



IRISH GPP
CRITERIA:

ENERGY-RELATED PRODUCTS

(WHITE GOODS/APPLIANCES, ELECTRONIC
DISPLAYS AND VACUUM CLEANERS)

IRISH GPP CRITERIA: ENERGY-RELATED PRODUCTS

(WHITE GOODS/APPLIANCES, ELECTRONIC DISPLAYS AND VACUUM CLEANERS)



This document sets out the proposed core and comprehensive GPP criteria for the purchase of specific energy-related products by Irish public bodies. The criteria cover the procurement of:

- Air conditioners
- Residential ventilation units
- Cooking appliances (professional and household)
- Dishwashers (professional and household)
- Electronic displays and televisions
- Refrigerating appliances (professional, household and vending machines)
- Washing machines and tumble dryers (professional and household)
- Vacuum cleaners

Note that the following items within these criteria are included in the SEAI *Triple E Register*, meaning that it is a requirement under Irish law that public bodies only purchase products which meet the Triple E Register criteria (which are incorporated in these GPP criteria):

- Commercial Combination Ovens
- Commercial Dishwashers
- Refrigerated Display Cabinets
- Refrigeration System Control and Monitoring
- Commercial Laundry Dryers
- Commercial Laundry Washers

The criteria are divided into core and comprehensive versions. The core criteria are expected to have minimal effect on costs or verification effort. The comprehensive criteria go beyond the core requirements to target enhanced environmental performance, and may imply some additional costs or verification effort.

The criteria have been developed based on the EU Energy Label and Ecodesign requirements, the SEAI Triple E Register criteria, relevant Irish and

European legislation and a consultation with Irish public bodies, industry associations and sectoral experts. Further context for the development of the criteria, and advice on how they can be applied and verified within tender procedures, is given in the accompanying EPA guidance document. Information on Life-cycle costing for this product group is included in *Life Cycle Costing*.

¹ Under S.I. No. *151/2011* and S.I. No. *426/2014* as amended by S.I. No. *646/2016*. To ensure adequate competition, there is an exception to the requirement to purchase items meeting these criteria where, in the opinion of the public body concerned, there is, or is likely to be, an insufficient amount of equipment which meets the criteria.

WHAT DO THE CRITERIA COVER?

The following table summarises the core and comprehensive GPP criteria for Energy-related Products. A merged cell indicates the same criteria apply at the core and comprehensive levels.

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
A. AIR CONDITIONERS	SC1. Technical Capacity	
	TS1. Ecodesign and applicable standards	
	TS2. Energy label	
	TS3. Product longevity and warranty	TS3. Product longevity and warranty
	TS4. Installation instructions and user information	
	TS5. End-of-life service	
	AC1. Life-cycle costs	
	AC2. Additional warranty	
	CPC1. Environmental performance	
	CPC2. Reporting on the end-destination of equipment	
B. RESIDENTIAL VENTILATION UNITS	SC1. Technical Capacity	
	TS1. Ecodesign and applicable standards	
	TS2. Energy label	
	TS3. Product longevity and warranty	TS3. Product longevity and warranty
	TS4. Installation instructions and user information	
	TS5. End-of-life service	
	AC1. Life-cycle costs	
	AC2. Additional warranty	
	CPC1. Environmental performance	
	CPC2. Reporting on the end-destination of equipment	

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA	
C. COOKING APPLIANCES	SC1. Technical Capacity		
	TS1. Ecodesign and applicable standards		
	TS2. Energy label	TS2. Energy label	
	TS3. Product longevity and warranty	TS3. Product longevity and warranty	
	TS4. Installation instructions and user information		
	TS5. End-of-life service		
	TS6. Additional requirements for commercial combination ovens		
	AC1. Life-cycle costs		
	AC2. Additional warranty		
	CPC1. Environmental performance		
	CPC2. Reporting on the end-destination of equipment		
	D. DISHWASHERS	SC1. Technical Capacity	
		TS1. Ecodesign and applicable standards	
TS2. Energy label			
TS3. Product longevity and warranty		TS3. Product longevity and warranty	
TS4. Installation instructions and user information			
TS5. End-of-life service			
TS6. Additional requirements for commercial dishwashers			
AC1. Life-cycle costs			
AC2. Additional warranty			
CPC1. Environmental performance			
CPC2. Reporting on the end-destination of equipment			

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
E. ELECTRONIC DISPLAYS AND TELEVISIONS	TS1. Ecodesign and applicable standards	
	TS2. Energy label	TS2. Energy label
	TS3. Product longevity and warranty	TS3. Product longevity and warranty
	TS4. Installation instructions and user information	
	TS5. End-of-life service	
	AC1. Life-cycle costs	
	AC2. Additional warranty	
	CPC1. Environmental performance	
	CPC2. Reporting on the end-destination of equipment	
	F. REFRIGERATING APPLIANCES (PROFESSIONAL, HOUSEHOLD AND VENDING MACHINES)	SC1. Technical Capacity
TS1. Ecodesign and applicable standards		
TS2. Energy label		
TS3. Product longevity and warranty		TS3. Product longevity and warranty
TS4. Installation instructions and user information		
TS5. End-of-life service		
TS6. Additional requirements for refrigerated display cabinets		
AC1. Life-cycle costs		
AC2. Additional warranty		
CPC1. Environmental performance		
CPC2. Reporting on the end-destination of equipment		

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
G. WASHING MACHINES AND TUMBLE DRYERS	SC1. Technical Capacity	
	TS1. Ecodesign and applicable standards	
	TS2. Energy label	
	TS3. Product longevity and warranty	TS3. Product longevity and warranty
	TS4. Installation instructions and user information	
	TS5. End-of-life service	
	TS6. Additional requirements for commercial washing machines	
	TS7. Additional requirements for commercial dryers	
	AC1. Life-cycle costs	
	AC2. Additional warranty	
	CPC1. Environmental performance	
	CPC2. Reporting on the end-destination of equipment	
	H. VACUUM CLEANERS	TS1. Ecodesign and applicable standards
TS2. Product longevity and warranty		TS2. Product longevity and warranty
TS3. End-of-life service		
AC1. Extended warranty		
CPC1. Reporting on the end-destination of equipment		

IRISH GPP CRITERIA - HOW TO READ THE TEMPLATE

Scope	Defines the products and services to which the criteria apply.
Exclusions	Identifies any related products or services which are not covered by the criteria.
References	The primary sources consulted to develop the Irish GPP criteria.
Eco-labels	Type I eco-labels and other labels which address relevant environmental characteristics of the products or services and may be used either to define GPP criteria, verify compliance or both. Labels with equivalent criteria must also be accepted.
Legislation and Standards	Relevant EU and Irish legislation which applies within the sector and International, European or Irish standards which may be referenced in technical specifications (accompanied by the words 'or equivalent').
Notes	Practical tips and advice on applying the criteria, and explanations of the environmental impacts being addressed.
Core Criteria	Criteria which can be applied by any Irish public body and which are expected to have minimal effect on costs or verification effort.
Comprehensive Criteria	Criteria which go beyond the core requirements to target enhanced environmental performance and may imply some additional costs or verification effort.
Selection Criteria	Criteria which operators must meet in order to be eligible for tender submission (in a two-stage procedure) or award (in an open procedure).
Specification	Minimum requirements which all tenders must meet. Where multiple specifications are included in the criteria, these may be used together (recommended) or separately.
Specification - Variant	An optional alternative to the specification, which allows alternative solutions to be considered.
Award Criteria	Criteria which target environmental performance beyond the minimum requirements of the specification. These may be qualitative or quantitative in nature and must be weighted for evaluation. It is up to the contracting authority to determine an appropriate weighting based on its priorities and the totality of criteria which it is applying in a specific tender.
Contract Management	Clauses which can be inserted into contracts in order to manage environmental aspects and promote progressive improvements in delivery.

SCOPE, REFERENCES, LEGISLATION AND CERTIFICATIONS/LABELS

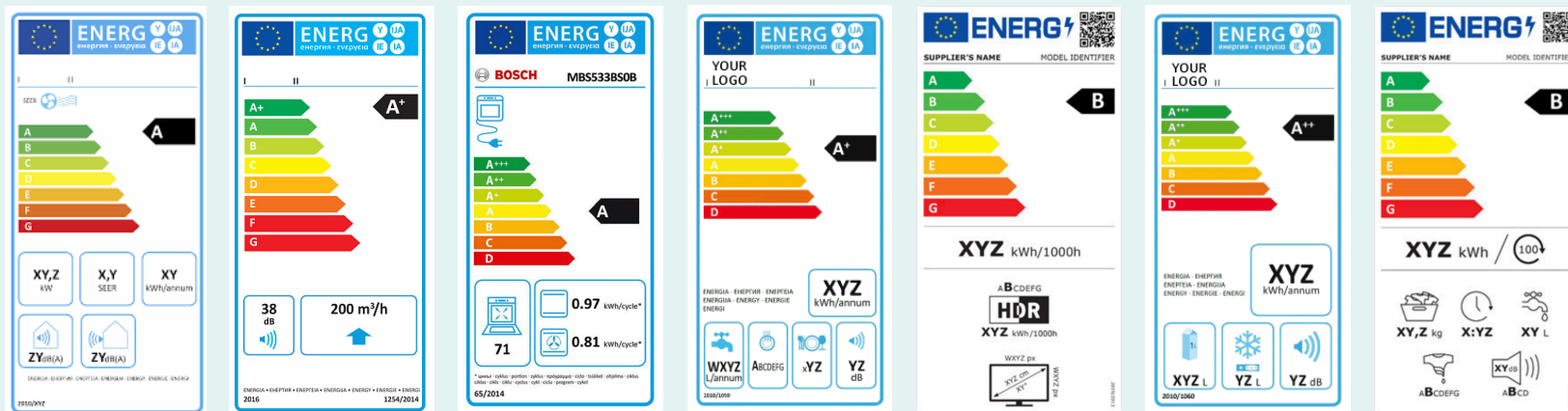
IN SCOPE	<p>The criteria apply to the following energy-related products which are subject the EU Energy Label and Ecodesign Regulations:</p> <ul style="list-style-type: none"> • Air conditioners • Residential ventilation units • Cooking appliances (professional and household) • Dishwashers (professional and household) • Electronic displays and televisions • Refrigerating appliances (professional, household and vending machines) • Washing machines, tumble dryers and washer-dryers (professional and household) • Vacuum cleaners <p>The criteria also apply to service contracts in which any of the above products will be purchased by service providers partially or wholly for the purpose of providing the service in question. The Irish GPP criteria for Catering and Cleaning services incorporate the criteria set out here for relevant products which may be purchased in the context of those contracts.</p>
NOT IN SCOPE	<p>The following energy-related products fall outside of the scope of these criteria:</p> <ul style="list-style-type: none"> • Appliances (including biomass and cogeneration) and other heating equipment • Indoor and outdoor lighting • ICT equipment • Vehicles and tyres <p>These products are all covered by separate Irish GPP criteria. Other energy-related products which are not covered by the EU Energy Label or Ecodesign Regulations are also excluded. For a full list of the products covered by EU rules please refer to <i>this page</i>.</p>
REFERENCE DOCUMENTS	<ol style="list-style-type: none"> 1. Sustainable Energy Authority of Ireland (various dates) <i>Eligibility Criteria for Triple E Register</i> 2. European Commission (2013) <i>Staff Working Document on Implementation of EED Article 6: Purchasing by public bodies</i> 3. Topten Pro (2019) <i>Procurement Guidelines for Refrigeration, Dishwashers and Televisions</i> 4. European Commission (2015) <i>Guidelines Accompanying Regulations 65/2014 and 66/2014 on Energy Labelling and Ecodesign of Domestic Ovens, Hobs and Range Hoods</i> 5. European Commission (2018) <i>Guidelines on Ecodesign Requirements for Air Heating and Cooling Products</i> 6. European Commission (2019) <i>Guidelines on Ecodesign Requirements for Vacuum Cleaners</i>

SCOPE, REFERENCES, LEGISLATION AND CERTIFICATIONS/LABELS

LEGISLATION AND STANDARDS

- S.I. 151/2011 European Union (Energy Efficient Public Procurement) Regulations 2011
- S.I. 366 of 2011 European Union (Energy Labelling) Regulations, as amended by S.I. 351 of 2014
- S.I. 454 of 2013 European Union (Ecodesign Requirements for certain energy related products) Regulations, as amended by S.I. 228 of 2016 and S.I. 96/2021
- S.I. No. 426/2014 European Union (Energy Efficiency) Regulations, as amended by S.I. 646/2016
- Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and delegated regulations for each product group
- Commission Regulation (EU) 2021/341 (Ecodesign Omnibus Regulation) amending various Ecodesign regulations
- Directive 2012/27/EU on energy efficiency, as amended by Directive 2018/2002
- Regulation (EU) 2017/1369 setting a framework for energy labelling and delegated regulations for each product group
- Commission Regulation 2021/340 (Energy Label Omnibus Regulation) amending various Energy Labelling regulations
- Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment (RoHS)
- Directive 2012/19/EU on waste electrical and electronic equipment (WEEE Directive)
- EN 50625-1 Collection, logistics & Treatment requirements for WEEE: General treatment requirements

ECOLABELS (EU ENERGY LABEL)



NOTE: The labels for dishwashers, washing machines, refrigerators and electronic displays were rescaled in March 2021. See notes in individual criteria below and overview [here](#).

SCOPE, REFERENCES, LEGISLATION AND CERTIFICATIONS/LABELS
NOTES

Under the Energy Efficiency Regulations (*S.I. 426/2014*) the following rules apply to central government contracts above the EU threshold:

- For products subject to the EU Energy Label, only products belonging to the highest energy efficiency class possible in the light of the need to ensure sufficient competition may be purchased
- Where a product is not subject to the EU Energy Label but is covered by an Ecodesign Regulation, only products complying with the energy efficiency benchmarks in the relevant Regulation may be purchased
- For office ICT equipment, only purchase products that comply with the minimum energy efficiency requirements applicable under the Energy Star program²
- Only purchase tyres that comply with the highest fuel energy efficiency class as defined in Regulation (EC) 1222/2009³
- In service contracts, require that any new products purchased by service providers partially or wholly for the purpose of providing the service in question comply with the above requirements
- Only purchase or lease buildings that comply with certain minimum energy performance requirements

In addition, under *S.I. 646/2016* a public body shall only procure equipment which-

- i. is listed on the SEAI's Triple E Product Register, or
- ii. satisfies the published SEAI energy efficiency criteria for the equipment or concerned, and the public body shall specify this requirement in any documentation describing its procurement requirements.

The EU requirements for Ecodesign and Energy Labelling evolve over time and contracting authorities should check to the requirements applicable at the time of tendering. The easiest way to do so is by consulting *this page*. The requirements included in this criteria document are those which apply as of March 2021, with notes regarding the *rescaling of energy labels from March 2021* included in the relevant criteria. In February 2021, the *Ecodesign Omnibus Regulation* updated the testing and other requirements for several of the product categories included in these GPP criteria (refrigerating appliances, dishwashers and washing machines), in particular to ensure that defeat devices or software are not used to circumvent standards by detecting when tests are being run. In March 2021, Ecodesign rules regarding the reparability of refrigerating appliances, dishwashers and washing machines also come into effect. These establish requirements such as:

- Spare parts must be available for a minimum of 7 years from date of purchase for refrigerating appliances (10 years for door gaskets); 10 years minimum for household washing-machines and household washer-dryers; and 10 years minimum for household dishwashers (7 years for some parts for which access can be restricted to professional repairers)
- During the above specified periods, the manufacturer shall ensure the delivery of the spare parts within 15 working days
- It must be possible to replace spare parts with commonly available tools and without permanent damage to the appliance

To ensure that public purchasers are able to avail of these conditions, the GPP criteria specify compliance with the relevant Ecodesign rules. In addition, repair and availability of spare parts is required under warranty, with additional marks available for extended warranties.

² Although the EU-US Energy Star Agreement has ended, it is still possible to refer to the criteria under the Energy Star program. Both the IEEE 1680 standards and the EPEAT label incorporate the Energy Star criteria for office ICT equipment.

³ This requirement shall not prevent public bodies from purchasing tyres with the highest wet grip class or external rolling noise class where justified by safety or public health reasons.

HOW CAN THE CRITERIA BE APPLIED AND VERIFIED?

Information about how each of the criteria can be verified is included. **The verification methods form an essential part of the criteria and must be included in tender documents to ensure that suppliers are aware of how compliance with the criteria will be assessed.** The forms of verification referred to in the criteria include:

- Provision of the product's **Declaration of Conformity or Product Information Sheet**
- A valid **Energy Label** issued under the EU Energy Labelling Framework Regulation (2017/1369). From 1 January 2019, all products requiring an energy label must be registered on the European Product Database for Energy Labelling (*EPREL*)
- Where the criteria are based on the **SEAI Triple E Register** criteria, inclusion of a specific product on this Register can verify compliance. Alternatively, technical documentation and/or test results which demonstrate compliance with the criteria should be accepted
- **Shipping information** for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU
- For WEEE exported to be treated outside the EU, a **third-party certificate of compliance** with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme

There should be a clear link between all supporting documentation supplied and the product being submitted. This will typically take the form of a product code or product name that can be cross referenced between the submitted product and relevant supporting documentation. If product codes/names have been changed since publication of the supporting documentation, then a record of this must be provided with the supporting documentation supplied. Any deviation from these requirements should result in the supporting documentation not being considered adequate for the purposes of demonstrating compliance with the criteria.

Test Reports

A test report must include the following elements: An outline of the complete test including introduction, details on test conditions, the specific model details of the product tested, the steps taken in the test, the results, graphical representations, and a conclusion. All documents should be on headed paper and the document should be officially signed off. All documentation must be in English, or include an adequate translation.

Certification

Where certificates are provided, all tests must be carried out by an organisation that is accredited by a national accreditation body recognised via the European Cooperation for Accreditation or the International Accreditation Forum. All documentation must be in English, or include an adequate translation.

Equivalence

Some criteria conditions allow for scientifically equivalent tests and/or standards to be used. In the event that a product has not been designed, manufactured or tested to the specific standard named, then documentation relating to an equivalent internationally recognised standard may be used. In such cases, the onus is on the tenderer to demonstrate satisfactory equivalence of the standards.

According to Article 44(2) of Directive 2014/24/EU, other appropriate means of proof may be accepted where the bidder concerned had no access to test reports, ecolabels, certificates etc. or no possibility of obtaining them within the relevant time limits for reasons which are not attributable to the economic operator. This could include, for example, a technical dossier from the manufacturer. In this case, the bidder must prove that the works, supplies or services it provided meet the requirements or criteria set out in the technical specifications, the award criteria or the contract performance conditions.

Some simple market research in advance of tendering should be sufficient to confirm that suppliers, products and services are available which meet the criteria and verification requirements. One particularly useful source is the *Topten EU* website which lists the most energy-efficient products available in a number of categories (including air conditioners, refrigeration, cookers, dishwashers and vacuum cleaners).⁴ From the end of 2020, it will also be possible to consult the *EU EPREL database* to find products based on their energy rating. Further information on techniques for market engagement linked to GPP, including legal and practical considerations, is available in *Module 6 of the GPP Training Toolkit*.

KEY ENVIRONMENTAL IMPACTS – ENERGY-RELATED PRODUCTS

The key environmental impacts from energy-related products are linked to their production, operation, and end-of-life. The sourcing and processing of raw materials can have heavy impacts in terms of resource depletion and emissions to air, water and soil. Energy consumption, and the associated greenhouse gas emissions, generally have the greatest impact. Greenhouse gas emissions are mainly due to energy consumption during usage and, to a lesser extent, manufacturing. Correct installation instructions and user information regarding efficient operation and maintenance can have a significant impact on energy consumption. For some product categories

climate impacts are also linked to the risk of refrigerant leakage either during use or at products' end-of-life.

Additional environmental impacts such as acidification, tropospheric ozone and air, water and soil pollution are related to air emissions during operation including nitrogen oxides (NO_x), carbon monoxide (CO), organic gaseous carbon (OGC) and particulate matter (PM). Many energy-related products contain substances which pose an environmental threat if not correctly treated at their end-of-life. Noise emissions during use are also of concern.

⁴ Topten is strictly neutral and independent from manufacturers and retailers, its selection criteria are always published online.

KEY ENVIRONMENTAL IMPACTS

- Energy consumption and noise emissions in use phase
- Emissions of greenhouse gases, NO_x, OGC, CO and PM during use phase, due to fossil fuel combustion for energy or refrigerant leakage
- Product durability and longevity
- Water consumption during usage
- Suboptimal performance due to incorrect installation, usage or maintenance
- End-of-life impacts from product disposal and replacement



GPP APPROACH

- Specify minimum energy efficiency levels, ensure compliance with ecodesign principles and correct installation and commissioning
- Award marks for products with lower life-cycle costs which reflect their reduced energy use and emissions
- Specify water-efficient appliances in line with ecodesign principles
- Select skilled installors, require comprehensive user instructions to be provided with products and ensure contractor is responsible for ongoing environmental performance
- Ensure products are durable and designed for repairability
- Ensure recycling/disposal in compliance with WEEE Directive

Please note that the order of environmental impacts above does not necessarily correspond to their importance.

DEFINITION OF TERMS USED IN THE GPP CRITERIA

- **'Air conditioner'** means a device capable of cooling or heating, or both, indoor air, using a vapour compression cycle driven by an electric compressor, including air conditioners that provide additional functionalities such as dehumidification, air-purification, ventilation or supplemental air-heating by means of electric resistance heating and appliances that may use water (either condensate water that is formed on the evaporator side or externally added water) for evaporation on the condenser, provided that the device is also able to function without the use of additional water, using air only.
- **'Ventilation unit'** means an electricity driven appliance equipped with at least one impeller, one motor and a casing and intended to replace utilised air by outdoor air in a building or a part of a building.
- **'Residential ventilation unit'** means a ventilation unit where:
 - a. the maximum flow rate does not exceed 250 m³/h;
 - b. the maximum flow rate is between 250 and 1 000 m³/h, and the manufacturer declares its intended use as being exclusively for a residential ventilation application.
- **'Commercial electric and gas combination ovens'** are used in commercial kitchens and catering. They are categorised as electric (both full and half-size) and gas convection ovens (full-size only – minimum capacity for 10 gastronorm pans) where cookery within one unit is possible by using a combination of convection heat and steam.
- **'Oven'** means an appliance or part of an appliance which incorporates one or more cavities using electricity and/or gas in which food is prepared by use of a conventional or fan-forced mode.
- **'Range hood'** means an appliance, operated by a motor which it controls, intended to collect contaminated air from above a hob, or which includes a downdraft system intended for installation adjacent to cooking ranges, hobs and similar cooking products, that draws vapour down into an internal exhaust duct.
- **'Household dishwasher'** means a machine which cleans, rinses, and dries dishware, glassware, cutlery and cooking utensils by chemical, mechanical, thermal, and electric means and which is designed to be used principally for non-professional purposes.
- **'Commercial dishwashers'** are defined as equipment constructed in stainless steel for use in commercial kitchens and to clean and sanitise dishes, plates, utensils, glasses, trays, cups, and bowls.
- **'Electronic display'** means a display screen and associated electronics that, as its primary function, displays visual information from wired or wireless sources.
- **'Television'** means an electronic display designed primarily for the display and reception of audiovisual signals and which consists of an electronic display and one or more tuners/receivers.
- **'Refrigerating appliance'** means an insulated cabinet with one or more compartments that are controlled at specific temperatures, cooled by natural or forced convection whereby the cooling is obtained by one or more energy consuming means.

- **'Refrigerating appliance with a direct sales function'** means an insulated cabinet with one or more compartments that are controlled at specific temperatures, cooled by natural or forced convection through one or more energy consuming means and is intended for displaying and selling, with or without assisted serving, foodstuffs and other items at specified temperatures below the ambient temperature to customers, accessible directly through open sides or through one or more doors, or drawers or both, including refrigerating appliances with a direct sales function with areas used for storage of foodstuffs and other items not accessible by customers, and excluding minibars and wine storage appliances.
- **'Professional refrigerated storage cabinet'** means an insulated refrigerating appliance integrating one or more compartments accessible via one or more doors or drawers, capable of continuously maintaining the temperature of foodstuffs within prescribed limits at chilled or frozen operating temperature, using a vapour compression cycle, and intended for the storage of foodstuffs in non-household environments but not for the display to or access by customers.
- **'Household washing machine'** means an automatic washing machine which cleans and rinses household laundry by using water, chemical, mechanical and thermal means, which also has a spin extraction function, and which is declared by the manufacturer in the Declaration of Conformity as complying with Directive 2014/35/EU or with Directive 2014/53/EU.
- **'Household washer-dryer'** means a household washing machine which, in addition to the functions of an automatic washing machine, in the same drum includes a means for drying the textiles by heating and tumbling, and which is declared by the manufacturer in the Declaration of Conformity as complying with Directive 2014/35/EU or with Directive 2014/53/EU.
- **'Commercial laundry dryers'** are defined as products that automatically use mechanical motion and a heat source to dry laundry such as clothes, towels, sheets, etc.
- **'Commercial laundry washers'** are defined as products that automatically use mechanical motion to clean laundry such as clothes, towels, sheets, etc, and use water as the primary washing solution.
- **'Vacuum cleaner'** means an appliance that removes soil from a surface to be cleaned by means of an airflow created by underpressure developed within the unit.

GPP CRITERIA FOR ENERGY-RELATED PRODUCTS

A AIR CONDITIONERS

CORE CRITERIA	COMPREHENSIVE CRITERIA
SELECTION CRITERIA	
<p>SC1. Technical Capacity <i>[where installation is included in the contract]</i></p> <p>Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel must be fully trained and qualified. Training should comprise the following elements <i>[select all which are relevant]</i>:</p> <ul style="list-style-type: none"> • Assembly, installation and commissioning of the specific products covered by the contract • Pressure testing of components • Electrical testing of equipment • Testing controls and meters • Ensuring safety devices are correctly installed and working • Operational testing of individual components of the system • Testing the whole system under a range of normal operating conditions • Adjustment of the equipment to energy-efficient settings • Air emission measurement techniques • Technical and legal documentation for the products (certificate of conformity, commissioning and test reports). <p>Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.</p>	

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS1. Ecodesign and applicable standards</p> <p>Air conditioners must comply with the ecodesign requirements set out in <i>Regulation (EU) 206/2012</i> (as amended) and the relevant standards cited in <i>Commission Communication 2018/C 092/03</i> or any updates thereto.</p> <p>Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.</p>	
<p>TS2. Energy label</p> <p>Air conditioners must be labelled in accordance with <i>Regulation (EU) No 626/2011</i> (as amended) and have a rating of A+++ for heating and cooling [<i>if unit will be used for only one of these functions specify which</i>], or the highest available class if the scale is revised.</p> <p>Verification: A copy of the energy label for the proposed product(s) and product information sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: <i>Procurers may wish to review the list of products with the A+++ rating on the Topten website or EPREL database.</i></p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the air conditioner and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the air conditioner and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA
COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS
TS5. End-of-life service

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

AWARD CRITERIA
AC1. Life-cycle costs

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded **[X]** marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [\mathbf{X}] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *SMART-SPP LCC Tool*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC2. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/ [warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	

CORE CRITERIA
COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES
CPC2. Reporting on the end-destination of equipment

To be applied in conjunction with TS5

The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:

- A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or
- A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme.

Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:

- Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU.

For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme⁵ must be provided.

⁵ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e -Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end-of-life electrical and electronic equipment'

B RESIDENTIAL VENTILATION UNITS

CORE CRITERIA

COMPREHENSIVE CRITERIA

SELECTION CRITERIA

SC1. **Technical Capacity** *[where installation is included in the contract]*

Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel must be fully trained and qualified. Training should comprise the following elements *[select all which are relevant]*:

- Assembly, installation and commissioning of the specific products covered by the contract
- Pressure testing of components
- Electrical testing of equipment
- Testing controls and meters
- Ensuring safety devices are correctly installed and working
- Operational testing of individual components of the system
- Testing the whole system under a range of normal operating conditions
- Adjustment of the equipment to energy-efficient settings
- Air emission measurement techniques
- Technical and legal documentation for the products (certificate of conformity, commissioning and test reports).

Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.

TECHNICAL SPECIFICATIONS

TS1. **Ecodesign and applicable standards**

Residential ventilation units must comply with the ecodesign requirements set out in *Regulation 1253/2014* (as amended) and the relevant standards cited in *Commission Communication 2016/C 416/06* or any updates thereto.

Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS2. Energy label</p> <p>Residential ventilation units must be labelled in accordance with <i>Regulation (EU) No 1254/2014</i> (as amended) and have a rating of A+ (or the highest available class if the scale is revised).</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: Procurers may wish to review the list of products with the A+ rating on the <i>EPREL</i> database.</p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the ventilation unit and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the ventilation unit and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS5. **End-of-life service**

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

AWARD CRITERIA

AC1. **Life-cycle costs**

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded **[X]** marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = \text{[X]} * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *SMART-SPP LCC Tool*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC2. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/[warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	

CORE CRITERIA
COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES
CPC2. Reporting on the end-destination of equipment

To be applied in conjunction with TS5

The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:

- A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or
- A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme.

Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:

- Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU.

For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme⁶ must be provided.

⁶ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end -of-life electrical and electronic equipment'

C COOKING APPLIANCES (including domestic and commercial gas or electric ovens, hobs and electric range hoods)

CORE CRITERIA	COMPREHENSIVE CRITERIA
SELECTION CRITERIA	
<p>SC1. Technical Capacity <i>[where installation is included in the contract]</i></p> <p>Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel must be fully trained and qualified. Training should comprise the following elements <i>[select all which are relevant]</i>:</p> <ul style="list-style-type: none"> • Assembly, installation and commissioning of the specific products covered by the contract • Electrical testing of equipment • Testing controls and meters • Ensuring safety devices are correctly installed and working • Operational testing of individual components of the system • Testing the whole system under a range of normal operating conditions • Adjustment of the equipment to energy-efficient settings • Air emission measurement techniques • Technical and legal documentation for the products (certificate of conformity, commissioning and test reports). <p>Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.</p>	
TECHNICAL SPECIFICATIONS	
<p>TS1. Ecodesign and applicable standards</p> <p>Ovens, hobs and electric range hoods must comply with the ecodesign requirements set out in <i>Regulation (EU) No 66/2014</i> (as amended) and the relevant standards cited in <i>Commission Communication 2017/C 267/01</i> or any updates thereto. This includes the CE marking and compliance with <i>Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment</i> (RoHS) and <i>Directive 2012/19/EU on waste electrical and electronic equipment</i> (WEEE Directive).</p> <p>Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.</p>	

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS2. Energy label</p> <p>Domestic ovens, hobs and electric range hoods must be labelled in accordance with <i>Regulation (EU) No 65/2014</i> (as amended) and have a rating of A+ or better.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: Procurers may wish to review the list of products with the A+ rating on the <i>Topten website</i> or <i>EPREL</i> database.</p>	<p>TS2. Energy label</p> <p>Domestic ovens, hobs and electric range hoods must be labelled in accordance with <i>Regulation (EU) No 65/2014</i> (as amended) and have a rating of A++ or better.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: Procurers may wish to review the list of products with the A++ rating on the <i>Topten website</i> or <i>EPREL</i> database.</p>
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the cooking appliance and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the cooking appliance and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA
COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS
TS5. End-of-life service

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

TS6. Additional requirements for Commercial Combination Ovens

6.1 Commercial combination ovens must have the option to be supplied with an integrated condenser hood to regulate climate control in the location where it will operate or a heat exchanger to transfer heat from the steam exhaust to the incoming water.

6.2 Electric-powered combination ovens must achieve a minimum cooking efficiency of 70% (both half and full-size units) and must not exceed 1.6 kW (for full-size ovens) or 1.0 kW (for half-size ovens) in electrical energy consumption while operating at a stabilised temperature set point (standby rate).

6.3 Gas convection ovens must achieve a minimum cooking efficiency of 44% and must not exceed 3.8 kWh gas consumption while operating at a stabilised temperature set point (standby rate).

Verification: Products which are included on the *Triple E Register* will be deemed to comply. Alternatively, technical documentation and diagrams which confirm compliance with the above requirements must be provided.

CORE CRITERIA
COMPREHENSIVE CRITERIA
AWARD CRITERIA
AC1. Life-cycle costs

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded [X] marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [X] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *SMART-SPP LCC Tool*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

AC2. Additional warranty

Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.

Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.

CORE CRITERIA	COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/ [warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	
<p>CPC2. Reporting on the end-destination of equipment</p> <p><i>To be applied in conjunction with TS5</i></p> <p>The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:</p> <ul style="list-style-type: none"> • A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or • A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme. <p>Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:</p> <ul style="list-style-type: none"> • Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU. <p>For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme⁷ must be provided.</p>	

⁷ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end-of-life electrical and electronic equipment'

D DISHWASHERS (including household and professional dishwashers)

CORE CRITERIA	COMPREHENSIVE CRITERIA
SELECTION CRITERIA	
<p>SC1. Technical Capacity <i>[where installation is included in the contract]</i></p> <p>Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel must be fully trained and qualified. Training should comprise the following elements <i>[select all which are relevant]</i>:</p> <ul style="list-style-type: none"> • Assembly, installation and commissioning of the specific products covered by the contract • Electrical testing of equipment • Testing controls and meters • Ensuring safety devices are correctly installed and working • Operational testing of individual components of the system • Testing the whole system under a range of normal operating conditions • Adjustment of the equipment to energy-efficient settings • Air emission measurement techniques • Technical and legal documentation for the products (certificate of conformity, commissioning and test reports). <p>Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.</p>	
TECHNICAL SPECIFICATIONS	
<p>TS1. Ecodesign and applicable standards</p> <p>Dishwashers must comply with the ecodesign requirements set out in <i>Regulation (EU) 2019/2022</i>⁸ and the relevant standards cited in <i>Commission Communication 2016/C 416/05</i> or any updates thereto. This includes the CE marking and compliance with <i>Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment</i> (RoHS) and <i>Directive 2012/19/EU on waste electrical and electronic equipment</i> (WEEE Directive). It also includes the availability of spare parts for the designated terms set out in Regulation (EU) 2019/2022.</p> <p>Verification: Tenderers must provide the product Declaration of Conformity for appliances confirming that the above requirements are met.</p>	

⁸ Regulation 2019/2022 repeals and replaces Regulation 1016/2010 with effect from 1 March 2021.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS2. Energy label</p> <p>Dishwashers must be labelled in accordance with <i>Regulation (EU) 2019/2017</i> (as amended) and have a rating of A or the highest available energy class.</p> <p>Verification: A copy of the energy label for the proposed product(s) and the Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: From 1st March 2021, the scale for energy labels changed so that the highest possible class is A. It is expected to take some time for products in the new A class to become available. Procurers may wish to review the list of products with high energy ratings on the <i>TopTen website</i> or <i>EPREL</i> database to ensure the energy rating specified is suitable given their requirements and product availability.</p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the dishwasher and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the dishwasher and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA	COMPREHENSIVE CRITERIA
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TECHNICAL SPECIFICATIONS

TS5. End-of-life service

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

TS6. Additional requirements for Commercial Dishwashers

6.1 Commercial dishwashers must have a maximum water consumption as per Table 1 below.

6.2 Commercial dishwashers must have a maximum idle energy rate as per Table 1 below (measured with door closed, representative of the energy used by the tank heater only)

6.3 Single and multiple tank rack conveyor dishwashers must incorporate a heat-recovery system to preheat rinse water to a minimum temperature of 40° C.

Dishwasher Type	Water Consumption (litres per rack)	Idle Energy Rate (kW per hour)
Under-counter	≤3	≤0.9
Stationary Single Tank Door	≤3	≤1
Single and Multiple Tank Rack Conveyor	≤2.9	≤2.6

Table 1: Minimum Dishwasher Water Consumption and Idle Energy Rates

Verification: Products which are included on the *Triple E Register* will be deemed to comply. Alternatively, technical documentation and diagrams which confirm compliance with the above requirements must be provided.

CORE CRITERIA
COMPREHENSIVE CRITERIA
AWARD CRITERIA
AC1. Life-cycle costs

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded [X] marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [X] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *SMART-SPP LCC Tool*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

AC2. Additional warranty

Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.

Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.

CORE CRITERIA	COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/ [warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	
<p>CPC2. Reporting on the end-destination of equipment</p> <p><i>To be applied in conjunction with TS5</i></p> <p>The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:</p> <ul style="list-style-type: none"> • A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or • A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme. <p>Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:</p> <ul style="list-style-type: none"> • Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU. <p>For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme⁹ must be provided.</p>	

⁹ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end-of-life electrical and electronic equipment'

E ELECTRONIC DISPLAYS AND TELEVISIONS

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS1. Ecodesign and applicable standards</p> <p>Electronic displays and televisions must comply with the ecodesign requirements set out in <i>Regulation (EU) 2019/2021</i>¹⁰ (as amended). This includes compliance with <i>Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment</i> (RoHS) and <i>Directive 2012/19/EU on waste electrical and electronic equipment</i> (WEEE Directive).</p> <p>Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.</p>	
<p>TS2. Energy label</p> <p>Electronic displays and televisions must be labelled in accordance with <i>Regulation (EU) 2019/2013</i> (as amended) and have a rating of A, B, C or D.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p>	<p>TS2. Energy label</p> <p>Electronic displays and televisions must be labelled in accordance with <i>Regulation (EU) 2019/2013</i> (as amended) and have a rating of A, B or C.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p>
<p>NOTE: From 1st March 2021, the scale for energy labels changed so that the highest possible class is A. It is expected to take some time for products in the new A class to become available. Procurers may wish to review the list of products with high energy ratings on the <i>Topten website</i> or <i>EPREL</i> database to ensure that the class specified is suitable based on their requirements and product availability.</p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the electronic display/television and each of its components must be covered by the warranty terms for a minimum of two years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the electronic display/television and each of its components must be covered by the warranty terms for a minimum of three years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

¹⁰ Regulation 2019/2021 repeals and replaces Regulation 642/2009 with effect from 1 March 2021. It sets requirements regarding design for repair and reuse, including minimum periods during which spare parts must be available from the manufacturer. This has been amended by Regulation 2021/341 (Ecodesign Omnibus Regulation)

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA
COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS
TS5. End-of-life service

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

AWARD CRITERIA
AC1. Life-cycle costs

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded **[X]** marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [\mathbf{X}] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *European Commission LCC Tools*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC2. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/[warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	

CORE CRITERIA
COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES
CPC2. Reporting on the end-destination of equipment

To be applied in conjunction with TS5

The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:

- A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or
- A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme.

Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:

- Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU.

For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme¹¹ must be provided.

¹¹ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end -of-life electrical and electronic equipment'

F REFRIGERATING APPLIANCES (including household and professional refrigeration and refrigerated vending machines)

CORE CRITERIA

COMPREHENSIVE CRITERIA

SELECTION CRITERIA

SC1. **Technical Capacity** *[where installation is included in the contract]*

Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel shall be fully trained and qualified. Training should comprise the following elements *[select all which are relevant]*:

- Assembly, installation and commissioning of the specific products covered by the contract
- Electrical testing of equipment
- Pressure testing of equipment
- Testing controls and meters
- Ensuring safety devices are correctly installed and working
- Operational testing of individual components of the system
- Testing the whole system under a range of normal operating conditions
- Adjustment of the equipment to energy-efficient settings
- Air emission measurement techniques
- Technical and legal documentation for the products (certificate of conformity, commissioning and test reports).

Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.

TECHNICAL SPECIFICATIONS

TS1. **Ecodesign and applicable standards**

Refrigerating appliances must comply with the ecodesign requirements set out in *Regulation (EU) 2019/2019*¹² *[for household refrigerating appliances]*, *Regulation (EU) 2015/1095* (as amended) *[for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers]* or *Regulation (EU) 2019/2024* *[for refrigerated appliances with a direct sale function]* and the relevant harmonised standards. This includes the CE marking and compliance with *Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment* (RoHS) and *Directive 2012/19/EU on waste electrical and electronic equipment* (WEEE Directive).

Verification: Tenderers must provide the Declaration of Conformity for the product confirming that the above requirements are met.

¹² Regulation 2019/2019 repeals and replaces Regulation 643/2009 with effect from 1 March 2021. It includes requirements regarding availability of spare parts.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS2. Energy label</p> <p>2.1 Household refrigerators must be labelled in accordance with Regulation <i>(EU) 2019/2016</i> (as amended) and have a rating of A (or the highest available energy class)</p> <p>2.2 Professional refrigerated storage cabinets must be labelled in accordance with <i>Regulation (EU) 2015/1094</i> and have a rating of A+ or better.</p> <p>2.3 Refrigerating appliances with a direct sales function must be labelled in accordance with <i>Regulation (EU) 2019/2018</i> and have a rating of B or better.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: From 1st March 2021, the scale for energy labels changed so that the highest possible class is A. It is expected to take some time for products in the new A class to become available. Procurers may wish to review the list of products with the A+, A and B rating on the <i>TopTen website</i> or <i>EPREL</i> database to confirm that suitable products to meet their requirements are available.</p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the unit and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative refrigeration where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the unit and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative refrigeration where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS5. **End-of-life service**

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system)
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use
- Dismantling for component re-use, recycling and/or disposal

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

AWARD CRITERIA

AC1. **Life-cycle costs**

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded [X] marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [X] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *European Commission LCC Tools*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC2. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/[warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	

CORE CRITERIA
COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES
CPC2. Reporting on the end-destination of equipment *[To be applied in conjunction with TS5]*

The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:

- A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or
- A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme.

Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:

- Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU.

For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme¹³ must be provided.

¹³ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end -of-life electrical and electronic equipment'

G

WASHING MACHINES, TUMBLE DRYERS AND COMBINED WASHER-DRYERS
(including household and commercial washers and dryers)

CORE CRITERIA

COMPREHENSIVE CRITERIA

SELECTION CRITERIA

SC1. **Technical Capacity** *[where installation is included in the contract]*

Candidates must demonstrate that suitably qualified and experienced personnel will undertake the installation of the equipment and any ancillary works. Fitters and service personnel shall be fully trained and qualified. Training should comprise the following elements *[select all which are relevant]*:

- Assembly, installation and commissioning of the specific products covered by the contract
- Electrical testing of equipment
- Pressure testing of equipment
- Testing controls and meters
- Ensuring safety devices are correctly installed and working
- Operational testing of individual components of the system
- Testing the whole system under a range of normal operating conditions
- Adjustment of the equipment to energy-efficient settings
- Air emission measurement techniques
- Technical and legal documentation for the products (certificate of conformity, commissioning and test reports).

Verification: Candidates must submit evidence that the personnel directly responsible for installation and any ancillary works have relevant experience, qualifications and training in relation to each of the above aspects. This may be in the form of a list of relevant contracts carried out over the previous three years, references, CVs, training records and/or other evidence of qualifications and experience.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
<p>TS1. Ecodesign and applicable standards</p> <ol style="list-style-type: none"> All products must comply with applicable standards including the CE marking and compliance with <i>Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment</i> (RoHS) and <i>Directive 2012/19/EU on waste electrical and electronic equipment</i> (WEEE Directive). Washing machines and washer-dryers must comply with the ecodesign requirements set out in <i>Regulation (EU) 2019/2023</i>.¹⁴ Tumble dryers must comply with the ecodesign requirements set out in <i>Regulation (EU) 932/2012</i> (as amended). <p>Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.</p>	
<p>TS2. Energy label</p> <p>2.1 Washing machines and washer-dryers must be labelled in accordance with <i>Regulation EU 2019/2014</i> and have a rating of A or the highest available energy class.</p> <p>2.2 Tumble dryers must be labelled in accordance with <i>Regulation EU 392/2012</i> (as amended) and have a rating of A+++.</p> <p>Verification: A copy of the energy label for the proposed product(s) and Product Information Sheet showing compliance with the above requirements must be submitted with the tender.</p> <p>NOTE: From 1st March 2021, the scale for energy labels for washing machines and washer-dryers changed so that the highest possible class is A. Procurers may wish to review the list of products with high energy ratings on the <i>Topten website</i> or <i>EPREL</i> database to confirm that suitable products to meet their requirements are available.</p>	
<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the unit and each of its components must be covered by the warranty terms for a minimum of four years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>	<p>TS3. Product longevity and warranty</p> <p>Repair or replacement of the unit and each of its components must be covered by the warranty terms for a minimum of five years from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least ten years from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.</p> <p>Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.</p>

¹⁴ Regulation 2019/2023 repeals and replaces Regulation 1015/2010 with effect from 1 March 2021. It includes requirements regarding availability of spare parts.

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS4. Installation instructions and user information

The equipment must be supplied with installation instructions and user information in printed (on the packaging and/or on documentation accompanying the product) and electronic format, which include the following:

- a. Full installation instructions, including:
 - i. instructions specifying that the equipment shall be installed by fully trained fitters;
 - ii. any specific precautions that shall be taken when the equipment is assembled or installed;
 - iii. instructions specifying how the control settings of the equipment shall be adjusted properly after installation;
 - iv. information on who the fitter can approach for guidance on installation;
- b. Operating instructions for service personnel;
- c. User information, including:
 - i. references to competent installers and service personnel;
 - ii. recommendations on the proper use and maintenance of the equipment;
 - iii. advice on how users can minimise the environmental impact of the equipment, in particular information on use to minimise energy consumption;
 - iv. if applicable, information on how diagnostic results should be interpreted and how they can be improved;
 - v. information about which spare parts can be replaced;
- d. Recommendations on appropriate disposal at the product's end-of-life.

Verification: A copy of the installation instructions and user information which will be supplied with the equipment must be provided in electronic format as part of the tender.

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS5. **End-of-life service**

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

TS6. **Additional Requirements for Commercial Washing Machines**

6.1 The load capacity of the washing machine must be a minimum of 10 kg.

6.2 The performance of the washing machine must be as per the minimum values set out in Table 1 below.

Performance Type	Minimum Value for A rating
Energy Consumption	≤ 0.15 kWh per kg wash load
Washing Efficiency Index	≥ 1.03

Table 1: Minimum laundry washer energy performance values

Verification: Products which are included on the *Triple E Register* will be deemed to comply. Alternatively, technical documentation and diagrams which confirm compliance with the above requirements must be provided.

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS7. **Additional requirements for Commercial Laundry Dryers**

- 7.1 The load capacity of the dryer must be a minimum of 14 kg.
- 7.2 The dryer must have a moisture sensing element that will automatically turn off the machine once the load is dry.
- 7.3 The performance of the dryer must be as per the minimum values set out in Table 2 below.

Dryer	Energy Efficiency (kWh per kg dryer load)
Air Vented Dryer	≤ 0.51
Condensing Dryer	≤ 0.55

Table 2: Minimum dryer energy performance values

Verification: Products which are included on the *Triple E Register* will be deemed to comply. Alternatively, technical documentation and diagrams which confirm compliance with the above requirements must be provided.

AWARD CRITERIA

AC1. **Life-cycle costs**

The cost of each valid and responsive tender will be evaluated on the basis of total life-cycle costs (LCC). Tenderers are required to complete the spreadsheet included in the tender documents with the requested data regarding their products. This information will be used to calculate LCC and the tender with the lowest life-cycle cost will be awarded [X] marks, with other tenders being scored according to the following formula:

$$\text{Score Tender A} = [X] * \frac{\text{Lowest LCC}}{\text{LCC}_{\text{TENDER A}}}$$

Verification: The completed spreadsheet must be submitted with the tender and where indicated, supporting documentation verifying the data must be provided. The data entered in the spreadsheet will become binding under the contract with the successful tenderer.

NOTE: Contracting authorities may choose to evaluate LCC using an existing template such as the *European Commission LCC Tools*, or based on their own bespoke template. In either case, certain information such as the evaluation period, energy costs and cost of maintenance/replacement (if not included in the tender) will need to be completed by the contracting authority. See *Life Cycle Costing* for further information.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC2. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Environmental performance</p> <p><i>This clause should be adapted to the specific nature of the contract and the scope of any maintenance/repair/warranty commitments. It is important that it includes a specific requirement to test environmental performance at regular intervals and assigns responsibility for this activity.</i></p> <p>The contractor is responsible for ensuring that the levels of environmental performance, including energy efficiency, indicated in its tender are met both at the point of installation/commissioning and during the <i>[entire operating lifetime of the appliance]/[warranty period]</i>. Where this is dependent upon specific usage instructions and maintenance activities these must have been clearly highlighted in the tender. Regular inspections and testing of the equipment to ensure compliance will be carried out <i>[specify the schedule for these and whether the contractor is responsible for the cost]</i>.</p> <p>Where the inspections or tests indicate that the designated levels of environmental performance are not being achieved, the contractor is responsible for <i>[repairing and/or replacing the equipment and any components]/[the costs of such work carried out by the contracting authority's nominated agent]</i>. The maximum time period for remedying any default in environmental performance shall be <i>[14 working days]</i> from the date on which the fault is identified. Where required by the contracting authority, the contractor must provide suitable alternative equipment during the repair period.</p>	

CORE CRITERIA
COMPREHENSIVE CRITERIA
CONTRACT PERFORMANCE CLAUSES
CPC2. Reporting on the end-destination of equipment

To be applied in conjunction with TS5

The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:

- A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or
- A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme.

Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:

- Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU.

For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme¹⁵ must be provided.

¹⁵ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end -of-life electrical and electronic equipment'

H VACUUM CLEANERS

CORE CRITERIA

COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS1. Ecodesign and applicable standards

Vacuum cleaners must comply with the ecodesign requirements set out in *Regulation EU 666/2013* (as amended). This includes compliance with *Directive 2011/65/EU on the restriction of certain hazardous substances in electrical and electronic equipment* (RoHS) and *Directive 2012/19/EU on waste electrical and electronic equipment* (WEEE Directive).

Verification: Tenderers must provide the product Declaration of Conformity confirming that the above requirements are met.

TS2. Product longevity and warranty

Repair or replacement of the vacuum cleaner and each of its components must be covered by the warranty terms for a minimum of **four years** from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least **ten years** from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.

Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.

TS2. Product longevity and warranty

Repair or replacement of the vacuum cleaner and each of its components must be covered by the warranty terms for a minimum of **five years** from the date of commissioning. The tenderer must confirm that genuine or equivalent spare parts will be available for at least **ten years** from the date of purchase. Where repair work is undertaken the maximum time period from notification of the fault through to its resolution must be stated together with the provision which will be made for temporary alternative equipment where required.

Verification: Tenderers must provide a copy of the warranty terms which includes the above requirements.

TS3. End-of-life service

Tenderers must provide a service for the re-use and recycling of the whole product or of components requiring selective treatment in accordance with Annex VII of the WEEE Directive for equipment that has reached the end of its service life. The service must comprise the following activities:

- Collection (take back system);
- Functional testing, servicing, repair and upgrading to prepare products or components for re-use;
- Dismantling for component re-use, recycling and/or disposal.

In providing the service, the contractor must report on the proportion of equipment prepared or remarketed for re-use and the proportion of equipment prepared for recycling. Preparation for re-use, recycling and disposal operations must be carried out in full compliance with the requirements in Article 8 and Annexes VII and VIII of the (recast) WEEE Directive 2012/19/EU and with reference to the list of components for selective treatment.

Verification: The tenderer must provide details of the arrangements for collection, preparation for re-use, and recycling/disposal. This must include valid proof of compliance for the WEEE handling facilities to be used.

CORE CRITERIA	COMPREHENSIVE CRITERIA
AWARD CRITERIA	
<p>AC1. Additional warranty</p> <p>Up to [X] marks will be awarded to tenders offering a product warranty in excess of the minimum period required under TS3. Full marks will be awarded to the tender offering the longest warranty period, with other offers being scored proportionately.</p> <p>Verification: Tenderers must provide a copy of the warranty terms offered for the product. Where the extended warranty has an additional cost this must be clearly indicated within the pricing schedule.</p>	
CONTRACT PERFORMANCE CLAUSES	
<p>CPC1. Reporting on the end-destination of equipment</p> <p><i>To be applied in conjunction with TS3</i></p> <p>The contractor must provide a report on the status of the equipment once all items have been processed for re-use, recycling or disposal. The report must identify the proportion of items re-used or recycled, and whether they remained in the EU or were exported. For equipment and components recycled in the EU, the following means of proof for the handling facilities will be accepted:</p> <ul style="list-style-type: none"> • A permit issued by the national competent authority in accordance with Article 23 of Directive 2008/98/EC, or • A third-party certificate of compliance with the technical requirements of EN 50625-1 or an equivalent compliance scheme. <p>Where equipment and components are exported for re-use or recycling, contractors must provide the following shipment and treatment information:</p> <ul style="list-style-type: none"> • Shipping information for equipment intended for re-use, in accordance with Annex VI of WEEE Directive 2012/19/EU. <p>For WEEE exported to be treated outside the EU, a third-party certificate of compliance with the minimum WEEE requirements, or with the technical requirements of EN 50625-1 or an equivalent compliance scheme¹⁶ must be provided.</p>	

¹⁶ The following compliance schemes are considered, at the time of writing, to meet these requirements: WEEELABEX:2011 requirement on 'Treatment of WEEE'; 'Responsible Recycling' (R2:2013) standard for electronics recyclers; e-Stewards standard 2.0 for Responsible Recycling and Reuse of Electronic Equipment; Australian/New Zealand standard AS/NZS 5377:2013 on 'Collection, storage, transport and treatment of end-of-life electrical and electronic equipment'

LIFE CYCLE COSTING

Life cycle costing (LCC) is a technique that can be used to estimate the total cost of ownership for energy-related products, as well as environmental externalities such as CO₂ emissions.¹⁷ It is a method for making effective, long-term investment decisions since some cost aspects may not be immediately apparent to the decision maker, e.g. a higher initial investment may be required to achieve lower life-cycle costs, based on lower energy costs and improved durability with associated longer lifespans and lower repair costs. When externalities are taken into consideration, LCC is particularly relevant to achieving an improved environmental performance.

In addition to applying the GPP criteria set out in this document, it is recommended that contracting authorities carry out a comparison of life-cycle costs for the different product options either prior to or during the tender process. LCC can be included as part of award criteria under Article 68 of Directive 2014/24/EU. Further information on how to conduct LCC comparisons can be found in the EPA guidance document and on the *EU GPP website*.

The European Commission has published a number of tools for LCC, along with accompanying user guidance. You can access the tools and guidance *here*. The LCC tools will provide you with the cost information needed to compare tenders. In addition to figures, they provide graphical output to illustrate costs. A recorded webinar introducing the tools and explaining how to use them is available *here*.

The award criteria included in the Irish GPP criteria are designed to be used with these tools, although it is also possible to use other LCC approaches. To ensure that suppliers will be able to provide the data requested, it is highly recommended to publish the spreadsheet at the pre-tender stage, for example as part of preliminary market consultation or in a Prior Information Notice. Ask suppliers to review the 'Bidder Response Sheet' and confirm that they will have access to the relevant technical data during the tender period. The information requested is all based on industry standards, so it should not be problematic to provide this.

¹⁷ Further information on LCC, including the possibility to account for externalities, is included in the EPA guidance document accompanying these criteria.

