching agents that produce elemental halogens in-situ
		<ul style="list-style-type: none"> • Surfactant used in pulp/paper production, if necessary, should be biodegradable.
		<ul style="list-style-type: none"> • The product should not be formulated or manufactured with optical brighteners or fluorescent whitening agents.
		<ul style="list-style-type: none"> • Colorants (pigments or dyes) containing mercury, lead, cadmium or hexavalent chromium compounds as constituents should not be used.
		Reminder: <ul style="list-style-type: none"> • Reduce packaging as far as possible. Consider simple or reusable packaging.
N03	Plastic films and sheets	Desirable Requirement
		<ul style="list-style-type: none"> • The product should have recycled content
		<ul style="list-style-type: none"> • The product should not contain intentionally added heavy metals of lead, mercury, cadmium and hexavalent chromium, excepting those added as result of using recycled content, the sum of which shall not exceed 100 ppm by weight.
		<ul style="list-style-type: none"> • The product should not contain Polyvinyl Chloride (PVC) or chlorinated plastics
		Reminder: <ul style="list-style-type: none"> • Reduce packaging as far as possible. Consider simple or reusable packaging.
N04	Carton boxes	Mandatory Requirement
		<ul style="list-style-type: none"> • The product shall not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ul style="list-style-type: none"> i. Elemental chlorine; and ii. Halogenated bleaching agents that produce elemental halogens in-situ.
		<ul style="list-style-type: none"> • Colorants (pigments or dyes) containing mercury, lead, cadmium or hexavalent chromium compounds as constituents shall not be used.
		<ul style="list-style-type: none"> • The product shall not be formulated or manufactured with optical brighteners or fluorescent whitening agents.
		Desirable Requirement
		<ul style="list-style-type: none"> • The product should be made of paper fibre with 100% recycled content.

Paper for printing and photocopying (Category Code – O)		
Product Code	Product Item	Recommended Green Specifications*
O01	Continuous stationery for computer-generated form	Desirable Requirement
		<ul style="list-style-type: none"> • The product should contain 50% of recovered/recycled fibre, including a minimum of 30% of postconsumer materials.
O02	Recycled photocopying paper (office use)	Mandatory Requirement
		<ul style="list-style-type: none"> • The paper shall contain at least 80% recovered fibre or at least 40% postconsumer fibre by weight.
		<ul style="list-style-type: none"> • Paper packing (paper wrapper and carton box) shall be made from 100% recovered fibre by weight.
		<ul style="list-style-type: none"> • Shall obtain a copy of forestry label(s) or certification(s) of Forest Stewardship Council (FSC) or Programme for the Endorsement of Forestry Certification (PEFC) awarded to the brand product offered or the manufacturer.
		Desirable Requirement
		<ul style="list-style-type: none"> • The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ul style="list-style-type: none"> i. Elemental chlorine ii. Halogenated bleaching agents that produce elemental halogens in-situ iii. Non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives • Surfactant used in pulp/ paper production, if necessary, should be biodegradable.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none">The product should not be formulated or manufactured with optical brighteners or fluorescent whitening agents.The product should not be manufactured with dyes, pigments or coatings that contain phthalates, mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.Adsorbable organic halides emissions (AOX) from the production of each pulp used should be strictly control.The active components in biocides or biostatic agents used in paper production should not bioaccumulate or be potentially bioaccumulative.Pallet packing material should not contain chlorine-based plastics.
O03	Recycled paper for printing	Mandatory Requirement
		<ul style="list-style-type: none">Shall obtain a copy of forestry label(s) or certification(s) of Forest Stewardship Council (FSC) or Programme for the Endorsement of Forestry Certification (PEFC) awarded to the brand product offered or the manufacturer.
		Desirable Requirement
		<ul style="list-style-type: none">The fibre source of the product should contain of a minimum of 80% recovered fibre, including a minimum of 40% postconsumer fibre by weight.
		<ul style="list-style-type: none">Paper packing (paper wrapper and carton box) should be made from 100% recovered fibre by weight.
		<ul style="list-style-type: none">The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre:<ul style="list-style-type: none">i. Elemental chlorineii. Halogenated bleaching agents that produce elemental halogens in-situiii. Non-biodegradable complexing agents such as ethylene diaminetetra acetic acid (EDTA) or its derivatives
		<ul style="list-style-type: none">Surfactant used in pulp/paper production, if necessary, should be biodegradable
		<ul style="list-style-type: none">The product should not be formulated or manufactured with optical brighteners or fluorescent whitening agents.
		<ul style="list-style-type: none">The product should not be manufactured with dyes, pigments or coatings that contain phthalates, mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		<ul style="list-style-type: none">Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.
		<ul style="list-style-type: none">Pallet packing material should not contain chlorine-based plastics.
		<ul style="list-style-type: none">Adsorbable organic halides emissions (AOX) from the production of each pulp used should be strictly control.
<ul style="list-style-type: none">The active components in biocides or biostatic agents used in paper production should not bioaccumulate or be potentially bioaccumulative.		
O04	Woodfree photocopying paper (office use)	Mandatory Requirement
		<ul style="list-style-type: none">The paper pulp shall be made from sustainably managed forests and materials with recycled content are preferable.
		<ul style="list-style-type: none">Paper packing (paper wrapper and carton box) shall be made from 100% recovered fibre by weight.
		<ul style="list-style-type: none">Shall obtain a copy of forestry label(s) or certification(s) of Forest Stewardship Council (FSC) or Programme for the Endorsement of Forestry Certification (PEFC) awarded to the brand product offered or the manufacturer.
		Desirable Requirement
		<ul style="list-style-type: none">The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre:<ul style="list-style-type: none">i. Elemental chlorineii. Halogenated bleaching agents that produce elemental halogens in-situiii. Non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives
<ul style="list-style-type: none">Surfactant used in pulp/paper production, if necessary, should be biodegradable.		
<ul style="list-style-type: none">The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.		

		<ul style="list-style-type: none"> The manufacturer should have implemented a sound environmental, and/or management system and are adhering to sound environmental, and/or energy management practices at the production facility. Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.
O05	Printing paper coated on both sides	Mandatory Requirement
		<ul style="list-style-type: none"> Shall obtain copy of forestry certification(s) or green labels awarded to the brand product offered or manufacturer such as Forest Stewardship Council (FSC) and Programme for the Endorsement of Forestry Certification (PEFC) awarded to the brand product offered or the manufacturer.
		Desirable Requirement
		<ul style="list-style-type: none"> The fiber source of the product should consist of a minimum of 80% recovered fibre, including a minimum of 40% postconsumer fibre by weight.
		<ul style="list-style-type: none"> Paper packing (paper wrapper and carton box) should be made from 100% recovered fibre by weight.
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ Non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, should be biodegradable.
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners or fluorescent whitening agents.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain phthalates, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		<ul style="list-style-type: none"> Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.
		<ul style="list-style-type: none"> Plastic packing, if applicable, should be made from chlorine free plastics.
O06	Woodfree paper for printing	Reminder:
		<ul style="list-style-type: none"> Consider using recycled paper (item O03) for paper printing.
		Mandatory Requirement
		<ul style="list-style-type: none"> Shall obtain a copy of forestry label(s) or certification(s) of Forest Stewardship Council (FSC) or Programme for the Endorsement of Forestry Certification (PEFC) awarded to the brand product offered or the manufacturer.
		Desirable Requirement
		<ul style="list-style-type: none"> The paper pulp should be made from sustainably managed forests and materials with recycled content are preferable.
		<ul style="list-style-type: none"> Paper packing (paper wrapper and carton box) should be made from 100% recovered fibre by weight.
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ Non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, should be biodegradable.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
O07	Publication	<ul style="list-style-type: none"> The manufacturer should have implemented a sound environmental, and/or management system and are adhering to sound environmental, and/or energy management practices at the production facility.
		<ul style="list-style-type: none"> Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.
		Mandatory Requirement

	booklets	<ul style="list-style-type: none"> The fibre source of the product shall meet one of the followings: <ol style="list-style-type: none"> A minimum of 60% recovered fibre; or For virgin fibre products, fibre is originated from sustainably managed forest which is certified by internationally recognized standard (e.g. FSC, PEFC)
		<ul style="list-style-type: none"> The total content of the following heavy metals or their compounds in printing inks or toners used in the product shall not exceed 100ppm by dry weight: <ol style="list-style-type: none"> Cadmium Hexavalent Chromium Mercury Lead
		<ul style="list-style-type: none"> Note: Not applicable to legal and sensitive documents
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain the component that hinders recycling, such as varnish coating, laminate of polyethylene or polypropylene, metal printing (gilt and silver gilt), and fabric and felt of synthetic fiber.
		<ul style="list-style-type: none"> Washing agents used in the production process should not contain aromatic hydrocarbons and phthalates.
		Reminder: <ul style="list-style-type: none"> Consider adopting electronic means (e.g. website, email etc.) to disseminate information when feasible.
O08	Paper for newsprint	Mandatory Requirement
		<ul style="list-style-type: none"> The paper shall contain 100% recycled materials by weight of the product.
		Desirable Requirement
		<ul style="list-style-type: none"> The content of heavy metals or their compounds (dry weight) in colourants (a pigment or a dye) used in the product should not exceed below levels: <ol style="list-style-type: none"> Cadmium: 20 mg/kg Chromium: 100 mg/kg Mercury: 4 mg/kg Lead: 100 mg/kg
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ
		<ul style="list-style-type: none"> Alkylphenol ethoxylates (APEOs), ethylenediamine tetraacetic acid (EDTA) and diethylenetriamine pentaacetic acid (DTPA) should not be used during the production process of the product.

Paper products other than for printing and photocopying (Category Code – P)		
Product Code	Product Item	Recommended Green Specifications*
P01	Brown wrapping paper	Desirable Requirement
		<ul style="list-style-type: none">The product should consist of a minimum of 30% recovered fibre, including a minimum of 25% postconsumer fibre by weight.
		<ul style="list-style-type: none">The wood pulp should be derived from sustainably managed forests.
P02	Toilet paper & paper towel	Mandatory Requirement
		Toilet Paper in Rolls
		<ul style="list-style-type: none">The toilet paper shall contain by weight 100% recovered fibre and that recovered fibre shall contain not less than 60% postconsumer fibre.
		<ul style="list-style-type: none">Bleaching agent used in pulp/paper production, if necessary, shall not contain chlorine.
		<ul style="list-style-type: none">Surfactant used in pulp/paper production, if necessary, shall be biodegradable.
		<ul style="list-style-type: none">The core and carton box packing shall be made from 100% recovered fibre.
		Jumbo Roll Toilet Paper

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The toilet paper shall contain by weight 100% recovered fibre and that recovered fibre shall contain not less than 60% postconsumer fibre.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, shall not contain chlorine
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, shall be biodegradable.
		<ul style="list-style-type: none"> The core and carton box packing shall be made of 100% recovered fibre.
		Paper Towel (Manifold)
		<ul style="list-style-type: none"> Contains by weight 100% recovered fibre and that recovered fibre shall contain not less than 60% postconsumer fibre.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, shall not contain chlorine.
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, shall be biodegradable.
		<ul style="list-style-type: none"> Packing: carbon box shall be made of 100% recovered fibre.
		Hand Roll Paper Towel
		<ul style="list-style-type: none"> The paper towel shall contain by weight 100% recovered fibre and that recovered fibre shall contain not less than 60% postconsumer fibre.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, shall not contain chlorine
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, shall be biodegradable.
		<ul style="list-style-type: none"> The core and carton box packing shall be made of 100% recovered fibre.
		Desirable Requirement
		Toilet Paper in Rolls
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, should not contain halogenated bleaching agents or non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> Absorbable Organic Halides (AOX) emissions from each individual pulp used in the paper should not exceed 0.25 kg/tonne.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		Jumbo Roll Toilet Paper
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, should not contain halogenated bleaching agents or non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> Absorbable Organic Halides (AOX) emissions from each individual pulp used in the paper should not exceed 0.25 kg/tonne.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		Paper Towel (Manifold)
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, should not contain halogenated bleaching agents or non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> Absorbable Organic Halides (AOX) emissions from each individual pulp used in the paper should not exceed 0.25 kg/tonne.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		Hand Roll Paper Towel
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners.
		<ul style="list-style-type: none"> Bleaching agent used in pulp/paper production, if necessary, should not contain halogenated bleaching agents or non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> Absorbable Organic Halides (AOX) emissions from each individual pulp used in the paper should not exceed 0.25 kg/tonne.
		<ul style="list-style-type: none"> The product should not be manufactured with dyes, pigments or coatings that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
		Reminder:
		<ul style="list-style-type: none"> Consider using towel or hand dryer (item F27) to reduce waste generation.
P03	Index card	Desirable Requirement

	(paper)	<ul style="list-style-type: none"> The product should contain a minimum of 50% of recovered/ recycled fibre, including a minimum of 30% of postconsumer materials.
P04	Compostable paper bag	Mandatory Requirement
		<ul style="list-style-type: none"> The product should be biodegradable.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 40% recycled fibre by weight, including a minimum of 20% postconsumer fibre.
P05	Notepad	Desirable Requirement
		<ul style="list-style-type: none"> The fibre source of the product should meet one of the following requirements: <ol style="list-style-type: none"> A minimum of 50% recycled content with at least 20% postconsumer fibre by weight; or For virgin fibre products, fibre is originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC or equivalent]; or For mixed fibre products, at least 70% of the total fibre should be a combination of recycled content, waste wood or certified sustainable source
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine; Halogenated bleaching agents that produce elemental halogens in-situ; and Non-biodegradable complexing agents such as ethylenediaminetetraacetic acid (EDTA) or its derivatives
		<ul style="list-style-type: none"> Surfactant used in pulp/paper production, if necessary, should be biodegradable
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with optical brighteners or fluorescent whitening agents
		<ul style="list-style-type: none"> Chemical Oxygen Demand (COD) in water discharge during pulp and paper production should be less than 20kg/tonne of paper produced.
P06	Printed labels	Desirable Requirement
		<ul style="list-style-type: none"> The fibre source of the product should meet one of the following: <ol style="list-style-type: none"> A minimum of 50% recycled content with at least 20% of post-consumer fibre by weight; or For virgin wood fibers, fibre is originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC or equivalent]
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine; and Halogenated bleaching agents that produce elemental halogens in-situ
		Reminder: <ul style="list-style-type: none"> Avoid using printed labels as far as possible. For example, utilize waste paper and adhesive tape to make labels.

Plastics and rubber products (Category Code – Q)		
Product Code	Product Item	Recommended Green Specifications*
Q01	Plastic garbage bag	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall be made from at least 50% by weight of recycled plastics content, in which shall contain a minimum of 40% post-consumer or post-industrial material.
		Desirable Requirement

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The product should be marked with an appropriate plastic resin identification code.
Q02	Plastic bags (other uses)	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall contain a minimum of 30% by weight of recycled plastic.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 50% by weight of recycled plastic. The product should be marked/ printed with an appropriate plastic resin identification code.
		<p>Reminder:</p> <ul style="list-style-type: none"> Avoid using single-use disposable plastic bags including umbrella plastic bags. Consider to use reusable bags e.g. textile bag (item U02).
Q03	Traffic management tools (traffic bollard, traffic cones & road barrier)	Mandatory Requirement
		<ul style="list-style-type: none"> For traffic bollard, the product shall contain a minimum of 50% by weight of recycled or recovered plastic materials against the total weight of plastic contained in the product.
		Desirable Requirement
		<ul style="list-style-type: none"> For traffic cone and traffic barrier, the minimum recycled or recovered plastic content (by weight) of products should be as follows: <ul style="list-style-type: none"> ➤ Traffic cone: 50% ➤ Traffic barrier: 80%
		<ul style="list-style-type: none"> The product should be marked with an appropriate plastic resin identification code.
		<ul style="list-style-type: none"> The following substances should not be added during manufacturing processes: <ol style="list-style-type: none"> Arsenic Cadmium Chromium Lead Mercury Tin (including organic tin catalysts or stabilizers) Fluorine Chlorine Pentachlorophenol (PCP) Tar oils (benzo(a)pyrene)
		<ul style="list-style-type: none"> The recycled plastic product (or component) should not be impregnated, labelled, coated or otherwise treated in a manner which would prevent post-consumer recycling. Exemption may be made for products with a long product life where a coating or treatment would further extend the useful life of the product.
		<ul style="list-style-type: none"> If 1,3-butadiene is used in latex, rubber or foams, its concentration should be less than 1mg/kg.
		<ul style="list-style-type: none"> Chlorinated or halogenated plastics should not be used in product packaging. Used packaging should be able to be recycled by local recycling systems.
Q04	General plastic products	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall be marked with an appropriate plastic resin identification code.
		<ul style="list-style-type: none"> The product shall contain a minimum of 50% by weight of recycled or recovered plastic materials against the total weight of plastic contained in the product.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should contain a minimum of 90% by weight of recycled or recovered plastic materials against the total weight of plastic contained in the product.

		<ul style="list-style-type: none"> The following substances should not be added during manufacturing processes: <ol style="list-style-type: none"> Arsenic Cadmium Chromium Copper Lead Mercury Tin (including organic tin catalysts or stabilizers) Fluorine Chlorine Pentachlorophenol (PCP) Tar oils (benzo(a)pyrene)
Q05	General rubber products	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall contain a minimum of 50% by weight of recycled or recovered rubber materials against the total weight of rubber contained in the product.
		Desirable Requirement
		<ul style="list-style-type: none"> The recycled rubber product (or component) should not be impregnated, labeled, coated or otherwise treated in a manner which would prevent further post-consumer recycling.
		<ul style="list-style-type: none"> The product should contain a minimum of 90% by weight of recycled or recovered rubber materials against the total weight of rubber contained in the product.
		<ul style="list-style-type: none"> The product should not contain the following substances: <ol style="list-style-type: none"> Halogenated organic solvents or binding agents Elemental halogens (e.g. fluorine, chlorine, including in-situ precursors from halide salts) Fluoropolymer additives or coatings Aniline based amines Phthalates Aziridine or polyaziridines Pigments and additives that contain lead, tin, arsenic, cadmium, mercury or their compounds CFCs, HCFCs, HFCs or any ozone depleting substances PBDEs, or chlorinated organic flame retardants 1,3-butadiene

Printing and publishing equipment and supplies (Category Code – R)		
Product Code	Product Item	Recommended Green Specifications*
R01	Environment-friendly lithographic process inks	Mandatory Requirement
		<ul style="list-style-type: none"> The ink shall comply with the VOC limit for regulated printing inks stipulated in the Air Pollution Control (VOC) Regulation of Hong Kong.
		<ul style="list-style-type: none"> The ink shall contain a minimum of 20% vegetable or soybean oil in its composition.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not be formulated with pigments based on compounds of antimony, arsenic, cadmium, hexavalent chromium, lead, mercury and selenium.
		<ul style="list-style-type: none"> The product should not be formulated with <ol style="list-style-type: none"> Phthalates Halogenated solvents Aromatic hydrocarbons at concentrations exceeding 1% in total by weight

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Methanol should not be used, except in industrial methylated spirits at most 5%.
		<ul style="list-style-type: none"> Inks should not use hydroquinone and formaldehyde or they should not have potentials to release formaldehyde during use.
		<ul style="list-style-type: none"> The product should not exceed the following VOC and mineral oil content levels: <ol style="list-style-type: none"> Water-based inks: VOC < 5%; mineral oil content = 0% Sheetfed offset inks: VOC < 3%; mineral oil content < 1% Heatset web offset inks: VOC < 25%; mineral oil content < 25% Coldset web offset and letterpress inks: VOC < 4%; mineral oil content < 25% Ultraviolet cured inks: VOC < 2%; mineral oil content = 0%
		<ul style="list-style-type: none"> Solvents should not exceed 10% by weight.
		<ul style="list-style-type: none"> Ink containers should be recyclable.

Stationery and office supplies (Category Code – S)		
Product Code	Product Item	Recommended Green Specifications*
S01	Adhesive tape & tape dispenser	Desirable Requirement
		Adhesive tape
		<ul style="list-style-type: none"> Adhesive tape core should contain 40% of recycled paper or recycled plastic materials.
		<ul style="list-style-type: none"> The adhesives used in the adhesive coating layers should not contain organic solvents.
		<ul style="list-style-type: none"> The product should not contain detectable phthalate plasticizers.
		<ul style="list-style-type: none"> The product should comply with the following maximum allowable concentrations of hazardous substances: <ol style="list-style-type: none"> Antimony: < 60 mg/kg by weight Arsenic: < 25 mg/kg by weight Cadmium: < 75 mg/kg by weight Hexavalent chromium: < 60 mg/kg by weight Lead: < 90 mg/kg by weight Selenium: < 500 mg/kg by weight
		Adhesive tape dispenser
		<ul style="list-style-type: none"> The product should contain at least 25% recycled plastic content.
		<ul style="list-style-type: none"> The product should not contain PVC or other chlorine-containing plastics.
		<ul style="list-style-type: none"> The product should be marked with an appropriate resin identification code to ease recycling.
S02	Correction fluid and thinner	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not contain ozone depleting substance regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane, carbon tetrachloride).
		<ul style="list-style-type: none"> The product shall comply with EN71 Part 3 latest version or equivalent.
S03	File box	Mandatory Requirement
		<ul style="list-style-type: none"> The material of the product shall meet one of the following requirements: <ol style="list-style-type: none"> The box shall be made of hard and stiff cardboard containing a minimum of 50% recycled paper fibre; or For virgin fibre products, fibre shall be originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC].
		Desirable Requirement

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ Optical brighteners Non-biodegradable complexing agents such as ethylene diaminetetra acetic acid (EDTA) or its derivatives The product's parts, accessories or affixed plastic materials should be easy to separate and contain no PVC.
S04	General office stationery	<p>Desirable Requirement</p> <ul style="list-style-type: none"> The product should comprise more than 25% of recycled raw materials (particularly for the constituent paper fibre and plastics) of the total product weight. The product should not be manufactured with dyes, pigments or coatings that contain mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts. The product should not contain alkylphenol ethoxylates (APEOs), phthalates or halogenated solvents.
S05	Ink / Toner cartridge	<p>Mandatory Requirement</p> <ul style="list-style-type: none"> The product supplier shall provide collection, recycling and delivery services to various government departments. <p>Desirable Requirement</p> <ul style="list-style-type: none"> The recycling percentage of recovered toner cartridge parts should be over 95% of the total product weight (excluding the toner). The product should not contain any materials containing mercury, cadmium, lead, nickel or hexavalent chromium compounds as constituent parts. Any plastic parts should be manufactured without the following halogenated flame retardants: polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs) and chlorinated paraffins. The toners should not contain azo colourants (dyes or colour pigments) that can release carcinogenic substances.
S06	Self-stick note-pad	<p>Desirable Requirement</p> <ul style="list-style-type: none"> The fibre source of the product should consist of a minimum of 25% recycled post-consumer fibre. For virgin fibre products, at least 25% should be originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC]. The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ Optical brighteners Non-biodegradable complexing agents such as ethylene diaminetetra acetic acid (EDTA) or its derivatives The product should not be manufactured with dyes, pigments or coatings that contain mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts. The product should not contain alkylphenol ethoxylates (APEOs), phthalates, halogenated solvents or ethylene glycol ethers as adhesives. <p>Reminder:</p> <ul style="list-style-type: none"> Avoid using self-stick note-pad as far as possible. For example, use electronic means such as email or text message to serve as reminders.
S07	Paper envelope	Mandatory Requirement

		<ul style="list-style-type: none"> The fibre source of the product shall meet one of the following requirements: <ol style="list-style-type: none"> The fibre source of the product shall consist of 100% recovered fibre by weight and that recovered fibre should contain not less than 50% post-consumer fibre; or For virgin fibre products, at least 25% shall be originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC].
		<ul style="list-style-type: none"> Note: Not applicable to envelope using high speed inserting machine
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ. Optical brighteners Non-biodegradable complexing agents such as ethylene diaminetetra acetic acid (EDTA) or its derivatives.
		<ul style="list-style-type: none"> The product should not contain alkylphenol ethoxylates (APEOs), phthalates, halogenated solvents or ethylene glycol ethers as adhesives. The product should not be manufactured with dyes, pigments or coatings that contain mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts.
S08	Paper file jacket	Mandatory Requirement
		<ul style="list-style-type: none"> Covers shall be made of hard and stiff cardboard containing a minimum of 50% recovered fibre by weight.
		Desirable Requirement
		<ul style="list-style-type: none"> For virgin fibre products, at least 25% should be originated from sustainably managed forest which is certified by internationally recognized standard [e.g. FSC, PEFC]. The product should not be manufactured with dyes, pigments or coatings that contain mercury, lead, copper, chromium, nickel, aluminium or cadmium as constituent parts. The product should not contain alkylphenol ethoxylates (APEOs), phthalates, halogenated solvents or ethylene glycol ethers as adhesives. The product should not be manufactured with the use of the following bleaching agents at any stage in the production/processing of fibre: <ol style="list-style-type: none"> Elemental chlorine Halogenated bleaching agents that produce elemental halogens in-situ Optical brighteners Non-biodegradable complexing agents such as ethylene diaminetetra acetic acid (EDTA) or its derivatives
S09	Pen	Mandatory Requirement
		White Board Marking Pen <ul style="list-style-type: none"> Toxic elements for surface coating and ink shall comply with EN71 Part 3:2013 or latest version.
		Ballpoint Pen <ul style="list-style-type: none"> The product shall use refillable ink or refills, and such refill products should be available.
		Desirable Requirement
		Pen
		<ul style="list-style-type: none"> Should comply with EN71 Part 3:2013 or latest version. The ink should not contain volatile organic solvent, aromatic or halogenated hydrocarbons. Bioaccumulable preservatives should not be used.
S10	Pencil	Mandatory Requirement
		<ul style="list-style-type: none"> The pencil barrel shall be made of at least 70% recycled fibre or materials by weight. Colour paint used shall be non-toxic. No heavy metals in the dye of graphite.

		Desirable Requirement
		<ul style="list-style-type: none"> The pencil lead shall not contain aromatic or halogenated hydrocarbons.
		<ul style="list-style-type: none"> Bioaccumulable preservatives shall not be used.
S11	Plastic file jacket	Mandatory Requirement
		<ul style="list-style-type: none"> For file jacket with plastics laminated and welded paper cardboard and 2-ring spring mechanism, the cardboard shall be hard and stiff and containing at least 50% recovered fibre which should contain a minimum of 50% postconsumer fibre.
		Desirable Requirement
		<ul style="list-style-type: none"> The product should be marked with an appropriate plastic resin identification code.
		<ul style="list-style-type: none"> For file with clear pockets, it should contain a minimum of 30% plastics recycled material by weight, as a proportion of total plastic content.
		<ul style="list-style-type: none"> The sum of total of lead, cadmium, mercury, and hexavalent chromium in the product should not be greater than 100 mg/kg.
		Reminder: <ul style="list-style-type: none"> Consider to use paper file jacket (item S08) to avoid plastic waste generation.
S12	Rechargeable battery	Mandatory Requirement
		<ul style="list-style-type: none"> The heavy metal content of the entire battery shall not exceed the limits given below: <ol style="list-style-type: none"> Cadmium: ≤ 20 ppm Lead: ≤ 40 ppm Mercury: ≤ 5 ppm
		Desirable Requirement
		<ul style="list-style-type: none"> The product should be capable of delivering 65% rated capacity after 500 discharge/charge cycles.
S13	Standard / Alkaline dry battery	Mandatory Requirement
		<ul style="list-style-type: none"> The heavy metal content of the entire battery shall not exceed the limits given below: <ol style="list-style-type: none"> Cadmium: ≤ 10 ppm Lead: ≤ 40 ppm Mercury: ≤ 1 ppm
		Reminder: <ul style="list-style-type: none"> Consider to use rechargeable battery (item S12) instead of single use disposable battery.
S14	Calculator	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ol style="list-style-type: none"> Lead: 0.1% by weight Cadmium: 0.01% by weight Mercury: 0.1% by weight Hexavalent chromium: 0.1% by weight PBBs: 0.1% by weight PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> Solar cell calculators should ensure full functioning at a minimum luminal flux of 50 lux or lower.
		<ul style="list-style-type: none"> The product should not contain organic halogen compounds (e.g. polychlorinated biphenyls) as flame retardants.
S15	Correction tape	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall use refillable materials which are readily available.

		Desirable Requirement
		<ul style="list-style-type: none"> The plastic part of the product should contain a minimum of 25% of recycled plastic material.
		<ul style="list-style-type: none"> The product should not contain the substances regulated in the Montreal Protocol on Substances that Deplete the Ozone Layer (particularly CFCs, HCFCs, 1,1,1-trichloroethane, carbon tetrachloride).
S16	Glue / Adhesive	Desirable Requirement
		<ul style="list-style-type: none"> Adhesive products should not contain more than 5% by weight of Volatile Organic Compounds (VOCs).
		<ul style="list-style-type: none"> The product should not contain alkylphenol ethoxylates (APEOs), phthalates, halogenated solvents or bioaccumulative preservatives. The product should comply with the following maximum allowable concentrations of hazardous substances: <ol style="list-style-type: none"> Cadmium: ≤ 0.5 mg/kg Hexavalent chromium: ≤ 0.5 mg/kg Lead: ≤ 50.0 mg/kg Mercury: ≤ 0.5 mg/kg
S17	Ink for stamp pad	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall not be formulated with pigments based on compounds of antimony, arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, and selenium.
		Desirable Requirement
		<ul style="list-style-type: none"> Ink and dye used should not contain aromatic hydrocarbons and halogenated solvent.
		<ul style="list-style-type: none"> Toxic elements for ink should comply with EN71 Part 3:2013 or latest version.
		<ul style="list-style-type: none"> The product should not be formulated or manufactured with phthalate plasticizers. The product should contain less than 5% and 30% of volatile organic compounds (VOCs) for water-based and solvent-based inks respectively.
S18	Pre-inked stamp	Mandatory Requirement
		<ul style="list-style-type: none"> Ink and dye used shall not contain aromatic hydrocarbons and halogenated solvent.
		<ul style="list-style-type: none"> The product shall not be formulated with pigments based on compounds of antimony, arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, and selenium.
		<ul style="list-style-type: none"> The product shall not be formulated or manufactured with phthalate plasticizers.
		<ul style="list-style-type: none"> The product shall contain less than 5% and 30% of volatile organic compounds (VOCs) for water-based and solvent-based inks respectively.
		Desirable Requirement
		<ul style="list-style-type: none"> Toxic elements for ink should comply with EN71 Part 3:2013 or latest version. The plastic part of the product should contain a minimum of 25% of recycled plastic material.
S19	Clock	Desirable Requirement
		<ul style="list-style-type: none"> The product should be powered by a solar cell.
		<ul style="list-style-type: none"> Any plastic components of the product should be made of recycled plastics.

		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should not contain the restricted substances exceeding the following concentrations: <ul style="list-style-type: none"> i. DEHPs: 0.1% by weight ii. BBPs: 0.1% by weight iii. DBPs: 0.1% by weight iv. DIBPs: 0.1% by weight

Telecommunication equipment and spares (Category Code – T)		
Product Code	Product Item	Recommended Green Specifications*
T01	Key telephone system	Desirable Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		<ul style="list-style-type: none"> The product should comply with international power consumption standards such as Energy Star.
		<ul style="list-style-type: none"> The supplier should provide product take-back/ recycling services to government departments at the end of life of the product.
T02	Mobile phone	Mandatory Requirement
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) shall comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight
		Desirable Requirement
		<ul style="list-style-type: none"> The product should not contain beryllium oxide.
		<ul style="list-style-type: none"> The outer casing and surface coating of the product should not contain nickel.
		<ul style="list-style-type: none"> Any plastic parts should be manufactured without chlorinated paraffins flame retardants.
T03	Radio communication system and transceiver	Desirable Requirement
		<ul style="list-style-type: none"> The main battery should be able to withstand a minimum of 300 charging cycles with at least 60% of the initial capacity.
		<ul style="list-style-type: none"> The heavy metal content in the rechargeable battery should not exceed the limits given below: <ul style="list-style-type: none"> i. Lead: ≤ 5 ppm ii. Cadmium: ≤ 5 ppm iii. Mercury: ≤ 1 ppm
		<ul style="list-style-type: none"> Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are:

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight <ul style="list-style-type: none"> • Any plastic parts should be manufactured without chlorinated paraffins flame retardants. • Component parts should not contain halogenated substances. • The heavy metal content in the rechargeable battery should not exceed the limits given below: <ul style="list-style-type: none"> i. Cadmium: ≤ 20 ppm ii. Lead: ≤ 40 ppm iii. Mercury: ≤ 5 ppm • The supplier should provide product take-back/ recycling services to government departments at the end of life of the product.
T04	Radio paging equipment	<p style="text-align: center;">Desirable Requirement</p> <ul style="list-style-type: none"> • Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS. Maximum Concentration Values of the RoHS restricted substances are: <ul style="list-style-type: none"> i. Lead: 0.1% by weight ii. Cadmium: 0.01% by weight iii. Mercury: 0.1% by weight iv. Hexavalent chromium: 0.1% by weight v. PBBs: 0.1% by weight vi. PBDEs: 0.1% by weight • Component parts should not contain halogenated substances. • Any plastic parts should be manufactured without chlorinated paraffins flame retardants. • The supplier should provide product take-back/ recycling services to government departments at the end of life of the product. • The heavy metal content in the rechargeable battery should not exceed the limits given below: <ul style="list-style-type: none"> i. Cadmium: ≤ 20 ppm ii. Lead: ≤ 40 ppm iii. Mercury: ≤ 5 ppm
T05	Telephone battery	<p style="text-align: center;">Desirable Requirement</p> <ul style="list-style-type: none"> • The product should be able to withstand a minimum of 300 charging cycles with at least 60% of the initial capacity. • The levels of the following hazardous substances in the rechargeable battery should not exceed the following: <ul style="list-style-type: none"> i. Lead: ≤ 5 ppm ii. Cadmium: ≤ 5 ppm iii. Mercury: ≤ 1 ppm

Textile materials and garment (Category Code – U)			
Product Code	Product Item	Recommended Green Specifications*	
U01	Clothing and textile products	Desirable Requirement	
		• The product should contain at least 10% of recycled textile fiber materials.	
		• The levels of ionic impurities for pigments used should not exceed the following:	
		Items	Levels of ionic impurities
		Arsenic	50 ppm
		Cadmium	50 ppm
Chromium	100 ppm		
Lead	100 ppm		
Mercury	25 ppm		

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

55/70

		<ul style="list-style-type: none">The levels of ionic impurities for dyes used should not exceed the following:<table><tr><th>Items</th><th>Levels of ionic impurities</th></tr><tr><td>Arsenic</td><td>50 ppm</td></tr><tr><td>Cadmium</td><td>20 ppm</td></tr><tr><td>Chromium</td><td>100 ppm</td></tr><tr><td>Cobalt</td><td>500 ppm</td></tr><tr><td>Copper</td><td>250 ppm</td></tr><tr><td>Lead</td><td>100 ppm</td></tr><tr><td>Mercury</td><td>4 ppm</td></tr></table>Azo dyes should not be used.For products which contact the skins directly, the levels of formaldehyde should not exceed 75 ppm. <p>Reminder:</p> <ul style="list-style-type: none">Consider simple / reusable packaging	Items	Levels of ionic impurities	Arsenic	50 ppm	Cadmium	20 ppm	Chromium	100 ppm	Cobalt	500 ppm	Copper	250 ppm	Lead	100 ppm	Mercury	4 ppm
Items	Levels of ionic impurities																	
Arsenic	50 ppm																	
Cadmium	20 ppm																	
Chromium	100 ppm																	
Cobalt	500 ppm																	
Copper	250 ppm																	
Lead	100 ppm																	
Mercury	4 ppm																	
U02	Textile bag (nylon, canvas and gunny bag)	<table><tr><td>Mandatory Requirement</td></tr><tr><td><ul style="list-style-type: none">The product shall not include polyvinyl chloride (PVC) material.</td></tr><tr><td>Desirable Requirement</td></tr><tr><td><ul style="list-style-type: none">The product should contain recycled textile fiber materials.The sum of lead, mercury, cadmium, and hexavalent chromium should not exceed 100 parts per million (ppm) by weight.Azo dyes should not be used.</td></tr></table>	Mandatory Requirement	<ul style="list-style-type: none">The product shall not include polyvinyl chloride (PVC) material.	Desirable Requirement	<ul style="list-style-type: none">The product should contain recycled textile fiber materials.The sum of lead, mercury, cadmium, and hexavalent chromium should not exceed 100 parts per million (ppm) by weight.Azo dyes should not be used.												
Mandatory Requirement																		
<ul style="list-style-type: none">The product shall not include polyvinyl chloride (PVC) material.																		
Desirable Requirement																		
<ul style="list-style-type: none">The product should contain recycled textile fiber materials.The sum of lead, mercury, cadmium, and hexavalent chromium should not exceed 100 parts per million (ppm) by weight.Azo dyes should not be used.																		
U03	Bag / Backpack	<table><tr><td>Mandatory Requirement</td></tr><tr><td><ul style="list-style-type: none">The product shall contain at least 50% by weight of recycled materials, for example, recycled fiber.</td></tr><tr><td>Desirable Requirement</td></tr><tr><td><ul style="list-style-type: none">Each material type (e.g. buttons, zipper, buckles, reflectors, plastic emblems, metal parts) should not contain lead, cadmium or nickel. Also, plastic parts shall not contain phthalates or consist of chlorinated plastic.The product should not include polyvinyl chloride (PVC) material.The levels of ionic impurities for pigments used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 50 ppmiii. Chromium: 100 ppmiv. Lead: 100 ppmv. Mercury: 25 ppmThe levels of ionic impurities for dyes used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 20 ppmiii. Chromium: 100 ppmiv. Cobalt: 500 ppmv. Copper: 250 ppmvi. Lead: 100 ppmvii. Mercury: 4 ppmAzo dyes should not be used.</td></tr></table>	Mandatory Requirement	<ul style="list-style-type: none">The product shall contain at least 50% by weight of recycled materials, for example, recycled fiber.	Desirable Requirement	<ul style="list-style-type: none">Each material type (e.g. buttons, zipper, buckles, reflectors, plastic emblems, metal parts) should not contain lead, cadmium or nickel. Also, plastic parts shall not contain phthalates or consist of chlorinated plastic.The product should not include polyvinyl chloride (PVC) material.The levels of ionic impurities for pigments used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 50 ppmiii. Chromium: 100 ppmiv. Lead: 100 ppmv. Mercury: 25 ppmThe levels of ionic impurities for dyes used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 20 ppmiii. Chromium: 100 ppmiv. Cobalt: 500 ppmv. Copper: 250 ppmvi. Lead: 100 ppmvii. Mercury: 4 ppmAzo dyes should not be used.												
Mandatory Requirement																		
<ul style="list-style-type: none">The product shall contain at least 50% by weight of recycled materials, for example, recycled fiber.																		
Desirable Requirement																		
<ul style="list-style-type: none">Each material type (e.g. buttons, zipper, buckles, reflectors, plastic emblems, metal parts) should not contain lead, cadmium or nickel. Also, plastic parts shall not contain phthalates or consist of chlorinated plastic.The product should not include polyvinyl chloride (PVC) material.The levels of ionic impurities for pigments used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 50 ppmiii. Chromium: 100 ppmiv. Lead: 100 ppmv. Mercury: 25 ppmThe levels of ionic impurities for dyes used should not exceed the following:<ul style="list-style-type: none">i. Arsenic: 50 ppmii. Cadmium: 20 ppmiii. Chromium: 100 ppmiv. Cobalt: 500 ppmv. Copper: 250 ppmvi. Lead: 100 ppmvii. Mercury: 4 ppmAzo dyes should not be used.																		
U04	Bedding	<table><tr><td>Mandatory Requirement</td></tr><tr><td><ul style="list-style-type: none">The amount of free formaldehyde in the product shall not exceed 20 ppm.The concentration of the following heavy metals and their compounds in the product shall not exceed 1 mg/kg by weight:<ul style="list-style-type: none">i. Cadmiumii. Hexavalent chromiumiii. Arsenic</td></tr></table>	Mandatory Requirement	<ul style="list-style-type: none">The amount of free formaldehyde in the product shall not exceed 20 ppm.The concentration of the following heavy metals and their compounds in the product shall not exceed 1 mg/kg by weight:<ul style="list-style-type: none">i. Cadmiumii. Hexavalent chromiumiii. Arsenic														
Mandatory Requirement																		
<ul style="list-style-type: none">The amount of free formaldehyde in the product shall not exceed 20 ppm.The concentration of the following heavy metals and their compounds in the product shall not exceed 1 mg/kg by weight:<ul style="list-style-type: none">i. Cadmiumii. Hexavalent chromiumiii. Arsenic																		

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		iv. Lead
		<ul style="list-style-type: none"> The product shall not contain phthalates.
		Desirable Requirement
		<ul style="list-style-type: none"> At least 10% of cotton and other natural cellulose seed fibres of the product should be organic or from sustainable source certified by internationally recognized standards (such as Better Cotton Standard System and Global Organic Textile Standard [GOTS]).
		<ul style="list-style-type: none"> The product should contain at least 20% of recycled textile materials.
		<ul style="list-style-type: none"> The following substances should not be used in the production process of products: <ul style="list-style-type: none"> ➢ Azo dyes ➢ Chlorinated bleaching agents ➢ Aromatic solvents

Vehicles and spare parts (Category Code – V)		
Product Code	Product Item	Recommended Green Specifications*
V01	Private cars	Mandatory Requirement
		<ul style="list-style-type: none"> Private cars with 5 or less seats (including driver) <ul style="list-style-type: none"> ➢ The vehicle shall be electric vehicle unless good justifications are given and approved by Department Head or Senior Directorate level (i.e. D3 level or above) in consultation with EPD. ➢ If justified that electric vehicles cannot be procured, the vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.
		<ul style="list-style-type: none"> Private cars with more than 5 seats (including driver) <ul style="list-style-type: none"> ➢ The vehicle shall meet the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) for newly registered private cars and shall not be diesel private cars.
		Desirable Requirement
		<ul style="list-style-type: none"> For private cars with 5 or less seats (including driver), if justified that electric vehicles cannot be procured, the vehicle should be hybrid electric vehicle.
		<ul style="list-style-type: none"> For private cars with more than 5 seats (including driver), the vehicle should be in the order of priority electric vehicles or hybrid electric vehicle.
V02	Light goods vehicles	Mandatory Requirement
		<ul style="list-style-type: none"> The vehicle shall meet the Environmental Protection Department's qualifying standards for tax incentives scheme for environment-friendly commercial vehicles.
		<ul style="list-style-type: none"> The vehicle shall be in the order of priority petrol or diesel vehicle.
		Desirable Requirement
V03	Other commercial vehicles	<ul style="list-style-type: none"> The vehicle should be in the order of priority electric vehicle or hybrid electric vehicle.
		Mandatory Requirement
		<ul style="list-style-type: none"> The vehicle shall meet the Environmental Protection Department's qualifying standards for tax incentives scheme for environment-friendly commercial vehicles.
V04	Rubber / Retreaded tyre	Desirable Requirement
		<ul style="list-style-type: none"> Tyres should contain at least 5% recycled rubber by weight, as a proportion of total content of rubber compound.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> The following compounds should not be added to the finished products: <ul style="list-style-type: none"> i. Halogenated organic solvents or binding agents ii. Elemental halogens (e.g. fluorine, chlorine, including in-situ precursors from halide salts) iii. Fluoropolymer additives or coatings iv. Aniline based amines v. Phthalates vi. Aziridine or polyaziridines vii. Pigments and additives that contain lead, tin, arsenic, cadmium, mercury or their compounds viii. CFCs, HCFCs, HFCs or any ozone depleting substances ix. PBDEs, or chlorinated organic flame retardants x. 1,3-butadiene
--	--	---

Water using equipment (Category Code – W)		
Product Code	Product Item	Recommended Green Specifications*
W01	Showers for bathing	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall meet the Grade 1 water efficiency rating (i.e. nominal flow rate of less than or equal to 9 litres per minute) for Showers for Bathing of the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department.
		Desirable Requirement
		<ul style="list-style-type: none"> Product and their packaging materials should be recyclable in nature which do not contain heavy metals like lead, cadmium, mercury or hexavalent chromium, and should not contain organically bound halogens.
W02	Urinal equipment	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall meet the Grade 1 water efficiency rating for Urinal Equipment of the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department, unless product with other water efficiency ratings is required to meet particular functional purpose.
		Desirable Requirement
		<ul style="list-style-type: none"> Product and their packaging materials should be recyclable in nature which do not contain heavy metals like lead, cadmium, mercury or hexavalent chromium, and should not contain organically bound halogens.
W03	Water tap	Mandatory Requirement
		<ul style="list-style-type: none"> The product shall meet the Grade 1 water efficiency rating for Water Taps of the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department, unless product with other water efficiency ratings is required to meet particular functional purpose.
		Desirable Requirement
		<ul style="list-style-type: none"> Product and their packaging materials should be recyclable in nature which do not contain heavy metals like lead, cadmium, mercury or hexavalent chromium, and should not contain organically bound halogens. Motion-sensing products should be able to stop the water flow less than 2 second after exiting the use stage or power supply disruption.
W04	Water closet	Desirable Requirement
		<ul style="list-style-type: none"> The product should have obtained a Grade 2 or above with preference on Grade 1 water efficiency rating for water closets of the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department, unless product with other water efficiency ratings is required to meet particular functional purpose.

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Product and their packaging materials should be recyclable in nature which do not contain heavy metals like lead, cadmium, mercury or hexavalent chromium, and should not contain organically bound halogens.
W05	Flow controller	<p>Mandatory Requirement</p> <ul style="list-style-type: none"> The product shall meet the Grade 1 water efficiency rating for Flow Controller of the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department, unless product with other water efficiency ratings is required to meet particular functional purpose.

Services (Category Code – X)		
Product Code	Product Item	Recommended Green Specifications*
X01	Event, meeting & conference services ⁵	Mandatory Requirement
		<ul style="list-style-type: none"> Transportation The service provider shall provide information of public transportation available to participants to the event venue.
		<ul style="list-style-type: none"> Waste Management Plastic bottled water shall not be provided.
		Desirable Requirement
		<ul style="list-style-type: none"> Event Sustainability Management System The service provider should establish an Event Sustainability Management System (ESMS) for the selected venue certified to ISO 20121:2012 standard or latest.
		<ul style="list-style-type: none"> Energy Management For indoor event, meeting and conference, the indoor air temperature should maintain at 25.5°C for energy saving purpose.
		<ul style="list-style-type: none"> Food and Beverage Selection and Arrangement The service provider should adopt the green specification of “X04 - food and catering services” in the Government’s green procurement list promulgated by EPD.
X02	Cleansing services	<ul style="list-style-type: none"> Waste Management <ol style="list-style-type: none"> The service provider should take steps to minimise printing materials (e.g. provision of e-registration process, or e-channels for communication and promotion); The service provider should provide paper and stationery following green purchase tips promulgated by EPD as far as practicable; The service provider should provide waste recycling bins in the public accessible areas nearby; The service provider should install filtered water dispensers connected to water mains in the event venue.
		Desirable Requirement
		<ul style="list-style-type: none"> Environmental Management Systems The service provider should establish an Environmental Management System certified to ISO 14001:2015 standard or latest.
		<ul style="list-style-type: none"> Use of Cleansing Chemicals The service provider should select all-purpose cleaners that meet the mandatory requirements in the Government’s green procurement list promulgated by EPD.
		<ul style="list-style-type: none"> Use of Cleansing Accessories <ol style="list-style-type: none"> At least 20% of cleaning cloths should be made of microfiber; For cleaning cloths containing fibres, these fibres should contain recycled content and should take up to at least 70% by weight of the product.

⁵ The service provider should make reference to “A Waste Reduction Guidebook for Large Event Organizers” issued by EPD (https://www.wastereduction.gov.hk/sites/default/files/GreenEvent_Guidebook_Eng_201801.pdf).

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> • Energy Saving in Equipment <ol style="list-style-type: none"> The service provider should select energy efficient vacuum cleaner that meet the requirements of the Government's green procurement list promulgated by EPD; All powered equipment should be switched off and remove the plug from socket when not in use; Filters of vacuum cleaners should be changed or cleaned regularly to attain the optimal cleaning efficiency.
		<ul style="list-style-type: none"> • Waste Management <ol style="list-style-type: none"> The service provider should provide waste management proposal covers waste sorting and storing recyclable waste in recycling facilities; The service provider should engage waste recycling contractors for collection of recyclable materials or facilitate the collection by Government contractor.
		<ul style="list-style-type: none"> • Water Saving <ol style="list-style-type: none"> The service provider should wash in a basin rather than under running water whenever practical, and keep water level in the basin to minimum to reduce spillage; The service provider should report any leakage of faucets and hoses for repairing immediately; The service provider should use mops instead of running water hoses for cleaning floors whenever practical.
		<ul style="list-style-type: none"> • Staff Training All workers should receive regular trainings to maintain knowledge of correct procedures for equipment and techniques used to maintain environmental standards.
X03	Laundry services	Desirable Requirement
		<ul style="list-style-type: none"> • Use of Chemicals The laundry detergent / soap should meet the mandatory requirements in the Government's green procurement list promulgated by EPD.
		<ul style="list-style-type: none"> • Water Use The washing machine should have obtained a Grade 1 Type Water Efficiency Label under the Water Efficiency Labelling Scheme of Water Supplies Department (WSD).
		<ul style="list-style-type: none"> • Energy Management The washing machine should have obtained a Grade 1 Energy Label under the Energy Efficiency Labelling Scheme of Electrical and Mechanical Services Department (EMSD).
		<ul style="list-style-type: none"> • Material Reuse / Recycling The service provider should establish a system to collect, reuse or recycle used hangers.
		<ul style="list-style-type: none"> • Transportation The service provider should adopt mandatory requirements for transportation services / vehicles in the Government's green procurement list promulgated by EPD.
X04	Food and catering services	Mandatory Requirement
		<ul style="list-style-type: none"> • Waste Management <ol style="list-style-type: none"> Plastic bottled water shall not be provided. Reusable utensils, dishes and containers shall be provided.
		Desirable Requirement <ul style="list-style-type: none"> • Food <ol style="list-style-type: none"> For organic vegetables, at least 10% of the total monetary value of raw ingredients should be certified to organic products. For seafood products, sustainable seafood should be provided. Food items on the Government's sustainability-conscious menu, e.g. shark fin, black moss and Bluefin tuna, should be avoided.⁶ For banquet, the number of main dishes should be limited to no more than 6 to avoid excessive food.

⁶ It is suggested to make reference to Environmental Bureau Circular Memorandum No. 1/2016 on "Sustainability-Conscious Food Consumption in Official Entertainment" (http://etwb.host.ccgo.hksarg/ENB_CirNo_01_2013.pdf).

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		<ul style="list-style-type: none"> Waste Management <ol style="list-style-type: none"> The service provider should provide a waste management proposal to identify, collect and recycle all types of recyclable materials as far as practicable. The service provider should take steps to handle the surplus food in order to minimise food (e.g. food donation, takeaway by guests, etc.). The service provider should collect packaging materials for reuse or recycling. Provision of disposable tableware including napkins, utensils, stirring sticks and straws should be avoided. Condiments should be served in reusable container instead of individual pack. The service provider should use electronic means or printed matters to remind guests to reduce food waste. Waste cooking oils (WCO) (on-site/off-site) should be collected by EPD registered WCO collector for recycling. Equipment The coolants used in refrigerators and freezers to be used in carrying out the service should be free of ozone-depleting substances.
X05	Property management services	<p>Desirable Requirement</p> <ul style="list-style-type: none"> Waste Management <ol style="list-style-type: none"> The service provider should provide a waste management proposal to identify, collect and recycle all types of recyclable materials as far as practicable. The service provider should monitor and measure general waste and recycled materials and generate a monthly report to the contracting authority. Adequate space and facilities should be provided to facilitate separation, collection, sorting and storage of materials for recycling, including installation of waste separation bins and separate collection of food and yard waste for treatment where applicable and needed⁷. Energy and Water Performance The service provider shall produce a monthly energy and water report using the data from Building Management System (BMS) / energy bills / water bills to identify trends in energy / water use within the managed operations, and submit to the contracting authority. The report shall also include recommendations on energy / water saving initiatives that could be made. Environmental Management The service provider shall establish an Environmental Management System (EMS) certified to ISO 14001:2015 standard or latest. Cleansing Services The service provider should adopt the green specification of "X02 - cleansing services" in the Government's green procurement list promulgated by EPD.
X06	Travel / Hotel services	<p>Desirable Requirement</p> <ul style="list-style-type: none"> Travel Service The service provider should provide information of public transportation available to travellers. Hotel Service <ol style="list-style-type: none"> The service provider should select hotel which provides choices to guests on how often their bed linens / towels / bathrobes will be changed. The service provider should select hotel which provides recycling bins at the guest rooms or accessible public areas. The service provider should encourage guests to prepare their own toiletries (e.g. toothbrush, toothpaste) to avoid using disposal items in guest rooms. Waste Management Provision of plastic bottled water shall be avoided.
X07	Hiring of light goods vehicles	<p>Mandatory Requirement</p> <ul style="list-style-type: none"> The vehicle hired in carrying out the service shall meet EURO V Standard (first registered on or after 1 June 2012 for petrol vehicle and 31 December 2012 for diesel vehicle).

⁷ It is suggested to make reference to Development Bureau Technical Circular No. 2/2015 and Environment Bureau Circular Memorandum No. 3/2015 on "Green Government Buildings" (<https://www.devb.gov.hk/filemanager/technicalcirculars/en/upload/336/1/C-2015-02-01.pdf>).

* For information, local testing and certification services, such as those accredited by Hong Kong Accreditation Service (link: <http://www.itc.gov.hk/en/quality/hkas/about.htm>), are available for verification of compliance of many of the green specifications.

		Desirable Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service should be either: <ol style="list-style-type: none"> Electric vehicle; or EURO VI Standard hybrid vehicle or above; or EURO VI Standard or above
X08	Hiring of lorries	Mandatory Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service shall be registered on or after 1 October 2006 which meets EURO IV Standard.
		Desirable Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service should be either: <ol style="list-style-type: none"> Electric vehicle; or EURO V Standard hybrid vehicle or above; or EURO V Standard or above
X09	Hiring of saloon cars	Mandatory Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service shall be a petrol vehicle registered on or after 1 June 2012 which meets EURO V Standard.
		Desirable Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service should be either: <ol style="list-style-type: none"> Electric vehicle; or EURO VI Standard petrol hybrid vehicle or above; or EURO VI Standard petrol vehicle or above
X10	Hiring of coaches with 20 or more passenger seats	Mandatory Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service shall be registered on or after 1 October 2006 which meets EURO IV Standard.
		Desirable Requirement
		<ul style="list-style-type: none"> The vehicle hired in carrying out the service should be either: <ol style="list-style-type: none"> Electric vehicle; or EURO V Standard hybrid vehicle or above; or EURO V Standard or above

Glossary:

AOX: Adsorbable Organic Halogens

APDs: Alkylphenol derivatives

APEO: Alkylphenol ethoxylates

BBP: Benzylbutylphthalate

BEC: Building Energy Code

BFR: Brominated Flame Retardant

BMS: Building Management System

CFCs: Chlorofluorocarbons

CFR: Chlorinated Flame Retardants

Cl: Chlorine

CO: Carbon monoxide

CO₂: Carbon dioxide

COD: Chemical Oxygen Demand

COP: Coefficient of Performance

CRI: Colour Rendering Index

CSF: Condensed Silica Fume

dB(A): decibel (A-weighted measurements)

DBP: Dibutyl phthalate

DEHP: Bis(2-ethylhexyl)phthalate

DIBP: Diisobutyl phthalate

DMF: Dimethylformate

DTPA: Diethylene triamine penta acetic acid

E. coli: Escherichia coli

EC50: Half maximal effective concentration

EDTA: Ethylene diamine tetraacetic acid

EMS: Environmental Management System

EN: European Standards

EN71 part 3: Safety of toys — Part 3: Migration of certain elements

EN717-1: Wood-based panels - Determination of formaldehyde release - Part 1: Formaldehyde emission by the chamber method

ESMS: Event Sustainability Management System

EU: European Union

FSC: Forest Stewardship Council

FTOH: Fluorotelomer alcohol

GGBS: Ground Granulated Blastfurnace Slag

GOTS: Global Organic Textile Standard

HCFCs: Hydrochlorofluorocarbons

HFCs: Hydrofluorocarbons

HICC: Hydroxyisohexyl 3-cyclohexene carboxaldehyde

IARC: International Agency for Research on Cancer

IEC: International Electrotechnical Commission

IFRA: International Fragrance Association

ISM: The Industrial, Scientific, and Medical

ISO: International Organization for Standardization

ISO 14001: Environmental management systems -- Requirements with guidance for use

LC50: Lethal Concentration 50%

LCD: Liquid crystal display

LD50: Lethal Dose 50%

LED: Light-emitting diode

LPG: *Liquefied petroleum gas*

lm: Lumen

lux: illuminance

MDF board: Medium-density Fibreboard

NMP: N-Methylpyrrolidone

NOx: Mono-nitrogen oxides (i.e., nitrogen (II) oxide and nitrogen (IV) oxide)

NTA: Nitritotriacetate

OECD: Organisation for Economic Co-operation and Development

PBBs: Polybrominated biphenyls

PBDEs: Polybrominated diphenyl ethers

PCP: Pentachlorophenol

PEFC: Programme for the Endorsement of Forest Certification Schemes

PFA: Pulverised fuel ash

PFHxS: Perfluorohexanesulfonate

PFOS: Perfluorooctanesulfonate

PFOA: Perfluorooctanoate

ppm: Parts-per-million

PUR: Polyurethane

PVC: Polyvinyl chloride

RAP: Reclaimed Asphalt Pavement

RoHS: the Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations

RSB: Roundtable on Sustainable Biomaterials

RSPO: Roundtable on Sustainable Palm Oil

SO₂: Sulfur dioxide

TCE: Trichloroethylene

TCP: Tetrachlorophenol

TiO₂: Titanium dioxide

TVOCs: Total Volatile Organic Compounds (TVOCs)

VCM: Vinyl chloride monomer

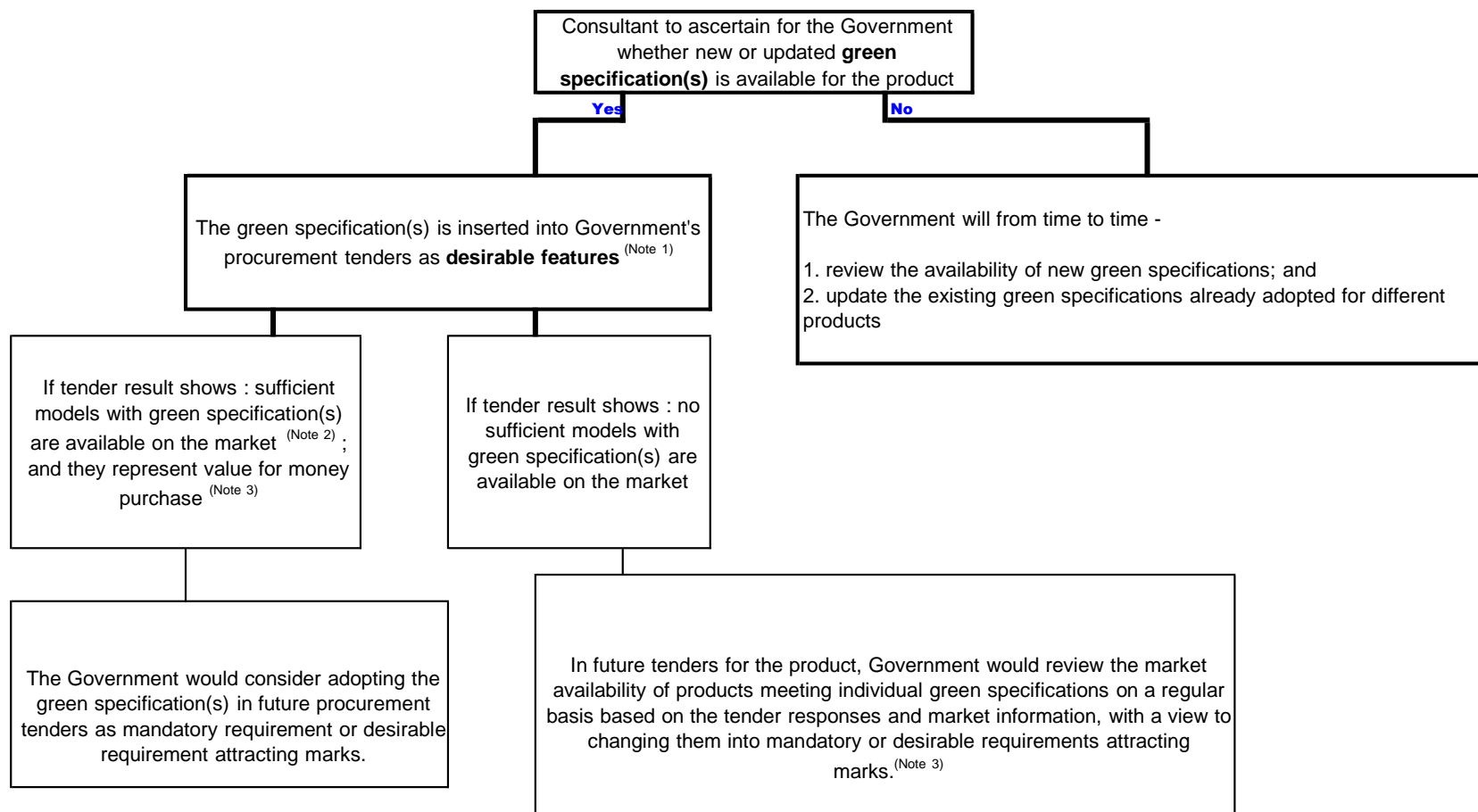
VOC: Volatile Organic Compounds

WCO: Waste Cooking Oils

WELS: Water Efficiency Labelling Scheme

Flow chart showing existing green procurement mechanism

Annex III



Note 1

Desirable features mean the preferable features in a product. Under normal circumstances, the green features will not be taken into account in the tender assessment. But if there are two or more lowest conforming offers which are identical in all other respects and only one desirable specification such as a green feature, an offer meeting the “desirable” specification may be given preference. The intention should be spelt out clearly in the tender document.

Note 2

Each case has to be considered on its own merits and there is no fixed number on what constitutes adequate supply in each case. Nonetheless, if there are less than three models meeting the specifications for that product, generally GLD would consider that there is not yet an adequate supply of that product with green specifications.

Note 3

GLD usually assesses whether it is economically rational to procure a product with green specifications on a case by case basis and would take into account other factors such as whether there is policy support for such procurement. Consideration may also be given to adopting a marking scheme with appropriate technical weighting for the green features against the price offered.

List of item categories

Cat. Code	Category	Product Code	Product Item
A	Agriculture and horticulture	A01	Garden machinery (lawn mowers)
		A02	Pest control (termiticide)
		A03	Fertilizers / Compost
		A04	Mulch for horticultural use
		A05	Growing media
B	Building and construction supplies	B01	Flooring materials (plastic-, wood-, cork- or bamboo- based)
		B02	PVC pipe and fitting
		B03	Solvent-based / Water-based paint for building finish
		B04	Carpet
		B05	Adhesives and sealants
		B06	Concrete
		B07	Timber door
		B08	Gypsum plasterboard
		B09	Concrete paving units (use of recycled aggregates only)
		B10	Photovoltaic panel
		B11	Asphalt pavement
		B12	Fill materials
		B13	Non-structural steel work (such as steel mesh, steel tubing, steel door and steel louvre)
		B14	Sub-base materials
		B15	Rubber mat for playground
		B16	Thermal insulation
		B17	Ceramic tiles
		B18	Varnish and wax polish
		B19	Window
		B20	Wood panel
		B21	Cement
		B22	Paint and varnish remover
		B23	Partition wall block
		B24	Wallpaper

		B25	Heat pump
		B26	Chiller
		B27	Water pump / Pool pump
C	Cleansing products	C01	All purpose cleaner
		C02	Laundry detergent /soap
		C03	Sanitary detergent
		C04	Soap toilet liquid
		C05	Cleaning rags and cotton waste
		C06	Disinfectant
		C07	Deodorant
		C08	Detergents for dishwasher
		C09	Hand soap
		C10	Personal care products
D	Computer equipment and products	D01	Desktop computer
		D02	LCD & LED monitor
		D03	Network products (including LAN switches, routers, etc.)
		D04	Notebook computer
		D05	Printer
		D06	Server
		D07	All-in-one multifunctional devices
		D08	Scanner
		D09	Computer keyboard & mouse
		D10	Tablet computer
		D11	External hard disk
E	Water dispenser & accessories	E01	Hot / Cold bottled water dispensers
		E02	Water carboy for water dispenser
F	Electrical appliances	F01	Domestic exhaust fan
		F02	Electric fan
		F03	Electric radiator (oil filled)
		F04	Refrigerator
		F05	Room air conditioner
		F06	Air purifier / cleaner
		F07	Dehumidifier
		F08	Dish washer
		F09	Electric storage water heater
		F10	LCD projector

		F11	Microwave oven
		F12	Television
		F13	Vacuum cleaner
		F14	Washing machine
		F15	Audio equipment (stereo system)
		F16	Induction cooker
		F17	Video equipment (video players & recorders)
		F18	Water boiler
		F19	Transformer
		F20	Domestic battery charger
		F21	Freezer
		F22	Commercial electric oven
		F23	Hand dryer
		F24	Cloth drying machine
		F25	Electric kettle
		F26	Digital camera
		F27	Electric rice cooker
G	Gas appliances	G01	LPG hot plate
		G02	LPG water heater
		G03	Towngas gas cooker
		G04	Towngas water heater
H	Light fittings	H01	Electronic ballast for fluorescent tube / lamp
		H02	Fluorescent tube / Compact fluorescent lamp
		H03	LED lamp
I	Fuel oils and hydrocarbon lubricants	I01	Automotive fuel oil
		I02	Lubricating oil / Grease
		I03	Fuel oil for non-road based applications
J	Furniture	J01	Chair
		J02	Mattress
		J03	Partition screen
		J04	Sofa
		J05	Steel filing cabinet
		J06	Workstation panel
		J07	Metal furniture
		J08	Wooden furniture

		J09	Outdoor furniture (chair, table & bench)
K	Containers and collection bins for waste / recyclables	K01	Plastic rubbish bin
		K02	Wheeled refuse container
		K03	Stainless steel recyclables collection bin
L	Wearables	L01	Safety helmet
		L02	Glove for field work [polythene (disposable), rubber (industrial)]
		L03	Rainboots
		L04	Safety boots / shoes
M	Office equipment	M01	Facsimile equipment
		M02	Photocopier
		M03	Fire extinguisher
		M04	Paper shredder
N	Packaging materials	N01	Food packaging - plastic films
		N02	Packaging paper
		N03	Plastic films and sheets
		N04	Carton boxes
O	Paper for printing and photocopying	O01	Continuous stationery for computer-generated form
		O02	Recycled photocopying paper (office use)
		O03	Recycled paper for printing
		O04	Woodfree photocopying paper (office use)
		O05	Printing paper coated on both sides
		O06	Woodfree paper for printing
		O07	Publication booklets
		O08	Paper for newsprint
P	Paper products other than for printing and photocopying	P01	Brown wrapping paper
		P02	Toilet paper & paper towel
		P03	Index card (paper)
		P04	Compostable paper bag
		P05	Notepad
		P06	Printed labels
Q	Plastic and rubber products	Q01	Plastic garbage bag
		Q02	Plastic bags (other uses)
		Q03	Traffic management tools (traffic bollard, traffic cones & road barrier)
		Q04	General plastic products

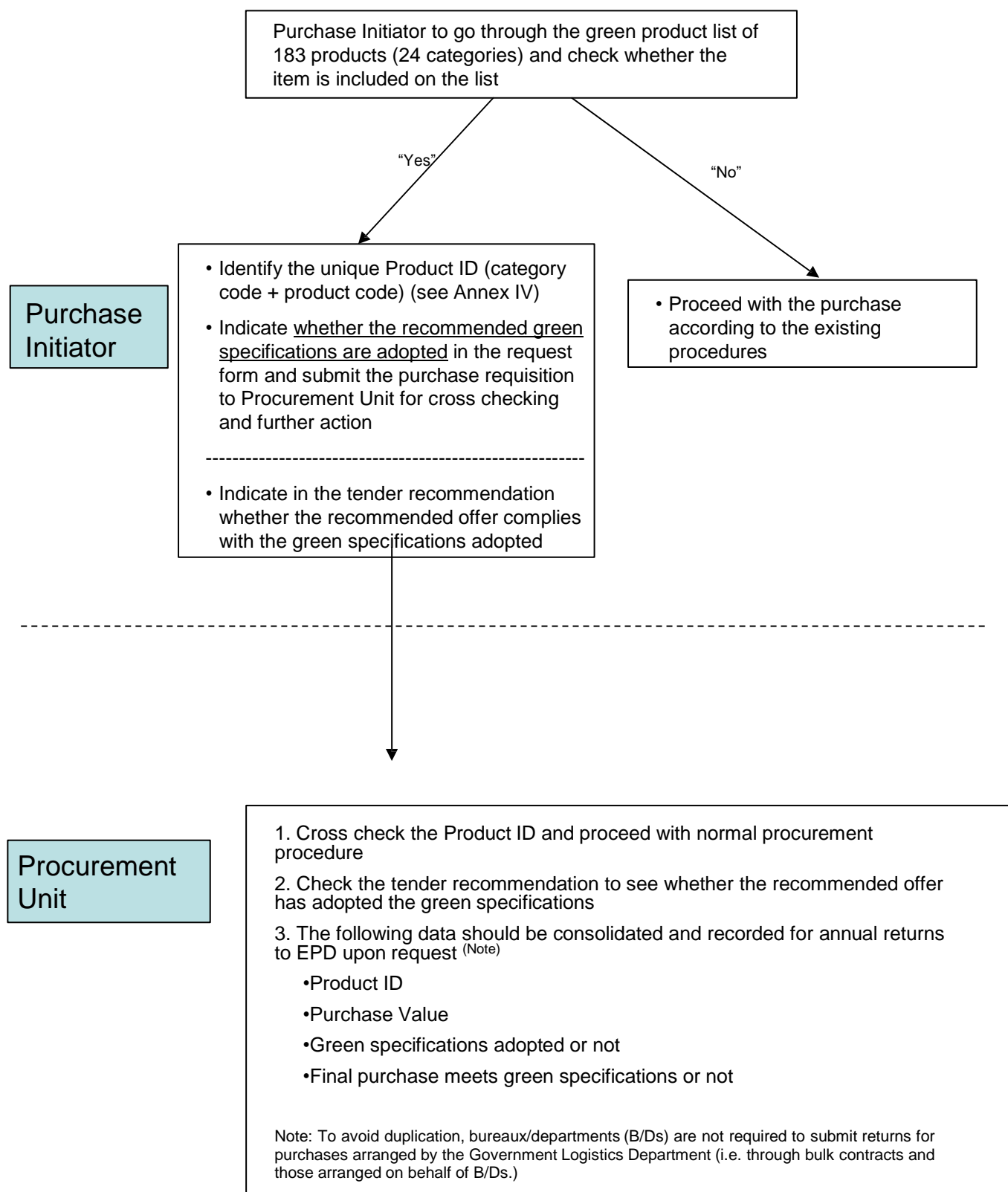
		Q05	General rubber products
R	Printing and publishing equipment and supplies	R01	Environment-friendly lithographic process inks
S	Stationery and office supplies	S01	Adhesive tape & tape dispenser
		S02	Correction fluid and thinner
		S03	File box
		S04	General office stationery
		S05	Ink / Toner cartridge
		S06	Self-stick note-pad
		S07	Paper envelope
		S08	Paper file jacket
		S09	Pen
		S10	Pencil
		S11	Plastic file jacket
		S12	Rechargeable battery
		S13	Standard / Alkaline dry battery
		S14	Calculator
		S15	Correction tape
		S16	Glue / Adhesive
		S17	Ink for stamp pad
		S18	Pre-inked stamp
		S19	Clock
T	Telecommunication equipment and spares	T01	Key telephone system
		T02	Mobile phone
		T03	Radio communication system and transceiver
		T04	Radio paging equipment
		T05	Telephone battery
U	Textile materials and garment	U01	Clothing and textile products
		U02	Textile bag (nylon, canvas and gunny bag)
		U03	Bag / Backpack
		U04	Bedding
V	Vehicles and spare parts	V01	Private cars
		V02	Light goods vehicles
		V03	Other commercial vehicles
		V04	Rubber / Retreaded tyre
W	Water using equipment	W01	Showers for bathing

		W02	Urinal equipment
		W03	Water taps
		W04	Water closet
		W05	Flow controller
		X01	Event, meeting & conference services
X	Services	X02	Cleansing services
		X03	Laundry services
		X04	Food and catering services
		X05	Property management services
		X06	Travel / Hotel services
		X07	Hiring of light goods vehicles
		X08	Hiring of lorries
		X09	Hiring of saloon cars
		X10	Hiring of coaches with 20 or more passenger seats



New categories or products

Proposed Purchase Procedure



Template for Reporting Green Procurement to EPD

To: EPD (e-mail: mptsui@epd.gov.hk) & (e-mail: mwchu@epd.gov.hk); please provide last calendar year's return by end of February of each year ^[Note1]

From: Bureau/Department: _____ Contact: _____
 Tel: _____ E-mail: _____

[Note 1] To avoid duplication, Bureaux/Departments are not required to submit returns for purchases arranged by GLD (i.e. through bulk contracts and those arranged on behalf of B/Ds by GLD).

[Note 2] Among the 183 government procurement items with established green specifications, there is a total of 109 items which have been identified by the government as products with small amount purchase need. Small amount purchase refers to a maximum single purchase value of HK\$50,000 per order regardless of the quantity of the purchase item. Bureau/department can follow the green purchase tips to facilitate small amount purchase of these 109 designated items.

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
A	Agriculture and horticulture	A01	Garden machinery (lawn mowers)			—	—
		A02	Pest control (termiticide)			—	—
		A03	Fertilizers / Compost				
		A04	Mulch for horticultural use			—	—
		A05	Growing media			—	—
B	Building and construction supplies	B01	Flooring materials (plastic-, wood-, cork- or bamboo- based)				
		B02	PVC pipe and fitting			—	—
		B03	Solvent-based / Water-based paint for building finish			—	—
		B04	Carpet				
		B05	Adhesives and sealants			—	—
		B06	Concrete			—	—
		B07	Timber door				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		B08	Gypsum plasterboard			—	—
		B09	Concrete paving units (use of recycled aggregates only)			—	—
		B10	Photovoltaic panel			—	—
		B11	Asphalt pavement			—	—
		B12	Fill materials			—	—
		B13	Non-structural steel work (such as steel mesh, steel tubing, steel door and steel louvre)			—	—
		B14	Sub-base materials			—	—
		B15	Rubber mat for playground			—	—
		B16	Thermal insulation			—	—
		B17	Ceramic tiles			—	—
		B18	Varnish and wax polish			—	—
		B19	Window			—	—
		B20	Wood panel				
		B21	Cement			—	—
		B22	Paint and varnish remover			—	—
		B23	Partition wall block			—	—
		B24	Wallpaper			—	—
		B25	Heat pump				
		B26	Chiller			—	—
		B27	Water pump / Pool pump				
C	Cleansing products	C01	All purpose cleaner				
		C02	Laundry detergent /soap			—	—

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		C03	Sanitary detergent			—	—
		C04	Soap toilet liquid			—	—
		C05	Cleaning rags and cotton waste			—	—
		C07	Deodorant			—	—
		C08	Detergent for dishwasher			—	—
		C09	Hand soap			—	—
		C10	Personal care products			—	—
D	Computer equipment and products	D01	Desktop computer				
		D02	LCD & LED monitor				
		D03	Network products (including LAN switches, routers, etc.)				
		D04	Notebook computer				
		D05	Printer				
		D06	Server				
		D07	All-in-one multifunctional devices				
		D08	Scanner				
		D09	Computer keyboard & mouse			—	—
		D10	Tablet computer				
		D11	External hard disk				
E	Water dispenser & accessories	E01	Hot / Cold bottled water dispensers				
		E02	Water carboy for water dispenser			—	—
F	Electrical appliances	F01	Domestic exhaust fan				
		F02	Electric fan				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		F03	Electric radiator (oil filled)			—	—
		F04	Refrigerator				
		F05	Room air conditioner				
		F06	Air purifier / cleaner				
		F07	Dehumidifier				
		F08	Dish washer				
		F09	Electric storage water heater				
		F10	LCD projector				
		F11	Microwave oven				
		F12	Television				
		F13	Vacuum cleaner			—	—
		F14	Washing machine				
		F15	Audio equipment (stereo system)				
		F16	Induction cooker				
		F17	Video equipment (video players & recorders)				
		F18	Water boiler				
		F19	Transformer			—	—
		F20	Domestic battery charger			—	—
		F21	Freezer				
		F22	Commercial electric oven				
		F23	Hand dryer			—	—
		F24	Cloth drying machine			—	—
		F25	Electric kettle				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		F26	Digital camera			—	—
		F27	Electric rice cooker				
G	Gas appliances	G01	LPG hot plate				
		G02	LPG water heater				
		G03	Towngas gas cooker				
		G04	Towngas water heater				
H	Light fittings	H01	Electronic ballast for fluorescent tube / lamp				
		H02	Fluorescent tube / Compact fluorescent lamp				
		H03	LED lamp				
I	Fuel oils and hydrocarbon lubricants	I01	Automotive fuel oil				
		I02	Lubricating oil / Grease				
		I03	Fuel oil for non-road based applications				
J	Furniture	J01	Chair				
		J02	Mattress			—	—
		J03	Partition screen				
		J04	Sofa				
		J05	Steel filing cabinet				
		J06	Workstation panel				
		J07	Metal furniture				
		J08	Wooden furniture				
		J09	Outdoor furniture (chair, table & bench)				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
K	Containers and collection bins for waste / recyclables	K01	Plastic rubbish bin				
		K02	Wheeled refuse container				
		K03	Stainless steel recyclables collection bin				
L	Wearables	L01	Safety helmet				
		L02	Glove for field work [polythene (disposable), rubber (industrial)]			—	—
		L03	Rainboots				
		L04	Safety boots / shoes				
M	Office equipment	M01	Facsimile equipment				
		M02	Photocopier				
		M03	Fire extinguisher				
		M04	Paper shredder				
N	Packaging materials	N01	Food packaging - plastic films			—	—
		N02	Packaging paper				
		N03	Plastic films and sheets			—	—
		N04	Carton boxes				
O	Paper for printing and photocopying	O01	Continuous stationery for computer-generated form			—	—
		O02	Recycled photocopying paper (office use)			—	—
		O03	Recycled paper for printing				
		O04	Woodfree photocopying paper (office use)				
		O05	Printing paper coated on both sides				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		O06	Woodfree paper for printing			—	—
		O07	Publication booklets				
		O08	Paper for newsprint			—	—
P	Paper products other than for printing and photocopying	P01	Brown wrapping paper				
		P02	Toilet paper & paper towel			—	—
		P03	Index card (paper)			—	—
		P04	Compostable paper bag			—	—
		P05	Notepad				
		P06	Printed labels				
Q	Plastic and rubber products	Q01	Plastic garbage bag				
		Q02	Plastic bags (other uses)				
		Q03	Traffic management tools (traffic bollard, traffic cones & road barrier)				
		Q04	General plastic products				
		Q05	General rubber products			—	—
R	Printing and publishing equipment and supplies	R01	Environment-friendly lithographic process inks			—	—
S	Stationery and office supplies	S01	Adhesive tape & tape dispenser				
		S02	Correction fluid and thinner			—	—
		S03	File box				
		S04	General office stationery				
		S05	Ink / Toner cartridge				
		S06	Self-stick note-pad				

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
		S07	Paper envelope				
		S08	Paper file jacket				
		S09	Pen				
		S10	Pencil			—	—
		S11	Plastic file jacket				
		S12	Rechargeable battery				
		S13	Standard / Alkaline dry battery				
		S14	Calculator			—	—
		S15	Correction tape				
		S16	Glue / Adhesive			—	—
		S17	Ink for stamp pad			—	—
		S18	Pre-inked stamp				
		S19	Clock			—	—
T	Telecommunication equipment and spares	T01	Key telephone system				
		T02	Mobile phone			—	—
		T03	Radio communication system and transceiver			—	—
		T04	Radio paging equipment			—	—
		T05	Telephone battery			—	—
U	Textile materials and garment	U01	Clothing and textile products				
		U02	Textile bag (nylon, canvas and gunny bag)			—	—
		U03	Bag / Backpack			—	—
		U04	Bedding			—	—

Cat. Code	Category	Product Code	Product Item	Value of purchases with green specifications (at least one adopted) (HK\$)	Value of purchases without green specifications (HK\$)	Value of Small Amount Purchases following established green purchase tips (at least one) (HK\$) [Note 2]	Value of Small Amount Purchases not following green purchase tips (HK\$)
V	Vehicles and spare parts	V01	Private cars			—	—
		V02	Light goods vehicles			—	—
		V03	Other commercial vehicles			—	—
		V04	Rubber / Retreaded tyre			—	—
W	Water using equipment	W01	Showers for bathing				
		W02	Urinal equipment				
		W03	Water tap				
		W04	Water closet				
		W05	Flow controller			—	—
X	Services	X01	Event, meeting & conference services				
		X02	Cleansing services				
		X03	Laundry services				
		X04	Food and catering services				
		X05	Property management services				
		X06	Travel / Hotel services				
		X07	Hiring of light goods vehicles				
		X08	Hiring of lorries				
		X09	Hiring of saloon cars				
		X10	Hiring of coaches with 20 or more passenger seats				
Subtotal:							

Please also provide the total purchases of <u>goods</u> (not limited to the above product items) made by your bureau/department in the last calendar year in the right box	HK\$
---	------

Please also provide the total purchases of <u>services</u> (not limited to the above service items) made by your bureau/department in the last calendar year in the right box	HK\$
--	------