



J R C T E C H N I C A L R E P O R T S

# Revision of the EU Green Public Procurement Criteria for Food and Catering Services

Technical report for the 1st AHWG meeting

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## TERMS AND DEFINITIONS

Assembly-serve	The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site.
Bio-waste	Biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants.
Catering service	The preparation, storage and, where appropriate, delivery of food and drinks for consumption by the consumer/client/patient at the place of preparation, at a satellite unit or at the premises/venue of the client.
Centralised production unit	Central kitchens or central food factories that send out completed dishes or pre-processed ingredients/meals to satellites. Can include both ready-prepared services and assembly-serve services.
Contract catering firm	A business engaged in (amongst other activities or services) providing a meals service (for example by running a staff restaurant or providing school meals) or providing drinks, snacks or vending.
Conventional kitchen	A kitchen (at the place of consumption) where all, or a significant part of, food is prepared from raw ingredients.
Conventional production	Traditional farming methods.
EU Ecolabel	'EU Ecolabel' refers to a voluntary eco-labelling award scheme developed and managed by The European Commission intended to promote products and services with a reduced environmental impact during their entire life cycle and to provide consumers with accurate, non-deceptive, science-based information on the environmental impact of products or services. There are three types of voluntary labels identified by ISO with the EU Ecolabel falling under the Type I category.
Green public procurement	'Green Public Procurement (GPP)' is a voluntary instrument defined in the Commission Communication "COM (2008) 400 - Public procurement for a better environment" as "...a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured."
Integrated production	Farming methods that try to optimise resource use (e.g. pesticides and synthetic fertilisers use) and aim to have a low overall impact on the environment.
Life-cycle assessment	Calculating environmental impact for each stage in a food supply chain, focusing on determined environmental impact categories.
Organic production	Farming methods that aims to have a low impact on the environment (e.g. no or low pesticide use and no synthetic fertiliser use). (Working with ecosystems).
Private sector	Private companies (restaurants, pubs etc.)
Public sector	The cost sector (education, health and social care etc.)
Ready-prepared	Preparation on site or at a central facility of large batches of items for consumption that are then adequately stored frozen or chilled until required.
SMEs	Small and medium-sized enterprises
Type I Ecolabel	'Type I Ecolabel' is defined by the ISO 14024 standard as a voluntary multi-criteria-based, third party program that awards a license that authorises the use of environmental labels on products indicating overall environmental preference of a product within a particular product category based on life cycle considerations.
Vending and hot-drink machines	Machines that are available at all times with snacks, fruit, drinks and/or sandwiches etc. that are ready to eat/drink or that can be reheated.
Water dispensers	A device specifically for dispensing drinking water, which might have the possibility of heating and/or cooling the drinking water.

## **EXECUTIVE SUMMARY**

The objective of this project is to revise the existing EU Green Public Procurement (GPP) criteria for Food and Catering Services, produced in 2008, and to propose updates. The existing EU GPP criteria are available at: [http://ec.europa.eu/environment/gpp/pdf/toolkit/food\\_GPP\\_product\\_sheet.pdf](http://ec.europa.eu/environment/gpp/pdf/toolkit/food_GPP_product_sheet.pdf).

The recommendations for the revision of the EU GPP criteria for Food and Catering Services are available on the JRC website: [http://susproc.jrc.ec.europa.eu/Food\\_Catering/](http://susproc.jrc.ec.europa.eu/Food_Catering/).

This report is the first draft of the technical report on the revision of the EU GPP criteria for Food and Catering Services. This technical report presents the findings and the criteria proposal to be discussed in the 1<sup>st</sup> Ad-Hoc Working Group (AHWG) meeting that will take place on the 8<sup>th</sup> March 2016 in Seville.

Public authorities in the European Union (EU) spend around 13 % of gross domestic product (GDP) on works, goods and services, (excluding utilities) spending over €1.7 trillion (European Commission, 2015). The public authorities' considerable purchasing power can make a difference from an environmental perspective by supporting the market to shift into a resource-efficient and low-carbon economy.

The development of EU GPP criteria for Food and Catering Services aims to help public authorities ensure that the food and catering services procured are executed in a way that reduces their associated environmental impacts.

# 1 Introduction

## 1.1 EU GPP policy and criteria

EU GPP criteria aim at facilitating public authorities the purchase of products, services and works with reduced environmental impacts. The use of the criteria is voluntary. The criteria are formulated in such a way that they can be, if deemed appropriate by the individual authority, integrated into its tender documents.

Green Public Procurement (EU GPP) is defined by the European Commission (EC COM 400/2008) as: *“a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured”* (Commission of the European Communities, 2008). Hence, EU GPP criteria should be formulated either as Selection criteria, Technical specifications, Award criteria or Contract performance clauses which, according to the “Buying green handbook” (European Union, 2011), can be understood as follows:

Following is a description of the main components within the GPP process.

- The **‘subject matter’** of a contract refers to the goods, services or work is intended to be procured. As a general rule the criteria shall apply on the subject matter of a contract.
- **Selection Criteria (SC):** Selection criteria refer to the tenderer, *i.e.*, the company applying for the contract and not to the product being procured. It may relate to suitability to pursue the professional activity, economic and financial standing and technical and professional ability.
- **Technical Specifications (TS):** Technical specifications constitute minimum compliance requirements that must be met by all tenders (pass/fail criteria). TSs must be linked to the contract’s subject matter and must not concern general corporate practices but only characteristics specific to the product being procured. Offers not complying with the technical specifications must be rejected. TSs are not scored for award purposes, they are strictly pass/fail requirements.
- **Award Criteria (AC):** At the award stage, the contracting authority evaluates the quality of the tenders and compares costs. Contracts are awarded based on MEAT (Most Economically Advantageous Tender). MEAT includes the following elements:
  - Cost (price, total cost of ownership (TCO) or life cycle cost (LCC).
  - Functional performance (*e.g.*, technical merit, delivery time, *etc.*).
  - Environmental performance (*e.g.*, EU GPP criteria).

Everything that is evaluated and scored for award purposes is an AC. These may refer to characteristics of goods or to the way in which services or works are performed (in this case they are similar in form to CPCs but instead are evaluated at the award phase). ACs must be linked to the contract’s subject matter and must not concern general corporate practices but only characteristics specific to the product being procured.

- **Contract Performance Clauses (CPC):** Contract performance clauses are used to specify how a contract must be carried out. CPCs must be linked to the contract’s subject matter and must not concern general corporate practices but only those specific to the product being procured. The economic operator may not be requested to prove compliance with the CPCs during the procurement procedure. CPCs are not scored for award purposes. Compliance with the CPCs should only be monitored during the execution of the contract, therefore after this has been awarded. It may be linked to penalties or bonuses under the contract in order to ensure compliance.

The EU GPP criteria comprise a choice between ‘core’ and ‘comprehensive’ criteria that determine the level of ambition of contracting authorities on environmental performance:

- **Core:** The *Core criteria* are designed to allow easy application of GPP, focussing on the key area(s) of environmental performance of a product and aimed at keeping administrative costs for companies to a minimum.
- **Comprehensive:** The *Comprehensive criteria* take into account more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals

It is important to investigate overall environmental impacts that are caused by the provision of food and catering services to be able to identify areas with substantial environmental improvement potentials. Furthermore it is essential to understand how general procurement processes work in practice and learn from actors in the industry that have been successful in execute contracts. Because of this, the European Commission has created a process in which procurement and technical experts are brought together to collaborate in a consensus oriented manner, to develop a proposal for precise and verifiable criteria that can be used to procure food and catering services with a reduced environmental impact.

A detailed environmental and market analysis, as well as an assessment of potential improvement areas, was conducted within the framework of this project and was presented in the Preliminary Report on EU Green Public Procurement Criteria for Food and Catering Services. This report can be publicly accessed at the JRC website for Food and Catering Services [http://susproc.jrc.ec.europa.eu/Food\\_Catering/](http://susproc.jrc.ec.europa.eu/Food_Catering/). The main findings presented in the Preliminary Report are presented in the next chapter. A summary of the contents of the Preliminary Report is provided by covering the following issues: product groups scope and definition, market analysis, key environmental hotspots and improvement areas for EU GPP.

## 1.2 Overview of the current and proposed EU GPP criteria set

The current revision of the EU GPP criteria is based on the feedback collected from stakeholder consultation and in depth research on the relevant subject areas. Table 1 compares the existing EU GPP criteria and the proposed draft EU GPP criteria for the procurement of Food resulting from this study. Table 2 compares the existing EU GPP criteria and the proposed draft EU GPP criteria for the procurement of Catering Services resulting from this study.

**Table 1: Current and proposed EU GPP criteria for the procurement of Food.**

	Current EU GPP Criteria				Proposal for the EU GPP Criteria			
	#	Criterion	Core	Comprehensive	#	Criterion	Core	Comprehensive
Technical specification (TS)	1	Organic production	X	X	1	Organic food products	X	X
	2	Integrated production (for the % non-organic)		X	2	Marine and aquaculture food products	X	X
					3	Seasonal produce	X	X
					4	Integrated production		X
Award criteria (AC)	1	Additional organic production	X	X	1	additional Organic food products	X	X
	2	Packaging	X	X	2	Integrated production	X	X
	3	Additional integrated production		X	3	additional Marine and aquaculture food products	X	X
	4	Aquaculture and marine products		X	4	Animal welfare	X	X
	5	Animal welfare standards		X	5	Fair trade products	X	X
		---	--	--	6	Packaging	X	X
		---	--	--	7	Sustainable palm oil	X	X
	---	--	--	-	Other schemes of sustainable production	--	--	

**Table 2: Current and proposed EU GPP criteria for the procurement of Catering Services.**

	Current EU GPP Criteria				Proposal for the EU GPP Criteria			
	#	Criterion	Core	Comprehensive	#	Criterion	Core	Comprehensive
Selection criteria (SC)		Professional capability to perform the environmental aspects of the contract		X	1	Staff training	X	X
					2	Environmental management measures and practices	X	X
Technical specification (TS)	1	Organic production	X	X	1	Organic food products	X	X
	2	Menu planning	X	X	2	Marine and aquaculture food products	X	X
	3	Integrated production (for the % non-organic)		X	3	Seasonal produce	X	X
	4	Paper products		X	4	Integrated production		X
					5	Menu planning	X	X
					6	Waste sorting and disposal	X	X
					7	Vehicle fleet and planning of food delivery	X	X
Award criteria (AC)	1	Additional organic production	X	X	1	additional Organic food products	X	X
	2	Packaging	X	X	2	Integrated production	X	X
	3	Additional integrated production (for the % non-organic)		X	3	additional Marine and aquaculture food products	X	X
	4	Aquaculture and marine products		X	4	Animal welfare	X	X
	5	Animal welfare standards		X	5	Fair trade products	X	X
	6	Equipment		X	6	Packaging	X	X
	7	Cleaning products		X	7	Sustainable palm oil	X	X
					8	Consumable goods (paper products, tableware, cleaning products)	X	X
					9	Equipment	X	X
					Other schemes of sustainable production	X	X	
Contract performance clause (CPC)	1	Waste generation	X	X	1	Staff training	X	X
	2	Transport	X	X	2	Waste management	X	X
	3	Staff training		X		----	--	--
	4	Service management (if selection criteria not included)		X		----	--	--



## 2 Summary of the Preliminary Report

### 2.1 Product Group Scope and definitions

#### 2.1.1 Scope

Food service supply chains are extremely complex and diverse. For example, some foodservice operators use the traditional ‘cook from scratch’ model while others buy the food ‘ready to serve’. Some also use a hybrid of the two. Table 3 shows the stages of the supply chain considered in scope for the revision of the EU GPP criteria for Food and Catering Services and provides a brief description of each stage.


Table 4 shows the food categories, catering services and foodservice segments that were covered in the analysis. The proposed scope was further investigated within the Preliminary Report for market analysis and environmental hotspots identification. The availability of robust data was a key factor and Table 4 indicates in which areas there were a lack of data, i.e. green means sufficient data and orange (*italics*) means insufficient data was identified for these catering and food service segments. The food categories included in the current EU GPP were further enlarged to categories as bread and cereals, oils and fat and sugar, jam, honey, chocolate and confectionery. Moreover, other food products were explicitly covered within the scope as for eggs, and other drinks as coffee, tea, cocoa, mineral waters, soft drinks, fruit and vegetable juices. This was the result of the further investigation in the standard food categories (COICOP) and stakeholders’ feedback.

The scope identified for food and catering services is identified below:

*The direct procurement of food by public authorities and the procurement of catering services, either using in-house resources or facilities or out-sourced in full or in-part through contract catering firms. Food can be procured directly from producers, manufacturers, wholesalers or importers or can form part of the service provided by the contract catering firms.*

In-sourcing and outsourcing aspects

**Table 3: Important food supply chain stages for ‘food and catering services’** (section 1.4.1.2, Preliminary Report)

	Primary production	Primary production is the life-cycle stage that has the largest environmental impact compared to other stages in food supply chains. It is responsible for around 90 % of total eutrophication and 50 % of GHG emissions. <sup>a</sup>
	Processing	The processing stage creates food waste and uses resources such as water, energy and detergents. <sup>a</sup>
	Transport	In comparison to production and processing, the transport stage has generally a comparatively low impact, although the mode of transport (airfreight, ship, train or road) is an important factor. <sup>a</sup>
	Packaging	Packaging generally has a low total environmental impact compared to the production and processing stages of food products. The exceptions are bottled water and milk, where packaging has a large total impact. <sup>a</sup>
	Wholesale	This stage is not considered to be relevant for this project. Even though food products may travel through this route they will not stay for long at this stage (due to short shelf life or inventory management the food products will be shipped off to the next supply chain level as soon as possible i.e. high turnover rate). Therefore this stage has low levels of resource use and food wastage.
	Food preparation	<i>How the food is prepared.</i> Equipment (energy use, water use), food waste, type of packaging used (to preserve food until it reaches the end consumer).
	Food service	<i>Where the food is prepared.</i> On site, in central kitchens (cooked and chilled/frozen for use at a later time or shipped off instantly), or prepared for assembly at a later stage. For meals prepared offsite it is more than likely that an additional transportation stage is required to deliver the meals to the point of consumption.
	End user/consumer	<i>Who the food is prepared for.</i> Children, adults, hospital patients, soldiers etc. Portion sizes and nutritional composition are different, as is how it is served (e.g. in bulk served on plates or in single pre-prepared portions).

<sup>a</sup> EU Ecolabel feasibility study for food and feed products (Oakdene Hollins *et al.*, 2011).

**Table 4: Food categories, catering services and foodservice segments in scope**

Food categories according to the COICOP standard (United Nations Statistics Division, 2015)	Catering services	Foodservice segments
Bread and cereals (code 01.1.1)	Conventional kitchen	Schools
Meat (code 01.1.2)	Centralised production unit	Universities
Fish and seafood (code 01.1.3)	Ready-prepared	Hospitals
Milk, cheese and eggs (code 1.1.4)	Assembly-serve	Caring homes
Oils and fats (code 01.1.5)	Vending machines	Canteens in gov. buildings
Fruit (code 01.1.6)	Hot drink machines	Events
Vegetables (code 01.1.7)	Water dispensers	Prisons
Sugar, jam, honey, chocolate and confectionery (code 01.1.8)		Armed forces
Coffee, tea and cocoa (code 01.2.1)		Kinder gardens
Mineral waters, soft drinks, fruit and vegetable juices (code 01.2.2)		Nurseries

#### Consultation questions

- Do you consider all the food categories relevant for the foodservice segments considered relevant within this project?
- Your views on the adequacy of the criteria set proposed to the foodservice segments listed are very welcome.

## 2.1.2 Definitions

The following definitions for scope and for food service have been amended by stakeholder consultation feedback. In the following a list of definitions considered relevant for the revision of the EU GPP criteria.

Catering service: *The preparation, storage and, where appropriate, delivery of food and drinks for consumption by the consumer/client/patient at the place of preparation, at a satellite unit or at the premises/venue of the client.*

Contract catering firm: *A business engaged in (amongst other activities or services) providing a meals service (for example by running a staff restaurant or providing school meals) or providing drinks, snacks or vending.*

Conventional kitchen: *A kitchen (at the place of consumption) where all, or a significant part of, food is prepared from raw ingredients.*

Centralised production unit: *Central kitchens or central food factories that send out completed dishes or pre-processed ingredients/meals to satellites. Can include both ready-prepared services and assembly-serve services.*

Ready-prepared: *Preparation on site or at a central facility of large batches of items for consumption that are then adequately stored frozen or chilled until required.*

Assembly-serve: *The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site.*

Vending and hot drink machines: *Machines that are available at all times with snacks, fruit, drinks and/or sandwiches etc. that are ready to eat/drink or that can be reheated.*

Water dispensers: *A device specifically for dispensing drinking water, which might have the possibility of heating and/or cooling the drinking water.*

## 2.2 Market analysis

Key findings from the market analysis include (chapter 2, Preliminary Report):

- The total expenditure on food and catering services in Europe for the 28 Member States is €206.3 billion (2011 data from Eurostat). The sector (in total) includes 1.5 million enterprises, has a turnover of €354 billion, and employs 8 million people (2012 data from Eurostat).
- The turnover of the total EU contract catering industry in 2008 was €24.6 billion and around 600000 people were employed (EIRO, 2010).
- Self-operating public bodies and contract caterers on average share the food and catering market around 50/50, but the difference is large between Member States (FERCO, 2012). The market penetration of contract catering organisations varies significantly across Member States and across public sector segments. For example, in Ireland contract caterers account for 61.9% of the market and in Sweden they account for only 15%.
- The most important sectors (in terms of purchase volume and value) in Europe that procure food and catering services are: health/welfare (42.7% of the total meals served), education (31.4% of the total meals served) and business & industry (17.8% of the total meals served).
- The EU-28 is a large producer of dairy, cereals (e.g. wheat), fruit and vegetables, meat, potatoes, bread and cold beverages. But the EU is also dependent on imports of fish, fruit, vegetables, animal feed, coffee, tea and cocoa (Eurostat Statistics in focus, 2011).

The consumption of organic production in the EU has been steadily rising since 2004 (FiBL and IFOAM, 2014). Germany (31 %), France (18 %), UK (8 %) and Italy (8 %) are the countries that buy most organic products. Combined these four countries accounted for nearly two thirds (65%) of the overall EU organic food sales in 2012. Conversely, countries such as Bulgaria, Cyprus, Estonia, Greece, Hungary, Latvia, Lithuania and Slovakia represent very underdeveloped markets (Thünen Institute of Farm Economics, 2013). In 2013 only 5.7 % of the arable land in the EU-28 was used for organic production.

- The most popular organic food products that are bought by consumers are: eggs, dairy, fruit, vegetables, hot beverages, meat (mainly in Northern Europe) and bread and bakery.
- There is a rising demand for healthy food and drink products both from private consumers and governments, especially in the education and health sectors.
- Labour cost and food purchase cost, are the two most important factors that influences the price per meal
- In terms of corporate engagement in sustainability issues there is a significant focus in the catering industry on energy savings, packaging reduction and food waste prevention.

## 2.3 Key environmental hotspots

The majority of the environmental impacts from food products (including catering service activities) arise at the primary production stage and in some cases also at the processing stage. Table 5 summarises the main impacts and causes identified from the review of Life Cycle Assessments (LCA) studies (section 3.1., Preliminary Report). At the catering service stage in the foodservice supply chain, energy and water use are important contributors to environmental impact, as well as waste generation and management.

**Table 5: Main environmental hotspots and causes from food and catering services.**

Category	Main environmental hotspots for Food and Catering Services	Overview of the environmental hotspots
<b>Fish and Seafood</b>	<p><b>Wild caught:</b></p> <ul style="list-style-type: none"> <li>- Fuel use of fishing vessels</li> <li>- Antifouling treatment (anti corrosion paint in fishing vessels)</li> <li>- Depletion of fish stocks</li> </ul> <p><b>Aquaculture:</b></p> <ul style="list-style-type: none"> <li>- Feed for fish (both from fishmeal or arable crops).</li> <li>- Antifouling treatment (anti corrosion paint in fish cages)</li> </ul> <p>• <b>Activities common to both fishing:</b></p> <p><b>Processing:</b></p> <ul style="list-style-type: none"> <li>- Energy use in processing</li> <li>- Wastewater treatment</li> <li>- Oils used in fish canning</li> </ul> <p><b>Refrigeration:</b></p> <ul style="list-style-type: none"> <li>- Energy and refrigerants used for cold storage</li> </ul> <p><b>Packaging materials:</b></p> <ul style="list-style-type: none"> <li>- Production of cans (e.g. aluminium)</li> </ul>	<ul style="list-style-type: none"> <li>• Combustion of fossil fuels and the use of anti-fouling treatments in fishing vessels for wild caught species and equipment for aquaculture</li> <li>• Depletion of fish stocks</li> <li>• Production of feed for fish and the use of anti-fouling treatments in fish cages</li> <li>• Processing activities, refrigeration and packaging</li> </ul>
<b>Meat</b>	<p><b>Animal feed production:</b></p> <ul style="list-style-type: none"> <li>- Land use</li> <li>- Land use change (e.g. destruction of natural habitats and CO<sub>2</sub> emissions associated with e.g. soy)</li> <li>- Pesticide use (in non-organic feed)</li> <li>- Long transport emissions</li> <li>- Production and use of fertilisers</li> </ul> <p><b>Animal production:</b></p> <ul style="list-style-type: none"> <li>- Methane emissions from ruminants</li> <li>- Ammonia emissions from rearing houses and manure storage</li> <li>- Energy use (heating and cooling birdhouses)</li> </ul> <p><b>Processing:</b></p> <ul style="list-style-type: none"> <li>- Energy use in slaughtering</li> </ul>	<ul style="list-style-type: none"> <li>• Animal feed production (land use, land use change, pesticide and fertilisers production and use)</li> <li>• Methane emissions from ruminants</li> <li>• Ammonia emissions from manure</li> <li>• Energy use (fossil fuels) for animal processing and bird breeding farms (heating and cooling)</li> </ul>
<b>Milk and Cheese</b>	<p><b>Animal feed production:</b></p> <ul style="list-style-type: none"> <li>- Land use</li> <li>- Land use change (e.g. destruction of natural habitats and CO<sub>2</sub> emissions associated with e.g. soy)</li> <li>- Pesticide use (in non-organic feed)</li> <li>- Long transport emissions</li> <li>- Production and use of fertilisers</li> </ul> <p><b>Animal production:</b></p> <ul style="list-style-type: none"> <li>- Methane emissions from ruminants</li> <li>- Emissions of ammonia from manure storage</li> </ul> <p><b>Processing:</b></p> <ul style="list-style-type: none"> <li>- Energy use in dairy plant</li> </ul>	<i>as meat (see above)</i>
<b>Eggs</b>	<p><b>Animal feed production (cereals and soy):</b></p> <ul style="list-style-type: none"> <li>- Land use</li> <li>- Land use change (e.g. destruction of natural habitats and CO<sub>2</sub> emissions associated with e.g. soy)</li> <li>- Pesticide use (in non-organic feed)</li> <li>- Long transport emissions</li> <li>- Production and use of fertilisers</li> </ul> <p><b>Animal production:</b></p> <ul style="list-style-type: none"> <li>- Energy use (heating and cooling birdhouses)</li> <li>- Emissions of ammonia from manure storage</li> </ul> <p><b>Transport</b></p> <ul style="list-style-type: none"> <li>- Fuel use (feed, manure and hens)</li> </ul>	<ul style="list-style-type: none"> <li>• Animal feed production (land use, land use change, pesticide and fertilisers' production and use)</li> <li>• Ammonia emissions from manure storage</li> <li>• Energy use (fossil fuels) in bird breeding farms (heating and cooling) and in birds transport.</li> </ul>

Category	Main environmental hotspots for Food and Catering Services	Overview of the environmental hotspots
Fruit	<p><b>Cultivation stage:</b></p> <ul style="list-style-type: none"> <li>- Production of chemical fertilisers and pesticides</li> <li>- Use of fertilisers and pesticides</li> <li>- Energy and water use for irrigation</li> </ul> <p><b>Processing</b></p> <ul style="list-style-type: none"> <li>- Energy use on fruit processing</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of card boxes, kraft paper and plastic boxes</li> </ul> <p><b>Transport</b></p> <ul style="list-style-type: none"> <li>- Long distance transport</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides, and energy and water in irrigation),</li> <li>• Energy use (in processing and refrigeration).</li> <li>• Packaging materials</li> <li>• Transport (fossil fuel).</li> </ul>
Vegetables	<p><b>Cultivation stage:</b></p> <ul style="list-style-type: none"> <li>- Production of chemical fertilisers and pesticides</li> <li>- Use of fertilisers and pesticides</li> <li>- Energy and water use for irrigation</li> <li>- Energy use when cultivating in greenhouses <sup>a)</sup></li> </ul> <p><b>Processing</b></p> <ul style="list-style-type: none"> <li>- Water and energy use in processing</li> </ul> <p><b>Refrigeration</b></p> <ul style="list-style-type: none"> <li>- Energy use for long term cold storage</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of steel, glass and carton</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides, and energy and water in irrigation).</li> <li>• When greenhouses are used (energy use).</li> <li>• Water and energy used in processing and refrigeration (fossil fuels).</li> <li>• Packaging materials.</li> </ul>
Bread and Cereals	<p><b>Cultivation stage:</b></p> <ul style="list-style-type: none"> <li>- Production of chemical fertilisers and pesticides</li> <li>- Use of fertilisers and pesticides</li> <li>- Energy use in field work</li> </ul> <p><b>Manufacture</b></p> <ul style="list-style-type: none"> <li>- Energy use</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of packaging materials</li> </ul> <p><b>Transport</b></p> <ul style="list-style-type: none"> <li>- Fuel use</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides, and energy in fieldwork).</li> <li>• Energy used in processing (fossil fuel).</li> <li>• Packaging materials</li> <li>• Transport (fossil fuel).</li> </ul>
Oils and fats	<p><b>Cultivation stage:</b></p> <ul style="list-style-type: none"> <li>- Production of chemical fertilisers and pesticides</li> <li>- Use of fertilisers and pesticides</li> <li>- Energy use in field work</li> </ul> <p><b>Manufacture (mill process)</b></p> <ul style="list-style-type: none"> <li>- Energy use (fossil fuel)</li> <li>- Methane release (anaerobic digestion of effluent in open ponds)</li> <li>- Disposal of Empty Fruit Bunch in landfills leads to GHG emissions</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of packaging materials (e.g. glass bottles)</li> </ul> <p><b>Transport</b></p> <ul style="list-style-type: none"> <li>- Fuel use</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides, and energy in fieldwork)</li> <li>• Energy used in processing (fossil fuel)</li> <li>• Emissions from landfill</li> <li>• Packaging materials</li> <li>• Transport (fossil fuels)</li> </ul>
Hot drinks	<p><b>Cultivation stage:</b></p> <ul style="list-style-type: none"> <li>- Production and use of chemical fertilisers</li> <li>- Production and use of pesticides</li> </ul> <p><b>Manufacture:</b></p> <ul style="list-style-type: none"> <li>- Drying of tea leaves</li> </ul> <p><b>Consumer</b></p> <ul style="list-style-type: none"> <li>- Energy use for water boiling</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of materials (e.g. glass)</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides).</li> <li>• Energy used in drying tea leaves (fossil fuel).</li> <li>• <u>Energy use during consumption (heating).</u></li> <li>• Packaging materials</li> </ul>

Category	Main environmental hotspots for Food and Catering Services	Overview of the environmental hotspots
Cold drinks	<p><b>Cultivation stage (e.g. orange juice):</b></p> <ul style="list-style-type: none"> <li>- Production and use of chemical fertilisers</li> <li>- Production and use of pesticides</li> <li>- Energy use in irrigation</li> </ul> <p><b>Manufacture:</b></p> <ul style="list-style-type: none"> <li>- Energy use in the bottling process</li> <li>- Water use</li> <li>- Packaging</li> </ul> <p><b>Consumer</b></p> <ul style="list-style-type: none"> <li>- Energy use for refrigeration</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of materials and weight of packaging</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation stage (production and use of fertilisers and pesticides).</li> <li>• Energy used in irrigation.</li> <li>• Energy, water and packaging during manufacture.</li> <li>• <u>Energy use for refrigeration.</u></li> <li>• Packaging materials.</li> </ul>
Confectionery	<p style="text-align: center;"><i>Amount of information available is scarce.</i></p>	<p style="text-align: center;"><i>Amount of information available is scarce.</i></p>
Catering Services	<p><b>Food procurement:</b></p> <ul style="list-style-type: none"> <li>- Embedded environmental impacts in food products</li> </ul> <p><b>Operational support</b> (<i>lighting, ventilation, air conditioning, heating, water use, supplies (cleaning, toilets, disposable products) and administration stage</i>):</p> <ul style="list-style-type: none"> <li>- Use of energy and partially use of cleaning products have a large impact on carcinogens, eco-toxicity and fossil fuels.</li> </ul> <p><b>Food storage and food preparation</b> only have a marginal impact on the total.</p> <ul style="list-style-type: none"> <li>- Among the food preparation operations, the cooking stage shows a large contribution. Cook chill systems show a comparatively larger impact when compared to the cook-warm. Cook chill requires chill, stored cool and reheated. Cook warm is ready to eat. But since the cook chill system has less food waste than cook warm it has a lower impact in total (if including the effect of food waste).</li> </ul> <p><b>Transport</b></p> <ul style="list-style-type: none"> <li>- Fuel use</li> </ul> <p><b>Packaging materials</b></p> <ul style="list-style-type: none"> <li>- Production of materials (e.g. tinfoil)</li> </ul> <p><b>Solid waste management</b></p> <ul style="list-style-type: none"> <li>- Production and disposal of organic waste</li> <li>- Use and disposal of packaging (e.g. landfilling)</li> </ul>	<ul style="list-style-type: none"> <li>• <b><u>Food procurement</u></b> (production of food products)</li> <li>• <b><u>Energy use in food storage and preparation (marginal impact on the overall)</u></b></li> <li>• Energy and water use in kitchens during meals preparation</li> <li>• Packaging materials</li> <li>• <b><u>Solid waste</u></b> (production and landfilling of organic waste and packaging materials)</li> </ul>

<sup>a)</sup> energy use in greenhouses (originated from fossil fuels) was identified as a hotspot for vegetables. There is currently no energy use limit for greenhouses in the EU, even for organic systems, as the demand for energy depends on regions and climate – of which the differences between EU Member States are great – and therefore one limit for the whole of the EU is not easy to achieve (European Commission, 2013a). The information collected shows that the organic label KRAV (national label for Sweden) states that of the total electricity used in greenhouses (for instance for heating, cold storage and lighting) 80 % must be from renewable sources and the maximum use of fossil fuel energy per week is 2.5 kWh per m<sup>2</sup> (KRAV, 2015).

## **2.4 Improvement areas**

Improvement potential areas associated with food and catering services were investigated in the Preliminary Report (section 4.5., Preliminary Report). This was done by analysing together the findings from the technical analysis (section 3.2., Preliminary Report) were the availability of labels and schemes across EU-28 that could be used as part of the criteria verification for the food service sector together with the analysis of the improvement potentials) retrieved from current available standards (including the Best Environmental Management Practices in the tourism and food and beverages sectors), the best cases studies mentioned in GPP for food and catering and potentials collected from other sources) (section 4.1 to 4.4., Preliminary Report). After cross-checking which ones have the potential to be addressed in the framework of the EU GPP, relevant improvement potential areas were identified and are summarised in Table 6 for Food Procurement and for Catering Services.

**Table 6: A summary of the potential environmental improvement opportunities.**

Food and catering service areas	Key environmental (and ethical) aspects and impacts	Potential environmental improvement areas for food and catering services
<b>Food procurement</b>	<p><i>Impacts in the <u>food cultivation stage</u>:</i></p> <ul style="list-style-type: none"> <li>• Production and use of fertilisers and pesticides;</li> <li>• Energy uses in fieldwork;</li> <li>• Water uses in irrigation;</li> <li>• Energy uses in greenhouses production.</li> </ul>	<p>Procurement of organic produce            Procurement of products under "integrated production systems"            Procurement of seasonal produce            Procurement of more sustainable products</p>
	<p><i>Impacts from <u>wild and farm fishing</u>:</i></p> <ul style="list-style-type: none"> <li>• Depletion of fish stocks</li> <li>• Fuel and antifouling used in fishing vessels</li> <li>• Production of feed and anti-fouling treatments in fish cages for farmed fish</li> </ul>	<p>Exclude fish species identified in the 'fish to avoid' list            Procurement of certified fish and seafood from wild capture and farmed</p>
	<ul style="list-style-type: none"> <li>• Animal cruelty due to a lack of respect for the animal health and well-being</li> </ul>	<p>Procure of livestock products with high animal welfare standards</p>
	<ul style="list-style-type: none"> <li>• Products sourced in developing countries considering ethical and minimal environmental considerations (as e.g. unsustainable deforestation and restrict use of hazardous pesticides)</li> </ul>	<p>Procure fair trade products</p>
	<ul style="list-style-type: none"> <li>• Materials in packaging</li> </ul>	<p>Procurement in bulk or more environmental friendly packaging (bio-based materials being a possible option). As for instance choose packaging with less material (lighter weight) where possible. In some cases single-use portions are better than bulk.</p>
<b>Catering service</b>	<ul style="list-style-type: none"> <li>• Energy and water uses in food storage and meals preparations</li> </ul>	<p>Staff training            Implementation of an environmental management system to ensure that the service provider attempts to lower the environmental impact associated with service provision            Procure energy efficient kitchen equipment</p>
	<ul style="list-style-type: none"> <li>• Production of solid waste (from packaging and organic)</li> </ul>	<p>Staff training (awareness in areas such as stock management and storage, use less bulk portions or use smaller plates, and adequate offer to clients taste). Also on reusable cutlery, crockery wherever possible.            Selective solid waste sorting (including possibly of bio-based materials) and adequate disposal for final treatment</p>
	<ul style="list-style-type: none"> <li>• Fuel use in transport of food (raw and prepared meals)</li> </ul>	<p>Procure vehicle fleet with lower environmental impact            Improvement of transport routes</p>
	<ul style="list-style-type: none"> <li>• Consumption of natural resources and wastewater pollution derived from the consumption of consumables goods (paperware, tableware and cleaning products as hand soaps, surface cleaners and detergents)</li> </ul>	<p>Procure more environmentally friendly consumable goods</p>
	<p><i>General environmental hotspots:</i></p> <ul style="list-style-type: none"> <li>• Use of lower environmental impact food products</li> <li>• Generation of food waste</li> <li>• Food stock management</li> <li>• Energy and water consumption during meals preparation</li> </ul>	<p>Actions to take on menu planning which can have a large improvement potential in several areas, as e.g., promoting the use of food products with lower environmental impacts (by offering vegetarian meals), offer meals with seasonal products, reduce food waste, and provide information on nutritional values to consumers.</p>



### 3 Food safety

In the European market, there is a common legal framework that sets the food safety requirements that ensure that only safe food and feed is placed on the Union market or fed to food-producing animals. The main pieces of legislation are the Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, which is further developed by other regulations, and Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs. The Regulation (EC) No 178/2002 requires food and feed business operators to be able to identify any person from whom they have been supplied with a food, a feed, a food-producing animal, or any substance intended to be, or expected to be, incorporated into a food or feed. To this end, such operators shall have in place systems and procedures which allow for this information to be made available to the competent authorities on demand. They shall have in place systems and procedures to identify the other businesses to which their products have been supplied. Food or feed which is placed on the market shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with the relevant requirements of more specific provisions. The requirements on traceability are mandatory for all food operators including retail and distribution activities, i.e. catering services.

On the other hand, the Regulation (EC) No 852/2004 establishes the obligation of food business operators, including retail and distribution activities, to put in place, implement and maintain a permanent procedure or procedures based on the HACCP (Hazard analysis and critical control points) principles as follows:

- a. identifying any hazards that must be prevented, eliminated or reduced to acceptable levels;
- b. identifying the critical control points at the step or steps at which control is essential to prevent or eliminate a hazard or to reduce it to acceptable levels;
- c. establishing critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards;
- d. establishing and implementing effective monitoring procedures at critical control points;
- e. establishing corrective actions when monitoring indicates that a critical control point is not under control;
- f. establishing procedures, which shall be carried out regularly, to verify that the measures outlined in subparagraphs (a) to (e) are working effectively;
- g. establishing documents and records commensurate with the nature and size of the food business to demonstrate the effective application of the measures outlined in (a) to (f).

The same regulation sets requirements on staff training, so food business operators, including retail and distribution activities, are to ensure:

- that food handlers are supervised and instructed and/or trained in food hygiene matters commensurate with their work activity;
- that those responsible for the development and maintenance of the hygiene procedures or for the operation of relevant guides have received adequate training in the application of the HACCP principles; and
- compliance with any requirements of national law concerning training programmes for persons working in certain food sectors.

Regarding official controls, registration and approval, the Regulation (EC) No 852/2004 sets every food business operator to notify the appropriate competent authority of each establishment under its control that carries out any of the stages of production, processing and distribution of food, with a view to the registration of each such establishment. Food business operators shall also ensure that the competent authority always has up-to-date information on establishments. The regulation also establishes that food business operators shall ensure that establishments are approved by the competent authority, following at least one on-site visit.

Apart from the European legislation which sets mandatory requirements in the European Union, the ISO 22000 standard sets requirements on food safety management systems, to be third-party certified. This standard covers

all the food supply chain, while other private schemes focused on food safety, as GlobalGap are limited to the primary production (FAO, 2008).

In the view of the European legislation and controls already in force in the European market, it seems unnecessary to set specific food safety criteria within the EU GPP. In case any environmental criterion might jeopardize the food safety principles, the precautionary approach to secure the food safety should rule on the decision making. In conclusion, the inclusion of food safety issues is considered to be out of the scope of this EU GPP revision.

## 4 Draft EU GPP Criteria proposal for Food

Table 7 summarises the main areas of improvement per criterion proposal. The rationale behind it is presented in more detail in the following sections.

**Table 7: Main improvement areas for food for each proposed criteria.**

Criteria type	Criterion	Name	Potential improvement areas
<b>Technical specifications (TS)</b>	TS1	Organic food products	<ul style="list-style-type: none"> <li>• Lower eco-toxicity and lower GWP (in some cases)</li> <li>• Higher animal welfare standards</li> <li>• Healthier (in some aspects as containing more oxidants, less pesticides and heavy metals)</li> <li>• Natural resources should be targeted, better protected under organic production: air, biodiversity, soil and water</li> </ul>
	TS2	Marine and aquaculture food products from sustainably managed sources	<ul style="list-style-type: none"> <li>• Avoided pressure on depleting fish stocks</li> <li>• Lower environmental impact feed used in aquaculture</li> </ul>
	TS3	Seasonal produce	<ul style="list-style-type: none"> <li>• Lower environmental impact when compared to artificial growing environment heated by fossil fuels.</li> </ul>
	TS4	Integrated production	<ul style="list-style-type: none"> <li>• Restricted use of pesticides and synthetic fertilisers</li> <li>• Greater resource efficiency</li> </ul>
<b>Award Criteria (AC)</b>	AC1	Additional organic food products	<ul style="list-style-type: none"> <li>• Lower eco-toxicity and lower GWP (in some cases)</li> <li>• Higher animal welfare standards</li> <li>• Healthier (in some aspects as containing more oxidants, less pesticides and heavy metals)</li> </ul>
	AC2	Integrated production	<ul style="list-style-type: none"> <li>• Restricted use of pesticides and synthetic fertilisers</li> <li>• Greater resource efficiency</li> </ul>
	AC3	Additional marine and aquaculture food products from sustainably managed sources	<ul style="list-style-type: none"> <li>• Avoided pressure on depleting fish stocks</li> <li>• Lower environmental impact feed used in aquaculture</li> </ul>
	AC4	Animal welfare	<ul style="list-style-type: none"> <li>• Ethical consideration</li> <li>• Some evidence was found on better meat quality</li> </ul>
	AC5	Fair trade products	<ul style="list-style-type: none"> <li>• Ethical consideration</li> <li>• Sustainable deforestation and restrict use of hazardous substances (leading to a lower environmental impact)</li> </ul>
	AC6	Packaging	<p>Embedded impacts in packaging materials, lower transport emissions, better end of life for waste management:</p> <ul style="list-style-type: none"> <li>• Lower abiotic resource depletion</li> <li>• Lower energy use</li> <li>• Lower human toxicity</li> <li>• Lower eco-toxicity</li> </ul>
	AC7	Sustainable palm oil	<p>Better management systems used in the palm oil production and extraction:</p> <ul style="list-style-type: none"> <li>• Use of fertilisers</li> <li>• Lower emissions in oil mills</li> </ul>
		Other schemes of sustainable production (Criteria area)	<ul style="list-style-type: none"> <li>• Ethical and sustainability considerations</li> </ul>

## 4.1.1 Technical Specifications (TS) and Award Criteria (AC)

### 4.1.1.1 Organic food products (TS1, AC1)

#### **Rationale**

In the review of LCAs studies on organic food products the general consensus was that organic products (per functional unit expressed in mass or volume of food product) had lower pesticide use (eco-toxicity) and a lower impact on climate change than conventional food products (e.g. for eggs, milk and bananas). However, organic products (per functional unit) have larger eutrophication and acidification potentials when compared with conventional products (in particular for livestock production due to manure emissions and more extensive land use). The reasoning why organic can have larger environmental and economic impacts than conventional production is that organic production needs more resources (e.g. more land to grow crops since yields are lower and more feed for animals because they live longer). Based on the findings from the environmental analysis (section 3.1.3.6.3., Preliminary Report) it is concluded that there is insufficient evidence available to suggest that organic products, have, overall, a lower environmental impact than conventionally produced products. The findings from the environmental analysis are that the evidence regarding organic vs conventional food is inconclusive. Overall, research shows both pros and cons concerning organic and conventional farming. A few articles mentioned that if carbon sequestration were included in the LCA, the carbon footprint for organic animal products would be the same as for conventional (Hietala et al., 2014; Pergola et al. 2013), or lower than conventional if the farm has a large proportion of grassland (Hietala et al., 2014; Halberg et al., 2010).

However, recently a study from Ponisio (2015) revealed that the organic-to-conventional yield ratio is being estimated as an average over many disparate systems and crop types. The over-representation of specific practices or crops in the dataset may therefore influence the current estimations for the yield gap between the conventional and the organic farming systems. In addition, the many management practices used in both organic and conventional farming, a broad-scale comparison of organic and conventional production may not provide the most useful insights for improving management of organic systems (Ponisio, 2015).

A literature review of 34 LCAs that compared organic and conventional agriculture concluding that it is not yet possible to draw a conclusion between LCAs that compare organic and conventional food products, since the studies do not take into account the differences of the farming systems at an inventory level (Meier et al., 2015). This is to say that, often, assumptions made for organic systems are based on the nitrogen values for conventional agriculture. (One reason can be that there is little data available on extensive systems). Furthermore, organic farming provides non-commodity outputs such as enhanced soil quality, biodiversity and ecosystem services to society. Some of these aspects related to the multi-functionality of agriculture, such as biodiversity and soil quality, are still rather difficult to integrate into LCA methodology.

When looking at the more health-related aspects, the comprehensive systematic review of 343 research articles about organic and conventional crops, found statistical significant results that organic crops (i.e. cereals, fruit and vegetables) contain more antioxidants, less pesticides and less heavy metals (such as cadmium that accumulates in the body) than do conventional crops (section 3.1.7.4., Preliminary Report). In addition, from an animal welfare perspective, organic production has higher standards. This is to say that products based on genetically modified organisms are prohibited in organic production and animal welfare is taken into consideration (OJEU, 2007). For animal welfare there are requirements on what breeds are used, what feed animals are given, and living conditions must be comfortable with access to the outdoors (European Commission, 2014). Animals must be healthy and must have their special needs acknowledged and furthermore enjoy freedom of pain, which entails rules on transport and slaughter methods (European Commission, 2014).

With respect to the market availability it is observed that the growth in the EU organic food market continued at a steady rate between 2004 and 2012. The growth between 2011 and 2012 is 6 % (section 2.2.4.1., Preliminary Report). On the other hand it is also clear that that the spending of the catering sector in organic food products is substantially lower (by value) when compared with the retail sector (Table 45, Preliminary Report). It was also identified that some organic products are more dominant than others in the European organic market. The most dominant organic food products include: eggs, dairy, fruit, vegetables, hot beverages, meat (mainly in Northern Europe) and bread and bakery (in some Member States) (FiBL and IFOAM, 2014).

Stakeholders show a different view on the request of organic food products in tenders, when requested to express their views by responding to the questionnaire hand out at the beginning of this project (section 1.5.3.2. Preliminary Report). Further, the uptake of EU GPP criteria by public procurers shows that the majority 5 out of 7 respondents use it within the public tendering (section 1.5.3.3., Preliminary Report). Furthermore, the review made on current GPP schemes allows concluding that 16 entities out of 31 use this requirement within the public tenders. The percentage of organic product required is however, wide variable ranging from 10% to 100% of organic meals (according to the 31 GPP schemes reviewed - section 1.6, Preliminary Report). Organic products are often more expensive than conventional products. Stakeholders, with practice in procuring catering services, revealed that cost for fully organic meals have increased 30%. However, it seems that any cost premium for organic products does not dissuade certain public procurers. In some cases, the overall costs of organic meat purchase (and the related environmental impact) is reduced by including a veggie-day or an overall reduction in the offer of meat in canteens.

The proposed award criterion is in line with the benchmarks of excellence for green procurement of food and drink products (European Commission, 2013b). This reference document informs that is at least 40 % food and drink products, by procurement value, are certified according to high environmental standards or criteria (European Commission, 2013b).

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS1. Organic food products</b> The organic produce used per year shall be at least 25% of the total procurement cost of food and drink products.</p> <p><b>Verification:</b> The tenderer shall provide data (name, amount in mass and cost) of food and drink products, planned to be supplied in the execution of the contract indicating specifically the products that comply with organic requirements. Organic products shall comply with Regulation (EC) No 834/2007. Products carrying an EU label for organic products, or national organic labels third party verified, will be deemed to comply.</p>	<p><b>TS1. Organic food products</b> The organic produce used per year shall be at least 50% of the total procurement cost of food and drink products.</p> <p><b>Verification:</b> The tenderer shall provide data (name, amount in mass and cost) of food and drink products, planned to be supplied in the execution of the contract indicating specifically the products that comply with organic requirements. Organic products shall comply with Regulation (EC) No 834/2007. Products carrying an EU label for organic products, or national organic labels third party verified, will be deemed to comply.</p>
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC1. Additional organic food products</b> Points shall be awarded proportionally to tenders in which the amount of organic produce, per year, is above 25% of the total procurement cost of food and drink products.</p> <p><b>Verification:</b> See above TS1</p>	<p><b>AC1. Additional organic food products</b> Points shall be awarded proportionally to tenders in which the amount of organic produce, per year, is above 50% of the total procurement cost of food and drink products.</p> <p><b>Verification:</b> See above TS1</p>

### Consequences

This criterion drives the food market towards sustainable food production through the procurement of greater amounts of certified organic products by public authorities. The amounts vary with the ambition level. Organic production still has areas for improvement in terms of environmental impacts, as identified in the Preliminary Report, but it cannot be dismissed since organic products are available throughout EU members and organic products are currently being used either as mandatory or optional requirements in public tenders.

**Consultation questions to stakeholders**

- Do you agree with the ambition levels set (% for the criteria) for the technical specifications and award criteria?
- Do you agree to express the criteria in terms of the total procurement cost of food and drink products within the contract?
- Is this criterion particular relevant for vending machines (e.g. organic coffee and sugar)? If so, shall we have a threshold for the % of organic in vending machines?

#### **4.1.1.2 Marine and aquaculture food products (TS2 and AC3)**

##### **Rationale**

The main environmental impacts associated with fish product consumption are caused by fuel use when catching fish and the soy feed used in fish farming systems. Another hotspot related to the consumption of fish and seafood products is biodiversity. It is more sustainable to procure fish from stocks that are not overfished and this can be done by a careful selection of the fish species being procured. The Marine Conservation Society provides an up-to-date guideline on what fish stocks can be responsibly fished or farmed for wild caught fish and aquaculture respectively. A responsible procurement is done by not purchasing threatened or endangered species and fish from damaging fisheries or farming systems (listed in the Marine Conservation Society red list) (MCS, 2015). Fish to avoid (species belonging to the so called 'Red list') are fish that have been calculated as being from unsustainable, overfished, highly vulnerable or poorly managed systems. There may also be unacceptable levels of unwanted bycatch and other damaging environmental practices.

When procurement includes the purchase of popular (and often overfished) species such as tuna or cod, and fish from aquaculture (e.g. salmon), the means of verifying responsible sourcing can be achieved through the use of the ecolabelling schemes such as the Marine Stewardship Council (MSC) label for wild caught fish and the Aquaculture Stewardship Council (ASC) label for fish from aquaculture. Products with the MSC and ASC labels are widely available in all Member States.

In terms of the hotspots addressed by the labels, the MSC label does not have specific restrictions in place for fuel use, but does encourage fishing methods which use less fuel (section 3.2.1.3., Preliminary Report). There are over 20,000 MSC-labelled products on sale around the world, from prepared seafood meals to fresh fish from the seafood counter. Today, more than 250 fisheries are MSC-certified in 36 countries. Over 17,000 MSC-labelled products are available in just under 100 countries around the world and over 34,000 business locations have MSC Chain of Custody, making sure the product can be traced back to a sustainable fishery (MSC, 2015a). In total, 8.8 million tons of seafood is caught by certified fisheries, about 10% of the total global wild-caught seafood supply (MSC, 2015b).

In terms of the hotspots addressed by the farmed fish ASC label, it requires the sourcing of responsibly produced feed that may vary according to the fish or seafood species (section 3.2.1.3., Preliminary Report). As an example for salmon, the requirements include certification schemes to show the sourcing of Responsibly Produced Salmon Feeds. The ASC label certifies that the majority of soya used is certified according to RTRS (Round Table on Responsible Soy) which ensures that more soy is sustainably produced. Since its starting, the ASC logo is responsible for the farming of 12 different types of fish and shellfish and the logo is on packaging across 44 countries (ASC, 2015).

Stakeholder feedback to the survey sent out revealed that distinct requirements should be available to address separately marine and aquaculture fish and seafood, since they have different production methods and therefore different environmental impacts. It was also proposed to have this criterion as core. The analysis on the uptake of EU GPP criteria by public procurers shows that only 2 out of 7 respondents use it within the public tendering (section 1.5.3.3., Preliminary Report). The review made of currently used GPP schemes allows concluding that 6 out of 31 foresee this requirement (section 1.6., Preliminary Report). However, the current schemes may either set as mandatory or optional the requirements on certified MSC or ASC fish and seafood, however, the amount to be required is not clearly identified among the criteria reviewed.

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS2. Marine and aquaculture food products</b> All fish products must not contain species and stocks identified in the Marine Conservation Society 'fish to avoid' list.<sup>1)</sup></p> <p><b>Verification:</b> The tenderer shall provide data (name and the amount in mass) of marine and aquaculture food products, planned to be supplied in the execution of the contract indicating specifically the marine and aquaculture products that comply with the requirements.<sup>2)</sup></p>	<p><b>TS2. Marine and aquaculture food products</b></p> <p>1. All fish products must not contain species and stocks identified in the Marine Conservation Society 'fish to avoid' list<sup>1)</sup></p> <p>2. At least 10 % of the amount (in mass) of marine food products shall be compliant with the following principles:</p> <ul style="list-style-type: none"> <li>• respects all applicable (local, national and international) laws and standards;</li> <li>• is kept at a level which ensures it can continue indefinitely;</li> <li>• is conducted in a manner that does not significantly alters the age, genetic structure or sex composition of the captured stock;</li> <li>• allows for the maintenance of the structure, productivity, function and diversity of the ecosystem on which the fishery depends;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p>3. At least 10% of the amount (in mass) of aquaculture food products shall be compliant with the following principles:</p> <ul style="list-style-type: none"> <li>• respects all applicable laws and regulations where farming operation is located;</li> <li>• avoids, remedies or mitigates significant adverse effects on habitats and biodiversity;</li> <li>• avoids and mitigates detrimental effects to the health and genetic diversity of wild populations;</li> <li>• manages diseases and pests in an environmentally responsible manner;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p><b>Verification:</b> The tenderer shall provide data (name and the amount in mass) of marine and aquaculture food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations<sup>2)</sup> will be deemed to comply.</p>
<b>Core criteria</b>	<b>Comprehensive criteria</b>
<b>Award Criteria</b>	
<p><b>AC3. Additional marine and aquaculture food products</b></p> <p>1. Points shall be awarded to tenders where at least 10 % of the amount (in mass) of marine food products compliant with the following principles:</p>	<p><b>AC3. Additional marine and aquaculture food products</b></p> <p>1. Points shall be awarded to tenders where at least 20 % of the amount (in mass) of marine food products compliant with the following principles:</p>



<ul style="list-style-type: none"> <li>• respects all applicable (local, national and international) laws and standards;</li> <li>• is kept at a level which ensures it can continue indefinitely;</li> <li>• is conducted in a manner that does not significantly alters the age, genetic structure or sex composition of the captured stock;</li> <li>• allows for the maintenance of the structure, productivity, function and diversity of the ecosystem on which the fishery depends;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p>2. Points shall be awarded to tenders where at least 10% of the amount (in mass) of aquaculture food products compliant with the following principles:</p> <ul style="list-style-type: none"> <li>• respects all applicable laws and regulations where farming operation is located;</li> <li>• avoids, remedies or mitigates significant adverse effects on habitats and biodiversity;</li> <li>• avoids and mitigates detrimental effects to the health and genetic diversity of wild populations;</li> <li>• manages diseases and pests in an environmentally responsible manner;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p><b>Verification:</b> The tenderer shall provide data (name and the amount in mass) of marine and aquaculture food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations<sup>2)</sup> will be deemed to comply.</p>	<ul style="list-style-type: none"> <li>• respects all applicable (local, national and international) laws and standards;</li> <li>• is kept at a level which ensures it can continue indefinitely;</li> <li>• is conducted in a manner that does not significantly alters the age, genetic structure or sex composition of the captured stock;</li> <li>• allows for the maintenance of the structure, productivity, function and diversity of the ecosystem on which the fishery depends;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p>2. Points shall be awarded to tenders where at least 20% of the amount (in mass) of aquaculture food products compliant with the following principles:</p> <ul style="list-style-type: none"> <li>• respects all applicable laws and regulations where farming operation is located;</li> <li>• avoids, remedies or mitigates significant adverse effects on habitats and biodiversity;</li> <li>• avoids and mitigates detrimental effects to the health and genetic diversity of wild populations;</li> <li>• manages diseases and pests in an environmentally responsible manner;</li> <li>• uses resources in an efficient and environmentally responsible manner.</li> </ul> <p><b>Verification:</b> The tenderer shall provide data (name and the amount in mass) of marine and aquaculture food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations<sup>2)</sup> will be deemed to comply.</p>
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1) The fish to avoid list is available from <http://www.fishonline.org/fishfinder?min=5&max=5&fish=&avoid=1>

2) Such as, e.g., the Marine Stewardship Council (MSC) for marine food products and the Aquaculture Stewardship Council (ASC) for aquaculture food products.

### **Consequences**

This criteria proposal requires that all fish and seafood products purchased are not included in the red list for the species and stocks identified in the Marine Conservation Society. This proposal awards points to tenderers that provide third-party certified fish and seafood products originated from wild catch or aquaculture. This proposal aims to support the use of fish and seafood from sustainably managed sources across the EU.

<b>Consultation questions</b>
<ul style="list-style-type: none"> <li>○ Do you agree with the ambition levels (% set) for the technical specifications and award criteria?</li> <li>○ Do you have experience in the use of other than the Marine Conservation Society guide for the red-listed fish?</li> <li>○ What is your experience in the market availability for the MSC- and ASC-labelled fish and seafood?</li> <li>○ Do you have experience in the feasibility for SMEs to comply with this criterion?</li> <li>○ Do you think the principles within the certification schemes for MSC and ASC are adequately summarised?</li> </ul>

### 4.1.1.3 Seasonal produce (TS3)

#### Rationale

Scientific evidence shows that seasonal produce have lower environmental impact than food products cultivated in artificial environments that are strongly dependent on fossil fuels (section 4.5.1.4., Preliminary Report). Seasonal produce is also likely to be cheap as there is high supply.

The evidence of the review made has found cases where in-season produce which is imported has a lower environmental impact than out-of-season produce sourced locally - such as tomatoes from Spain grown on fields compared to domestic production of tomatoes in fossil fuel heated greenhouses in the UK (Webb *et al.*, 2013). However, it is also suggested that there are a number of factors that dictate whether out-of-season in country of procurement or import of in season products is the most environmentally beneficial option when products are out of their natural season in the country of procurement. However, the variability of situations leads to complexity that does not make it easy to set a threshold for the seasonal produce to be used in menus.

Stakeholders feedback on the survey sent out revealed that this criterion should be linked to the country in which it has been produced. The analysis on the uptake of EU GPP criteria by public procurers shows that menu planning according to season shows that 4 out of 7 respondents use it within the public tendering (section 1.5.3.3., Preliminary Report). The review made on current GPP schemes allows concluding that seasonal was cited in 15 GPP schemes (out of 31) (section 1.6., Preliminary Report). All this supports the proposal to retain the current criteria on seasonality to promote the seasonal produce within catering menus.

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p>This criterion applies whenever the procurer can choose to buy seasonal produce by using season calendars</p> <p><b>TS3. Seasonal produce</b> 1. Non-refrigerated natural environments seasonal produce<sup>a)</sup> (e.g. vegetables, fruit) shall be provided according to the seasonal produce calendars accompanying the tender</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) on the fresh food products planned to be supplied in the execution of the contract indicating explicitly which products are natural environments seasonal produce and identification of the producer</p>	<p>This criterion applies whenever the procurer can choose to buy seasonal produce by using season calendars</p> <p><b>TS3. Seasonal produce</b> 1. Non-refrigerated natural environments seasonal produce<sup>a)</sup> (e.g. vegetables, fruit) shall be provided according to the seasonal produce calendars accompanying the tender</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) on the fresh food products planned to be supplied in the execution of the contract indicating explicitly which products are natural environments seasonal produce and identification of the producer.</p>

<sup>a)</sup> Natural environments seasonal produce include food products that are produced according to the local seasons, are not refrigerated and not grown in heated greenhouses.

#### Consequences

The proposed criteria specify the type of food products in focus to promote the procuring of fresh (not refrigerated), naturally grown (without resource to artificially heated greenhouses) seasonal products.

Consultation questions
<ul style="list-style-type: none"> <li>○ Do you have any experience on an alternative methodology to verification throughout the contract of this requirement?</li> <li>○ Do you have a sharable experience on the use of seasonal calendars?</li> </ul>

#### 4.1.1.4 Integrated production (TS4, AC2)

##### Rationale

Scientific evidence suggests that integrated production could be a way to achieve lower environmental impacts from agriculture at no or little additional cost, as it represents a compromise between organic and conventional production methods (section 3.2.1.1., Preliminary Report). It provides larger environmental benefits compared to conventional farming because of the restricted use of pesticides and synthetic fertilisers. However, at present there is no EU wide certification system which sets out minimum requirements to verify compliance. National labels are available but only for a limited number of Member States (mostly in Spain, Italy and France), and the minimum requirements within these labels vary (section 3.2.1.1., Preliminary Report).

The environmental analysis research has proposed that integrated production can be the way forward, since it is a combination of organic and conventional practices (Tuomisto et al., 2012a; Tuomisto et al., 2012b). However, there were few LCAs available (within the scope of this study) that investigated integrated production and thus this environmental analysis cannot conclude what production systems is most preferable – it depends on the food category and sometimes also the farmer.

Stakeholders when requested to express their views by responding to the questionnaire (section 1.5.3.2. Preliminary Report) have proposed that integrated production is likely to be more suited as an award criterion. The analysis on the uptake of EU GPP criteria by public procurers shows that only 2 out of 7 respondents use it within the public tendering (section 1.5.3.3., Preliminary Report). Furthermore, the review made on current GPP schemes allows concluding that few entities (only 2) out of 31 recommend this requirement. When analysing the GPP schemes, this criteria is often integrated within the requirement for organic products. The reviewed schemes do not make a distinction between requirements on organic and integrated production. Conventional and organic farming are regulated at European level, including with a quality label for organic farming. On the other hand, integrated production takes place exclusively at national or regional level and also there is an uneven uptake on the available integrated production schemes (OJEU, 2014). Due to that the criterion proposed a formulation as a technical specification at the comprehensive level and award criterion at the core level.

The criterion for organic production is proposed as a minimum technical specification due to widespread availability in the EU whereas the criterion for integrated production is set as a technical specification at the comprehensive level and as an award criterion due to potentially limited local availability. It should be noted that this proposal for the use of certified integrated products are considered as complementary to requirements for organic products.

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
	<p><b>TS4. Integrated production</b></p> <p>At least 10 % of the procurement cost of all food products, used per year, are produced according to integrated production standards</p> <p><b>Verification:</b></p> <p>The tenderer shall provide data (name, amount and cost) of all food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with integrated production standards.</p> <p>Food products carrying a national or regional label third party certified for integrated production, or equivalent, will be deemed to comply.</p> <p>Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.</p>
Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<b>AC2. Integrated production</b>	<b>AC2. Integrated production</b>

<p>Points shall be awarded to tenders in which at least 10 % of the procurement cost of all food products, used per year, are produced according to integrated production standards.</p> <p><b>Verification:</b> The tenderer shall provide data (name, amount and cost) of all food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with integrated production standards. Food products carrying a national or regional label third party certified for integrated production, or equivalent, will be deemed to comply. Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.</p>	<p>Points shall be awarded to tenders in which more than 10 % of the procurement cost of all food products, used per year, are produced according to integrated production standards</p> <p><b>Verification:</b> The tenderer shall provide data (name, amount and cost) of all food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with integrated production standards. Food products carrying a national or regional label third party certified for integrated production, or equivalent, will be deemed to comply. Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.</p>
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### **Consequences**

This criterion awards points to tenderers that provide third party certified food products from integrated production. It is important to support the development of integrated production (and accompanied labels) across the EU for the following reason: Due to the associated cost saving from reduced fertiliser and pesticide use farmers across the whole of the EU are undertaking the core components of integrated production albeit without branding it 'integrated production'. If more Member States signal to the market that food products are produced using integrated production then it can favour the development of an EU wide standardised integrated production scheme.

<b>Consultation questions to stakeholders</b>
<ul style="list-style-type: none"> <li>○ Do you have experience in using similar criteria in previous tenders?</li> <li>○ Do you agree with the ambition levels set (% for the criteria) for the core and comprehensive criteria?</li> </ul>

#### 4.1.1.5 Animal welfare (AC4)

##### Rationale

No harmonised system of animal welfare standards for labelling purposes exists (European Commission, 2015a). However, voluntary welfare labelling schemes exist, and animal welfare standards as an ethical criterion forms part of a number of the national GPP schemes mainly focusing on meat, eggs and dairy products. This particular issue is not covered by the reviewed LCA studies, because LCA studies disregards such aspects as social, economic or ethical matters, by focussing on productivity and resource use and efficiency. However, it is important to consider animal welfare, not only because consumers find it important, but also because animal welfare is linked with animal health and well-being (section 4.1.5.7., Preliminary Report).

The scientific evidence shows that higher animal welfare standards do not necessarily lead to reduced environmental impacts; in fact the reverse may be true because of, among other things, lower stocking densities.

In the environmental analysis section it became clear that higher animal welfare standards do not seem to have a beneficial impact on the environmental impact categories. Longer lives and more space (reduced stocking density) require more resources (per unit of production), hence, from an LCA perspective that will increase the total burden of meat production. Therefore there is a trade-off between environmental and ethical aspects for livestock production. In contrast, one study on pigs found that free-range pigs had better meat quality and stress level indicators than pigs kept indoors on slatted floors (Section 3.1.7.2., Preliminary Report). Though, there is too little evidence to confirm that better animal welfare always leads to better food quality.

It is proposed that where public authorities wish to procure livestock products with higher than average animal welfare standards that this be regarded as a premium product where procurement quantities are reduced. This will thus reduce the overall environmental burden associated with such products and will reduce the cost.

Stakeholders feedback on the survey revealed that this criterion should also be included as a core criteria. The analysis on the uptake of EU GPP criteria by public procurers shows that only 2 out of 7 respondents use it within the public tendering (section 1.5.3.3., Preliminary Report). The review made on current GPP schemes allows concluding that 7 out of 31 make use of this requirement within the public tenders (section 1.6., Preliminary Report). Within the current GPP schemes the focus of the criteria is on eggs, pig and poultry.

Higher animal welfare can be achieved by specifying free-range products, which have a number of standard requirements that can be considered as higher than average standards (i.e. free movement outdoors and lower stock densities). The label “free range” denotes a production method similar to conventional production but in which the animals are guaranteed outdoor access (Organic Trust Ltd, 2015).

These products are also generally cheaper than organic and slightly more expensive than conventional. It is hence proposed to be an award criterion. In addition, organic animal products go beyond free-range products in terms of animal welfare, thus the scope of the proposed criteria exclude organic food products. Organic products are instead proposed as technical specification (in criterion TS1 and AC1).

Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<p><b>AC4. Animal welfare</b></p> <p>1. Points shall be awarded to tenders where all non-organic eggs in shell to be delivered have been produced respecting animal welfare standards on outdoor access.</p> <p><b>Verification:</b></p> <p>The tenderer shall provide data (amount and labels) of all eggs planned to be supplied in the execution of the contract indicating specifically the ones compliant with free range standards.</p> <p>Eggs in shell labelled as free-range that have been third party certified, will be deemed to comply. Free range eggs labelled as 1 for producer code, as specified in the Commission Regulation No 589/2008 (annex I part A), can be used as a mean of proof for this criterion.</p>	<p><b>AC4. Animal welfare</b></p> <p>1. . Points shall be awarded to tenders where all non-organic eggs in shell to be delivered have been produced respecting animal welfare standards on outdoor access.</p> <p>2. Points shall be awarded to tenders where more than 5 % of the procurement cost, include <b>non-organic products</b> that are designated as ‘free-range’ animal products (e.g. chicken meat and pig meat)</p> <p><b>Verification:</b></p> <p>Free-range eggs in shell that have been third party certified according to high animal welfare standards <sup>a)</sup>, or equivalent, will be deemed to comply. Free range eggs labelled as 1 for producer code, as specified in the Commission Regulation No 589/2008 (annex I part A), can be used as a means of proof</p>

	<p>for this criterion.  Free-range animal products that have been third party certified according to high animal welfare standards <sup>1)</sup> will be deemed to comply.</p>
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<sup>1)</sup> Such as e.g. Label Rouge, RSPCA Assured, Red Tractor Farm Assurance,.

**Consequences**

This criterion aims to drive the use of higher animal welfare standards across the food industry. This proposal awards points to tenderers that provide food products certified with animal welfare standards.

<p><b>Consultation questions</b></p>
<ul style="list-style-type: none"> <li>○ Which is your experience in the market availability for meat products third party certified to animal welfare standards? Do you agree with the threshold level (5%) set for the comprehensive criteria)?</li> </ul>

#### 4.1.1.6 Fair trade products (AC5)

##### Rationale

Products originating from developing countries can have lower social/labour standards than the EU minimum accepted level. From an ethical perspective it is therefore proposed that products that are derived from developing countries should have a social/sustainable label to ensure at least a minimum social standard is achieved. These labels usually also have minimum environmental considerations, such as avoiding unsustainable deforestation and/or to restrict the use of hazardous pesticides (section 3.2.1.4., Preliminary Report).

Additionally, as part of these certification schemes farmers are often taught good farming practice which results in lower environmental impacts, compared to farmers that are not part of such a scheme. The most common products imported to the EU from developing countries (that are covered by sustainable/ ethical labels) are coffee, tea, sugar, chocolate and bananas (section 3.2.1.4., Preliminary Report).

There are a vast array of sustainable initiatives, programs and schemes available, for instance, in the coffee sector that have much higher uptake amongst farmers and which also have a positive impact on the environment. In terms of market availability the Fairtrade label is available across all of EU-28, although their market share is unknown (section 3.2.1.4., Preliminary Report).

The stakeholders feedback on the survey handed out revealed that ethical (fairly traded) standards could be part of the criteria set, since these usually include minimum environmental standards. The review made on current GPP schemes allows concluding that ethical trading was mentioned in 11 GPP schemes (out of 31) (section 1.6., Preliminary Report). Details in some of the schemes reveal that the majority have non mandatory requirements to fairly traded products as part of their tenders. Two schemes include mandatory requirements on fair trade products. One requires that one product is certified as 'fair trade' and the other scheme requires that a share of more than 50% of tea and coffee is 'fairly traded'. All this evidence supports the proposal to include fair trade as an additional award criterion.

Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<b>AC5. Fair trade products</b>	<b>AC5. Fair trade products</b>
Points shall be awarded to tenders where at least 20% of the procurement cost for all coffee, tea, chocolate (cocoa), sugar or bananas have been produced having sustainable/ethical considerations in regard.	Points shall be awarded to tenders where at least 50% of the procurement cost for all coffee, tea, chocolate (cocoa), sugar or bananas have been produced having sustainable/ethical considerations in regard
<b>Verification:</b>	<b>Verification:</b>
The tenderer shall provide data (amount and costs) of all coffee, tea, chocolate (cocoa), sugar or bananas planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion. Products that have been third party certified by widely accepted and recognised international organisations <sup>1)</sup> will be deemed to comply.	The tenderer shall provide data (amount and costs) of all coffee, tea, chocolate (cocoa), sugar or bananas planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion. Products that have been third party certified by widely accepted and recognised international organisations <sup>1)</sup> will be deemed to comply.
Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.	Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.

1) Such as e.g. Fairtrade, Rainforest Alliance, UTZ.

##### Consequences

This criterion aims to drive the use of fair trade food products to favour the use of social or sustainable labels. These labels are not only ethically sound but also beneficial for the environment as they have (at least) minimum environmental standards. Several environmental benefits from the use of labels include, for instance, the elimination of the use of hazardous materials (pesticide), avoidance of soil erosion deforestation, rationale use of water sources, management of wastewaters and solid waste, conservation of biodiversity (see Preliminary Report,

section 3.2.1.5 for a more complete overview). All these environmental benefits can be achieved through these labels.

**Consultation questions**

- Which is your experience in the market availability for products fair trade certified?
- Do you agree with the threshold level (20%) and 50% set, respectively, for the core and comprehensive criteria?
- Is this criterion particular relevant for vending machines?



#### **4.1.1.7 Packaging (AC6)**

Food packaging is a complex subject area. There have been many significant advancements in packaging design in recent years aimed at extending product life and improving the overall integrity of products, e.g. modified atmosphere packaging (MAP) and skin packaging. Food packaging was highlighted as a contributing factor to environmental impacts (section 3.1.5.4., Preliminary Report) and as a key environmental hotspot for a large number of food categories (section 3.1.3.6., Preliminary Report).

The environmental impacts of packaging are connected to: 1) the embedded impacts in materials from their manufacture, 2) unnecessary transport emissions from too heavy or bulky packaging, and 3) the environmental impacts associated with the end of life waste management (as in section 3.1.5.4., Preliminary Report). This criterion proposals tackles (at least partially) the first and second impacts. The third impact is tackled in the proposals for the criterion on Waste sorting and disposal (TS6).

The current criterion for packaging has three areas of focus:

- At least 45% recycled content of secondary or transport packaging,
- Packaging materials are based on renewable raw materials and,
- Individual's portions making use of single-unit packaging are avoided.

Many stakeholders had comments about this on the survey handed out. Some said that the percentage of recycled content could be higher. Some said that this criterion could include packaging that is biodegradable. A few stakeholders strongly disagreed with the single-use packaging 'ban' and argued that in some cases this is the best option – for instance when it helps to avoid food waste and/or optimises resource efficiency (e.g. hot beverages) (section 1.5.3.2., Preliminary Report). 4 out of 7 stakeholders from our survey had used the current packaging criterion (section 1.5.3.3., Preliminary Report). A small number of schemes (1 out of 31 GPP schemes) include a criterion on 'no packaging of meals' and 1 out of 31 schemes had recyclable/biodegradable as a criterion (section 1.6., Preliminary Report). This uptake shows the complexity of considering the food packaging as criterion within food and catering services.

It is not considered appropriate to remove packaging completely (in most cases), but there are improvement potentials in terms of what kind of packaging to use and how, as described by the BEMP in Food and Beverage Manufacturing (section 4.1.2.1., Preliminary Report):

- Light weight packaging.
- Bulk packaging.
- Refillable packaging.
- Returnable packaging.
- Packaging using recycled material.
- Compostable/Biodegradable/recyclability/bio-based packaging.
- Modified atmosphere packaging.
- Optimal portion size.
- Informative messages on the packaging for optimised storage of the food products.

For this criterion the last two points (from the list above) focuses on storage or preparation – which is more connected to the criterion on Staff training (SC1). Furthermore, the remaining points can be divided into relevance for primary and secondary packaging (see sub-sections below). The packaging types in scope are discussed in the following sections for primary and secondary packaging. In addition to the list above, based on stakeholder comments, material from sustainable sources and the use of compostable/biodegradable packaging are also included as an improvement potential.

##### **4.1.1.7.1 Primary packaging**

For primary packaging the main material types are, glass, aluminium, steel, carton board and plastics (section 4.1.2.1., Preliminary Report). Following are some recommendations for criterion specifications based on the list above, stakeholder comments, and data from the Preliminary Report.

- **Evaluate single unit packaging (portions).** Bulk packaging is preferred in order to reduce the generation of packaging waste, but only if it is more resource efficient for the catering service in question in terms of other aspects – such as creation of food waste. Therefore, if it is more resource efficient to use single portion packaging – this is recommended. If single-portion packaging is being used there has to be an explanation from the catering service provider of why that is.
- **Packaging based on renewable raw materials.** This is included in the current criteria but here the requirement has been updated. It is recommended that the renewable material should be derived from sustainable sources (e.g. for cardboard the label 'Forest Stewardship Council' would help verify compliance.)
- **Recycled content.** This is not currently applicable across all primary packaging materials because not all materials are allowed to contain recycled material when in contact with food (section 4.1.2.1., Preliminary Report). It is also hard to verify compliance
- **Light weighting.** This means the optimisation of the quantity of packaging used. This is not included in the current criteria. A study of 75cl glass wine bottles in the UK showed that the current average weight of bottles was circa 500g and best practice 300g, i.e. 40% lighter. In contrast, from an environmental perspective a cucumber with 1.5 gram of wrapping will stay fresh for 11 days longer than a cucumber without plastic – hence there is a limit to how little packaging is efficient. Furthermore, the recyclability of the material can be lower if the amount of material is too little (section 4.1.2.1., Preliminary Report). Hence, there is not enough evidence to state that lighter weight packaging is always preferable, and it is difficult to set a threshold and verify compliance. For those reasons this requirement is not included in the criterion.
- **Switch from single-use to re-use systems if available.** This is best suited for glass and some plastic containers with short supply chains since return rates are higher. However, from an environmental perspective such systems show to have some drawbacks due to the impacts associated with washing, replenishment / capture rates and transport of the containers. Nevertheless the evidence collected is not robust to not consider these systems and this requirement is included in the criterion set proposals.
- **Recyclability.** This is not included within the current criteria but clearly influences the recycling rate in the catering outlets. This ties in with the criterion on Waste sorting and disposal (TS6) criterion, because if packaging is supposed to be separated into a recycling stream it is important that the material is recyclable. Although, a large part of all material used in Europe is already recycled (and thus materials used are recyclable) (section 4.1.2.1., Preliminary Report). Hence, this requirement may not be needed and is proposed to be excluded.
- **Compostable/Biodegradable/ bio-based packaging.** This type of packaging is promoted in two GPPs from two Cities in Italy and in one GPP of a network of hospitals in France. It was also used during the London Olympics. Moreover, a legislation has been adopted in France which includes the ban of single use plastic tableware (food containers, dishes etc) which by 2020 at latest, has to be replaced by compostable tableware with a certain bio-based content (section 4.3., Preliminary Report). One example is that napkins must be biodegradable. Although biodegradable plastics seems like a preferred option to plastic based on fossil sources. Compostable/biodegradable/bio-based packaging is made from renewable materials and can undergo organic recycling. Materials need to meet the strict criteria of the European norm EN 13432 on industrial compostability/biodegradability(section 4.1.2.1., Preliminary Report).. The report of JRC (JRC, 2014) provided the background information and a possible technical proposal on end-of-waste criteria for biodegradable waste subject to biological treatment. This report proposed a scope of compostable/biodegradable materials inputs, including materials certified biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process. The use of compostable/biodegradable bio-based material should go together with the proper organic waste separation and management scheme The definition of compostability is considered within the criterion proposal and a requirement to procure biodegradable packaging is proposed to be considered in the criteria set.

In respect to oil-based polymers used in food packaging are particularly difficult to recycle due to mix levels of food contamination. Compostable biopolymer packaging systems, have the advantage that they can be composted together with the food waste, thus reducing the amount of biodegradable wastes sent

to landfill complying with European Regulations on reducing the amount of biodegradable wastes disposed (Calderon et al, 2010) (section 4.5.2.4., Preliminary Report).

#### 4.1.1.7.2 Secondary packaging

The material which is most often used in secondary packaging is corrugated/cardboard (European Commission, (2015b). Three key opportunities for reducing the environmental burden are:

- **Switch from single use cardboard packaging to returnable transit packaging systems.** The evidence shows that this works best in short supply chains for frequently ordered products. For example, bread and other bakery products that are delivered daily from the local bakery.
- **Recycled content.** This is included within the current criteria with the percentage of products that have more than 45% recycled content. Stakeholder comments from the survey were to either increase the percentage or to leave it open – as it is not specified what has founded this threshold in the first place (section 1.5.3.2., Preliminary Report). However, no EU-wide labels for recycled content has been identified hence this requirement has to be proven in another way, such as the supplier supplies evidence of packaging material do contain of recycled content.
- **Packaging based on renewable raw materials.** Cardboard is renewable material but it is important that it is sourced from sustainable sources (e.g. using the label 'Forest Stewardship Council' to verify compliance) (section 4.4.4.5., Preliminary Report).
- **Compostable/Biodegradable/ bio-based packaging.** *Please see section above for the primary packaging.*

All this evidence supports the proposal to include the following aspects (single use packaging, use of renewable materials, use of returnable packaging, recycled content in packaging and use of schemes for certification of the custody chain) as several award sub-criterion applicable to either primary and secondary packaging or to both. The tenders may offer different combinations from the single requirements identified below.

Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<p><b>AC6. Packaging</b> Points shall be awarded to tenders where some of the following (either from primary, secondary or both) requirements are met:</p> <p><u>Primary packaging</u></p> <ol style="list-style-type: none"> <li>1. Reusable packaging systems are provided by the tenderer (e.g. returnable bottles)</li> <li>2. No single unit packaging shall be provided. When a food product is supplied in a single unit packaging the supplier must explain why this is more adequate than bulk.</li> <li>3. Food products are supplied in packages produced from sustainably sourced fibres.</li> <li>4. Food products are supplied in packages certified compostable/biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ol> <p><u>Secondary packaging</u></p> <ol style="list-style-type: none"> <li>5. Returnable packaging systems are provided by</li> </ol>	<p><b>AC6. Packaging</b> Points shall be awarded to tenders where <u>at least three</u> of the following (either from primary, secondary or both) requirements are met:</p> <p><u>Primary packaging</u></p> <ol style="list-style-type: none"> <li>1. Reusable packaging systems are provided by the tenderer (e.g. returnable bottles)</li> <li>2. No single unit packaging shall be provided. When a food product is supplied in a single unit packaging the supplier must explain why this is more adequate than bulk.</li> <li>3. Food products are supplied in packages produced from sustainably sourced fibres.</li> <li>4. Food products are supplied in packages certified compostable/biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ol> <p><u>Secondary packaging</u></p> <ol style="list-style-type: none"> <li>5. Returnable packaging systems are provided by</li> </ol>

<p>the tenderer (e.g. returnable crates)</p> <ol style="list-style-type: none"> <li>6. Food and drinks are supplied with packaging with X % recycled content.</li> <li>7. Food products are supplied in packages produced from sustainably sourced fibres.</li> <li>8. Food products are supplied in packages certified compostable/biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ol> <p><b>Verification:</b> The tenderer must provide a declaration of compliance indicating which of these criteria is able to be met and how. The contract authority will verify compliance during the contract period. Packaging carrying Forest Stewardship Council (FSC) or equivalent standards will verify compliance for the requirements 2 and 6.</p>	<p>the tenderer (e.g. returnable crates).</p> <ol style="list-style-type: none"> <li>6. Food and drinks are supplied with packaging with X % recycled content.</li> <li>7. Food products are supplied in packages produced from sustainably sourced fibres.</li> <li>8. Food products are supplied in packages certified compostable/biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ol> <p><b>Verification:</b> The tenderer must provide a declaration of compliance indicating which of these criteria is able to be met and how. The contract authority will verify compliance during the contract period. Packaging carrying Forest Stewardship Council (FSC) or equivalent standards will verify compliance for the requirements 2 and 6.</p>
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### **Consequences**

The aim is to minimise the amount of packaging used or to minimise the environmental impact associated to packaging. From an LCA perspective there are many environmental benefits to gain by using less packaging, using recycled content, using sustainably sourced material and the use of compostable/biodegradable packaging. However, the impact on functionality and the protection given to the product contained within the packaging must be included within any review.

### **Consultation questions**

- Do you consider feasible the requirements for the core and comprehensive criteria?
- Do you have any experience on how the verification of the recycling content for the packaging materials being used?
- Are you aware of any GPP scheme that uses type 1 ecolabel (e.g for Nordic Ecolabel restaurants) as a proof of compliance for the requirement on recycled content and renewable materials for this criterion?
- Are you aware of any legal constraints within FSCis?

#### 4.1.1.8 Sustainable palm oil (AC7)

##### Rationale

Palm oil is used extensively in food manufacture and preparation in the EU (section 2.2.3.2., Preliminary Report). It was found that palm oil has a large environmental impact in its production and extraction. One LCA compared conventional palm oil and RSPO (Roundtable on Sustainable Palm Oil) certified palm oil in Malaysia and found that the latter had lower environmental impact due to such factors as better management systems (section 3.1.3.6.3., Preliminary Report). This is due to farmers' education in how to use fertilisers according to the need of the crop and thereby able to minimise that impact. Moreover, good management systems in place in the oil mills helped to minimise emissions. Five stakeholders replying to our survey said that oil should be included in scope and two of them specified palm oil (section 1.5.1.1., Preliminary Report). The review made on current GPP schemes shows that 2 out of 31 GPP schemes specified the procurement of sustainable palm oil (section 1.6., Preliminary Report).

According to the Ecolabel Index, in 2007 RSPO products were available in Italy, Latvia and the UK (Ecolabel Index RSPO products, 2015). However, on the RSPOs website it is possible to find a few certified palm oil products from France, Austria, Spain and Belgium – although the range of products is limited (RSPO, 2015). For the remaining Member States, the market availability of RSPO products is currently poor. If it is not possible to find sustainably certified palm oil one approach could be to substitute palm oil with other oils. Rapeseed and sunflower oil were found to have lower impact than palm oil (as well as lower impact than soy bean and peanut oil), which means that the total environmental impact of vegetable oils can be lowered in total if palm oil is substituted to rapeseed or sunflower oil – if the sustainable palm oil is not available (section 3.1.3.6.1., Preliminary Report).

Conversely, palm oil is relatively cheap due to the much higher yield rates than the main alternatives. Sixty percent of all palm oil used globally is as derivatives in food and other products such as candles, soap and cosmetics (Zoological Society of London, 2015) and 20% of all palm oil produced, for the global market, is RSPO certified (RSPO, 2015). However, there is no breakdown of the data on how much RSPO certified palm oil is used in Europe in food products.. Due to the lack of market data on certified palm oil use in the food product this requirement is proposed as an award criterion.

The RSPO standard has been criticised for not promoting an effective sustainable production and deforestation still occurs in some RSPO certified plantations. This is why RSPO has created a stricter voluntary addendum to the existing requirements, called RSPO NEXT, which includes: “No Deforestation, No Fire, No Planting on Peat, Reduction of GHGs, Respect for Human Rights and Transparency” (RSPO, 2015a). This voluntary standard is in its infancy and hence the market availability is at present likely to be low.

Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<p><b>AC7. Sustainable palm oil</b></p> <p>1. Points shall be awarded to tenders that prove that 20% of the units of food products containing palm oil contain palm oil from sustainable sources.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of all palm oil containing food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion. Products that have been third party certified by widely accepted and recognised international organisations<sup>1)</sup> will be deemed to comply.</p>	<p><b>AC7. Sustainable palm oil</b></p> <p>1. Points shall be awarded to tenders that prove that 50% of the units of food products containing palm oil contain palm oil from sustainable sources.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of all palm oil containing food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion. Products that have been third party certified by widely accepted and recognised international organisations<sup>1)</sup> will be deemed to comply.</p>

1) Such as e.g. RSPO (Roundtable on Sustainable Palm Oil) or RSPO NEXT

## **Consequences**

This requirement can help drive the palm oil industry towards more sustainable production and processing methods. This proposal awards points to tenderers that provide third party certified food products. This is a new proposal requirement that is not included in the current EU GPP criteria set.

### **Consultation questions**

- This is a new proposal criterion. From you experience is this criterion feasible in terms of market availability and verification process for certified RSPO food products within tenders?
- Is this criterion particular relevant for vending machines?

#### **4.1.1.9 Other schemes of sustainable production**

In the Preliminary report, it has been found that there are a number of eco-labels available in the EU-28 that has a strong emphasis on sustainable and ethical aspects and that have minimum environmental standards. The following ones are not covered by any other criteria proposed above:

- Round Table on Responsible Soy
- ProTerra Foundation
- Bonsucro (this scheme focus on the sugar supply chain)

The State of Sustainability Initiatives (SSI) Review 2014 Standards and the Green Economy' (IISD and IIED, 2014), gathers the description of the most relevant schemes of sustainable production, together with the market information of the penetration of these schemes within some product categories. Apart from the schemes identified above, the report also includes others as ProTerra Foundation. A brief description of each initiative is explained below (IISD and IIED, 2014).

##### Round Table on Responsible Soy

The Round Table on Responsible Soy (RTRS) is a member-based initiative founded in 2006, which works in the sector of responsible soy value chains. The initiative develops and manages standards for responsible soy production and operates across 21 countries. The RTRS offers a generic set of principles and specific criteria for genetically modified, conventional and organic production systems. The initiative operates business to business. RTRS units are evaluated for certification each year, by means of third party audits and, accredited auditors. RTRS offers a separate Chain of Custody certification and applies the segregation and mass balance models of supply chain traceability to its products to ensure accountability of compliance claims in the marketplace (IISD and IIED, 2014).

##### ProTerra Foundation

The ProTerra Foundation is a member-based, not for-profit foundation, starting in 2012. The ProTerra Standard is applicable to any food or agricultural product, although it is currently used mainly for soy production and soy-derived consumer products. The initiative operates business to consumer, developing standards and managing and maintaining quality control over certification. The validity period of ProTerra certificates is one year, with all audits conducted by third-party auditors. Identity preservation and the segregation models of supply chain traceability are applied to all ProTerra soy products to ensure accountability of compliance claims in the marketplace. (IISD and IIED, 2014).

##### Bonsucro

Bonsucro is a multistakeholder initiative operating in the sugar cane which was founded in 2008. The initiative operates business to consumer, and it comprises standards and a marketing label to ensure sustainable sugar cane practices. The verification process entails a three-year certification validity period, within which the companies are required to undergo surveillance audits by third-party auditors. The scheme also includes a separate Chain of Custody certification is offered, and the initiative applies both the mass balance and book-and-claim models of supply chain traceability to its products (IISD and IIED, 2014). Bonsucro's production is typically split between production for ethanol and sugar. The total certified area of Bonsucro in 2011/2012 was 685,589 hectares, which produced 3 million metric tons of sugar and 2.2 million cubic metres of certified ethanol (IISD and IIED, 2014).

##### Market penetration of standard compliant food products for soya and sugar

Soybeans are widely present in the global food chain; from edible oils to a source of protein for humans and livestock feed. According to SSI Review 2014 (IISD and IIED, 2014), approximately 87 % of all soybean production is crushed into soy meal and soy oil, with the remaining 13 % for direct human consumption. From the soybean crushing process, roughly 80 % is extracted as soy meal for use in animal feed, and 20% is extracted as oil for human consumption and as a biofuel feedstock. The total production of standard-compliant soybeans (including ProTerra, RTRS and organic), represent a small share of the market, at 2.0 %, which is equal to 5 million tons (2012). Sales of standard-compliant soybeans were equivalent to 1.5 % of exports. ProTerra certified soybeans

account for the largest volumes of soybeans of the major voluntary sustainability standards active in the sector, with 3.4 million metric tons certified in Brazil in 2012 or 5.2 % total Brazilian soybean production and 6.4 % Brazilian exports.

Standard-compliant sugar (Bonsucro, Fairtrade, organic and Rainforest Alliance) sales represented 1 % of total exports in 2012, and the production reached 3 % of global production during the same year (3.8 million metric tons). Brazil, Australia and Belize are the largest producers of compliant sugar, while Brazil and India are the largest producers of cane sugar by volume. (IISD and IIED, 2014).

The criteria area proposed would aim at awarding points to those offers including products certified under other sustainability schemes, apart from the ones addressed in other criteria (Organic production, Integrated production, Animal welfare, Fair Trade, Sustainable Palm oil).

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Do you think that this criteria area is suitable to be considered in addition to the other proposed criteria?</li><li>○ Are you aware of other schemes that should be covered by this criteria area?</li><li>○ Is this criteria area (together with the criterion on sustainable palm oil) particular relevant for vending machines?</li></ul>



## 5 Draft EU GPP Criteria proposal for Catering Services

Table 8 summarises the main areas of improvement, per criterion, and the rationale behind it is presented in more detail in this section.

**Table 8: Main improvement areas for catering services for each proposed criteria.**

Criteria type	Criterion	Name	Potential improvement areas
<b>Selection criteria (SC)</b>	SC1	Staff Training	<ul style="list-style-type: none"> <li>• Use of products with lower environmental impact</li> <li>• Use of consumables with lower environmental impact</li> <li>• Generation of food waste</li> <li>• Water use in catering services</li> <li>• Energy use in catering services</li> <li>• Wastewater discharge</li> <li>• Solid waste management</li> </ul>
	SC2	Environmental management measures and practices	<ul style="list-style-type: none"> <li>• Use of products and consumable goods with lower environmental impact</li> <li>• Water and energy use in catering services</li> <li>• Solid waste management</li> </ul>
<b>Technical specifications (TS)</b>	TS1	Organic food products	<ul style="list-style-type: none"> <li>• Lower eco-toxicity and lower GWP (in some cases)</li> <li>• Higher animal welfare standards</li> <li>• Healthier (in some aspects as containing more oxidants, less pesticides and heavy metals)</li> </ul>
	TS2	Marine and aquaculture food products	<ul style="list-style-type: none"> <li>• Avoided pressure on depleting fish stocks</li> <li>• Lower environmental impact feed used in aquaculture</li> </ul>
	TS3	Seasonal produce	<ul style="list-style-type: none"> <li>• Lower environmental impact if the alternative when compared to artificial growing environment heated by fossil fuels.</li> <li>• Competitive prices</li> </ul>
	TS4	Integrated production	<ul style="list-style-type: none"> <li>• Restricted use of pesticides and synthetic fertilisers</li> <li>• Better resource efficiency</li> </ul>
	TS5	Menu Planning	<ul style="list-style-type: none"> <li>• Use of food products with lower environmental impact</li> <li>• Use of food products in season</li> <li>• Lower generation of food waste</li> <li>• Better food stock management, portion size of meals and adequacy to of meals consumer tastes</li> <li>• Inform consumer on meals' nutritional values</li> </ul>
	TS6	Waste sorting and disposal	<ul style="list-style-type: none"> <li>• Liquid and solid waste management</li> </ul>
	TS7	Vehicle fleet and planning of food delivery	<ul style="list-style-type: none"> <li>• Lower combustion emissions from the vehicle fleet</li> <li>• Better planning the transportation of food (raw and ready prepared meals)</li> </ul>
<b>Award Criteria (AC)</b>	AC1	Additional organic food products	<ul style="list-style-type: none"> <li>• Lower eco-toxicity and lower GWP (in some cases)</li> <li>• Higher animal welfare standards</li> <li>• Healthier (in some aspects as containing more oxidants, less pesticides and heavy metals)</li> </ul>
	AC2	Integrated production	<ul style="list-style-type: none"> <li>• Restricted use of pesticides and synthetic fertilisers</li> <li>• Better resource efficiency</li> </ul>
	AC3	Additional marine and aquaculture food products	<ul style="list-style-type: none"> <li>• Avoided pressure on depleting fish stocks</li> <li>• Lower environmental impact feed used in aquaculture</li> </ul>
	AC4	Animal welfare	<ul style="list-style-type: none"> <li>• Ethical consideration</li> <li>• Some evidence was found on better meat quality</li> </ul>

	AC5	Fair trade products	<ul style="list-style-type: none"> <li>• Ethical consideration</li> <li>• Sustainable deforestation and restrict use of hazardous substances (leading to a lower environmental impact)</li> </ul>
	AC6	Packaging	<p>Embedded impacts in packaging materials, lower transport emissions, better end of life for waste management:</p> <ul style="list-style-type: none"> <li>• Lower abiotic resource depletion</li> <li>• Lower energy use</li> <li>• Lower human toxicity</li> <li>• Lower eco-toxicity</li> </ul>
	AC7	Sustainable palm oil	<p>Better management systems used in the palm oil production and extraction:</p> <ul style="list-style-type: none"> <li>• Use of fertilisers</li> <li>• Lower emissions on the oil mills</li> </ul>
		Other schemes of sustainable production (Criteria area)	<ul style="list-style-type: none"> <li>• Ethical and sustainability considerations</li> </ul>
	AC8	Consumable goods	<ul style="list-style-type: none"> <li>• Use of lower environmental impact consumable goods, including:</li> <li>• Paper products</li> <li>• Tableware</li> <li>• Cleaning products (as hand soaps, cleaning products and dishwasher detergents)</li> </ul>
	AC9	Equipment	<ul style="list-style-type: none"> <li>• Use of energy efficient kitchen equipment</li> </ul>
<b>Contract Performance Clauses (C)</b>	C1	Staff training	<ul style="list-style-type: none"> <li>• Multiple environmental benefits (use of food products with lower impact, energy and water minimisation in food storage and meals preparation), minimisation, management and adequate disposal of solid waste (including food waste).</li> </ul>
	C2	Waste management	<ul style="list-style-type: none"> <li>• Monitoring solid waste</li> </ul>

## 5.1.1 Selection criteria (SC)

### 5.1.1.1 Staff training (SC1)

#### **Rationale**

A study in the UK reports that staff training was the most efficient way of reducing environmental impacts in kitchens (SKM Enviro, 2010). The BEMP for Tourism sector also includes staff training in its criteria, such as implementing energy saving routines and standards (section 4.5.2.1., Preliminary Report). The analysis on the uptake of EU GPP criteria by public procurers in our survey showed that 4 out of 7 respondents use staff training within the public tendering (section 1.5.3.3., Preliminary Report). Furthermore, the review of 31 GPPs in Europe showed that 6 of 31 schemes include staff training for environmental purposes (section 1.6., Preliminary Report). The general consensus from stakeholders was that more detail was needed on what is included but, at the same time, it should not be too prescriptive leaving scope for businesses to customise staff training. The current EU GPP includes staff training as a contract performance clause. Stakeholders proposed that staff training should entail continuous improvement and include more than just waste issues (that so far considers minimisation, management and selective waste collection) (section 1.5.3.2., Preliminary Report).

In the foodservice sector there is a high turnover of staff which means staff training has to be on-going. Staff training is country, sector and company specific and hence the criterion scope aims to cover these specificities by being flexible in nature but clear for the purpose of criterion verification. The following criterion is designed to be a checklist of minimum requirements. It covers both the purchase of products and goods and the delivery of catering services. It has been developed to complement the other criteria and proposed to be included as a selection criteria.

Core criteria	Comprehensive criteria
<b>Selection Criteria</b>	
<b>SC1. Staff Training</b>	<b>SC1. Staff training</b>
<p>Tenderers shall have in place a staff training program, including formal written procedures, ensuring that relevant staff are sufficiently trained to deliver catering services in an efficient and environmentally responsible manner.</p> <p>Staff training shall cover the following topics:</p> <p><b>Procurement staff:</b></p> <ul style="list-style-type: none"> <li>– Staff shall be trained in the ordering of products and consumables, i.e. what to buy (quality and format), when to buy it and how much to buy. This will include replenishment protocols, the batch sizing of pre-prepared meals, the use of catering sized packs (where volumes permit) and the order and delivery frequency.</li> <li>– Staff shall be trained how to procure according to the current criteria on food including Organic food products (TS1, AC1), Marine and aquaculture food products (TS2 and AC3), Seasonal produce (TS3), Integrated production (TS4, AC2), Animal welfare (AC4), Fair trade products (AC5), Packaging (AC6) and Sustainable palm oil (AC7).</li> <li>– Staff shall be trained how to procure according to the current criteria on catering, including Consumable goods (e.g. paper products, tableware and cleaning products) (AC8), Equipment (AC9) and Vehicle fleet and planning of food delivery (TS7).</li> <li>– Staff shall be trained to minimise the procurement of single use crockery and cutlery and, where possible, to use returnable / refillable packaging, e.g. secondary packaging for frequent deliveries.</li> <li>- Staff shall be trained in the use seasonality charts when</li> </ul>	<p>Tenderers shall have in place a staff training program, including formal written procedures, ensuring that relevant staff are sufficiently trained to deliver catering services in an efficient and environmentally responsible manner.</p> <p>Staff training shall cover the following topics:</p> <p><b>Procurement staff:</b></p> <ul style="list-style-type: none"> <li>– Staff shall be trained in the ordering of products and consumables, i.e. what to buy (quality and format), when to buy it and how much to buy. This will include replenishment protocols, the batch sizing of pre-prepared meals, the use of catering sized packs (where volumes permit) and the order and delivery frequency.</li> <li>– Staff shall be trained how to procure according to the current criteria on food including Organic food products (TS1, AC1), Marine and aquaculture food products (TS2 and AC3), Seasonal produce (TS3), Integrated production (TS4, AC2), Animal welfare (AC4), Fair trade products (AC5), Packaging (AC6) and Sustainable palm oil (AC7).</li> <li>– Staff shall be trained how to procure according to the current criteria on catering, including Consumable goods (e.g. paper products, tableware and cleaning products) (AC8), Equipment (AC9) and Vehicle fleet and planning of food delivery (TS7).</li> <li>– Staff shall be trained to minimise the procurement of single use crockery and cutlery and, where possible, to use returnable / refillable packaging, e.g. secondary packaging for frequent deliveries.</li> <li>- Staff shall be trained in the use seasonality charts when</li> </ul>

ordering food products and menu planning.

- Staff shall be trained on the Class 2 produce (including food products that are good enough to eat, but that have some sort of esthetical defect).

**Catering staff:**

Menu planning:

– Staff shall be trained in menu planning to meet the requirements of (Menu planning (TS5)). The training will take into consideration, for e.g., seasonality, the environmental impacts associated with specific ingredients, preparation methods (in line with the catering unit capabilities) and customer preference / dietary requirements.

– Staff shall be trained in food portion sizing to minimise plate food waste.

Stock management:

– Staff shall be trained in stock rotation principles, i.e. first in first out (FIFO), and stock management systems such as the optimum storage systems for each product category and the utilisation of products approaching their shelf life expiration dates.

Energy saving:

– Staff shall be trained in switch on and switch off policies for all equipment. This is particularly important for cooking equipment (e.g. calculation of the warm up times and setting the switch on times accordingly), heating, ventilation and air conditioning (HVAC) equipment, lighting (particularly in the dining areas), dishwashers (only switch on when full).

– Staff shall be trained to use the appropriate equipment taking into consideration the variation in demand during peak and off peak periods.

Water saving:

– Staff shall be trained to minimise the use of water. For example, only using dishwashers when full and hand washing during off peak and not using running water to defrost products (instead using formal defrosting protocols).

Waste:

– Staff shall be trained to monitor the quantities of waste being generated with a particular emphasis on spoilage, unserved meals and plate waste.

– Staff shall be trained to segregate waste into categories that can be handled separately by the local or national waste management facilities as defined by Criterion Waste sorting and disposal (TS6)

Adequate training, with a minimum duration of 16 hours, shall be provided to all new staff within four weeks of starting employment and an update on the above points, with a minimum duration of 8 hours, for all other staff at least once a year.

**Verification:**

A record of these training measures (induction/vocational training) shall be made available for consultation by the contracting authority.

ordering food products and menu planning.

- Staff shall be trained on the Class 2 produce (including food products that are good enough to eat, but that have some sort of esthetical defect).

**Catering staff:**

Menu planning:

– Staff shall be trained in menu planning to meet the requirements of ((Menu planning (TS5)). The training will take into consideration, for e.g., seasonality, the environmental impacts associated with specific ingredients, preparation methods (in line with the catering unit capabilities) and customer preference / dietary requirements.

– Staff shall be trained in food portion sizing to minimise plate food waste.

Stock management:

– Staff shall be trained in stock rotation principles, i.e. first in first out (FIFO), and stock management systems such as the optimum storage systems for each product category and the utilisation of products approaching their shelf life expiration dates.

Energy saving:

– Staff shall be trained in switch on and switch off policies for all equipment. This is particularly important for cooking equipment (e.g. calculation of the warm up times and setting the switch on times accordingly), heating, ventilation and air conditioning (HVAC) equipment, lighting (particularly in the dining areas), dishwashers (only switch on when full).

– Staff shall be trained to use the appropriate equipment taking into consideration the variation in demand during peak and off peak periods.

Water saving:

– Staff shall be trained to minimise the use of water. For example, only using dishwashers when full and hand washing during off peak and not using running water to defrost products (instead using formal defrosting protocols).

Waste:

– Staff shall be trained to monitor the quantities of waste being generated with a particular emphasis on spoilage, unserved meals and plate waste.

– Staff shall be trained to segregate waste into categories that can be handled separately by the local or national waste management facilities as defined by Criterion Waste sorting and disposal (TS6).

Adequate training, with a minimum duration of 16 hours, shall be provided to all new staff within four weeks of starting employment and an update on the above points, with a minimum duration of 8 hours, for all other staff at least once a year.

**Verification:**

A record of these training measures (induction/vocational training) shall be made available for consultation by the contracting authority.

## **Consequences**

The cost of staff training is not significant when the overall savings that can be realised through reduced food waste, energy consumption and water usage are taken into consideration. Including staff training as a technical specification will allow procurers to assess if tenderers can ensure that their staff has the appropriate skills to deliver more environmentally conscious catering services.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Do you consider relevant to add new requirements to this proposal?</li><li>○ Is the 16 hours' minimum duration of training for all new staff adequate?</li></ul>

## 5.1.1.2 Environmental management measures and practices (SC2)

### Rationale

An Environmental Management System (EMS) is a systematic and documented means of demonstrating an organisations commitment to managing and reducing their environmental impacts. It is included within the current EU GPP criteria as a comprehensive criterion. This criterion requires applicants to develop their own in-house environmental management system and to have a registered EMS or an ISO 14001 certification or in alternative, to have an environmental policy and work instruction and procedures for carrying out the service in an environmental friendly way. The proposed criterion splits the comprehensive requirements in the current EU GPP criteria into core and comprehensive allowing for different levels of ambition to be chosen by the procurement authority.

In the reform of the Public Procurement Directives (Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC and Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC, published in the Official Journal 28<sup>th</sup> March 2014 and requiring transposition by Member States within 24 months), it is explicitly stated (Art. 66 of Directive 2014/24/EU) that the organisation, qualification and experience of staff assigned to performing the contract (where the quality of the staff assigned can have a significant impact on the level of performance of the contract) can be a criterion for awarding a contract.

Core criteria	Comprehensive criteria
<b>Selection Criteria</b>	
<p><b>SC2. Environmental management measures and practices</b></p> <p>The service provider shall have in place an environmental management system containing at least the following elements:</p> <ul style="list-style-type: none"> <li>• An environmental policy identifying most relevant direct and indirect environmental impacts and organisations policy toward those potential impacts.</li> <li>• A precise action program ensuring the application of the environmental policy to the serviced supplied and establishing targets on environmental performance regarding the use of resources (e.g., use of energy and water within catering services, solid waste management including food waste and the use of cleaning products and consumables with lower environmental impact ) and action to reduce the environmental impact. The establishment of targets and actions shall be supported by the collection of data on the use of resources and other environmental aspects (e.g. waste generation).</li> <li>• An internal audit process allowing verification every year on organisation performance with regards to the targets defined in the action program.</li> </ul> <p>The environmental policy and the performance of the organisation with regards to the targets shall be made available for consultation by the public on the provider premises.</p> <p><b>Verification:</b> The service provider shall provide a declaration of compliance with this criterion, together with a copy of the environmental policy, the action program, the audit report</p>	<p><b>SC2. Environmental management measures and practices</b></p> <p>The service provider shall have in place a documented, third party verified Environmental Management System, such as EMAS or ISO 14001, for at least the sector of the company directly involved in the contract<sup>1)</sup></p> <p><b>Verification:</b> Applicants registered in EMAS or certified according to ISO 14001 are considered as complying with this criterion. The applicant must provide the ISO 14001 certificate and/or EMAS registration as a mean of compliance for this criterion.</p>

and the procedures for taking into account the survey carried out to the client satisfaction. Applicants registered in EMAS or certified according to ISO 14001 are considered as complying with this criterion. The applicant must provide the ISO 14001 certificate and/or EMAS registration as a mean of compliance for this criterion.	
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<sup>1)</sup> Where an economic operator had demonstrably no access to such certificates, or no possibility of obtaining them within the relevant time limits for reasons that are not attributable to that economic operator, the contracting authority shall also accept other evidence of environmental management measures, provided that the economic operator proves that these measures are equivalent to those required under the applicable environmental management system or standard (art. 62, para 2 of Directive 2014/24/EU).

### **Consequences**

This criterion will encourage cleaning companies to implement the basis of, or have, a third party certified environmental management system, leading to improvements in environmental performance in a systematic way. The core criterion contains the core elements of a formal environmental management system and hence can be used as a platform to monitor environmental impacts and as a means of delivering continual improvement. At the comprehensive level it requires a verified or certified environmental management system.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Have similar criteria been set in previous tenders and, if so, what were the verification procedures?</li></ul>

## 5.1.2 Technical Specifications (TS) and Award Criteria (AC)

### 5.1.2.1 Food procurement

The literature review has shown that the LCA studies for catering services are scarce, but there are common results that enable to come with conclusions for the criteria proposal. From the life cycle perspective, the primary production of food stands for the major environmental impact (Baldwin et al., 2011; Calderón et al., 2010). Therefore, the proposed set of criteria addressing the procurement of food products proposed in 4 Draft EU GPP Criteria proposal for Food, is be also applicable to the procurement of catering services. The criteria set includes:

- *Organic food products (TS1, AC1)*
- *Marine and aquaculture food products (TS2 and AC3)*
- *Seasonal produce (TS3)*
- *Integrated production (TS4, AC2)*
- *Animal welfare (AC4)*
- *Fair trade products (AC5)*
- *Packaging (AC6)*
- *Sustainable palm oil (AC7)*
- *Other schemes of sustainable production*



### **5.1.2.2 Menu planning (TSS)**

#### **Rationale**

Menu planning is considered as one of the criteria with the largest potential for environmental improvement since it dictates the raw ingredients and products to be procured and the method of preparation. Menu planning can be country, sector, company and production system specific and hence the criterion scope needs to be flexible in nature but with clear instructions for criterion verification. The criterion is designed to be a checklist of minimum requirements.

The main benefits of the inclusion of menu planning in the criteria are that meals can be composed with new recipes that have a lower environmental impact, at the same time as maintaining or improving the nutritional properties of the service provision. Reducing meat content is one example of how to minimise environmental impact, or to change from one meat type to another. Red meat was found to have the largest impact on the environment in the current production systems and chicken and pork had lower impact (section 3.1.5.1.4., Preliminary Report). Changing from meat to fish is another alternative or perhaps increases the use of protein pulses. Furthermore, full-fat dairy products have larger environmental impact than half-fat dairy products due to the attribution of the fat to the product (section 3.1.5.1.5., Preliminary Report). Hence, there are opportunities available to minimise environmental impacts by reducing the use of livestock products. It is not proposed to limit the use of such products, but suggested to use them in moderation. This is up to the public authority to decide what is most suitable to do in their specific situation.

Menu planning can also be used as a tool to minimise food waste. It is estimated that 89 million tonnes of food waste is generated in Member States each year with 14% (12.5 million tonnes) attributable to the foodservice sector (European Commission, 2010). Reducing avoidable food waste allows catering companies to make substantial cost and environmental impact savings and the threshold limits have been set to deliver the EU commitment of a 30% reduction in food waste by 2025 (European Commission, 2015c). In 2014 the European Commission (2015c) proposed to the Member States that there should be a goal of reducing food waste by 30 % (as a minimum) by 2025 (based on the food waste levels in 2017).

The foodservice sector is defined as the sector involved in the preparation of ready-to-eat food for sale to individuals and communities; includes catering and restauration activities in the hospitality industry, schools, hospitals and businesses. The embedded environmental burdens associated with the production of food destined to be wasted means that this is a significant environmental hotspot. (Preliminary Report, section 3.1.3.6.2). Moreover, evidence gathered for catering services show that the disposal of food waste has a substantial influence on the total environmental impact due to the embedded emissions and the disposal of it (Preliminary Report, section 3.1.3.6.2). However, the current EU GPP criteria do not include this aspect within requirements. Several reasons may lead to food waste within the service provision. Studies are available that investigate the institutional drivers (business and economy) on the cause of food waste. This allowed identifying the improvement potentials to minimise food waste (Preliminary Report, section 4.4.6.). They include actions to change some aspects as, for instance, inflexible portion sizes, short time for lunch; assortment does not match requests, expiration date for food products, and potential use of leftovers. These are all part of menu planning. Stakeholders when requested to express their views by responding to the questionnaire handed out at the beginning of this project (section 1.5.3.2. Preliminary Report) have proposed that food waste should be separated from other waste streams and should be monitored and measured to create awareness on the food waste obligations. The review made on current GPP schemes allows concluding that few entities (2 out of 31) make use this requirement within the public tenders. The Preliminary Report (section 4.4.6.) provides a summary of root causes of food waste in the foodservice sector. It is proposed that criteria on food waste be included specifically in the menu planning.

In the current menu planning criterion, the focus is only on procuring seasonal produce. Apart from stakeholder comments about seasonality (covered in the criterion

Seasonal *produce* (TS3) ), they also propose the addition of more vegetarian alternatives. Other stakeholders said that availability and price may be barriers for this criterion to work in practice (section 1.5.3.2., Preliminary Report). As for the survey sent out to stakeholders it was found that 4 out of 7 respondents had implemented the menu planning criterion (section 1.5.3.3., Preliminary Report). In the case of the 31 GPP schemes there was not a single category called 'menu planning', but, 10 out of 31 GPPs had a criterion on reducing meat, 15 out of 31 had a criterion on seasonal produce, 10 out of 31 had a criterion on freshly prepared food and 4 out of 31 had a criterion on minimising/reducing waste (section 1.6., Preliminary Report). A study (Norden, 2012) for reducing the avoidable food waste within the hospitality sector in the Denmark, Finland, Norway and Sweden shows that 36% of the surveyed says that menu planning is important for the future in order to prevent avoidable food waste. According to the survey 30% says that utilization of food not used in other recipes is an important part of their work today on reducing the avoidable food waste.

Standard Operating Procedures (SOPs) can be used as a formal means of communicating the required working practices on how to operate in commercial kitchens (NFSMI and USDA, 2014) and can be used as a means of delivering staff training (SC1). SOPs work best if they are tailored to the organisation in focus. There are already SOPs available for foodservice which includes HACCP-principles for food safety (NFSMI and USDA, 2014).

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS4. Menu planning</b> Tenderers should have in place a Standard Operating Procedure (SOP) for menu planning and it should at least contain the following elements:</p> <p><u>Aspects related to meat production:</u></p> <ul style="list-style-type: none"> <li>The meat content (in particular red meat) in the overall meal composition shall be limited whilst maintaining the correct nutritional balance.</li> </ul> <p><u>Seasonality:</u></p> <ul style="list-style-type: none"> <li>The menu shall be planned according to season (in the country of procurement) 4.1.1.3 Seasonal produce (TS3)).</li> </ul> <p><u>Food waste:</u></p> <ul style="list-style-type: none"> <li>The tenderer shall provide a food waste minimisation plan. As a minimum the plan shall cover the following: <ul style="list-style-type: none"> <li>The menu shall be planned based on past performance, i.e. what meals do customers like best.</li> <li>The preparation losses from one meal shall be used as ingredient in other dishes.</li> <li>Dishes in more than one size shall be provided by providing the option for a lighter meal.</li> </ul> </li> </ul> <p><u>Information to consumer:</u></p> <ul style="list-style-type: none"> <li>Nutritional values of menus and information on menus shall be provided (e.g. allergens)</li> </ul> <p><b>Verification:</b> The tenderer shall provide the SOPs for menu planning.</p>	<p><b>TS4. Menu planning</b> Tenderers should have in place a Standard Operating Procedure (SOP) for menu planning and it should at least contain the following elements:</p> <p><u>Aspects related to meat production</u></p> <ul style="list-style-type: none"> <li>A weekly vegetarian offer shall be available</li> <li>The meat content (in particular red meat) in the overall meal composition shall be limited whilst maintaining the correct nutritional balance.</li> </ul> <p><u>Seasonality:</u></p> <ul style="list-style-type: none"> <li>The menu shall be planned according to season (in the country of procurement) (4.1.1.3 Seasonal produce (TS3)).</li> <li>Perishable raw ingredients shall be included in more than one dish, (e.g. carrots, onions, potatoes).</li> </ul> <p><u>Food waste:</u></p> <ul style="list-style-type: none"> <li>The tenderer shall provide a food waste minimisation plan. As a minimum the plan shall cover the following: <ul style="list-style-type: none"> <li>The menu shall be planned based on past performance, i.e. what meals do customers like best.</li> <li>The preparation losses from one meal shall be used as ingredient in other dishes.</li> <li>Dishes in more than one size shall be provided by providing the option for a lighter meal.</li> </ul> </li> </ul> <p><u>Information to consumer:</u></p> <ul style="list-style-type: none"> <li>Nutritional values of menus and information on menus shall be provided (e.g. allergens)</li> </ul> <p><b>Verification:</b> The tenderer shall provide the SOPs for menu planning.</p>

**Consequences**

The criterion will encourage the use of food and beverage products with low environmental impacts and will help reduce the quantity of food waste being generated.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Can a maximum % meat content for the core and comprehensive criteria be set?</li></ul>

### 5.1.2.3 Waste sorting and disposal (TS6)

#### Rationale

The preliminary report shows that the landfilling of organic waste is responsible for a large emission of greenhouse gas emissions (section 4.1.1.2., Preliminary Report). This can be avoided by more adequate procedures for waste management as for instance, by minimising the generation of (avoidable) food waste and/or by separating organic waste from general waste to avoid it going to landfill (European Commission, 2013a).

As the correct sorting and disposal of solid waste represents high potential improvement for environmental impacts, it is proposed to be covered here as a Technical Specification. This is a new proposal as in the current EU GPP criteria waste generation is considered only as a contract performance clause. It has been found that one of the GPP reviewed includes a waste management plan with information on actions to be taken to minimise waste and on how each category of waste will be collected and managed. This includes aspects such as the: specific tasks to be undertaken, allocation of responsibilities, positioning of containers, destination of waste, frequency of collection.. This aspect is already included in the scope of the selection criterion proposed to require the implementation of an environmental management system meeting EMAS regulation the ISO 14001 standard (see section 5.1.1.2 Environmental management measures and practices (SC2)). With regards of the current criterion, the survey showed that waste generation is a criterion quite applied (3 out of 7 replies refer to the application of core and 2 to comprehensive level).

Categories of waste that must be collected separately are paper/cupboard, glass, plastics/cans, organic matter, used oil and general waste. The separation and appropriate disposal of other types of waste is also encouraged. In this regard, it should be ensured that catering services companies separate and dispose of solid waste into the correct streams as required by the local or national waste management facilities. Stakeholder consultation yielded that it should be up to the operator to choose the best method, since it depends on the type of service provided, where it is and what solid waste collection alternatives are available in that area. Sometimes caterers have no influence over the waste collection methods. Thus, for this criterion, it is necessary to cover the case where the solid waste sorting and consequent disposal falls out of the control of the service provider.

One of the most important issues derived from waste generation in catering services is the food waste generation. It is estimated that 89 million tonnes of food waste is generated in Member States each year with 14% (12.5 million tonnes) attributable to the foodservice sector (European Commission, 2010). The foodservice sector is defined as the sector involved in the preparation of ready-to-eat food for sale to individuals and communities; includes catering and restauration activities in the hospitality industry, schools, hospitals and businesses. The embedded environmental burdens associated with the production of food destined to be wasted means that this is a significant environmental hotspot. (Preliminary Report, section 3.1.3.6.2). Moreover, evidence gathered for catering services show that the disposal of food waste has a substantial influence on the total environmental impact due to the embedded emissions and the disposal of it (Preliminary Report, section 3.1.3.6.2).. However, the current EU GPP criteria do not include this aspect within requirements.

Stakeholders when requested to express their views by responding to the questionnaire handed out at the beginning of this project (section 1.5.3.2. Preliminary Report) have proposed that food waste should be separated from other waste streams and should be monitored and measured to create awareness on the food waste obligations. The review made on current GPP schemes allows concluding that few entities (2 out of 31) make use this requirement within the public tenders. When analysing the GPP, it was revealed that 4 of them include specific requirements on food waste management. One of them sets continual waste monitoring and minimisation to be demonstrated in both off-site and on-site meal prep operations; and a food waste minimisation plan covering actions and estimated quantifiable reductions; staff trained in food waste minimisation; surplus food fit for consumption is redistributed (charities, foodbanks). The aspects related to food minimisation are already covered by the criterion proposal 'Menu planning' (see 5.1.2.2 Menu planning (TS5))

With regards to waste management, the BEMP recommends procedures for waste management as for instance, minimising the generation of (avoidable) food waste and/or separating organic waste from general waste to avoid

it going to landfill (European Commission, 2013a). The benchmarks of excellence for organic waste management are stated below:

- “≥95 % of organic waste separated and diverted from landfill, and, where possible, sent for anaerobic digestion or alternative energy recovery.
- Total organic waste generation ≤0.25 kg per cover.
- Avoidable waste generation ≤0.18 kg per cover”.

These benchmarks are indicative for the companies registered in EMAS and help to design and deploy actions within their environmental management systems that lead to measurable improvements. As mentioned above, this would be part of the selection criterion which requires the implementation of an Environmental Management System (see 5.1.1.2 Environmental management measures and practices (SC2)).

The criterion proposed for waste sorting and disposal is aimed at requiring the caterer to sort the waste generated into the fractions according to the local or national waste management practices and facilities. The tenderer is also required to pay a special attention to divert the organic fraction (food waste) from landfill, and, where possible, sent for composting, anaerobic digestion or alternative energy recovery.

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS2. Waste sorting and disposal</b> Waste generated at the sites where the catering service is provided shall be sorted into the correct waste stream categories wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste. When waste disposal is the responsibility of the tenderer, this shall be done in accordance with local or national waste management practices and facilities.</p> <p><b>Food waste:</b> When facilities for the collection and recycling of bio-waste are available, the tenderer shall segregate the bio-waste from the solid waste to be diverted from landfilled and dispose it into the appropriate collection system.</p> <p><b>Fats and oils:</b> When facilities for the collection and recycling of fats and oils are available, the tenderer shall separate the wasted fats and oils and dispose them into the authorised collection and recycling systems.</p> <p><b>Verification:</b> The tenderer shall supply a description of the waste stream categories sorted and the disposal procedures to be followed during the execution of the contract.</p>	<p><b>TS2. Waste sorting and disposal</b> Waste generated at the sites where the catering service is provided shall be sorted into the correct waste stream categories wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste. When waste disposal is the responsibility of the tenderer, this shall be done in accordance with local or national waste management practices and facilities.</p> <p><b>Food waste:</b> When facilities for the collection and recycling of bio-waste are available, the tenderer shall segregate the bio-waste from the solid waste to be diverted from landfilled and dispose it into the appropriate collection system.</p> <p><b>Fats and oils:</b> When facilities for the collection and recycling of fats and oils are available, the tenderer shall separate the wasted fats and oils and dispose them into the authorised collection and recycling systems.</p> <p><b>Verification:</b> The tenderer shall supply a description of the waste stream categories sorted and the disposal procedures to be followed during the execution of the contract.</p>

Note: Bio-waste (as defined in the Waste Framework Directive) is the biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants.

### **Consequences**

The correct sorting and disposal of solid waste represents high potential improvement for environmental impacts, therefore it is proposed to be worded as Technical Specification, instead of a contract performance clause. Food waste is identified as a major environmental concern, and hence the criterion proposal is drafted to highlight the sorting and correct disposal of the organic fractions of the waste stream, including fats and oils.

<b>Consultation questions</b>
<ul style="list-style-type: none"> <li>• Do you agree on the modifications proposed for this criterion?</li> <li>• Are you aware of any limitation to implement and verify this criterion?</li> </ul>

#### 5.1.2.4 Consumable goods (e.g. paper products, tableware and cleaning products) (AC8)

In the current criteria these areas are separate criterions but in this revised version they are proposed to be merged as they are all consumable goods. This criterion is relevant for those catering services that procure consumables.

- **Paper products.** The current criteria states that paper products, such as, kitchen paper or paper napkins must be made from recycled or sustainably managed virgin fibre. This is to avoid (in particular) the negative impacts from deforestation. Some stakeholders criticised the criterion for not having a particularly significant impact on the environment and that if it is to be kept it should be an award criterion and not a technical specification and applicable to both core and comprehensive level (section 1.5.3.2., Preliminary Report). Moreover, 3 out of 7 stakeholders from the survey had adopted the criterion (section 1.5.3.3., Preliminary Report). Only 1 out of 31 GPP schemes uses environmentally friendly paper products as a criterion (section 1.6., Preliminary Report). The EU GPP criteria for indoor cleaning services provide threshold limits for consumable goods (30% core and 50% comprehensive) and it is proposed to adopt here the same approach. EU Ecolabel for tissue paper can be used as a means of proof to verify compliance.
- **Reusable and non-reusable tableware.** The scientific evidence suggests that the use of reusable and biodegradable tableware (cutlery and crockery) is preferable to the use of disposables from an environmental perspective, at least in some settings (section 4.4.4.3., Preliminary Report). Conversely, items that are disposable and used for convenience or sanitary reasons cannot always be replaced by reusable items due to the nature of the catering service. This is the case where food is not consumed in a dedicated dining area or in unstaffed facilities (as in the 24/7 vending). Temporary events in places that do not have access to a kitchen are an example of when single use items may be the best environmental option. To reduce emissions, the disposable items can be recyclable, have recycled content, or be compostable (Baldwin *et al.*, 2011). For reusable cutlery and crockery the washing process represents the most significant environmental burden and hence efficient dishwashers and efficient use of dishwashers is critical, i.e. operate dishwashers with full loads (section 4.1.1.4., Preliminary Report). This aspect is addressed in the Staff Training criterion (Staff training (SC1) and hence not covered within the scope of the present criterion.

One stakeholder from the survey also stated that reusable items should be prioritised, followed by disposable (and these should include sustainable materials. Another stakeholder said that items which are disposable ought to be biodegradable (section 1.5.3.2., Preliminary Report). The aspect of use of cutlery and crockery is addressed in the current EU GPP criteria under the waste generation criterion. When analysed the responses to the survey on the implementation of current criteria 3 out of 7 stakeholders had implemented the current waste generation criterion of which using reusable items was included (section 1.5.3.3., Preliminary Report). As for the GPP schemes, 5 out of 31 had adopted a criterion on reusable cutlery and crockery (section 1.6., Preliminary Report).

In the case of disposable products only 1 out of 31 GPPs had a criterion for single use material that it had to be either renewable or biodegradable (section 1.6., Preliminary Report).

- **Cleaning products.** The scientific evidence suggests that cleaning products do not represent a significant environmental burden within the food and catering service sector and is absent from most LCA studies that were reviewed.  
However, from the stakeholder survey it was found that 3 out of 7 procurers had used the current cleaning products criterion (section 1.5.3.3., Preliminary Report). Additionally, only 2 of the 31 GPP schemes included cleaning products (section 1.6., Preliminary Report). To ensure that the environmental burden from cleaning products is minimised it is proposed that the criterion for cleaning products be kept as an award criteria for catering services. Stakeholders' feedback required specificity on the criteria applicable to the cleaning products to be used within catering services. The current EU GPP criteria for indoor cleaning services can be used as a guideline and it includes floor cleaning, sanitary cleaning,

glass/window cleaning and surface cleaning - with technical specification limits for hand soaps and cleaning products – as below. As for dishwasher detergents it is proposed to follow the requirements for the EU Ecolabel for Dishwasher Detergents or the EU Ecolabel for Industrial and Institutional Dishwasher Detergents, and the thresholds for procurement follows the same requirements as for cleaning products identified in the EU Ecolabel for Hard Surface Cleaning Products

Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<p><b>AC1. Consumable goods</b></p> <p><b>1. Paper products</b> Points shall be awarded to tenders that prove that at least 30% by number of paper tissue articles (e.g. pieces of toilet paper, napkins, paper mats) supplied per year to perform the contract shall be compliant with the requirements on Emissions to water and air, Fibres – Sustainable forest management, Hazardous Chemical substances, Product Safety of the EU Ecolabel for Tissue Paper.</p> <p><b>2. Reusable and disposable tableware</b> <u>Reusable tableware</u> should be used in all situations where it is feasible to do so</p> <p>Where it is deemed necessary to use <u>disposable tableware</u>:</p> <ul style="list-style-type: none"> <li>• Points shall be awarded to tenders that prove that a minimum of 70% of the material of which the disposable is composed of (by weight) must be produced from sustainably sourced fibres.</li> <li>• Points will be awarded to tenders that prove that a minimum of 50% of the cutlery units is certified according to EN 13432, EN 14995 or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ul> <p><b>3. Cleaning products</b></p> <p>1. Points shall be awarded to tenders that prove that at least 20% by volume of <u>hand soaps</u> supplied per year to perform the contract shall be compliant with the requirements on toxicity to aquatic organisms and excluded or limited substances and mixtures criteria of the EU Ecolabel for Rinse-off Cosmetics.</p> <p>2. Points shall be awarded to tenders that prove that at least 30% by volume at purchase of <u>all cleaning products</u> used per year to perform the contract shall be compliant with the criteria on toxicity to aquatic organisms and excluded and restricted substances of the EU Ecolabel for Hard Surface Cleaning Products.</p> <p>3. Points shall be awarded to tenders that prove that at least 30% by volume at purchase of <u>all dishwasher detergents</u> used per year to perform the contract shall be compliant with the criteria on toxicity to aquatic organisms</p>	<p><b>AC1. Consumable goods</b></p> <p><b>1. Paper products</b> Points shall be awarded to tenders that prove that at least 50% by number of paper tissue articles (e.g. pieces of toilet paper, napkins, paper mats) supplied per year to perform the contract shall be compliant with the requirements on Emissions to water and air, Energy use, Fibres – Sustainable forest management, Hazardous Chemical substances, Product Safety and Waste Management of the EU Ecolabel for Tissue Paper.</p> <p><b>2. Reusable and disposable tableware</b> <u>Reusable tableware</u> should be used in all situations where it is feasible to do so</p> <p>Where it is deemed necessary to use <u>disposable tableware</u>:</p> <ul style="list-style-type: none"> <li>• Points shall be awarded to tenders that prove that a minimum of 90% of the material of which the disposable is composed of (by weight) must be produced from sustainably sourced fibres.</li> <li>• Points will be awarded to tenders that prove all the cutlery units are certified according to EN 13432, EN 14995 or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process.</li> </ul> <p><b>3. Cleaning products</b></p> <p>1. Points shall be awarded to tenders that prove that at least 30% by volume of <u>hand soaps</u> supplied per year to perform the contract shall be compliant with the requirements on toxicity to aquatic organisms and excluded or limited substances and mixtures criteria of the EU Ecolabel for Rinse-off Cosmetics.</p> <p>2. Points shall be awarded to tenders that prove that at least 50% by volume at purchase of <u>all cleaning products</u> used per year to perform the contract shall be compliant with the criteria on toxicity to aquatic organisms and excluded or restricted substances of the EU Ecolabel for Hard Surface Cleaning Products.</p> <p>3. Points shall be awarded to tenders that prove that at least 50% by volume at purchase of <u>all dishwasher detergents</u> used per year to perform the contract shall be</p>

and excluded or restricted substances of the EU Ecolabel for Dishwasher Detergents or the EU Ecolabel for Industrial and Institutional Dishwasher Detergents.

**Verification:**

1. The tenderer shall supply a list of the consumable goods that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion. Products awarded with the EU Ecolabel for Rinse-off Cosmetic Products or equivalent and, EU Ecolabel for Tissue Paper, or equivalent, EU Ecolabel for Hard Surface Cleaning products, or equivalent, EU Ecolabel for Detergents for Dishwashers, or equivalent, will be deemed to comply with the requirements.
2. Where disposable tableware is deemed necessary the service provider will provide documentary evidence on the justification for procuring disposable tableware and that it meets the 70% sustainably sourced fibres. The Forest Stewardship Council (FSC) label and Programme for Endorsement of Forest Certification (PEFC) or equivalent standards, will be deemed to comply
3. The tenderer shall supply a list of the cutlery that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion. The tenderer shall provide a certificate according to the EN 13432 Standard for Compostable Plastics.

compliant with the criteria on toxicity to aquatic organisms and excluded or restricted substances of the EU Ecolabel for Dishwasher Detergents or the EU Ecolabel for Industrial and Institutional Dishwasher Detergents.

**Verification:**

1. The tenderer shall supply a list of the consumable goods that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion. Products awarded with the EU Ecolabel for Rinse-off Cosmetic Products, or equivalent and, EU Ecolabel for Tissue Paper, or equivalent, EU Ecolabel for Hard Surface Cleaning products, or equivalent, EU Ecolabel for Detergents for Dishwashers, or equivalent, will be deemed to comply with the requirements.
2. Where disposable tableware is deemed necessary the service provider will provide documentary evidence on the justification for procuring disposable tableware and that it meets the 90% sustainably sourced fibre. The Forest Stewardship Council (FSC) label and Programme for Endorsement of Forest Certification (PEFC), or equivalent standards, will be deemed to comply
3. The tenderer shall supply a list of the cutlery that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion. The tenderer shall provide a certificate according to the EN 13432 Standard for Compostable Plastics.

**Consequences**

The criterion will encourage the use of consumables with low environmental impacts.

**Consultation questions**

- Are the proposed consumable goods providing a good coverage of the consumables being used within the catering services provision?
- Are the proposed threshold % limits accessible to all service providers?



### 5.1.2.5 Equipment (AC9)

#### **Rationale**

The literature review has shown that the LCA studies for catering services are scarce, meaning that results should be considered with caution, especially with regard to their representativeness. From the life cycle perspective, the primary production of food stands for the major environmental impact (Baldwin et al., 2011; Calderón et al., 2010), nevertheless, the energy use in kitchen operations has an impact on fossil fuels, carcinogens and ecotoxicity, and it plays an important part once the catering service is analysed isolated from the primary production of food (Fusi et al., 2015). The study carried out by IEAA (2012) showed that almost 40% of the energy the four sites is used for cooking with refrigeration at 28%, extraction at 17% and dishwashing at 5%. In carbon terms cooking at 27% is less important than refrigeration at 34%. This is due to the lower carbon impact of gas which accounts for 68% of cooking energy. In the case of extraction, the main parameters affecting the energy consumption are related to the type of cooking appliances and dishwashers. The other parameters, as the speed variable fans, are usually part of the kitchen design which is out of the control of the catering service operator on some occasions.

The stakeholder survey gathered their views in the current EU GPP criterion, showing doubts about the relevance and clarity of the current wording of the criterion (section 1.5.3.2., Preliminary Report). Some comments also suggested to span the scope of the criterion to food waste management equipment. They also highlighted the need to set up the criterion applicable only where the caterer is responsible for providing own equipment'. Only two procurers declare the application of the current EU GPP award criterion set at the comprehensive level.

The review of other GPP criteria schemes shows that energy efficiency requirements on kitchen appliances seem to be not a current practice, revealing that just one public procurer applied it as a voluntary best practice.

Another relevant aspect relates to the alignment to other product policies setting requirements on professional kitchen equipment, as shortly described below for refrigeration appliances, cooking appliances and dishwashers.

The European Energy Label and Ecodesign schemes cover professional and commercial refrigeration equipment commonly used by catering services. Professional refrigeration equipment includes appliances used in professional kitchens. Commercial refrigeration equipment include appliances used to show and make accessible refrigerated food to the final consumers (supermarkets, shops, vending machines, etc.)

For professional refrigeration, the Ecodesign Regulation EU No 2015/1995 sets minimum requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers, while the Energy Label Regulation EU 2015/1995 settles the energy classes for professional refrigerated storage cabinets (Section 3.2.2 Preliminary report).

There is another Ecodesign and Energy Labelling study ongoing whose scope includes commercial refrigeration (Lot 12). For Ecodesign and Energy Label Lot 12, which covers commercial refrigeration, the discussion on the energy classes and ecodesign thresholds is still ongoing. In this regard, TopTen.eu (TopTen 2016) publishes regularly a list of commercial refrigeration appliances, which have to comply with TopTen requirements. These requirements are based on the ongoing work for the development of Ecodesign and Energy Labelling, and they will need to be updated once these regulations are in force. Therefore, it is proposed to wait for the adoption of these regulations for the correct alignment of these two product policies.

Another policy ruling the refrigeration appliances in Europe is the so called F-Gas Regulation (Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006). This regulation aims at the phase out of HFC refrigerants with high global warming potential, particularly for commercial and professional refrigeration; it sets the following deadlines to ban high and medium GWP refrigerants (Table 9).

**Table 9: Phase out deadlines for refrigerants with a high GWP according to the F-Gas Regulation (Regulation (EU) No 517/2014)**

Refrigerators and freezers for commercial use (hermetically sealed equipment)	That contains HFCs with GWP of 2500 or more	1 January 2020
	That contains HFCs with GWP of 150 or more	1 January 2022

The harmonisation of product policies bolsters their appropriate implementation and interpretation by means of common framework, terminology and test methods, and therefore they should be taken as references for the wording of the GPP criteria.

However, the other energy consumers within the catering services, i.e. the professional cooking appliances, lack European Ecodesign or Energy Labelling policy tools, which are just developed (or under development) for domestic appliances, that are out of the scope of the criterion. The existing gap for professional appliances might be overcome by the US Energy Star, which sets minimum energy efficiency requirements several cooking appliances (Section 3.2.2. Preliminary report)

Regarding US Energy star cooking appliances, the market availability of those appliances in Europe is uncertain. No data have been found for the European market and some comments from stakeholders pointed out that US Energy star was not relevant. Besides, as an example of non-US market, a Canadian market analysis of commercial kitchen equipment (commissioned by the Natural Resources Canada and carried out by the consultancy company Dunsy) showed that the availability of commercial kitchen equipment in Canada is quite uneven across the different categories of products, and in general it is still very limited. US Energy Star cooking equipment is difficult to find and is often questioned regarding its ability to meet the same quality standards necessary to guarantee food uniformity (Gobeil et al, 2015). This was also supported by the stakeholders in the field of equipment manufacture. The lack of information about the uptake of US Energy Star cooking appliances in the European market, together with the comments related to its low relevance, has led to the withdrawal of this energy rating system in the revision of the current criterion.

Nevertheless, the BEMP on Tourism services identified a set of measures related to cooking equipment that might help public procurers in the wording of award criteria.

- Replace electric hob with induction hob.
- Replace electric hob with gas hob (optimised burners).
- Replace gas hobs with new hobs controlled by pot sensors.
- Replace uninsulated food heating unit with insulated model.
- Replace conventional oven with convection oven.
- Use a combi oven or pressure cooker instead of conventional oven.
- Use microwave instead of oven or hob to (re)heat food.

The study carried out by IEEA, (2012) also recommends choosing gas appliances over the electrical ones, where possible.

These recommendations are used as to propose a criterion aimed at rewarding the most efficient technologies.

The market segmentation of the professional refrigeration in Europe has been overviewed by TopTen.eu the project ProCold, whose main goals are showcasing best products, supporting green procurement and helping to implement effective policies (ProCold, 2016). In their publication focusing on professional refrigerated storage cabinets and blast cabinets, it is provided data of the energy classes available in the European market, according to the Regulation 2015/1994 (Table 10) (TopTen, 2015) The product lists on Topten.eu represent 7 different brands (Gram, Desmon, Electrolux, Foster, Liebherr, Porkka, Snowflake) with 64 model types (not counting similar models with different configurations) that are all at least class D or better. It is important to highlight that the models registered in the TopTen.eu database shall meet at least class D, so it is not known the models below class D that are available in the market.

**Table 10. Models for professional refrigeration in Europe for energy classes above G (TopTen, 2015)**

Category	Energy classes				
	A	B	C	D	Total
Storage counter refrigerators	3	1	...	...	4
Storage refrigerators 1-door	6	4	14	...	24
Storage refrigerators 2-doors	...	...	4	4	8
Storage counter freezers	1	1	...	...	2
Storage freezers 1-door	1	3	2	14	20
Storage freezers 2-doors	...	...	...	5	5
Storage refrigerators freezers	...	...	...	1	1
Total	11	9	20	24	64

Based on these figures, ProCold (2016) recommends the lowest Energy Class for which there are models of each category. The proposal of ProCold would ensure an alignment to the Ecodesign tier planned for 2019 (EEI < 85, i.e. Energy Class shall be above F), and also that there are models currently available in the market. For that reason the ProCold (2016) recommendations are taken to draft the core criterion. For the comprehensive criterion, it is proposed to require Energy class A (EEI < 25) for all categories, in order to reward the highest energy rating classes (A and above). There is no data about the availability of some of these product categories in the market; therefore, this criterion proposal is open to discussion based on market data that the stakeholders might provide. Regarding professional dishwashers, the current Ecodesign and Energy labelling for domestic dishwasher are under revision, and it is planned to include professional appliances as well. Nevertheless, the BEMP on Tourism services also provides some recommendations to reduce water consumption:

- Install or retrofit PRSVs nozzles to produce a maximum flow of 6 L/min. Install or retrofit sensor- or trigger- activation.
- Select an appropriate size and type of efficient dishwasher with water consumption ≤2 L per rack (tunnel dishwasher).
- Install heat-recovery.
- Maximise dishwasher loading, and set programmes to optimise water, chemical and energy consumption (e.g. avoid prewash).
- Avoid environmentally harmful chemicals and select eco-labelled dishwasher chemicals.

The study carried out by IEEA (2012) provides the following recommendations:

- Purchase the most energy efficient equipment (in kWh/100 dishes) when replacing.
- Consider models with heat recovery from hot sanitation.
- Purchase water-efficient dishwashers as these tend to be the most energy-efficient.
- Where centrally-generated hot water is available provide hot feed to the dishwasher as this can reduce running costs.
- Where local hot water generation exists, it may enable heat recovery from refrigeration.
- Hot feed from a central gas-fired boiler can reduce running costs.

However, one of the stakeholders recommended not to set any thresholds for dishwasher water consumption if the test method was not standardized, since the results would not allow any comparison. For that reason, an approach based on the promotion of more efficient technologies is proposed. In this regard, the criterion proposal is drafted to award points to dishwashers equipped with heat recovery systems.

Core criteria	Comprehensive criteria																								
<b>Award criteria</b>																									
<p><b>AC1. Equipment</b> This criterion is applicable only where the caterer is responsible for providing own equipment</p> <p><b>1 Refrigeration</b> Points shall be awarded to plug-in cabinets (remote cabinets are not considered) and storage cabinets with Energy efficiency index (EEI) as set in the following table:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Energy efficiency index</th> <th>Min. energy efficiency class</th> </tr> </thead> <tbody> <tr> <td>Storage counter refrigerators</td> <td>&lt;35</td> <td>B</td> </tr> <tr> <td>Storage refrigerators 1-door</td> <td>&lt;50</td> <td>C</td> </tr> <tr> <td>Storage refrigerators 2-doors</td> <td>&lt;75</td> <td>D</td> </tr> <tr> <td>Storage counter freezers</td> <td>&lt;35</td> <td>B</td> </tr> <tr> <td>Storage freezers 1-door</td> <td>&lt;75</td> <td>D</td> </tr> <tr> <td>Storage freezers 2-doors</td> <td>&lt;75</td> <td>D</td> </tr> <tr> <td>Storage refrigerator-freezers</td> <td>&lt;75</td> <td>D</td> </tr> </tbody> </table> <p><u>Note:</u> The Energy efficiency index shall be calculated according to EU regulation 2015/1094 (energy labelling of professional refrigerated storage cabinets).</p> <p>Points shall be awarded to the equipment using refrigerants with a GWP below 2500</p> <p><b>2 Cooking appliances</b> Points shall be awarded to the kitchen equipped with the following appliances (where appropriate)</p> <ul style="list-style-type: none"> <li>• Induction hob or gas hob with optimised burners and controlled by pot sensors.</li> <li>• Insulated food heating</li> <li>• Convection oven, combi oven or pressure cooker</li> </ul> <p><b>3 Dishwashers</b> Points will be awarded to the dishwashers equipped with heat recovery systems.</p> <p><b>Verification:</b> Suppliers shall provide a list of the equipment to be used in carrying out the service (explicit indicating equipment compliant with this criterion), together with the test reports and the technical documentation of the appliances from their manufacturers.</p>	Category	Energy efficiency index	Min. energy efficiency class	Storage counter refrigerators	<35	B	Storage refrigerators 1-door	<50	C	Storage refrigerators 2-doors	<75	D	Storage counter freezers	<35	B	Storage freezers 1-door	<75	D	Storage freezers 2-doors	<75	D	Storage refrigerator-freezers	<75	D	<p><b>AC1. Equipment</b> This criterion is applicable only where the caterer is responsible for providing own equipment</p> <p><b>1 Refrigeration</b> Points shall be awarded to plug-in cabinets (remote cabinets are not considered) and storage cabinets with Energy efficiency index (EEI) below 25 (Energy Class A): <u>Note:</u> The Energy efficiency index shall be calculated according to EU regulation 2015/1094 (energy labelling of professional refrigerated storage cabinets).</p> <p>Points shall be awarded to the equipment using refrigerants with a GWP below 150</p> <p><b>2 Cooking appliances</b> Points shall be awarded to the kitchen equipped with the following appliances (where appropriate)</p> <ul style="list-style-type: none"> <li>• Induction hob or gas hob with optimised burners and controlled by pot sensors.</li> <li>• Insulated food heating</li> <li>• Convection oven, combi oven or pressure cooker</li> </ul> <p><b>3 Dishwashers</b> Points will be awarded to the dishwashers equipped with heat recovery systems.</p> <p><b>Verification:</b> Suppliers shall provide a list of the equipment to be used in carrying out the service (explicit indicating equipment compliant with this criterion), together with the test reports and the technical documentation of the appliances from their manufacturers.</p>
Category	Energy efficiency index	Min. energy efficiency class																							
Storage counter refrigerators	<35	B																							
Storage refrigerators 1-door	<50	C																							
Storage refrigerators 2-doors	<75	D																							
Storage counter freezers	<35	B																							
Storage freezers 1-door	<75	D																							
Storage freezers 2-doors	<75	D																							
Storage refrigerator-freezers	<75	D																							

## **Consequences**

The criterion will encourage the use of kitchen equipment (specifically refrigeration appliances, cooking appliances and dishwashers) with low environmental impacts. The types of equipment covered by this criterion are better specified and the requirements for each of them more detailed.

### **Consultation questions**

- Are the proposed thresholds and technologies accessible to all service providers?
- Would the criteria proposed entail a significant increase of the costs?
- Do you agree on withdrawing US Energy Star as a requirement on cooking appliances?

### **5.1.2.6 Vehicle fleet and planning of food delivery (TS7)**

#### **Rationale**

Transportation was not identified as a main hotspot in food supply chains although contributing to overall environmental impact (depending on food category and depending on situation). The use of fossil fuels leads to global warming, abiotic resource depletion, ozone depletion and acidification. Nevertheless, Cerutti et al. (2016) found that the GHG emission share of urban food distribution in the carbon footprint of the school catering service is relevant (24–28% of the total CF); and highlighted the possibilities for GHG emission reductions. The distribution of food is part of the catering service, and therefore, falls under the caterer responsibility. By requesting vehicles to be more fuel efficient or have lower emissions, will also minimise the impact on the other impact categories. But food supply chains are too complex to require all vehicles to achieve a certain environmental standard.

Some stakeholders proposed the highest levels of European emission standard (EURO 6). Other stakeholders were concerned that this criterion might be too ambitious for SMEs and hence the EURO 5 requirement should constitute the core criterion. On the other hand, there were comments recommending including CO<sub>2</sub> emissions as well. In this regard, at the end of 2013, the European Parliament and the Council of the European Union reached an agreement regarding two regulatory proposals that will implement mandatory 2020 CO<sub>2</sub> emission targets for new passenger cars and light-commercial vehicles in the European Union. The passenger car standards are 95 g/km of CO<sub>2</sub>, phasing in for 95% of vehicles in 2020 with 100% compliance in 2021. The light-commercial vehicle standards are 147 g/km of CO<sub>2</sub> for 2020 (ICCT, 2014). Due to the mandatory implementation, a separate sub-criterion on carbon emission seems to be unnecessary.

With regards to air emissions covered by Euro standards, for light commercial vehicles, the Euro 5 standard apit became mandatory for all new registrations in January 2015. As for Euro 6, it sets stricter diesel NO<sub>x</sub> limits, PN limits for gasoline vehicles, on-board diagnosis requirements, Its implementation will be completed in September 2018, when real drive emissions requirements will be in force, and the New European Driving Cycling will be replaced by Worldwide harmonized Light vehicles Driving Cycling (ICCT, 2015).

For heavy duty vehicles, the Euro V standard became mandatory for all new registrations in 2009. EURO VI was required to all new vehicles registration in January 2014, and some specific parts of it in 2017. It reduces 67% the PM emissions limit compared to EURO IV and V, and includes a PN limit. It also decreases the NO<sub>x</sub> emissions limit,, replaces the European Stationary Cycle and Transient Cycle used for testing by the World harmonized Transient cycle.. EURO VI also introduces in-service conformity testing using Portable Emission Measurement System. Besides, it sets new limit for ammonia emissions and stricter limits for methane on CNG and LPG vehicles (ICCT, 2015). Nevertheless, it is not clear how relevant these heavy duty vehicles are for distribution of food in the catering service activities

In the view of the set of improvements that EURO VI/6 standards introduce, new vehicles on the market need to make important efforts to comply with their requirements, and therefore, it is proposed these new standards to be promoted within the EU GPP criteria. Some stakeholders suggested that EURO V/5 would be suitable for core criterion and EURO VI/6 for comprehensive. In this concern, while EURO V/5 seems to be affordable, the total replacement of a fleet to EURO VI/6 may entail significant costs, leading to an excessive gap between the core and comprehensive levels Therefore it is proposed that EURO V/5 is requested to 100% of fleet, while certain percentages of the fleet should meet EURO VI/6, for core and comprehensive criteria. It is also necessary to take into account the different implement stages of this regulation.

Regarding the refrigerants, the MAC Directive prohibits the use of F-gases with a global warming potential of more than 150 times greater than carbon dioxide (CO<sub>2</sub>) in new types of passenger cars and light commercial vehicles introduced from 2011, and in all new passenger cars and light commercial vehicles produced from 2017. The other piece of legislation aimed at phasing out the high GWP refrigerants, the F-gas Regulation, does not ban any specific gas in refrigerated trucks. Efficient and secured refrigeration in food transportation is crucial to keep the cold chain in the food supply chain, and it is a food safety legal requirement. For that reason, a criterion on the refrigerants used in transportation (as it was suggested in some comments) might conflict with food safety

provisions, and this risk should be avoided. For light commercial vehicles, the MAC Directive already sets very strict requirements on the refrigerants.

The BEMP for Food and Beverage Manufacturing had recommendations on transport. It is made evident that under the current EURO standards, the newer model of EURO vehicle, the lower environmental impact (ICCT, 2015). But there were also recommendations on how vehicles are used. It is good practice to avoid empty loads and to use back-haul. Defra (2013) showed that when they were able to avoid daily deliveries of food and instead delivery every other day the impact of transport can be reduced by 50 %.

The review of other GPP criteria shows four procurers apply requirements to reduce the food delivery transportation. Some examples are the following:

- Deliveries to be made once a week and on a more regular basis when needed
- A contractual delivery stop on orders with a value below EUR 100

With regards of the current criterion, the survey showed that the requirement on transport is one of the most applied criteria, which underpinned the importance of this environmental aspect

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS1. Vehicle fleet and planning of food delivery</b></p> <p>The transport of food (raw and ready prepared meals) shall comply with the following:</p> <ul style="list-style-type: none"> <li>- The vehicle fleet own or leased by the caterer to transport the meals shall comply with the EURO V/5 standard and at least 25% of the vehicle fleet transporting the meals shall comply with the EURO VI/6 standard with the requirements in force at the time the call for tender is published</li> <li>- The provider shall have a company transport plan to minimise fuel consumption and maintenance records for the own or leased vehicle fleet</li> </ul> <p><b>Verification:</b> Tenderers shall provide a list of the vehicles to be used in carrying out the service that are owned/ leased by the applicant and vehicles' public registration as proof of compliance with the EURO standards. Tenderers shall provide a copy of the company transport plan, including fuel consumption evolution. Tenderers shall provide a copy of the maintenance plan for the vehicle fleet (vehicle service records can be used as proof of compliance).</p>	<p><b>TS1. Vehicle fleet and planning of food delivery</b></p> <p>The transport of food (raw and ready prepared meals) shall comply with the following:</p> <ul style="list-style-type: none"> <li>- The vehicle fleet own or leased by the caterer to transport the meals shall comply with the EURO V/5 standard and at least 50% of the vehicle fleet transporting the meals shall comply with the EURO VI/6 standard, with the requirements in force at the time the call for tender is published</li> <li>- The provider shall have a company transport plan to minimise fuel consumption and maintenance records for the own or leased vehicle fleet</li> </ul> <p><b>Verification:</b> Tenderers shall provide a list of the vehicles to be used in carrying out the service that are owned/ leased by the applicant and vehicles' public registration as proof of compliance with the EURO standards. Tenderers shall provide a copy of the company transport plan, including fuel consumption evolution. Tenderers shall provide a copy of the maintenance plan for the vehicle fleet (vehicle service records can be used as proof of compliance).</p>

### **Consequences**

Implementing these criteria may help reducing for instance global warming potential as well as air quality in cities. The EURO standards have been updated, from EURO IV/4 to EURO V/5 in the core criterion, and from EURO V/5 to EURO VI/6 in the comprehensive. It has also been added a requirement for a percentage of the fleet to meet the EURO VI/6, given that it represents a significant environmental improvement for air emissions. Apart from that, it is also proposed to include a transport plan to minimise the fuel consumption. It is also proposed to define this criterion as technical specification instead of contract performance clause. This would ensure that the tenderers own or lease fleets complying with these requirements and hence, no verification along the contract is needed.

**Consultation questions**

- Do you think the criterion should cover refrigerants in transport?
- Are you aware if heavy duty vehicles are being used within the catering service activities?



### 5.1.3 Contract performance clauses (C)

#### 5.1.3.1 Staff training (C1)

##### **Rationale**

Although staff training is also proposed to be covered in the Selection Criteria, the aim of this Contract Performance Clause is to assure that documentation related to staff training will be available for the purpose of monitoring on-going compliance. The importance and benefits of staff training are discussed in Section 5.1.1.1 of this report.

The current EU GPP criteria cover Staff Training as a Contract Performance Clause, with a list of topics that should be covered. In this EU GPP criteria proposal, Staff Training is covered as Selection Criteria, to ensure that the cleaning service provider has the means of providing the training, and a Contract Performance Clause, to ensure that adequate records are kept throughout the contract delivery.

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C2. Staff training</b>	<b>C2. Staff training</b>
The service provider shall document and report yearly the amount (hours) and subject of training provided to each member of staff to the contracting authority.	The service provider shall document and report yearly the amount (hours) and subject of training provided to each member of staff to the contracting authority.
<b>Verification:</b>	<b>Verification:</b>
The yearly staff training report shall be made available to the contracting authority for verification purposes. The contracting authority shall foresee rules for penalties for non-compliance.	The yearly staff training report shall be made available to the contracting authority for verification purposes. The contracting authority shall foresee rules for penalties for non-compliance.

##### **Consequences**

This contract performance clause ensures that there is a channel for the procurer to continuously monitor the performance of the contractor. Although this might impose a significant administrative burden to the contractors, it is deemed necessary to have a mean to check that adequate staff training is in place during the contract period.

#### 5.1.3.2 Waste sorting and disposal (C2)

##### **Rationale**

As the correct sorting of the waste represents high potential improvement for environmental impacts, it is proposed to be covered both in the Contract Performance Clauses and as an Award Criteria (Section 0). The proposed criterion Waste Sorting and Disposal as a Contract Performance Clause ensures that the tenderer sorts and disposes of waste correctly throughout the contract. For more information on waste sorting and disposal in the scope of the EU GPP, see Section 0.

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C2. Waste sorting and disposal</b>	<b>C2. Waste sorting and disposal</b>
The service provider shall document and report every 3 months to the contracting authority, for the waste generated, at the sites where the catering service is provided, the categories sorted and their disposal for eventual treatment in accordance with local or national waste management practices and facilities.	The service provider shall document and report every 3 months to the contracting authority, for the waste generated, at the sites where the catering service is provided, the categories sorted and their disposal for eventual treatment in accordance with local or national waste management practices and facilities.

**Verification:**

The tenderer shall submit a report to the contracting authority including a description of the solid waste stream categories sorted and the disposal procedures followed. The contracting authority shall foresee rules for penalties for non-compliance.

**Verification:**

The tenderer shall submit a report to the contracting authority including a description of the solid waste stream categories sorted and the disposal procedures followed. The contracting authority shall foresee rules for penalties for non-compliance.

**Consequences**

The objective of this criterion is to monitor the waste management practices offered in the tender.

**Consultation questions**

- Do you agree with the frequency proposed for monitoring the waste management practices?

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