



Task 1: Proposal for the Product Group Scope and Definition (Draft) Working Document

Revision of the EU GPP Criteria for the
Product Group Food and Catering Services

Pernilla Sjögren (Oakdene Hollins)
Peter Lee (Oakdene Hollins)
Belmira Neto (JRC-IPTS)
Rocio Rodriguez Quintero (JRC-IPTS)
Oliver Wolf (JRC-IPTS)

June 2015

ACKNOWLEDGEMENTS	iv
EXECUTIVE SUMMARY	v
1 SCOPE, DEFINITIONS AND LEGISLATION	1
1.1 European Directives on Public Procurement	1
1.2 Public Procurement Principles.....	1
1.3 Types of EU Public Procurement Criteria	1
1.4 Food and Catering Services: scope and definition	3
1.4.1 Scope and definitions.....	4
1.4.2 Definitions of food and catering services	7
1.4.3 Food product categories	10
1.4.4 Categorisation of catering services.....	11
1.4.5 Public food service sectors.....	12
1.5 Stakeholders feedback and analysis.....	14
1.5.1 Stakeholders feedback on scope	15
1.5.2 Stakeholders feedback on food service definitions.....	17
1.5.3 Stakeholders feedback on the current criteria	18
1.6 Local, Regional and National GPP criteria for food and catering services	25
1.7 European Legislation and Policies	29
1.7.1 Relevant EU Legislation for Food and Catering services.....	29
1.7.2 Biodiversity.....	29
1.7.3 Water	30
1.7.4 Waste	30
1.7.5 Emissions and energy.....	30
1.7.6 Sustainability.....	31
1.7.7 Hygiene and food safety	32
1.7.8 Social and ethics issues	33
1.8 Voluntary environmental legislation, eco-labels and other schemes	34
1.8.1 Voluntary environmental legislation.....	34
1.8.2 Relevant Ecolabels schemes for the Product Group.....	34
1.8.3 Other schemes	38
1.9 Preliminary scope and definition proposals	40
1.9.1 Proposals for definitions and scope for food and catering services	40
1.9.3 Preliminary scope considerations	42
REFERENCES.....	44
Appendix A – The COICOP product classifications.....	48
Appendix B	50

Abbreviations and acronyms

ASC:	Aquaculture Stewardship Council
BREF:	Best Available Techniques Reference (Document)
CO₂e:	carbon dioxide equivalent
DG ENV:	Directorate General Environment
DG SANCO:	Directorate General Health and Consumer Affairs
EC:	European Commission
EU:	European Union
FAO:	Food and Agriculture Organization of the United Nations
GDP:	gross domestic product
GHG:	greenhouse gas
GMO:	genetically modified organism
GPP:	Green Public Procurement
IP:	Integrated Production
IPTS:	Institute of Prospective Technological Studies
LCA:	life-cycle assessment
LCC:	life-cycle costing
MSC:	Marine Stewardship Council
PP:	Public Procurement
SPP:	Sustainable Public Procurement
UK:	United Kingdom

Terms and definitions

Assembly serve: *The food is delivered pre-processed and reheated and assembled on site. (Mostly common in fast food restaurants)*

Catering: *“the preparation, storage and where appropriate delivery of food for consumption by the consumer at the place of preparation or at a satellite unit” (EC DG SANCO, 1993).*

Centralised: *central kitchens or central food factories, that sends out completed dishes to satellites. For example school kitchens.*

Contract catering firm: *“A business engaged in providing a meals service (for example by running staff restaurant or providing school meals)” (National Audit Office, 2006).*

Conventional kitchen: *Food is prepared on site (the majority made from scratch)*

The Hospitality and Food Service sector *“can be defined as outlets that sell food and drinks for immediate consumption outside of the home” (WRAP, 2013).*

Mass caterer: *“means any establishment (including a vehicle or a fixed or mobile stall), such as restaurants, canteens, schools, hospitals and catering enterprises in which, in the course of a business, food is prepared to be ready for consumption by the final consumer” (Official Journal of the European Union, 2011).*

Mass catering: *“the preparation, storage and/or delivery and serving of food to a large number of people” (EC DG SANCO, 1993).*

Meal services and catering: *“Procurement of meals services means that the contracting authority procures an external supplier which wholly or partly runs the meals service”* (Swedish Competition Authority, 2015).

Ready-prepared: *Preparation on site of large batches that are then kept frozen or chilled until required. (Used in hospitals and prisons).*

Vending and coffee 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 microwaved.*

Water dispensers: *A device for heating or cooling and dispensing drinking water.*

Wholesale supplier: *“A business that buys a range of different food and non-food items from producers (such as farms or food manufacturers) and importers for resale to catering contractors, kitchens within public sector organisations”* (National Audit Office, 2006).

ACKNOWLEDGEMENTS

We would like to thank all the stakeholders that took the time to respond to our survey about the current EU GPP criteria. Your comments have been made a large part of this chapter and it has been very useful going forward with the revision. For anonymous reasons we will not state names here, but your feedback has been greatly appreciated.

EXECUTIVE SUMMARY

The aim of this project is to revise the existing EU Green Public Procurement (GPP) criteria for Food and Catering services. This will assist in the reduction of negative impacts of the, public procurement of these services, on the environment, human health and natural resources. The project is led by the Joint Research Centre's Institute for Prospective Technological Studies (JRC-IPTS) with the technical support of Oakdene Hollins. The team will carry out the necessary groundwork to the revision of criteria.

The revision of EU GPP requires in-depth information about the technical and environmental performance of the service group as well as about the current procurement processes. The scientific body of evidence gathered will be cross-checked with sector experienced stakeholders, to develop consensus on how the criteria should be revised to deliver optimum environmental improvements. The revision entails four main background tasks:

Task 1: Scope and definition proposals for the product group.

Task 2: Market analysis.

Task 3: Technical and environmental analysis.

Task 4: Improvement potential and life-cycle costing considerations (LCC).

Based on Tasks 1-4, the project team will prepare the Preliminary Report which will be the basis for producing the Technical Report that will include draft criteria proposals. Both reports comprise the working documents for the 1st Ad Hoc Working Group (AHWG) meeting. The Technical Report including draft criteria proposal will be revised in the light of the output of the 1st AHWG meeting. Additionally, within Task 1 a questionnaire was developed for stakeholder feedback about scope, definitions and current EU GPP criteria.

This report focuses on the definition for and scoping of Food and Catering Services. The scope and definitions for these services is long and understandings vary widely. Hence, it is important to gain an overview of the different scope and definitions and to narrow down the services in order to obtain a homogenous scope for an appropriate and meaningful set for the EU GPP criteria.

In this report, the scope and existing definitions are presented and discussed, relevant European policies presented and the stakeholder feedback obtained in the first questionnaire sent to stakeholders. Section 1.1. presents the scope and the definitions in the current EU GPP criteria, additionally are included the saope and definitions from a literature review made. Section 1.2. presents the stakeholders feedback and analysis gathered in the questionnaire. Section 1.3. presents a review of current GPP schemes for food and catering services. Section 1.4. and 1.5. present, respectively, the European Directives on public procurement and the relevant European policies. The last section (section 1.6.) concludes with the first proposals for scope and definition for Fodd and Catering Services.

In next steps, the market, technical and environmental analysis will be carried out to further inform and validate criteria development. The improvement potentials and the best available techniques for the service provision are to be identified. At the final stage drafts of the proposed EU GPP criteria and supporting background reports (including Market, Technical Analysis and Improvement Potential) will be circulated and will be discussed at two working group meetings.

1 SCOPE, DEFINITIONS AND LEGISLATION

1.1 European Directives on Public Procurement

The Public Procurement Directive 2014/24/EU (public works, supply and service contracts) sets out the legal framework for public procurement. It applies when contracting authorities seek to acquire supplies, services (e.g. catering services), or works when its value exceeds set thresholds, unless it qualifies for a specific exclusion.

The EU procurement regime is based on the Treaty principles of transparency, non-discrimination, equal treatment and proportionality. For example, to ensure transparency and equal treatment, products that fulfil the requirements under the eco-label without having the label must also be accepted.

1.2 Public Procurement Principles

Every criterion used in a Public Procurement process must comply with the following guiding principles:

- Free movement of goods and services, freedom of establishment;
- Non-discrimination and equal treatment;
- Transparency;
- Proportionality;
- Mutual recognition.

1.3 Types of EU Public Procurement Criteria

The 'subject matter' of a contract is about what good, service 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;
- Technical and professional ability;

Technical Specifications (TS): Technical specifications constitute minimum compliance requirements that must be met by all tenders. TSs 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. Offers not complying with the technical specifications must be rejected. TSs are not scored for award purposes, they are strictly pass/fail requirements.

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.

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, TCO: total cost of ownership or LCC: life cycle cost);
- 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, opposite to these, 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 those specific to the product being procured.

1.4 Food and Catering Services: scope and definition

The European Union Green Public Procurement (EU GPP) initiative is a voluntary instrument, 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, 2008a).

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) . By using their considerable purchasing power they can therefore make a difference, from both an environmental and a sustainability perspective, to support the market shift into a resource-efficient and low-carbon economy.

This document is intended to provide background information for the revision of the current EU GPP criteria for the product group ‘Food and Catering Services’ that has been in use since 2008. This product group is considered important since the impacts of food and drink area of consumption are highlighted and recognised in the original background report (European Commission, 2008a) as responsible for 20-30 % of several environmental impacts of total consumption and in the case of eutrophication for even more than 50 % (Tukker *et al.*, 2006).

The EU GPP criteria comprise two key parts, the ‘core’ and ‘comprehensive’ criteria. Table 1 provides the definitions of the two parts and Table 2 provides a summary of the current criteria.

Table 1: Definitions of the core and comprehensive criteria (Source: European Commission, 2004)

Criteria	Definition
Core	Suitable for use by any contracting authority across the Member States and address the key environment impacts. They are designed to be used with minimum additional verification effort or cost increases.
Comprehensive	For those wishing to purchase the best environmental products available on the market. These may require additional verification effort or a slight increase in cost compared to the other products with the same functionality.

Table 2: A summary of the current criteria for Food and Catering Services (Source: European Commission, 2008c)

Criteria		Summary of existing criteria
Core	Food supply	Organic food and packaging
	Catering service	Organic food, menu planning, packaging, waste generation and transport
Comprehensive	Food supply	Organic food, food from integrated production, aquaculture and marine standards, animal welfare standards and packaging.
	Catering service	Organic food, food from integrated production, menu planning, paper products, aquaculture and marine standards, animal welfare standards, packaging, equipment, cleaning products, waste generation, transport, staff training and service management.

The Institute of Prospective Technological Studies (IPTTS) has developed the webpage http://susproc.jrc.ec.europa.eu/Food_Catering/ from which stakeholders may retrieve information related to the revision of the EU GPP, and register their interest in participating in the revision process.

1.4.1 Scope and definitions

1.4.1.1 Scope and definitions of the current EU GPP for 'food and catering services'

The current EU GPP criteria for food and catering services were released in 2008 (European Commission, 2008a) do not include specific definitions but only a brief description of what is considered in scope. This document states that the product group refers both to the direct procurement of food by public authorities and the procurement of catering services. The procurement of food is normally included as part of the catering service. To analyse this scope two issues are further considered, namely, the life cycle stages considered in scope and the environmental impacts and additional impacts in scope.

1.4.1.2 The life cycle stages in scope

The standards document ISO 14024 sets out the life cycle stages that should be considered in criteria setting, albeit, for Type 1 ecolabelling (ISO, 2001) it refers that:

"Lifecycle stages to be taken into account when developing the product environmental criteria should include: extraction of resources, manufacturing, distribution, use and disposal relating to relevant cross-media environmental indicators"

Table 3 shows the stages of the supply chain considered in scope for the revision of these criteria.

Table 3: Important food supply chain stages for ‘food and catering services’



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. ^a
Processing	The processing stage creates food waste and uses resources such as water, energy and detergents. ^a
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. ^a
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. ^a
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 chipped off instantly), or prepared for assembly at a later stage. A long distance to the end consumer may require transport.
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).

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

Food service supply chains are extremely complex and diverse. For example, some food service operators use the traditional ‘cook from scratch’ model while others buy the food ‘ready to serve’. Some also use a hybrid of the two. This will have a large impact on the point in the environmental life cycle where most impacts occur, such as food waste and energy use. This can change the point in the life cycle that the intervention (criteria requirements) should target.

There are six systems identified that are likely to be relevant for this report: conventional kitchen, centralised, ready-prepared, assembly serve, vending and coffee machines, and water dispensers (as defined in the beginning of this report). These food service systems will be further reviewed in the Market Analysis (Task 2 in preparation). Furthermore to the scope and definitions, the stakeholder consultation (by means of the questionnaire) provided feedback on scope, definitions and relevance of these systems. The Technical and Environmental Analysis (Task 3 to be part of The Preliminary Report) will assess their environmental impacts.

1.4.1.3 The environmental impacts and other impacts in scope

From the perspective of the potential environmental impacts that should be considered in the revised criteria, the inclusion of both ‘supply’ (in the form of direct procurement of food) and ‘service’ broadens the scope. Table 4 provides a summary of the potential environmental impacts outlined in the handbook on GPP that should be considered for a supply or service contract.

Table 4: A summary of contract types and potential environmental impacts (Source: European Commission, 2004)

Contract type	Potential environmental impacts
Supply	<ul style="list-style-type: none"> • The environmental impacts of materials used to make the product, and the impact of the production processes. • The use of renewable raw materials in making the product. • The energy and water consumption of the product during use. • Durability / lifespan of the product. • Opportunities for recycling / reusing the product at the end of life. • The packaging and transportation of the product.
Service	<ul style="list-style-type: none"> • The technical expertise and qualifications of staff to carry out the contract in an environmentally friendly way. • The products / materials used in carrying out the services. • Management procedures put in place to minimise the environmental impact of the service. • The energy and water consumed, and waste generated in carrying out the service.

The current criteria have a strong focus on the first bullet point in Table 4, and in particular on addressing the significant impacts from primary food production. Conversely, a ‘GPP in Practice’ case study from the City of Helsinki, Finland (*Calculating the environmental impact of catering services*) found that the average carbon footprint per meal was circa 1.1 kgCO₂e. This study showed that the ‘direct energy consumption’ for storage and cooking of food accounted for 41 % of that amount (see Figure 1). Direct energy consumption is considered in the last bullet point in Table 4 and thus shall not be neglected. This shows that other aspects besides food production may be relevant and it is therefore important to consider all these along in this study.

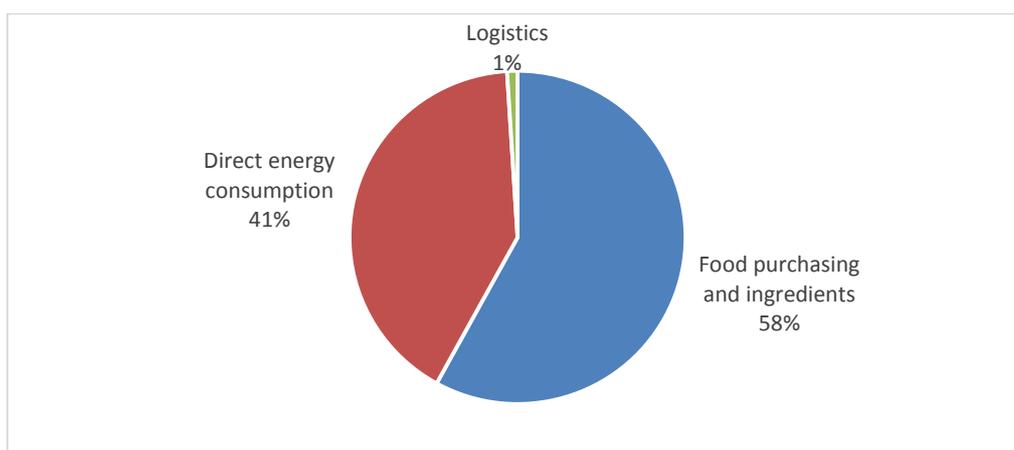


Figure 1: Share of the emissions of carbon dioxide equivalent for the three stages considered for the calculation of a carbon footprint of an average meal of a catering service in the City of Helsinki, Finland (European Commission, 2014b). The stages considered are: food purchasing, direct energy consumption and logistics.

EU GPP represents one measure introduced as part of the Sustainable Production and Consumption Action Plan (Commission of the European Communities, 2008b) together with the EU Ecolabel. Ecolabels set out the environmental requirements (criteria) which must be met by products or services in order to carry the label. The criteria are based on scientific evidence and hence are very relevant to EU GPP. A feasibility study on applying the EU Ecolabel to food, feed and drink products was undertaken in 2011 and provides an indication of the significant issues associated with food, feed and drink products (Oakdene Hollins *et al.*, 2011). The study combined a literature review with a survey of both consumers and stakeholders to help identify the environmental impacts considered significant for the development of an EU Ecolabel. Table 5 provides a summary of the results. It is noted that this study had a product focus and hence did not consider the environmental impacts associated with the provision of the food service, which this report will include.

Table 5: Significant issues for food identified in the EU Ecolabel feasibility study (Oakdene Hollins *et al.*, 2011)

Greenhouse gas emissions	GMOs
Use of non-renewable resources (abiotic depletion)	Fish stock depletion
Water use	Impacts on biodiversity
Eutrophication	Soil degradation and soil erosion
Food waste	Ecotoxicity
Acidification	Social issues
Animal welfare	

Additionally, many studies, including the mentioned feasibility study, highlights how social and ethical issues are considered important by consumers and other stakeholders. This is further analysed in this chapter to an insight on over the social and ethical considerations to the ongoing revision process.

1.4.2 Definitions of food and catering services

There are many different definitions available for food and catering services that differ in context and in scope. The following definitions are considered most appropriate in terms of gaining a better understanding of the scope of the criteria for this product group.

1.4.2.1 Food definitions

According to the CODEX International Food Standards (2010), food can be defined as *“any substance, whether processed, semi-processed or raw, which is intended for human consumption, and includes drinks, chewing gum and any substance which has been used in the manufacture, preparation or treatment of “food” but does not include cosmetics or tobacco or substances used only as drugs”*. However, rather than defining food as a separate entity it is important to find a definition of *“food for catering”*, in which the definitions are more focused on where the food is consumed. CODEX International Food Standards (2010) defines food for catering services as: *“those foods for use in restaurants, canteens, schools, hospitals and similar institutions where food is offered for immediate consumption”*

1.4.2.2 Catering (services) definitions

Catering services are defined differently depending on where the service is being used. Royal Institution of Chartered Surveyors (RICS, 2013) reports that: *“Catering may vary from the provision of automated vending (e.g. hot/cold drinks, hot/cold snacks, confectionery), through drinks and snack counters, cafés, deli bars, canteens and staff restaurants to a full silver-service dining room for directors and clients, and may additionally include hospitality for occasional or regular events and conferences”*. EC DG SANCO (1993) has another definition: *the preparation, storage and, where*

appropriate, delivery of food for consumption by the consumer at the place of preparation or at a satellite unit". This is more broadly defined and is aligned to CODEX International Food Standards.

1.4.2.3 Definitions of the public food service sectors

The food service sector is split into two distinct groups: the profit or commercial sector and the public sector. From an EU GPP perspective only the public sector is in scope and it is from here that definitions are sought. Other terms for the public sector that are used in literature include the *cost (non-profit) sector* and the *social sector*.

GIRA Foodservice (2010a) has defined the whole food service sector as the 'out of home market' (Table 6) and categorised 'social food service' as one part of this market. In this example, 'vending' is a separate category, even though it will occur in the other categories. Social food service is further broken down into seven subcategories (Table 7). Worth highlighting is that the 'business and Industry' subcategory includes private companies.

Table 6: Definition of food services included in the 'out-of-home market' (GIRA Foodservice, 2010a)

OUT OF HOME MARKET					
Social food service	Commercial food service	Bars/pubs	Night life	Other distribution channels	Vending
Business & Industry Education Healthcare Welfare Captive sector	Table service restaurants Self-service restaurants Quick service restaurants Hotels & other lodging establishments Transport and food service Concession sites	Cafés Snack- cafés Pubs Wine bars	Modern bars Discos/night clubs Bowling clubs Casinos Cabarets	Bakeries Cooking terminal Party service Daily distribution channels Take away stands Convenience stores	Hot beverages Cold beverages snacks

Table 7: Sectors and segments included in 'social food service' (GIRA Foodservice, 2010b)

SOCIAL FOOD SERVICE						
B&I	Education	Health-care	Homes for elderly	Other welfare homes	Social leisure	Captive sector
Private companies Government employment Employees' restaurants Vocational training centres Workers' homes	Central kitchens School canteens Leisure centres for children State secondary schools Private schools Student canteens at universities Other kinds of high school	State hospitals Private clinics	State homes Private homes	Homes for disabled adults Home for adults in difficulty Workers' centres Homes for disabled children Homes for children in difficulty Nursing homes & day centres for young children	Holiday camps Social tourism establishments Youth hostels Houses of youth and culture (MJC)	Armed forces CRS barracks Fire stations Prisons Detention centres Homes for monitored education Religious communities

Horizons (2011) has defined the public food service industry in four sectors (Table 8). Again, it is not easily isolated the public procurement information from the private in the group sector 'business and industry' (B&I).

Table 8: In depth description of the public food service sectors (Horizons, 2011)

SECTOR	DEFINITIONS	EXAMPLES
Staff Catering	Feeding employees at workplace including government locations as well as Business and Industry (B&I).	Self-Run, Contracted canteens, National Government Canteens, Local Authority Canteens/Civic Centres, Off-shore catering
Health Care	Outlets whose main focus is providing health care (including short- and long-stay care).	Hospitals, Specialised Hospitals, Day Hospitals, Care & nursing homes
Education	Outlets which are primarily concerned with educating children or adults (or both)	Nursery, Primary, Secondary schools; Further & Higher Education establishments.
Services	Outlets which provide a publicly-funded service and which are not health care or educational establishments.	Prisons, Armed forces; Police & Fire service catering, Young Offenders Institutions, Welfare services (meals on wheels, day centres)

Edwards and Overstreet (2009) provides a definition of the public sector (cost sector), shown in Table 9. Important to note is that the terms ‘public’ and ‘social’ have different meanings here (i.e. ‘public service’ and ‘social service’). Hence the choice of wording in this report is as important as the definition of the choices. Again, the issue of private sector inclusion in the public sector is occurring in the ‘other employee feeding’ subsector. Industrial and non-industrial are mentioned but there is no clarification on whether this is public procurement.

Table 9: Institutions included in the cost sector (Edwards and Overstreet, 2009)

COST SECTOR						
Hospitals	Social services	Education	Prisons	Public services	Armed forces	Other employee feeding
Patients (in- and out-) Staff Visitors	Old people’s homes Day care centres Meals on wheels	Universities (students and staff) Schools (day or residential)	Prisoners Staff Visitors	Police Fire Ambulance	Navy Army Air Force Marines	Industrial Non-industrial Contract vs in-house

It is clear from this review that most definitions of the public food service sector are alike one another, and all include similar categories. However, comparing the three definitions all have grey areas in terms of the distinction between private and public procurement. This means that data gathered for these categories may not be exclusive for the public sector, they may include private elements. This issue must be taken into account when conducting the Market Analysis (Task 2).

1.4.3 Food product categories

The current EU GPP includes the following food categories (European Commission, 2008a):

- fruit and vegetables
- aquaculture
- marine
- meat and dairy
- drinks and beverages

These categories were identified based primarily on the findings from the Environmental Impact of Products (EIPRO) study in 2006 (Tukker *et al.*, 2006). The EIPRO study used the United Nations COICOP¹ classification system to group products by category. Table 10 provides a summary of the classifications.

Appendix A presents the COICOP product classification outlining the products included and excluded from each food product group.

Table 10: A summary of the COICOP product categories (United Nations Statistics Division, 2015)

Division	Group	Class
01 - Food and non-alcoholic beverages	01.1 - Food	01.1.1 - Bread and cereals
		01.1.2 - Meat
		01.1.3 - Fish and seafood
		01.1.4 - Milk, cheese and eggs
		01.1.5 - Oils and fats
		01.1.6 - Fruit
		01.1.7 - Vegetables
		01.1.8 - Sugar, jam, honey, chocolate and confectionery
		01.1.9 - Food products n.e.c. ²
	01.2 - Non-alcoholic beverages	01.2.1 - Coffee, tea and cocoa
		01.2.2 - Mineral waters, soft drinks, fruit and vegetable juices

COICOP was also used within the 2011 EU Ecolabel food, feed and drink products feasibility study. However, a few adaptations to the COICOP classifications were made to arrive at a suitable categorisation of food, feed and drink products:

- Fruit and vegetables were combined because of their similarity in terms of use and production.
- All drinks that reach the consumer in a liquid state were placed in one category.
- Tea and coffee differ significantly from other beverages as they are mostly sold as solids (powder, beans, and bags), and were given their own category.

¹ The classification of individual consumption by purpose (COICOP) is a classification used to classify both individual consumption expenditure and actual individual consumption. It is a standard classification with the framework of the United Nations System of National Accounts.

² n.e.c: not elsewhere classified

1.4.4 Categorisation of catering services

The term *catering service* can be used in many settings, just as the terms *food service* and *hospitality* are. In the UK, *catering* includes all aspects of the *catering industry*, and recently the term *food service* has become increasingly used to describe the same thing (Edwards and Overstreet, 2009).

The European Union has established the Common Procurement Vocabulary Codes (CPV Codes) which is a standardised single classification system to be used in tendering processes available the system (SIMAP) that includes information about European Public Procurement (SIMAP, 2015). Table 11 presents the available categories for food services. These classifications include preparation of food, serving of food and customer base (such as schools).

Table 11: Catering services in CPV codes (Official Journal of the European Union, 2007)

CPV Codes Restaurant and food-serving services
55310000-6 Restaurant waiter services
55311000-3 Restricted-clientele restaurant waiter services
55312000-0 Unrestricted-clientele restaurant waiter services
55320000-9 Meal-serving services
55321000-6 Meal-preparation services
55322000-3 Meal-cooking services
55330000-2 Cafeteria services
55400000-4 Beverage-serving services
55410000-7 Bar management services
55500000-5 Canteen and catering services
55510000-8 Canteen services
55511000-5 Canteen and other restricted-clientele cafeteria services
55512000-2 Canteen management services
55520000-1 Catering services
55521000-8 Catering services for private households
55521100-9 Meals-on-wheels services
55521200-0 Meal delivery service
55522000-5 Catering services for transport enterprises
55523000-2 Catering services for other enterprises or other institutions
55523100-3 School-meal services
55524000-9 School catering services
55900000-9 Retail trade services

Eurostat (2008) also has classifications of food and beverage service activities, summarised in Table 12. These are slightly different from the CPV codes but also highlight preparation of food, serving of food and identify the type of customers.

Table 12: Statistical groups for Food and Beverage Service Activities (Eurostat, 2008)

EUROSTAT - NACE Rev. 2, division I56: Food and beverage service activities
56.10 Restaurants and mobile food service activities <ul style="list-style-type: none">- Restaurants- Cafeterias- Fast-food restaurants- Take-out eating places- Ice cream truck vendors- Mobile food carts- Food preparation in market stalls- Restaurant and bar activities connected to transportation, when carried out by separate units
56.21 Event catering activities <ul style="list-style-type: none">- The provision of food services based on contractual arrangements with the customer, at the location specified by the customer, for a specific event.
56.29 Other food service activities <ul style="list-style-type: none">- activities of food service contractors (e.g. for transportation companies)- operation of food concessions at sports and similar facilities- operation of canteens or cafeterias (e.g. for factories, offices, hospitals or schools) on a concession basis
56.30 Beverage serving activities <ul style="list-style-type: none">- bars- taverns- cocktail lounges- discotheques (with beverage serving predominant)- beer parlours- coffee shops- fruit juice bars- mobile beverage vendors

The CPV codes describe different food service activities in detail in terms of how food is prepared (e.g. serving, preparing) and where it is served (e.g. restaurants, canteens). Eurostat's statistical categorisation is less detailed and differentiates food services into groups (e.g. restaurants, event catering, other catering and beverage serving). For the public sector food service the CPV codes are more useful than the Eurostat classification, since most of the food service activities would be grouped together under 'other food service activities'. In both cases, however, there is no clear distinction between public and commercial service activities.

1.4.5 Public food service sectors

The review made previously allowed to conclude that food service definitions do not clearly distinguish between the public and private food service sectors. An alternative approach to scoping the sectors to be included in the criteria is to review the public procurement spend on food and catering. In 2010, Defra estimated that the UK spends over £2 billion on food and food services. Figure 2 provides a breakdown of overall spend by sector. This shows that education (school dinners, further and higher education) and health care accounted for over 80 % of total spend. The report highlighted the fact that government department head offices account for only 1 % of public sector food procurement. While important in sending a positive message to the wider public sector, it is financially less significant and the challenges faced are different.

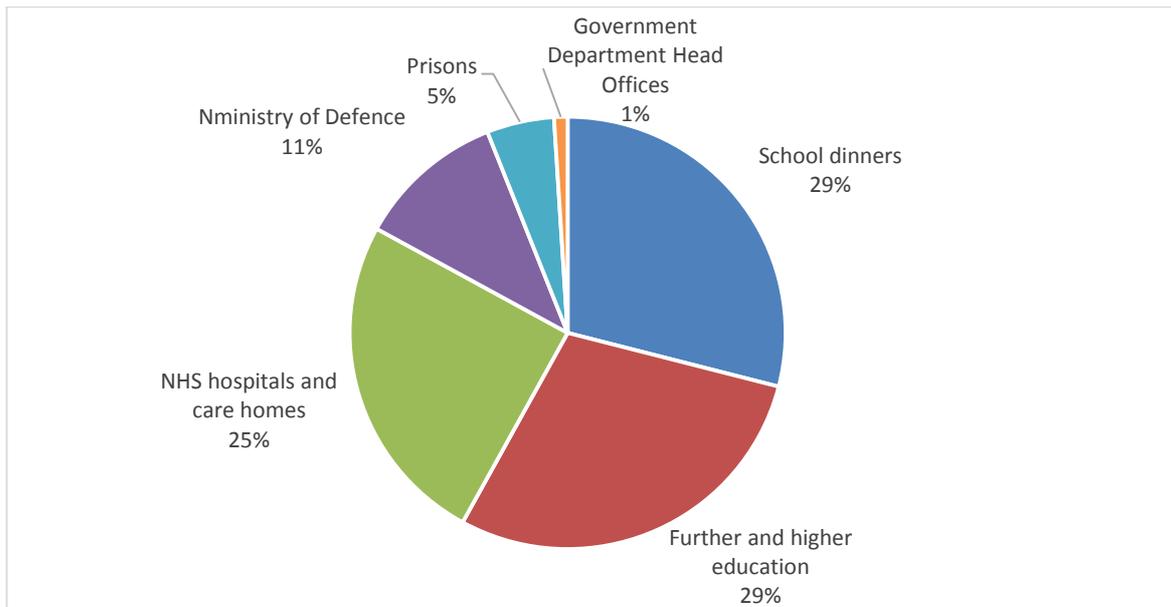


Figure 2: Public sector food procurement spend in the UK (April 2008 to March 2009)(Defra, 2010)

It is acknowledged that the UK analysis provides a snapshot of one country only, and that the spend profiles in other countries may differ significantly. However, a very initial proposal, to be later confirmed by a further public expenditure analysis at EU level (Task 2), for the public sectors to be considered in scope is the following:

- schools
- universities
- hospitals
- care homes
- armed forces
- prisons
- canteens in governmental buildings

1.5 Stakeholders feedback and analysis

A questionnaire was developed for the revision of scope, definitions and criteria of the current EU GPP for food and catering services. It was sent out to more than 300 stakeholders across Europe, including public procurers, catering service providers, food providers, industry wide body/trade associations, food labelling organisations, non-governmental organisations and others. Overall 38 responses were collected up to the fixed deadline for response.

Table 13 shows which countries in Europe the respondents were from. Table 14 shows what type of organisation they represent and which sector(s) their organisation operate in.

Table 13: Distribution of answers across EU-28

EU-28	Number of respondents	EU-28	Number of respondents
Austria		Lithuania	1
Belgium	5	Luxembourg	
Bulgaria		Malta	
Croatia		Netherlands	3
Cyprus		Poland	
Czech Republic		Portugal	1
Denmark	1	Romania	
Estonia		Slovakia	2
Finland	3	Slovenia	
France	2	Spain	2
Germany	3	Sweden	1
Greece		United Kingdom	8
Hungary			
Ireland	1	Subtotal	36
Italy	3	Switzerland	2
Latvia		TOTAL	38

Table 14: Type of organisation the respondent was from and which sector(s) the respondents operate in

Organisation type	
Food provider (only)	3
Catering service provider	4
Public procurer	9
Industry wide body/trade association	7
Food labelling organisation	
Other	15
Sector	
Schools	11
Universities	10
Hospitals	8
Care homes	9
Canteens in government buildings	9
Prisons	2
Armed forces	1
Other	20

1.5.1 Stakeholders feedback on scope

This section summarises stakeholder feedback from the survey on definitions, scope and current EU GPP criteria. The feedback will be taken into consideration going forward with the report and the development of new criteria proposals.

1.5.1.1 Food categories

The feedback on the current food categories, as well as proposals for new categories is shown in Table 15. Overall the respondents agreed with most categories, although many asked that the food categories ‘eggs’ and ‘cereals’ should be included. Three respondents asked for a much more comprehensive list of food categories; one respondent proposed using *the UK Public Health Responsibility Deal* on salt, including 76 categories.

Table 15: Feedback on current food categories

Fruit and vegetables
Most respondents (32 out of 38) agreed that this category can be kept as it is.
Aquaculture
28 respondents agreed to keep this category. However, two respondents wanted to combine Aquaculture with Marine, even though criteria specifications may be developed differently for them (due to different production methods).
Marine
31 respondents agreed to keep this category.
Meat and dairy
28 respondents agreed to keep this category as it is, whilst three respondents asked to separate meat and dairy. One respondent also proposed to create subcategories of meat (e.g. beef, pig, chicken).
Drinks and beverages
31 respondents agreed to keep this category as it is. Two respondents asked for better explanation on what this category includes and said that coffee, tea and cocoa ought to be one category and water/juice/soft drinks and beer, ought to be another.
Other food categories that were proposed
17 respondents proposed to include eggs . 10 respondents proposed to include cereals . 5 respondents proposed to include oils and fat (olive oils, palm oil). 3 respondents proposed to include legumes . 2 respondents proposed to include bread .

1.5.1.2 Scope definition

The scope definition, for which the stakeholders’ feedback is required, will determine in a broad sense what is included in scope. In addition to this definition stakeholders also provide feedback about which public sectors ought to be included, as well as the food categories and food preparation services relevant to include.

Proposed scope definition:

“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, wholesalers or importers or can form part of the service provided by the contract catering firms.”

A large part of the respondents (32 out of 38) agreed with this definition. Some comments were that the definition seems to include all relevant aspects, also from a competition perspective. Furthermore respondents liked that the definition included both outsourcing services and providing in-house services.

A small number of respondents (four in total) disagreed with this scope definition. One highlighted the need to mention catering equipment. Another asked to include 'food manufacturers'. A third respondent agreed and suggested to include following sentence: *food can be procured directly from producers, **manufacturers**, wholesalers or importers*. A fourth respondent said that this definition will result in a complex combined supply chain where economies of scale will be lost, which will result in added costs.

1.5.1.3 Food service segments

The questionnaire asked stakeholders if the segments (schools, universities, hospitals, caring homes, canteens in government buildings, events (conferences, meetings, festivities), prisons, armed forces, should be included in scope.

Around half of the respondents agreed with these segments. No segment was proposed to be excluded, but others were proposed for inclusion. There was confusion about what was included in the term 'caring homes'. Five respondents proposed kinder gardens and three respondents proposed nurseries to be included in scope. Others as business and industry (B&I), staff restaurants, sports facilities, child care facilities, orphanage, social services, retail, charitable food-offers, student hostels, oil platforms, remote platforms and extraction industries were also mentioned.

In conclusion the segments can be kept as they are proposed and the segments kinder gardens and nurseries suggested to be included will be further analysed for relevance in the Market Analysis (Task 2).

1.5.1.4 Catering services

The questionnaire asked stakeholders if the types of services provisions (conventional kitchen, ready-prepared, assembly-serve, centralised, vending and coffee machines, water dispensers or others) should be included in the scope.

Most respondents agreed with the catering services namely: conventional kitchen, ready-prepared, assembly-serve, centralised, vending and coffee machines and water dispensers.

Two respondents wondered why water dispensers are included. One said that (only) bottled water may be useful to include. The other respondent said that water dispensers are rather simple and may not have very much of an environmental impact compared to other categories.

In respect to the others types of service provision, respondents mentioned that others categories may content food storage equipment, cooking equipment, ware washing equipment, food waste management systems, food trolleys (let patients choose), fast food, take away, show-cooking, retail, charitable food offers.

In conclusion stakeholders agree with most of the catering services proposed and their relevance in terms of environmental impact will be looked at in the Technical and Environmental Analysis (Task 3).

1.5.2 Stakeholders feedback on food service definitions

Following section (Table 16) provides a summary of the stakeholder feedback for definitions of the food services that are proposed to be included in scope.

Table 16: Feedback on food service definitions

<p>Catering service: <i>“the preparation, storage and, where appropriate, delivery of food for consumption by the consumer at the place of preparation or at a satellite unit”</i></p> <p>30 agreed and 4 disagreed. Comments were:</p> <ul style="list-style-type: none"> - include ‘clients/patients’ with ‘consumers’, as they do not pay for the service - add ‘or at the premises/venue of the client’ - add the word ‘safe’, as in: ‘delivery of food safe for consumption’ - include procuring food and planning of menus/the food offer, and also include food, drinks, snacks and vending
<p>Contract catering firm: <i>“A business engaged in providing a meals service (for example by running a staff restaurant or providing school meals)”</i></p> <p>30 agreed and 4 disagreed. Comments were:</p> <ul style="list-style-type: none"> - add drinks, snacks and vending, and the fact that some contract caterers outsource elements of their contract to other firms (e.g. vending) - New definition: <i>‘A business engaged in (amongst other activities or services) providing a meals service (for example by running a staff restaurant or providing school meals)’</i> - New definition that includes following: <i>“A contract catering activity can be identified by the following features:</i> <ul style="list-style-type: none"> - <i>a contractual relationship between an organisation and a contract catering provider</i> - <i>services are offered in the premises of the organisation</i> - <i>the sector has clearly defined clientele: workers, civil servants, schools and universities students, patients and inmates, etc. who have access to an canteen or internal restaurant</i> - <i>meals are often delivered to an end consumer at a subsidised price”</i>
<p>Conventional kitchen: <i>“Food is prepared on site (the majority made from scratch)”</i></p> <p>30 agreed and 4 disagreed. Comments were:</p> <ul style="list-style-type: none"> - specify what ‘majority’ means - replace ‘majority made from scratch’ with ‘majority made from raw ingredients’, or change the whole definition to: <i>Food is prepared on site (from scratch or using pre-processed ingredients/products), or the following: A kitchen where all or the majority of food is prepared from scratch</i> - Clarify what ‘on-site’ means. Does it mean a school or a food factory or something else? - Also known as ‘cook fresh’ in the UK, and does not include kitchens designed to regenerate chilled or frozen foods only.
<p>Ready-prepared: <i>“Preparation on site of large batches that are then kept frozen or chilled until required. Used in hospitals and prisons.”</i></p> <p>28 agreed and 6 disagreed. Comments were:</p> <ul style="list-style-type: none"> - it can occur in all segments - the use of this system can be different on a national level - Is the phrase ‘used in hospitals and prisons’ part of the definition or an example? - this definition is confusing for the UK hospital market which talks about ‘in house’ and ‘delivered meals’ to differentiate between where meals are cooked - these meals are almost always prepared in a factory, far away from where they are eaten (e.g. they need to be delivered) - Does the definition mean ‘cook and chill’ or ‘cook and freeze’? This does not always happen on site; the food can also be cooked in a centralised kitchen or a food factory and then be delivered. - New definition: <i>Preparation on site of large batches that are then adequately stored frozen or chilled until required.</i>

Table 16: Feedback on food service definitions Cont.

<p>Assembly serve: "The food is delivered pre-processed and reheated and assembled on site. (Mostly common in fast-food restaurants)"</p> <p>27 agreed and 5 disagreed. Comments were:</p> <ul style="list-style-type: none"> - remove 'mostly common in fast-food restaurants' - also common in UK hospitals; in Finish schools and kinder gardens; and applies to party and event catering - New definition: <i>The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site. (Mostly common in fast-food restaurants).</i> - may be confusion between the definitions of assembly served, centralised and ready-prepared
<p>Centralised: "Central kitchens or central food factories, that sends out completed dishes to satellites. For example school kitchens."</p> <p>28 respondents agreed and 5 disagreed with this definition.</p> <ul style="list-style-type: none"> - New definition: <i>Central kitchens or central food factories, that sends out completed dishes or pre-processed ingredients/meals to satellites. For example school kitchens.</i> <p>Other comments were:</p> <ul style="list-style-type: none"> - change the word 'centralised' to 'centralised production unit' - clarify what type of food preparation is included in this definition, such as 'cook and serve', 'cook and chill' (+vacuum) and 'cook and freeze' (two respondents) - What does 'completed dishes' mean? Is it prepared plates or large batches, or both? - add the word 'in-house' to differentiate these meals from ready-made delivered meals
<p>Vending and coffee 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 microwaved."</p> <p>30 respondents agreed and 3 disagreed with this definition. Comments were:</p> <ul style="list-style-type: none"> - modify the title to 'Vending and hot drinks machines' - change the word 'microwaved' to 'reheated' <p>since vending machines and coffee machines are used differently, this category should be divided into two, and the new criteria should be divided between the food/beverage and the energy use</p>
<p>Water dispensers: "A device for heating or cooling and dispensing drinking water."</p> <p>30 respondents agreed and 4 disagreed with this definition.</p> <ul style="list-style-type: none"> - New definition: <i>A device for dispensing cooled/heated/ambient temperature drinking water.</i> - Another definition: <i>A device for dispensing drinking water, and/or with the possibility of heating or cooling the drinking water.</i> <p>Other comments were</p> <ul style="list-style-type: none"> - add 'specific' or 'with the primary purpose of' after 'A device' to make it more clear (e.g. <i>A device with the primary purpose of heating or cooling and dispensing drinking water</i>) - Delete 'for heating and cooling', since some dispensers work at ambient temperatures without heating and/or cooling. There are dispensers with tap water or with bottled water, and others that heat or cool water.

Overall many stakeholders agreed with the definitions. There were also a few stakeholders that proposed to alter the definitions slightly, either by removing parts or by adding more detail. The results of this feedback are shown in the last part of this chapter: 1.9.1 Proposals for definitions and scope for food and catering services.

1.5.3 Stakeholders feedback on the current criteria

1.5.3.1 General overview of the food and catering service criteria

Overall stakeholders agreed with the current criteria and only required to alter criteria in selected parts. Some respondents asked to make certain criteria more ambitious (especially from an environmental and an ethical perspective). For instance, five respondents proposed to change all or some of the comprehensive criteria into core criteria. Two of the respondents wanted to see more specific criteria for selected food categories. Furthermore, two respondents wanted to see more

scientific evidence for the actual environmental benefits of the criteria. Other respondents argued that more comprehensive criteria may result in added costs for the procurers and suppliers. If this is the case, some respondents mean, then this can lead to a lower uptake of EU GPP. This because consumers are very price sensitive in some countries in the EU.

New topics

The respondents mentioned a number of new topics that may be relevant to include in the new set of criteria. Examples are: short supply chains, collaboration in supply chains to minimise waste, monitoring and measuring food waste, food waste separation, food safety, food fraud and to create awareness on the food waste obligations. One respondent proposed that procurement of professional kitchen appliances should be a separate category. A few respondents wanted to include the alternatives of tap water, vegetarian food (reduced meat options), half-portions in the catering menus and to use Class 2 produce³. Furthermore, inclusion of ethical standards was also requested from some respondents. One respondent also wanted to see more on nutrition (healthy options), allergens, GMO content and different types of health hazards in food. It is difficult to decide at this stage which of these new topics that may be relevant going forward. However, they will be kept in mind in the coming chapters.

Questions to suppliers

Have any of the criteria of the current set been difficult to comply with? Most suppliers said that it has been difficult to comply with the current criteria set (10 said yes and 3 said no), and especially the organic criterion, due to availability and cost of such products. Waste reduction and waste management was also highlighted: one reason was that it is not always possible for the caterer to influence waste management. One respondent also mentioned that animal welfare standards and IP standards had been difficult to comply with.

Can you identify any example where you have been dissuaded from taking part in the tendering process due to current criteria? The majority of suppliers said that they had not turned down a bidding for this reason (2 said yes and 7 said no). One respondent mentioned that the organic criterion had kept them from participating.

Do you think SMEs can comply with the current criteria set? Many of the supplies believed that SMEs can comply (8 said yes and 5 said no). One respondent commented that the strong competition between SMEs all over Europe make them able to compete to tenders and fulfil current criteria. Another respondent stated that, within its member base, there are SMEs working actively with the criteria. One said that large companies have dedicated persons answering bids, while SMEs do not. One respondent stated that the process and criteria are too complex for SMEs.

Questions to procurers

Have you faced problems related with the number of offers complying with criteria set (too few)? In this case there were an even split between the suppliers (5 said yes and 5 said no). One respondent mentioned that the market is not always ready for the criteria.

Do you think most SMEs can comply with the current criteria set? Also in this case the responses were even (4 said yes and 5 said no). One respondent said that SMEs can comply but that larger companies win the bids due to better deals with subcontractors. Another respondent said that the market is not always ready.

Has procurement using the current EU GPP criteria been more expensive compared to non-green public procurement? Even this question gave split answers (5 said yes and 5 said no). One

³ Food products that are good enough to eat, but that have some sort of esthetical defect.

respondent said that it is not possible to assess the relative cost associated with individual criteria. Another said that 'it depends' and that sustainable products will become cheaper in the future if they become more common. Finally one respondent added that in their city the procurement of food is 100 % organic, and that helps to keep the prices lower. This respondent also buys fruit and vegetables in season, and demands different varieties of apples, pears, plums etc., giving bidders extra 'points' for how many different kinds they could offer. This encouraged the large catering firms to actively enlist new SMEs to their supply chains.

Standards other than EU GPP

Some respondents said that there are local procurement guidelines in their cities/countries that they must comply with. One respondent explained that it is using the UK Government Buying Standards and Soil Association standards because they are newer and more comprehensive than EU GPP. Another respondent mentioned that there is a new Brussels label for canteens and restaurants. Overall, the reason for using another standard was because EU GPP is not comprehensive enough or not up-to-date. One respondent said that it prefers other standards that are Sustainable Public Procurement (SPP) rather than 'just' GPP.

Not using GPP at all

The majority of responses indicated that it was either because the criteria are hard to comply with (too strict) or because of economic reasons. One respondent mentioned that since the current criteria not specifies approved labels, it is harder for procurers to know what to ask for and which labels are available that complies with EU GPP. One respondent elaborated further by saying that in order for criteria to be meaningful they have to be applicable both to self-operated and out-sourced services. They also need an enforcement mechanism that will ensure compliance. If this is not built into the criteria, the result may be that they will not be adopted.

1.5.3.2 General comments on specific criteria

One part of the questionnaire asked stakeholders to provide feedback on the current criteria. This section summarises the comments obtained.

Table 17: General comments on specific criteria

Organic production (Technical specification)
<ul style="list-style-type: none"> - decide a set % of organic food, or a higher % - better animal welfare considerations - more information should be provided in the product sheet, for instance on what a Type 1 Ecolabel is, with a link to more detail if necessary - obstacle to implement: availability of organic products may be low (e.g. due to seasonality or because organic is not available in all segments; such as coffee, where other tailored sustainability standards are better); or - too expensive
Additional organic production (Award criteria)
<ul style="list-style-type: none"> - as above - a set % of organic food does not take into account regional differences of availability, nor the whole life-cycle impact of products - a race to the highest % is not helpful; a set % is better

Table 17: General comments on specific criteria (Cont.)

Integrated production (Technical specification)
<ul style="list-style-type: none"> - higher animal welfare standards - more ambitious in terms of % - Integrated production (IP) standards may vary in Europe and may not even exist outside Europe, which can make this criterion discriminative. - Due to a lack of set standards, bids will be difficult to compare. It may therefore be better to have this criterion as an award criterion only.⁴ - Include recognised industry-owned sustainable agriculture standards (e.g. Unilever Sustainable Agriculture Code and SAI Platform Farm Sustainability Assessment) in the core criteria for IP, since this would make it easier for industry to show compliance. - To prove compliance may inflict added costs on farmers - Good with an alternative to organic, but the IP concept is not well known in all countries in Europe. Ethical (fairly traded) standards could be used instead, since these usually include minimum env. standards. - IP is not relevant for coffee suppliers - two respondents proposed to remove this criterion
Additional Integrated Production (Award criteria)
<ul style="list-style-type: none"> - similar/same comments as above - organic should be promoted and chosen over IP where possible
Packaging (Award criteria)
<ul style="list-style-type: none"> - add a higher % of recycled content - include biodegradable content as a criterion - add new category: <i>Percentage of product packaging that is collected and recycled/reused by the supplier</i> <p>Strongly disagree:⁵</p> <ul style="list-style-type: none"> - 'single-unit packages': in certain cases single-unit packages are the best option, mainly because they protect food (food safety), minimise food waste (shelf life, portion control), and tell the consumer how to prepare the food etc.⁶ - Rewrite the criterion: <i>'Food products shall not be supplied in single-unit packages unless this is specifically requested by the contracting authority'</i>. - % of renewable materials in packaging: not always the best option from a LCA perspective⁷. - More important to minimise secondary packaging than to increase recycled material content in primary packaging, as this is not fully developed yet⁸.

⁴ It may be risky to have it as a technical specification since it may outperform an organic bid that is just below its set percentage target but, in fact, more comprehensive than the IP bid.

⁵ The stakeholders that strongly disagree include: 1 catering service provider, 1 public procurer, 1 governmental agency, 2 Industry wide body/trade associations and 2 food providers.

⁶ For hot beverage vending machines, LCAs state that single-portions significantly reduce use of materials (e.g. water, coffee, energy) via portion control.

⁷ One respondent explained that cardboard with recycled content is weaker than virgin fibre and therefore it is likely that more recycled material is needed to achieve the same standard as cardboard from virgin material.

⁸ For example, packaging that will be in direct contact with food is regulated for reasons of food safety, and not all recycled materials are allowed to be used.

Table 17: General comments on specific criteria (Cont.)

Aquaculture and marine products (Award criteria)
<ul style="list-style-type: none"> - transfer to a core criterion - animal welfare considerations, particularly in cultivation systems - There should be different criterion for marine and aquaculture fish and seafood, since they have different production methods and therefore different environmental impacts. - In addition to the labels there should be a technical specification clause that states that fish on the MCS <i>Fish to Avoid</i> list should not be purchased. - These certifications may be costly to have as a supplier of fish, which may prevent SMEs from being able to compete for bids because they cannot afford the cost of the ecolabel. - these certified fish and seafood products may not always be available for purchasing and quality (taste) may be lacking - fish is an important element of a balanced diet and it would therefore be sad to see a lower intake of it due to too strict standards
Animal welfare standards (Award criteria)
<ul style="list-style-type: none"> - transfer to a core criterion - make it more comprehensive and specific - some countries do not have specific national guidelines for animal welfare, an EU-wide standard would be better - have specific criteria for specific animals - concerns with this criterion: the cost of these standards must be taken into account, as consumers will not tolerate price increases - Remove criterion; as it is impossible to have a meaningful and effective control on products.
Menu planning, according to season (Technical specifications)
<ul style="list-style-type: none"> - remove the phrase 'whenever possible' since it is a core criterion - should only apply to fresh produce (frozen produce has a long shelf life and may have been harvested in season and then kept frozen since) - the definition 'seasonal' should be linked to the country in which it has been produced - review environmental benefit is from this criterion - product availability and price will be key drivers in adhering to this criterion - add a climate aspect to this criterion and offer vegetarian options on the menu - remove criterion; nutritional considerations could potentially lead to the need to use out-of-season produce
Paper products (Technical specification)
<ul style="list-style-type: none"> - should apply at both core and comprehensive level - replace '<i>or sustainably managed virgin fibre</i>' with '<i>from certified renewable resources</i>' - concern with this criterion: it should only be applied when it was reasonable and financially practical, and (if kept) it should be transferred to an Award criterion instead of a Technical specification; and - 'one by one napkins' could be promoted as an alternative - Remove criterion, as it has minimal environmental effect on catering compared to other things. - As for verification, few recycled paper products actually have ecolabels.
Equipment (Award criteria)
<ul style="list-style-type: none"> - Is classification A is still relevant? - Energy Star label is not relevant in the EU - include cooking equipment, ware washing equipment and food waste management equipment - The EU Energy label for professional storage cabinets is expected to come into force on 1 July 2016. It will then be mandatory and should therefore provide a basis for the requirements for this GPP. - clarify which equipment the criterion for HCFCs and HFCs target - caterers (operators) are not always in control of the equipment they use - Add note '<i>this only applies where the caterer is responsible for providing own equipment</i>'.

Table 17: General comments on specific criteria (Cont.)

Cleaning products (Award criteria)
<ul style="list-style-type: none"> - if the product sheet for Cleaning Products and Services is used, it should also provide a guide as to which criteria are relevant to caterers - since the R-statements will become outdated shortly due to the GHS-system, the core criteria in the above mentioned sheet should be changed to indicate the relevant Hazard Statements of the GHS-system - include animal welfare considerations (i.e. only support animal test free detergents and toiletries)
Transport (Contract performance clauses: core criteria)
<ul style="list-style-type: none"> - the current EURO-ratings in the criterion are outdated, both at core and comprehensive level - EURO-rating 5 was mentioned suitable for the core level - add: <i>The transport to be used in carrying out the service must meet the following criteria: (link to Core criteria from the Transport Product Sheet)</i> - other types of emission-saving vehicles could be mentioned - Add: vehicles with refrigerants should use an environmentally friendly refrigerant - Caterers cannot always influence what vehicles are used by others in the supply chain. Therefore only caterers that largely conduct their own transport, should be affected by this criterion. - the cost of transportation must be taken into consideration - There are also other ways to optimise transport to minimise environmental impact
Transport (Contract performance clauses: comprehensive criteria)
<ul style="list-style-type: none"> - As above - EURO-rating 6 was proposed for vehicles by some.
Waste generation (Contract performance clauses)
<ul style="list-style-type: none"> - re-usable items should be the first option and renewable (non-reusable) the second - re-usable glassware and cutlery etc. is only sustainable if it is washed conservatively⁹ - optimal type of glassware and cutlery to be used depends on the type of business it is for¹⁰ - if the crockery and cutlery is non-reusable, it should be made from biodegradable sources, so that it can be composted and hence create no 'waste' - As for separate collection: it should be up to the operator to choose the best method, since it depends on what service they have, where it is and what waste collection alternatives are available in that area. Sometimes caterers have no influence over the waste collection methods.
Staff training (Contract performance clauses)
<ul style="list-style-type: none"> - Add more details on what should be included in the training, so that it is easy for the procurer to estimate whether the provider fulfils the requirements - that training should include more than just waste minimisation - including training on energy and water management to continuously improve the energy, water and waste minimisation performance - Why is social quality of products relevant for an environmental criterion? - Should not be too specific; leave room for companies to differ. The training should enable staff to feel confident about making suggestions based on customer feedback or leftovers, with ideas on who to report them to and how.

⁹ i.e. at lower temperatures with modern equipment which uses less water

¹⁰ For a single event non-reusable glassware and crockery may be better, whereas in a school kitchen re-usable is best. Another respondent pointed out that the reusable material sometimes needs to be plastic; for instance, in kindergartens where it is safer to use than glass and is less heavy.

Table 17: General comments on specific criteria (Cont.)

Service management (Contract performance clauses)
<ul style="list-style-type: none"> - Important to keep this criterion, since it is the most crucial part of catering services. - 6 months is a too ambitious target¹¹ - removing the phrase 'where possible' to make it clear what is required and hence make it possible to evaluate performance - a % may be useful to include as a means of measurement - New sentence: '<i>food used in carrying out the service is sustainably produced</i>'. - clarify how the "<i>Evaluation of the most significant environmental aspects of the service provided</i>" is expected to be performed - asked to use a recognised source on how to evaluate the most significant environmental aspects, to ensure this procedure is done continuously - refer to the BREFs prepared by EU Commission

1.5.3.3 Uptake of current EU GPP criteria

Seven public procurers specified how they have used the EU GPP criteria. Table 18 show the summary of the number of responses. The green squares represent which core criterion is available and the orange squares represent which comprehensive criterion is available. Overall, it is apparent that all core criteria have been used. The organic production and transport criteria are the most used core criteria, followed by packaging and menu planning. Almost of the comprehensive criteria have also been used, but the most frequent ones are packaging and staff training, followed by aquaculture and marine, menu planning, paper products, packaging, cleaning products and transport.

Furthermore, it is visible from Table 18 that procurers of food focus mostly on organic production and packaging, followed by the aquaculture and marine criterion. Catering service procurers also focus on organic production, but also transport is equally important, followed by menu planning and staff training.

¹¹ Proposed a change that the supplier comes up with a plan within 6 months and then gives the contractor time to live up to the plan during the time of the contract, giving the supplier sufficient time to implement the plan.

Table 18: Feedback on uptake of EU GPP

FOOD	Core	Comprehensive
Organic production	5	1
Integrated production	---	2
Additional organic	1	1
Packaging	4	4
Additional integrated	---	---
Aquaculture and marine	---	3
Animal welfare	---	2

CATERING	Core	Comprehensive
Professional capability to perform the environmental aspects of the contract	---	---
Organic production	5	2
Menu planning, according to season	4	3
Integrated production (for the % of non- organic food)	---	2
Paper products	---	3
Additional organic production	2	1
Packaging	3	3
Additional integrated production (for % of non-organic food)	---	1
Aquaculture and marine products	---	2
Animal welfare standards	---	2
Equipment	---	2
Cleaning products	---	3
Waste generation	3	2
Transport	5	3
Staff training	---	4
Service management (if Selection criteria not included)	---	---

1.6 Local, Regional and National GPP criteria for food and catering services

While in 2008 only 14 Member States had adopted national GPP action plans (Commission of the European Communities, 2008a), in November 2014 there were already 22 Member States that had some form of national action plan (European Commission, 2014a). In 2009 seven Member States had a high rate of implementation of GPP: these were the UK, Austria, the Netherlands, Germany, Sweden, Finland and Denmark (European Commission, 2015).

Table 19 shows a list of 31 GPP initiatives reviewed in terms of the food service sectors, food products covered and catering services. This review helps identify what other GPP schemes find important to include in the scope. Figure 3, Figure 4 and Figure 5 shows the results of the review. Appendix B shows the review of sectors and food categories, in more detail.

Table 19: Summary of GPP initiatives reviewed

ID	Procurer	Procurer type	Locality	Country	Year
1	City of Lens	Local government	Lens	France	2012
2	French Government	National government	Nationwide	France	
3	Northern Ireland Executive	Regional government	Northern Ireland	UK	
4	Northern Ireland Prison Service	Central government dept	Northern Ireland	UK	
5	Education and Library Boards	Central government dept	Northern Ireland	UK	2008
6	Health & Social Care	Central government dept	Northern Ireland	UK	
7	UK Government	National government	Nationwide	UK	2014
8	City of Malmö	Local government	Malmö	Sweden	2010
9	Municipality of Rome	Local government	Rome	Italy	2013
10	East Ayrshire Council	Local government	Scotland	UK	2008
11	City of Copenhagen	Local government	Copenhagen	Denmark	2013
12	City of Vienna	Local government	Vienna	Austria	1999
13	Scottish Government	Regional government	Scotland	UK	2011
14	Malta Government	National government	Nationwide	Malta	2008
15	Badalona City Council	Local government	Badalona	Spain	2009
16	IMEB (Municipal Education Institute), Barcelona City Council	Local government	Barcelona	Spain	2013
17	City of Helsinki	Local government	Helsinki	Finland	2010
18	Federal Procurement Agency (BBG)	National government	Nationwide	Austria	2012
19	UK Government	National government	Nationwide	UK	2010
20	Kiuruvesi town	Local government	Kiuruvesi	Finland	2012
21	Municipality of Pisa		Pisa	Italy	2011
22	University catering service (unidentified)	Higher education institution	Unidentified	UK	2012
23	Various	Higher education institution	Various	Various	2014
24	Various	Various	Various	USA	2014
25	Oulun Serviisi	Municipal food catering company	Oulu	Finland	2012
26	Compass Group	Contract Caterer	Various		
27	Various	Local government	Various	UK	2009
28	Various	Local government	Various	Finland	2012
29	Food for Life Partnership (FFLP)	Charitable initiative	Nationwide	UK	2012
30	Ministry of Defence (UK)	Central government dept	Nationwide	UK	2014
31	Ireland Government	National government	Nationwide	Ireland	2012

Schools (20 of the 31 initiatives) and health & social care (11 of the 31) were the two most prominent food service sectors covered (illustrated in Figure 3). This confirms the previous analysis which placed these two sectors at the top in terms of public expenditure. In terms of food products the first three products covered in the current EU GPP criteria are also the most included ones in other GPPs; namely, meat (15), dairy (13) and wild caught seafood (11). However, the next two food categories eggs (9) and bakery (8) are not included in the current EU GPP criteria (illustrated in Figure 4).

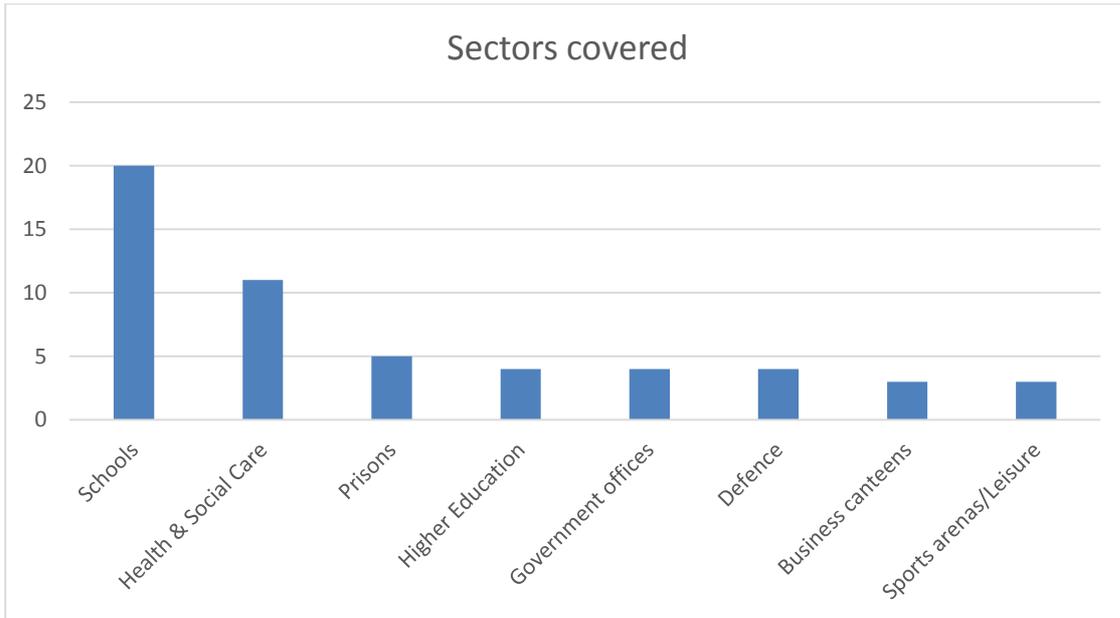


Figure 3: Aggregation of public sectors mentioned in the 31 GPPs schemes reviewed

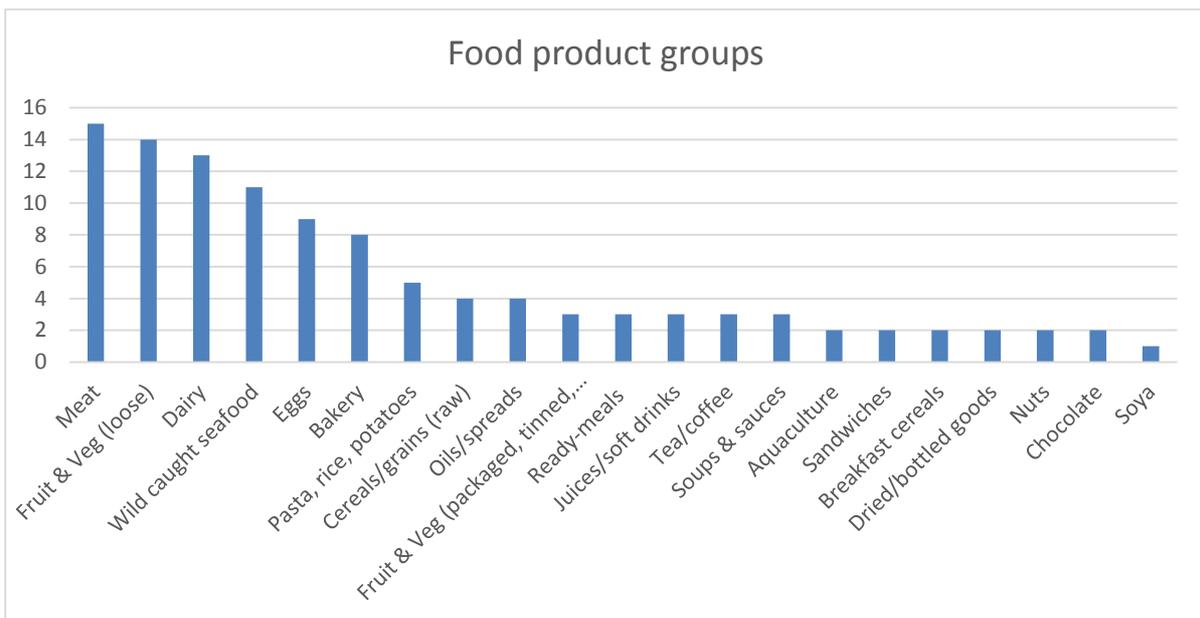


Figure 4: Aggregation of food product groups mentioned in the 31 GPPs schemes reviewed

The review of 31 GPPs also found which areas related to catering services that were mostly mentioned. 'Organic' was cited in 16 GPP schemes (out of 31) and seasonal in 15 schemes. Surprisingly integrated production, which is included in the current EU GPP criteria, was cited in only 2 cases. Ethical trading was also mentioned in 11 schemes (see Figure 5).

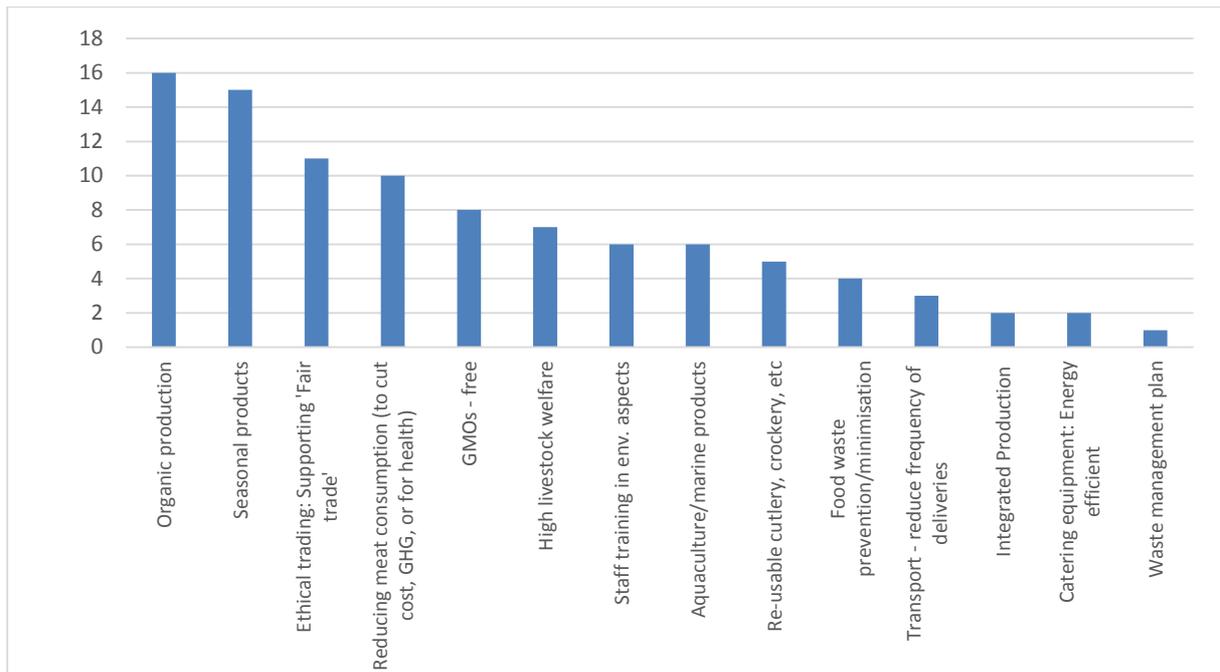


Figure 5: Criteria focused on catering services in the 31 GPPs schemes reviewed

Another review was also conducted of some of the top performing countries' national GPP schemes: namely Austria¹², Denmark¹³, the Netherlands¹⁴, Sweden¹⁵, and the United Kingdom¹⁶. Also Norway¹⁷ and UNEP (United Nations Environmental Program)¹⁸ were reviewed. Table 20 shows the main findings from the national GPPs and SPPs. The areas highlighted in Table 20 are the most common areas that most GPPs and SPPs mentioned more or less. Some of these areas are mentioned as core while other are mentioned as comprehensive.

¹² Nachhaltige Beschaffung (2015), *Ausschreibungen Lebensmittel (Tenders Food)*

¹³ *Grønne inkøb*, (2012), *Inkøpsmål and Inkøpsmål for storkøkkenudstyr (procurement targets)*

¹⁴ Dutch Ministry of Infrastructure and the Environment, (2011), *Criteria for sustainable public procurement of: Catering and Catering Equipment*

¹⁵ Konkurrentverket (Swedish Competition Agency), (2015), *criteria-wizard*

¹⁶ GOV.UK, 2014, *Sustainable procurement: the GBS (Governmental Buying Standard) for food and catering services*

¹⁷ Direktoratet for Forvaltning og IKT, (2012), *Anbefalte krav og kriterier for miljøvennlige og sosialt ansvarlige anskaffelser av mat- og drikkevarer i offentlig sektor, and, anskaffelser av serveringstjenster i offentlig sektor, (criteria for food and catering services)*

¹⁸ UNEP (United Nations Environment Programme), (2011), *Sustainable Procurement Guidelines – Cafeterias, Food & Kitchen Equipment product sheet*

Table 20: Main findings from 5 top performing National GPP schemes within the EU and 2 GPP schemes from outside the EU

Traceability.	Recyclable packaging.
% Organic production	Recycling procedures.
Sustainable palm oil.	Socially sourced (labour rights/helping communities).
Sustainable soy.	Minimise food waste.
Sustainable aquaculture.	Resource efficiency: energy, water, packaging.
Sustainable fisheries.	Staff training.
Seasonality.	Use reusable equipment.
Animal welfare: space (stocking densities), access to feed, water and bedding, right environment, natural behaviour, no physical interventions if possible, strict use of antibiotics, outdoor access if possible, GMO-free feed, hormone free, slaughter restrictions: maximum hours in transport, stunning before killing etc.	Have maintenance standards for equipment to maximise life.
Locally sourced.	Reduce meat consumption or animal protein.
Renewable energy.	Environmentally friendly cleaning agents.
Renewable packaging	Optimise distribution and transport by better planning.

1.7 European Legislation and Policies

1.7.1 Relevant EU Legislation for Food and Catering services

The following section summarises EU legislation and action plans (in general terms) that are relevant to this report on GPP for food and catering services, namely: biodiversity, water, waste, emissions and energy, sustainability, hygiene and food safety, and social and ethical issues.

1.7.2 Biodiversity

It is of great importance to the EU to preserve and protect biodiversity and habitats. Agricultural practices are one of the causes of biodiversity degradation. The EU aims to halt the loss of biodiversity and the degradation of ecosystems in the EU by 2020.

- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
- Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 17 October 2008 “Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss” [COM(2008) 645 final – Not published in the Official Journal].
 - The European Commission proposes to reduce gross tropical deforestation by at least 50 % by 2020 and remarks that GPP has a role to play in this.

- Commission Communication of 27 March 2001 to the Council and the European Parliament: Biodiversity Action Plan for Agriculture (Volume III) [COM(2001) 162 final - not published in the Official Journal].

1.7.3 Water

- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
- Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources
- Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture.

1.7.4 Waste

- Animal by-products regulations EC 1069 / 2009 on the management of animal by-products.

Directive on Waste

With a view to breaking the link between growth and waste generation, the EU has provided itself with a legal framework aimed at the whole waste cycle from generation to disposal, placing the emphasis on recovery and recycling.

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
- Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste [See amending acts].
- Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls [See amending act(s)].
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste [See amending act(s)].

1.7.5 Emissions and energy

The EU is committed to reducing its GHG emissions by 20 % by 2020 in relation to 1990 levels. The EU is also committed to producing 20 % of total EU energy consumption from renewable sources. If the goal of staying under a 2 °C global temperature increase is to be met, the EU must reduce emissions within its territory by 70 % by 2050.

Emissions

- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (Reference Document on Best Available Techniques in the Food, Drink and Milk Industries, 2006, currently under revision)
- Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their GHG emissions to meet the Community's GHG emission reduction commitments up to 2020.
- Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control.

- Directive 2000/25/EC of the European Parliament and of the Council of 22 May 2000 on action to be taken against the emission of gaseous and particulate pollutants by engines intended to power agricultural or forestry tractors and amending Council Directive 74/150/EEC.

Energy efficiency

- Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.
- Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-using products.

Transport

- Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles.
- Regulation (EC) No 595/2009 of the European Parliament and of the Council on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC.

1.7.6 Sustainability

Integrated production

- Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.
- Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides.
- Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC [See amending acts].

Organic farming

- Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91
- Commission Regulation (EC) No. 889/2008 of 5 September 2008 with detailed rules on production, labelling and control
- Commission Regulation (EC) No. 1235/2008 of 8 December 2008 with detailed rules concerning import of organic products from third countries

Aquaculture and fisheries

The demand for fish in the EU is increasing and even if wild stocks recover and are caught to Maximum Sustainable Yield levels it will not be enough to meet demand. Therefore it is important

for the EU to expand aquaculture, but in a sustainable way. Best practice methods should be used with consideration to the aquatic environment and to the cultivated fish and seafood. Water quality for the stocks must be high, and animal welfare and health are also important.

- Communication from the Commission to the European Parliament and the Council of 8 April 2009 - Building a sustainable future for aquaculture - A new impetus for the Strategy for the Sustainable Development of European Aquaculture [COM(2009) 162 final – Not published in the Official Journal].
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive).
- Council Regulation (EC) No 1342/2008 of 18 December 2008 establishing a long-term plan for cod stocks and the fisheries exploiting those stocks and repealing Regulation (EC) No 423/2004 [See amending act(s)].
- Council Regulation (EC) No 734/2008 of 15 July 2008 on the protection of vulnerable marine ecosystems in the high seas from the adverse impacts of bottom fishing gears.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 17 October 2007 on destructive fishing practices in the high seas and the protection of vulnerable deep sea ecosystems [COM(2007) 604 final - not published in the Official Journal].
- Communication from the Commission to the Council and the European Parliament of 28 March 2007 on a policy to reduce unwanted by-catches and eliminate discards in European fisheries [COM (2007) 136 final - not published in the Official Journal].
- Communication from the Commission to the Council and the European Parliament of 5 February 2007 on improving fishing capacity and effort indicators under the common fisheries policy [COM(2007) 39 final – not published in the Official Journal].
- Communication from the Commission to the Council and the European Parliament of 29 January 2007 entitled: Review of the management of deep-sea fish stocks [COM(2007) 30 final – Not published in the Official Journal].
- Communication from the Commission to the Council and the European Parliament: Implementing sustainability in EU fisheries through maximum sustainable yield [COM(2006) 360 - not published in the Official Journal].
- Directive 2006/113/EC of the European Parliament and of the Council of 12 December 2006 on the quality required of shellfish waters [See amending act(s)].
- Council Directive 2006/44/EC of 6 September 2006 on the quality of fresh waters needing protection or improvement in order to support fish life [See Amending Act(s)].

1.7.7 Hygiene and food safety

- Commission recommendation of 19 February 2013 on a coordinated control plan with a view to establish the prevalence of fraudulent practices in the marketing of certain foods (2013/99/EU).

- Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.
- Commission Regulation (EC) No 282/2008 of 27 March 2008 on recycled plastic materials and articles intended to come into contact with foods and amending Regulation (EC) No 2023/2006.
- Commission Directive 2007/42/EC of 29 June 2007 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs.
- 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 [See amending acts].
- Regulation (EC) 852/2004 on the hygiene of foodstuffs, 29 April 2004
- Regulation (EC) 853/2004 laying down specific hygiene rules for food of animal origin, 29 April 2004

1.7.8 Social and ethics issues

Animal welfare

- Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the European Union strategy for the protection and welfare of animals 2012-15 [COM(2012) 6 final/2 of 15.2.2012 - not published in the Official Journal].
- Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.
- Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs.
- Council Directive 2008/119/EC of 18 December 2008 laying down minimum standards for the protection of calves.
- Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97.
- Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens [See amending act(s)].
- Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes [See amending act(s)].
- Council Decision 92/583/EEC of 14 December 1992 on the conclusion of the Protocol of amendment to the European Convention for the Protection of Animals kept for Farming Purposes.

- Council Decision 88/306/EEC of 16 May 1988 on the conclusion of the European Convention for the Protection of Animals for Slaughter.
- Council Decision 78/923/EEC of 19 June 1978 concerning the conclusion of the European Convention for the protection of animals kept for farming purposes.

GMO

- 2009/41/EC of the European Parliament and of the Council of 6 May 2009 on the contained use of genetically modified micro-organisms.
- Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC.
- Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed.

1.8 Voluntary environmental legislation, eco-labels and other schemes

1.8.1 Voluntary environmental legislation

EU Ecolabel is a voluntary environmental labelling system. It enables consumers to recognise high quality eco-friendly products. The EU Ecolabel is available for distinct product groups, e.g. cleaning products, appliances, paper products, home and garden, clothing, tourism and lubricants (European Commission, 2008b). This label is not relevant for food products but can be relevant for some areas of catering services, for example the use of cleaning products (all-purpose cleaners, detergents for dishwashers, hand washing detergents, laundry detergents), paper products (tissue paper) and appliances (dishwashers, refrigerators, washing machines etc).

- Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel

Eco-management and audit system (EMAS)

The EU Eco-Management and Audit Scheme (EMAS) is a management instrument developed by the European Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EMAS is open to every type of organisation eager to improve its environmental performance. It spans all economic and service sectors and is applicable worldwide (EMAS, 2015).

- Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC. (BEMP on Food and beverage manufacturing, currently under development)

1.8.2 Relevant Ecolabels schemes for the Product Group

A website called 'ecolabel index'¹⁹ presents all available eco-label initiatives worldwide. This website showed 148 eco-labels relevant to food. These eco-labels indicate what is currently important for

¹⁹ Website: <http://www.ecolabelindex.com/ecolabels/?st=category,food>, accessed 2 June 2015.

consumers on the market. Table 21 shows 100 of these eco-labels (selected on the basis that they are either second or third party verified). For the EU GPP criteria, however, only third party verified eco-labels are relevant. These are indicated in the last column (Table 21). The second party verified schemes are indicated in grey (Table 21).

Of all ecolabels, 43 are certified organic labels and 51 stated to be environmental or sustainable labels (not organic). 18 labels focused on marine and aquaculture stewardship and 17 labels focused on animal welfare. 26 labels stated that they included or stood for social standards (human rights, fair trade etc.). As for the third party verified 35 is certified organic, 35 environmental or sustainable, 15 marine & aquaculture, 14 animal welfare and 18 social/ethical standards.

Table 21: Summary of eco-label initiatives worldwide

Table 21: Summary of eco-label initiatives worldwide

Ecolabel Index	Country	Starting year	Gov (G)/ Non-profit (N-P)/ Industry Association (I)/ For-profit (F-P)	ORGANIC	SUSTAINABILITY/ ENVIRONMENT	MARINE AND AQUACULTURE	ANIMAL WELFARE	SOCIAL STANDARDS	CARBON EMISSIONS	REGIONAL	TRACEABILITY/ TRANSPARENCY	3rd OR 2nd PARTY VERIFIED
4C Association		2004	N-P		X							3
AB (Agriculture Biologique)	FR/ZA	1985	N-P	X								3
ABIO	BR	1985	N-P	X								3
AfOR Compost Certified	UK	2002	N-P		X							3
AIAB (Italian Association for Organic Agriculture)	IT	1998	N-P	X								3
American Grassfed	US	2010	I				X					3
Animal Welfare Approved	US/CA	2006	N-P				X					3
Aquaculture Stewardship Council		2012	N-P		X	X						3
Australian Certified Organic	AU	2002	N-P	X		X					X	3
B Corporation	US/CA	2007	N-P		X	X		X			X	2
Best Aquaculture Practices	WW	2002	N-P		X	X		X			X	3
BioForum Biogarantie and Ecogarantie	BE	2002	N-P	X								3
BIO Hellas	BG/GR	2007	(F-P)	X		X						2
BIO Hotels	AT/DE/IT/CH	2001	I	X	X					X		2
Biokreis	AT/DE/CH	1979	N-P	X		X						3
Bioland	DE	1971	N-P	X			X					3
Bio Quebec	CA	2000	G	X								3
Bio-Siegel	DE/ZA	2001	G	X								3
Bio Suisse	CH	1981	N-P	X		X				X		3
Bird Friendly Coffee	N.Am/S.Am./NL	1998	N-P	X			X					3
Bonsucro	WW	2005	N-P		X			X	X			3
British Columbia Certified Organic	CA	1994	N-P	X								3
C.A.F.E. Practices	WW	2004	(F-P)		X			X				3
California Certified Organic Farmers - CCOF	US	1973	N-P	X								3
Canada Organic	CA	2009	G	X								3

Table 21: Summary of eco-label initiatives worldwide

Ecolabel Index	Country	Starting year	Gov (G)/ Non-profit (N-P)/ Industry Association (I)/ For-profit (F-P)	ORGANIC	SUSTAINABILITY/ ENVIRONMENT	MARINE AND AQUACULTURE	ANIMAL WELFARE	SOCIAL STANDARDS	CARBON EMISSIONS	REGIONAL	TRACEABILITY/ TRANSPARENCY	3rd OR 2nd PARTY VERIFIED
CarbonFree ® Certified	AU/BR/CA/US	2007	N-P						X		X	3
Carbon Neutral Certification	BR/IN/US	2008							X			2
Carbon Neutral Product Certification	AU/CL/JP/SG	2006	(F-P)						X			2
Carbon Reduction Label	WW	2007							X			3
Certified Green Restaurant	CA/US	1990	N-P		X							2
Certified Humane Raised and Handeled	US	2003	N-P		X		X				X	2
Certified Vegan	US	1998	N-P								X	2
Certified Wildlife Friendly®	WW	2007	N-P				X	X				2
Climatop	CH	2008	N-P		X				X			3
Delinat Bio Garantie	AT/FR/DE/IT/CH	1983	(F-P)	X	X		X	X		X		3
Demeter BioDynamic®	US	1940	N-P		X							2
Earthsure	CA/US	2006	N-P		X							3
Ecocert	WW	1991	(F-P)	X	X							3
Eco-Leaf	JP	2002			X							3
Ecomark: India	IN	1991	G		X							3
Environment Product Declaration	BE/GR/IT/NE/SE/CH/CN/UK	1999	G		X	X						3
EU organic products label	EU	1991	G	X	X		X				X	-
Fair for Life	US	2006	(F-P)		X			X				2
Fairtrade	WW	1997	N-P		X			X				3
Fair Trade Certified	CA/US	1998	N-P		X	X		X				3
Fair Trade Organization Mark	AR/BO/BR/CL/MX/ZA	2004	N-P					X				3
Farm and Ranch Certification Program	MX/US	1997	N-P		X		X	X				3
Farm Verified Organic	US	1995	N-P	X								3
Friend of the Sea	DE/IT/ES/CH/UK	2006	N-P			X						3
Global Good Agriculture Practice (GAP)	DE/ZA/UK/US	1997	N-P		X		X	X				3
Green Crane: Ukraine	UA	2002	N-P		X							3
Green Seal	US/CA/ID/(KR/KP)/PR/ZA	1989	N-P		X			X	X			2
Green Table	CA	2007			X							2
Green Tick	AU/NZ/US	2001	(F-P)		X	X						3
HAND IN HAND	WW	1992	(F-P)	X				X				3
Healthy Child Healthy World	US	1991	N-P					X				3
IMO Certified	WW	1991	(F-P)	X								3
Japanese Agricultural Organic Standard (JAS)	JP	2000	G	X								3
Krav	SE	1985	N-P	X	X	X	X	X				3
LEAF	CA	2009		X	X					X		3

Table 21: Summary of eco-label initiatives worldwide

Ecolabel Index	Country	Starting year	Gov (G)/ Non-profit (N-P)/ Industry Association (I)/ For-profit (F-P)	ORGANIC	SUSTAINABILITY/ ENVIRONMENT	MARINE AND AQUACULTURE	ANIMAL WELFARE	SOCIAL STANDARDS	CARBON EMISSIONS	REGIONAL	TRACEABILITY/ TRANSPARENCY	3rd OR 2nd PARTY VERIFIED
LEAF Marque	IE/UK	2002	N-P		X		X					3
LFP Certified	CA	2006	N-P	X	X		X	X	X			3
LowCO2 Certificaton	AU/CL/JP/SG	2006	(F-P)		X				X			2
Loumuliitto - The Ladybird label	FI	1989	N-P	X						X		3
Loumu Sun Sign	FI		G	X								3
Marine Stewardship Council	WW	1999	N-P		X	X					X	3
Max Havelaar	CH	1992	N-P					X				3
Milieukeur: the Dutch environmental quality label	NL	1992	N-P		X	X	X	X				3
National Green Pages™ Seal of Approval	US	2004	N-P		X			X				2
Nature's Promise	US		(F-P)	X								3
Naturland e.V.	DE/MX/LK	1982	N-P	X		X		X				2
Non-GMO	CA/US	2007	N-P								X	3
Nordic Ecolabel or Swan	DE/FI/NO/IS/SE/ZA	1989	N-P		X							3
Ø-label: Norway	NO	1986	N-P	X		X						3
Oregon Tilth	US	1982	N-P	X				X				2
Organic Food China	CN	1994	N-P		X							3
Organic Food Federation	UK	1986	N-P	X								2
Protected Harvest	US	2001	(F-P)		X							3
QCS Organic	US	1989	I	X								3
Rainforest Alliance Certified	WW	1992	N-P		X			X				3
Rhode Island Certified Organic	US	1990	G	X								2
RSPO Certified Sustainable Palm Oil	BR/CA/IT/LV/RU/UK/US	2007	N-P		X						X	3
RTRS Certified Soy	BR	2010	I		X			X				3
Safe Agri-Food Product	CN	2011	G		X							2
Salmon-Safe	US	1997	N-P		X	X						3
Singapore Green Label Scheme (SGLS)	Asia	1992	N-P		X							2
SIP Certified	FI/NO/US	2008	N-P	X	X			X				3
Skal Eko Symbol	NL	1985	N-P	X								3
Soil Association Organic Standard	UK	1973	N-P	X		X						3
SPCA Certified	CA	2002	N-P				X					3
State of Utah Organic Certification Program	US		G	X								3
Stemilt Responsible Choice		1989	I		X			X				2
TerraCycle	AR/BR/CA/IL/MX/SE/TR/UK/US	2005	(F-P)		X							2
Texas Certified Organically Produced	US	1988	G	X								2

Table 21: Summary of eco-label initiatives worldwide

Ecolabel Index	Country	Starting year	Gov (G)/ Non-profit (N-P)/ Industry Association (I)/ For-profit (F-P)	ORGANIC	SUSTAINABILITY/ ENVIRONMENT	MARINE AND AQUACULTURE	ANIMAL WELFARE	SOCIAL STANDARDS	CARBON EMISSIONS	REGIONAL	TRACEABILITY/ TRANSPARENCY	3rd OR 2nd PARTY VERIFIED
USDA Organic	US	2002	G	X			X					3
UTZ Certified	WW	2002	N-P		X							3
Vermont Organic Certified	US	1985	N-P	X								3
Vitality Leaf	RU	2001	N-P		X							2
WSDA Organic	US		G	X								3
Zque	NZ	2005	(F-P)		X		X				X	3

1.8.3 Other schemes

Fairtrade

The FAIRTRADE Mark is an independent consumer label that certifies that products, sourced from developing countries, have offered a good deal to small-scale farmers and workers, such as decent working conditions and better prices. In addition, the FAIRTRADE mark supports local communities to develop and to protect the environment in which they live and work (Fairtrade, 2015).

Green Seal

The Green Seal a label founded in the United States but is used worldwide. It provides life-cycle based sustainability standards for many types of products (Green Seal, 2015).

GLOBAL G.A.P – Good Agricultural Practice

This is a worldwide standard that originally was developed by retailers in order to comply with consumer demand on food safety, environmental impacts, and health, safety and welfare of animals and workers. Today this certification is the leading farm assurance program in the world that transform consumer requirements into standards of Good Agricultural Practice (Global G.A.P, 2015).

Integrated production

As part of the EU GPP are recommendations to purchase food products carrying the regional/national Integrated Production label according to Integrated Production standards, as a complementary to buying organic products. According to the EU GPP background report (European Commission, 2008a) there are different Integrated Production Schemes across Europe. Some are called Integrated Farm Management Systems and other Integrated Crop Management Systems, for instance. This means that there is no EU-wide standard for this type of production. Even though there are differences between the different schemes, their main objective is to achieve better productivity by using best available standards of pest management, soil fertilisers, and other modern technologies. The aim of these standards is to minimise the use of pesticides and nitrogen, both to protect the environment and to save money at a farm level. A higher level of food safety is also part of this standard (European Commission, 2008a).

Label Rouge

This is a French label that insures higher quality of food products compared to other current products. It certifies a top quality guarantee of food in terms of regularly checked production and sensory quality of products (Label Rouge, 2015).

NEULAND

This is a German label that certifies that animals are raised in a way that respects both animal welfare and the environment. The label guarantee that meat have good quality and are controlled all the way. Most of the meat sold with the NEULAND label is sold on farms, in local butcher shops, own corporations and in restaurants (NEULAND, 2015).

Nordic Ecolabelling

This label is a comprehensive Ecolabel that takes into consideration the whole life-cycle of products. Climate considerations is the key element of this label. It evaluates a product's total life-cycle impact on the environment and then put in place criteria to limit CO₂ emissions of said product. Both direct and indirect impacts are included in the criteria (Nordic Ecolabelling, 2015).

Rainforest Alliance

The Rainforest Alliance works to safeguard sustainable livelihood and to protect biodiversity. Their main methods are to change land-use practices, business practices and consumer behaviour and areas of expertise are in the world's most vulnerable eco-systems. This organisation has its own symbol called The Rainforest Alliance Certified™ Seal (Rainforest Alliance, 2015).

Red Tractor Assurance

This is a UK certification for farms that assures animal welfare (e.g. free range), food safety, hygiene and environmental protection through entire food supply chains. The standards available cover following food products: crops and sugar beet; fresh produce; beef and lamb; dairy; pigs; broilers and poussin; breeder layers; breeder replacements; free range; hatchery; catching and transport; lairage and slaughtering (Red Tractor Assurance, 2015).

Round Table on Responsible Soy (RTRS)

This initiative is an international mechanism to move soy production and trade into a more sustainable operation. Following are the RTRS principles (RTRS, 2013):

- Legal compliance and good business practice
- Responsible labour conditions
- Responsible community relations
- Environmental responsibility
- Good agricultural practice

The key areas of this standard are that there shall be no deforestation of native forests for the sake of soy production and other important environmental areas are also protected from soy production.

Roundtable on Sustainable Palm Oil (RSPO)

This certification focuses on sustainable palm oil production and have following principles that growers need to comply with (RSPO, 2013):

- Commitment to transparency.
- Compliance with applicable laws and regulations.
- Commitment to long-term economic and financial viability.
- Use of appropriate best practices by growers and millers.
- Environmental responsibility and conservation of natural resources and biodiversity.
- Responsible consideration of employees, and of individuals and communities affected by growers and mills.

- Responsible development of new plantings.
- Commitment to continuous improvement in key areas of activities.

UK GBS (Government Buying Standards)

This is a list of specification that is developed for public procurement in the UK. The standard includes both mandatory specifications and best practice specifications. Environmental impacts that are considered in the standard are: energy and water in use; end of life costs (repairability, upgradeability, recyclability and hazardousness of materials used) and resource use (levels of scarce materials and recycled content) (GOV.UK, 2012).

1.9 Preliminary scope and definition proposals

The existing subject matter for the Product group Food and Catering Services is described below. The subject matter will be revised according to the outcomes of the revision process.

For food is:

- (*Core criteria*) Purchase of food (or a certain food product group) coming at least partially from organic sources.
- (*Comprehensive criteria*) Purchase of food (or a certain food product group) with a percentage of products originating from organic and integrated production and with packaging reduced to a minimum.

For catering services is:

- (*Core criteria*) Contract for catering services with the provision of food with a percentage of products originating from organic sources and carried out in an environmentally friendly way.
- (*Comprehensive criteria*) Contract for catering services with the provision of food with a percentage of products originating from organic and integrated production, and carried out in an environmentally friendly way.

This section presents the first proposals for definitions and scope for food and catering services. This chapter has presented stakeholder feedback for both: scope, definitions and coming criteria. The new definitions are proposed here, but the boundaries of the scope for this report will be further informed by the Market Analysis (Task 2) to determine whether the food categories, food services and sectors are relevant, the Environmental and Technical Report (Task 3) and the Improvement potential and life-cycle costing considerations (LCC) report (Task 4).

1.9.1 Proposals for definitions and scope for food and catering services

The following definitions for scope and for food service have been amended by stakeholder consultation feedback.

Table 22: Scope definition of food and catering services

Scope
<p><i>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, wholesalers or importers or can form part of the service provided by the contract catering firms.</i></p> <p><u>New proposal:</u> <i>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.</i></p>

Table 23: Food service definitions

Food service definitions
<p>Catering service <i>The preparation, storage and, where appropriate, delivery of food for consumption by the consumer at the place of preparation or at a satellite unit</i></p> <p><u>New proposal:</u> <i>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.</i></p>
<p>Contract catering firm <i>A business engaged in providing a meals service (for example by running a staff restaurant or providing school meals)</i></p> <p><u>New proposal:</u> <i>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.</i></p>
<p>Conventional kitchen <i>Food is prepared on site (the majority made from scratch)</i></p> <p><u>New proposal:</u> <i>A kitchen (at the place of consumption) where all, or a significant part of, food is prepared from raw ingredients.</i></p>
<p>Ready-prepared <i>Preparation on site of large batches that are then kept frozen or chilled until required. Used in hospitals and prisons.</i></p> <p><u>New proposal:</u> <i>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.</i></p>
<p>Assembly-serve <i>The food is delivered pre-processed and reheated and assembled on site. (Mostly common in fast-food restaurants)</i></p> <p><u>New proposal:</u> <i>The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site.</i></p>
<p>Centralised <i>Central kitchens or central food factories, that sends out completed dishes to satellites. For example school kitchens.</i></p> <p><u>Centralised production unit, new proposal:</u> <i>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.</i></p>
<p>Vending and coffee machines <i>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 microwaved.</i></p> <p><u>Vending and hot drink machines, new proposal:</u> <i>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.</i></p>
<p>Water dispensers <i>A device for heating or cooling and dispensing drinking water.</i></p> <p><u>New proposal:</u> <i>A device specifically for dispensing drinking water, which might have the possibility of heating and/or cooling the drinking water.</i></p>

1.9.3 Preliminary scope considerations

Scope boundaries (what is included and what is excluded) will be investigated further in the coming sections of this report. However, a few limitations can be made at this stage based on the stakeholder feedback and on the brief literature reviews conducted. It was decided to follow the structure of COICOP with the food categories. Following are summaries of what will be investigated further. Firstly, Table 24 provides an insight on the grouping of the food categories. The COICOP groups presented will be further investigated in coming chapter.

Table 24: Proposed food categories converted to COICOP standard

Food categories	COICOP
<ul style="list-style-type: none"> • fruit and vegetables 	01.1.6 – Fruit 01.1.7 - Vegetables
<ul style="list-style-type: none"> • aquaculture 	01.1.3 - Fish and seafood
<ul style="list-style-type: none"> • marine 	01.1.3 - Fish and seafood
<ul style="list-style-type: none"> • meat and dairy 	01.1.2 – Meat 01.1.4 - Milk, cheese and eggs
<ul style="list-style-type: none"> • Hot drinks • Cold beverages 	01.2.1 - Coffee, tea and cocoa 01.2.2 - Mineral waters, soft drinks, fruit and vegetable juices
New proposed categories	COICOP
<ul style="list-style-type: none"> • Eggs (stakeholder survey/literature review) 	01.1.4 - Milk, cheese and eggs
<ul style="list-style-type: none"> • Cereals (stakeholder survey/literature review) 	01.1.1 - Bread and cereals
<ul style="list-style-type: none"> • Bread (literature review) 	01.1.1 - Bread and cereals
<ul style="list-style-type: none"> • sugar and confectionary (literature review) 	01.1.8 - Sugar, jam, honey, chocolate and confectionery
<ul style="list-style-type: none"> • Oils and fat (stakeholder survey and COICOP) 	01.1.5 - Oils and fats

As for catering services the meal preparation systems presented in Table 25 will be further analysed. The only difference here is that hot drinks and vending machines are divided. Furthermore, water dispensers are still included, but the relevance of that service will be investigated in the Technical and Environmental Analysis (Task 3).

About half of all stakeholders were satisfied with the food service segments but others proposed additional segments to be included. However, only kindergartens and nurseries were proposed by many. The food service segments will therefore be kept as they are with the inclusion of kinder gardens and nurseries (see Table 25). The Market Analysis (Task 2) will help determine whether all these segments are relevant or not for inclusion in the criteria set.

Table 25: Proposed catering services and food service segments

<u>Catering services</u>	<u>Food service segments</u>
<ul style="list-style-type: none">• conventional kitchen• ready-prepared• assembly-serve• centralised production unit• vending machines (i.e. drinks, snacks and food, chilled)• hot drink machines• water dispensers	<ul style="list-style-type: none">• schools• universities• hospitals• caring homes (for elderly)• canteens in government buildings• events (conferences, meetings, festivities)• prisons• armed forces <p><u>New food service segments to consider:</u></p> <ul style="list-style-type: none">• kindergartens• nurseries

REFERENCES

CODEX International Food Standards, 2010, *General Standard for the Labelling of Pre-packed Foods*, CODEX STAN 1-1985, available at: <http://www.codexalimentarius.org/standards/en/>, (accessed 18th Feb 2015).

Commission of the European Communities, (2008a), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - *on Public procurement for a better environment*, COM/2008/400 final, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0400>, (accessed 17th Feb 2015).

Commission of the European Communities, (2008b), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - *on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan*, COM(2008) 397 final, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008DC0397&from=EN>, (accessed 17th Apr 2015).

Defra, 2010, *Public Sector Food Procurement Initiative: Proportion of domestically produced food used by government departments and also supplied to hospitals and prisons under contracts negotiated by NHS Supply Chain and National Offender Management Service* (previously HM Prison Service). Third report: 1 April 2008 to 31 March 2009.

EMAS (Eco-management and audit system), 2015, European commission EMAS webpage, available at: http://ec.europa.eu/environment/emas/index_en.htm, (accessed May 2015)

European Commission (2004), *Buying green! A handbook on environmental public procurement*, available at: http://ec.europa.eu/environment/gpp/pdf/buying_green_handbook_en.pdf, (accessed 17th Apr 2015).

European Commission (2008a), *European Commission Green Public Procurement training toolkit – Module 3: Purchasing Recommendations, Food and Catering Services, Background Report*, DG Environment, Brussels, available at: http://ec.europa.eu/environment/gpp/pdf/toolkit/food_GPP_background_report.pdf, (accessed 17th Apr 2015).

European Commission (2008b), *European Commission Green Public Procurement training toolkit – Green Public Procurement and the European Ecolabel*, Fact Sheet, available at: http://ec.europa.eu/environment/gpp/pdf/toolkit/module1_factsheet ecolabels.pdf, (accessed 18th Mar 2015).

European Commission (2008c), *Catering & Food – Green Public Procurement (GPP) Product Sheet*, available at: http://ec.europa.eu/environment/gpp/pdf/toolkit/food_GPP_product_sheet.pdf, (accessed 27th Apr 2015).

European Commission (2014a), *GPP National Action Plans*, available at: http://ec.europa.eu/environment/gpp/action_plan_en.htm, (accessed 20th Feb 2015).

European Commission (2014b), *GPP in practice – Calculating the environmental impact of catering services*, City of Helsinki, Finland, available at:

http://ec.europa.eu/environment/gpp/pdf/news_alert/Issue47_Case_Study98_Helsinki.pdf, (accessed 27th Apr 2015).

European Commission (2015), *Public Procurement Indicators 2013*. European Commission DG Growth, May 2015, May 2015.

EC DG SANCO, (1993), *Code of Hygienic Practice for Pre-cooked and Cooked Foods in Mass Catering, CAC/RCP 39-1993*, available at: http://ec.europa.eu/food/food/biosafety/hygienelegislation/comm_rules_en.htm, (accessed 18th Feb 2015).

Edwards, J.S.A., and **Overstreet, K.** (2009), What is food service? Editorial in *Journal of Foodservice*, 20, pp. 1-3.

European Parliament, (2013), ****I Report – on the proposal for a directive of the European Parliament and of the Council on public procurement*, available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A7-2013-0007+0+DOC+PDF+V0//EN>, (accessed 25th February 2015).

Eurostat, (2008), *NACE Rev.2 Statistical classification of economic activities in the European Community*, available at: https://www.lb.lt/n22873/nace_rev.2_2008-en.pdf, (accessed 19th Feb 2015).

Fairtrade, (2015), *What FAIRTRADE does*, available at: <http://www.fairtrade.org.uk/en/what-is-fairtrade/what-fairtrade-does>, (accessed 19th Mar 2015).

GIRA Foodservice, (2010a), *The Structure of the Foodservice Market*, available at: <http://www.girafoodservice.com/en/catering-market/structure-catering-market.php>, (accessed 3rd Mar 2015).

GIRA foodservice, (2010b), *Database of Social Foodservice Outlets in France*, available at: <http://www.girafoodservice.com/en/databases/group-restaurants.php>, (accessed 19th Feb 2015).

GLOBAL G.A.P., (2015), *GLOBAL G.A.P. History*, available at: http://www.globalgap.org/uk_en/who-we-are/about-us/history/index.html, (accessed 21st Apr 2015).

GOV.UK, (2012), *Sustainable procurement: Government Buying Standards (GBS)*, available at: <https://www.gov.uk/government/collections/sustainable-procurement-the-government-buying-standards-gbs>, (accessed 21st Apr 2015).

Green Seal, (2015), *About Green Seal*, available at: <http://www.greenseal.org/AboutGreenSeal.aspx>, (accessed 21st Apr 2015).

Horizons, (2011), *Horizons Definitions*, available at: http://www.hrzns.com/mint/pepper/tillkruess/downloads/tracker.php?url=http://www.hrzns.com/files/Horizons_Definitions_.pdf&force&inline, (accessed 19th Feb 2015).

ISO 2001 *Environmental labels and declarations Type 1 environmental labelling principles and procedures* (ISO 14024:1999), Edition: 2001-02-01, Article 5.4.

Label Rouge, (2015), *What is the red label?*, available at:

http://www.labelrouge.fr/20_Labelrouge_qualite.php, (accessed 21st Apr 2015).

NEULAND, (2015), *NEULAND's Structure*, available at: <http://www.neuland-fleisch.de/verein/short-english-introduction-to-neuland/neulands-structure.html>, (accessed 21st Apr 2015).

Nordic Ecolabelling, (2015), *The Nordic Ecolabel & The Climate*, available at: <http://www.nordic-ecolabel.org/climate/>, (accessed 21st Apr 2015).

Official Journal of the European Union, (2011), *Legislation*, L304, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2011:304:FULL&from=EN>, (accessed 25th Feb 2015).

Official Journal of the European Union, (2007), *Commission Regulation (EC) No 213/2008 on the Common Procurement Vocabulary (CPV)*, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008R0213&from=EN>, (accessed 13th Mar 2015).

Rainforest Alliance, (2015), *About us*, available at: <http://www.rainforest-alliance.org/about>, (accessed 21st Apr 2015).

Royal Institution of Chartered Surveyors (RICS), (2013), *RICS draft guidance note – catering services*, RICS iConsult, available at: <https://consultations.rics.org/consult.ti/catering/viewCompoundDoc?docid=923092&partid=923412&sessionid=&voteid=>, (accessed 19th Feb 2015).

RSPO (Roundtable on Sustainable Palm Oil), (2013), *Principles and Criteria for the Production of Sustainable Palm Oil*, available at: http://www.rspo.org/file/PnC_RSPO_Rev1.pdf, (accessed 19th Mar 2015).

Oakdene Hollins, FiBL (Forschungsinstitut für biologischen Landbau) and Georg-August-Universität Göttingen (2011), *EU Ecolabel for food and feed products – feasibility study*, a study for the DG Environment, available at: http://ec.europa.eu/environment/ecolabel/documents/Ecolabel_for_food_final_report.pdf, (accessed 17th Apr 2015).

Red Tractor Assurance, (2015), *Red Tractor Farm Standards*, available at: <http://assurance.redtractor.org.uk/rtassurance/schemes/Standardshome/Standards2014.eb>, (accessed 21st Apr 2015).

RTRS, (Round Table for Responsible Soy production), (2013), *RTRS Standard for Responsible Soy Production*, available at: <http://www.responsiblesoy.org/documentos/rtrs-standard-for-responsible-soy-production/?lang=en>, (accessed 19th Mar 2015).

SIMAP, (2015), *CPV*, available at: http://simap.europa.eu/codes-and-nomenclatures/codes-cpv/codes-cpv_en.htm, (accessed 13th Mar 2015).

Swedish Competition Authority, (2015), *Sustainable procurement criteria – product group: Meal services and catering*, available at: <http://www.kkv.se/en/publicprocurement/sustainable-public-procurement/use-sustainable-criteria/sustainable-procurement-criteria/food/meal-services-and-catering/>, (accessed 25th Feb 2015).

Tukker, A., Huppes, G., Guinée, J., Heijungs, R., de Koning, A., van Oers, L., Suh, S., Geerken, T., Van Holderbeke, M., Jansen, B. and Nielsen, P. (2006), *Environmental Impact of Products (EIPRO), Analysis of the life cycle environmental impacts related to the final consumption of the EU-25*, JRC European Commission IPTS, ESTO. Available at: http://ec.europa.eu/environment/ipp/pdf/eipro_report.pdf, (accessed 17th Apr 2015).

United Nations Statistics Division, (2015), *Detailed structure and explanatory notes COICOP code 01*, available at: <http://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=5&Lg=1&Co=01>, (accessed 27th Apr 2015).

WRAP (2013), *Overview of Waste in the UK Hospitality and Food Service Sector*, available at: <http://www.wrap.org.uk/sites/files/wrap/Overview%20of%20Waste%20in%20the%20UK%20Hospitality%20and%20Food%20Service%20Sector%20FINAL.pdf>, (accessed 19th Feb 2015).

Appendix A – The COICOP product classifications

Division	Group	Class	Explanatory notes
01 - Food and non-alcoholic beverages	01.1 - Food	01.1.1 - Bread and cereals	Rice in all forms;
			maize, wheat, barley, oats, rye and other cereals in the form of grain, flour or meal;
			Bread and other bakery products (crisp bread, rusks, toasted bread, biscuits, gingerbread, wafers, waffles, crumpets, muffins, croissants, cakes, tarts, pies, quiches, pizzas, etc.);
			mixes and doughs for the preparation of bakery products;
			pasta products in all forms; couscous;
			Cereal preparations (cornflakes, oat flakes, etc.) and other cereal products (malt, malt flour, malt extract, potato starch, tapioca, sago and other starches).
			Includes: farinaceous-based products prepared with meat, fish, seafood, cheese, vegetables or fruit.
			Excludes: meat pies (01.1.2); fish pies (01.1.3); sweetcorn (01.1.7).
		01.1.2 - Meat	Fresh, chilled or frozen meat of:
			bovine animals, swine, sheep and goat;
			horse, mule, donkey, camel and the like;
			poultry (chicken, duck, goose, turkey, guinea fowl);
			hare, rabbit and game (antelope, deer, boar, pheasant, grouse, pigeon, quail, etc.);
			fresh, chilled or frozen edible offal;
			dried, salted or smoked meat & edible offal (sausages, salami, bacon, ham, pâté, etc.);
			other preserved or processed meat and meat-based preparations (canned meat, meat extracts, meat juices, meat pies, etc.).
		Includes: meat and edible offal of marine mammals (seals, walruses, whales, etc.) and exotic animals (kangaroo, ostrich, alligator, etc.); animals and poultry purchased live for consumption as food.	
		Excludes: land and sea snails (01.1.3); lard and other edible animal fats (01.1.5); soups, broths and stocks containing meat (01.1.9).	
		01.1.3 - Fish and seafood	Fresh, chilled or frozen fish;
			fresh, chilled or frozen seafood (crustaceans, molluscs and other shellfish, sea snails);
			dried, smoked or salted fish and seafood;
other preserved or processed fish and seafood and fish and seafood-based preparations (canned fish and seafood, caviar and other hard roes, fish pies, etc.).			
Includes: land crabs, land snails and frogs; fish and seafood purchased live for consumption as food.			
Excludes: soups, broths and stocks containing fish and seafood (01.1.9).			
01.1.4 - Milk, cheese and eggs	Raw milk; pasteurized or sterilized milk;		
	condensed, evaporated or powdered milk;		
	yoghurt, cream, milk-based desserts, milk-based beverages and other similar milk-based products;		
	cheese and curd;		
	eggs and egg products made wholly from eggs.		
	Includes: milk, cream and yoghurt containing sugar, cocoa, fruit or flavourings; dairy products not based on milk such as soya milk.		
Excludes: butter and butter products (01.1.5).			
01.1.5 - Oils and fats	Butter and butter products (butter oil, ghee, etc.);		
	margarine (including "diet" margarine) and other vegetable fats (including peanut butter);		
	edible oils (olive oil, corn oil, sunflower-seed oil, cottonseed oil, soybean oil, groundnut oil, walnut oil, etc.);		
	edible animal fats (lard, etc.).		
	Excludes: cod or halibut liver oil (06.1.1).		
01.1.6 -	Fresh, chilled or frozen fruit;		

		Fruit	dried fruit, fruit peel, fruit kernels, nuts and edible seeds;
			Preserved fruit and fruit-based products.
			Includes: melons and water melons.
			Excludes: vegetables cultivated for their fruit such as aubergines, cucumbers and tomatoes (01.1.7); jams, marmalades, compotes, jellies, fruit purées and pastes (01.1.8); parts of plants preserved in sugar (01.1.8); fruit juices and syrups (01.2.2).
		01.1.7 - Vegetables	Fresh, chilled, frozen or dried vegetables cultivated for their leaves or stalks (asparagus, broccoli, cauliflower, endives, fennel, spinach, etc.), for their fruit (aubergines, cucumbers, courgettes, green peppers, pumpkins, tomatoes, etc.), and for their roots (beetroots, carrots, onions, parsnips, radishes, turnips, etc.);
			Fresh or chilled potatoes and other tuber vegetables (manioc, arrowroot, cassava, sweet potatoes, etc.);
			preserved or processed vegetables and vegetable-based products;
			Products of tuber vegetables (flours, meals, flakes, purées, chips and crisps) including frozen preparations such as chipped potatoes.
			Includes: olives; garlic; pulses; sweetcorn; sea fennel and other edible seaweed; mushrooms and other edible fungi.
			Excludes: potato starch, tapioca, sago and other starches (01.1.1); soups, broths and stocks containing vegetables (01.1.9); culinary herbs (parsley, rosemary, thyme, etc.) and spices (pepper, pimento, ginger, etc.) (01.1.9); vegetable juices (01.2.2).
		01.1.8 - Sugar, jam, honey, chocolate and confectionery	Cane or beet sugar, unrefined or refined, powdered, crystallized or in lumps;
			jams, marmalades, compotes, jellies, fruit purées and pastes, natural and artificial honey, maple syrup, molasses and parts of plants preserved in sugar;
			chocolate in bars or slabs, chewing gum, sweets, toffees, pastilles and other confectionery products;
			cocoa-based foods and cocoa-based dessert preparations;
			Edible ice, ice cream and sorbet.
			Includes: artificial sugar substitutes. Excludes: cocoa and chocolate-based powder (01.2.1).
		01.1.9 - Food products n.e.c.	Salt, spices (pepper, pimento, ginger, etc.), culinary herbs (parsley, rosemary, thyme, etc.), sauces, condiments, seasonings (mustard, mayonnaise, ketchup, soy sauce, etc.), vinegar;
			prepared baking powders, baker's yeast, dessert preparations, soups, broths, stocks, culinary ingredients, etc.;
			Homogenized baby food and dietary preparations irrespective of the composition.
Excludes: milk-based desserts (01.1.4); soya milk (01.1.4); artificial sugar substitutes (01.1.8); cocoa-based dessert preparations (01.1.8).			
01.2 - Non-alcoholic beverages	01.2.1 - Coffee, tea and cocoa	Coffee, whether or not decaffeinated, roasted or ground, including instant coffee;	
		tea, maté and other plant products for infusions;	
		Cocoa, whether or not sweetened, and chocolate-based powder.	
	Includes: cocoa-based beverage preparations; coffee and tea substitutes; extracts and essences of coffee and tea.		
	Excludes: chocolate in bars or slabs (01.1.8); cocoa-based food and cocoa-based dessert preparations (01.1.8).		
01.2.2 - Mineral waters, soft drinks, fruit and vegetable juices			

Appendix B

Table 26: Sectors and food products covered in the reviewed GPP initiatives for Food and Catering services

ID	Sector(s)									Food products covered																										
	All/Multiple (unspecified)	Schools	Prisons	Higher Education	Government offices	Business canteens	Sports arenas/Leisure	Defence	Health & Social Care	All/Multiple (unspecified)	Fruit & Veg (loose)	Fruit & Veg (packaged, tinned, etc)	Dried/bottled goods	Cereals/grains (raw)	Nuts	Breakfast cereals	Aquaculture	Wild caught seafood	Meat	Dairy	Bakery	Pasta, rice, potatoes	Eggs	Soya	Ready-meals	Sandwiches	Soups & sauces	Chocolate	Oils/spreads	Juices/soft drinks	Tea/coffee					
1		1								1																										
2		1								1																										
3	1									1	1			1				1	1	1				1												
4			1							1									1	1	1			1												
5		1								1												1														
6								1											1																	
7	1	1	1		1			1	1	1	1					1		1	1	1	1	1		1		1	1	1		1		1		1		
8		1							1	1	1								1	1	1															
9		1							1	1	1			1				1	1		1	1	1	1					1	1						
10		1									1		1						1	1				1												
11		1				1	1		1	1																										
12		1							1	1	1							1	1																	
13	1									1																										
14																																				
15		1									1																									
16		1									1							1		1															1	
17		1							1																											
18	1																				1															
19			1		1			1	1																											
20		1									1							1	1		1	1				1										
21		1									1								1	1	1	1	1												1	
22				1							1							1	1	1								1								
23				1																																
24	1	1	1	1	1		1		1		1	1		1	1				1	1															1	
25	1	1				1			1														1													
26											1						1	1	1	1				1												1
27	1	1							1																											
28	1	1																																		
29		1																1						1												
30								1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
31	1	1	1	1	1	1	1	1	1	1									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new standards, methods and tools, and sharing and transferring its know-how to the Member States and international community.

Key policy areas include: environment and climate change; energy and transport; agriculture and food security; health and consumer protection; information society and digital agenda; safety and security including nuclear; all supported through a cross-cutting and multi-disciplinary approach.

