European Commission

Buying **green!**

A handbook on green public procurement

3rd Edition

Environment

Important notice

This handbook is an indicative document of the Commission services and cannot be considered binding to this institution in any way. It should also be noted that the content of the handbook is subject to the evolution of EU law, including the revision of the Procurement Directives and case-law of the Court of Justice. It represents the state of play as of February 2016.

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Introduction

Green Public Procurement (GPP) is an important tool to achieve environmental policy goals relating to climate change, resource use and sustainable consumption and production – especially given the importance of public sector spending on goods and services in Europe.

GPP is defined in the European Commission's Communication ***Public procurement for a better environment*** as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle when compared to goods, services and works with the same primary function that would otherwise be procured."[1] This handbook outlines the possibilities to pursue GPP under the 2014 Procurement Directives.[2]

GPP can be applied to contracts both above and below the threshold for application of the Procurement Directives. The 2014 Procurement Directives enable public authorities to take environmental considerations into account. This applies during pre-procurement, as part of the procurement process itself, and in the performance of the contract. Rules regarding exclusion and selection aim to ensure a minimum level of compliance with environmental law by contractors and sub-contractors. Techniques such as life-cycle costing, specification of sustainable production processes, and use of environmental award criteria are available to help contracting authorities identify environmentally preferable bids.

This handbook is designed to help public authorities successfully plan and implement GPP. It explains the possibilities offered by European Union law in a practical way, and looks at simple and effective approaches to greening contracts. The handbook follows the logic and structure of a procurement procedure. It also gives many real examples of green purchasing by public authorities across the EU.[3] It has been produced for public authorities, but many of the ideas and approaches are equally relevant for corporate purchasers. It should also help suppliers and service providers – particularly smaller companies (SMEs) – to better understand the environmental requirements increasingly encountered in public tenders.

Many public authorities in Europe practice not only GPP, but SPP – Sustainable Public Procurement – including both environmental and social criteria in their purchasing decisions. This handbook looks specifically at the environmental aspects of tendering. The 2014 directives also provide a number of new opportunities for socially responsible procurement, which are not considered here.

Why buy green?

Government expenditure on works, goods and services represents around 14% of EU GDP, accounting for roughly EUR 1,8 trillion annually[4]. By using their purchasing power to choose goods, services and works with a reduced environmental impact, they can make an important contribution towards local, regional, national and international sustainability goals. GPP can be a major driver for innovation, providing industry with real incentives for developing green products and services. This is particularly true in sectors where public purchasers represent a large share of the market (e.g. construction, health services, or transport).

GPP may also provide financial savings for public authorities – especially if you consider the full life-cycle costs of a contract

1 COM (2008) 400 at page 4.

2 Directive 2014/23/EU of the European Parliament and of the Council on the award of conces¬sion contracts ('the Concessions Directive'); Directive 2014/24/EU of the European Parliament and of the Council on public procurement and repealing Directive 2004/18/EC ('the Public Sector Directive'); and Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sector and repealing Directive 2004/17/EC ('the Utilities Directive'). This Handbook refers primarily to the Public Sector Directive, however most of the same possibilities for pursuing GPP also exist under the other two directives.

3 Important notice: Although the information in the handbook has been carefully checked, the European Commission accepts no liability or responsibility with regard to the specific cases mentioned in the handbook or the linked websites.

4 European Commission (2015) Public Procurement Indicators 2013. These figures exclude spending by utility companies; earlier estimates (2011) including utility procurement were of around 19% of EU GDP, accounting for more than EUR 2,3 trillion.

and not just the purchase price. Purchasing energy-efficient or water-saving products for example, can help to significantly reduce utility bills. Reducing hazardous substances in products can cut disposal costs. Authorities who implement GPP will be better equipped to meet evolving environmental challenges, for example to reduce greenhouse gas emissions or move towards a more circular economy.

The legal framework

The legal framework for public procurement is defined by the provisions of the Treaty on the Functioning of the European Union (hereafter the Treaty) and by the EU Procurement Directives, as interpreted by the European Court of Justice. From an international perspective, the EU is bound by the conditions of the Government Procurement Agreement (GPA) of the World Trade Organisation (WTO), and by bilateral trade agreements. In practice, compliance with these instruments is generally achieved by extending the same rights to operators established in third countries as apply to EU economic operators.

Examples of green contracts

- Energy efficient computers
- Office furniture from sustainable timber
- Low energy buildings
- Recycled paper
- Cleaning services using ecologically sound products
- Electric, hybrid or low-emission vehicles
- Electricity from renewable energy sources

5 *Mapping out good practices for promoting green public procurement* (OECD, 2013) at page 4. Available at: ***www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/PGC/ETH%282013%293&docLanguage=En***

6 *Green procurement is the key to green growth* (Danish Ministry of Environment and Food, 2012). Available at: ***http://eng.mim.dk/news-archive/2012/okt/20121009-green-procurement***

7 *De impact van het programma duurzaam inkopen anno 2011* at page 4 (Dutch Ministry of Infrastructure and Environment, 2011)

The above-mentioned framework establishes a number of rules and principles which must be observed in the award of public contracts. Within this framework, environmental objectives can be implemented in a variety of ways, as explained in this handbook.

Image: iStock / Atypeek

The Benefits of GPP

"GPP is a vehicle for economic growth: it is estimated that in 2020 the sales of eco-industries will reach EUR 2,2 trillion" OECD (2013)[5]

"If we in the public sector were better at buying green, we could solve several problems at once. We would be improving the climate and environment at the same time as creating growth and jobs at enterprises which develop green technology. In other words, green procurement is one of the keys to transforming the world to a green economy" Danish Minister for Environment (2012)[6]

The City of Regensburg used GPP for the procurement of utilities, helping to save EUR 10 million on energy and water costs over a 15 year period.

Three million tonnes of CO_2 would be saved in the Netherlands alone if all Dutch public authorities applied the national Sustainable Public Procurement criteria, which include green criteria. Public sector energy consumption would be reduced by 10%.[7]

Introduction

Sectoral legislation

Sector-specific EU legislation creates mandatory obligations for the procurement of certain goods and services, for example by setting minimum energy-efficiency standards which must be applied. Mandatory obligations currently apply in the following sectors, amongst others:

- **Office IT equipment** – IT products purchased by central government authorities must meet the latest minimum energy efficiency requirements prescribed by the EU Energy Star Regulation (Regulation No 106/2008 on a Community energy-efficiency labelling programme for office equipment)[8]

- **Road transport vehicles** – all contracting authorities must take into account the operational energy use and environmental impacts of vehicles as part of the procurement process. A common methodology for calculating lifetime operational costs is provided (Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles)

- **Buildings** – Minimum energy performance standards apply to public buildings, these are set at national level based on a common EU methodology. From 1 January 2019, all new buildings occupied and owned by public authorities must be "nearly zero-energy buildings" (Directive 2010/31/EU on the energy performance of buildings (recast)). The Energy Efficiency Directive[9] also sets mandatory requirements regarding renovation of public buildings and purchase or new rental agreements meeting minimum energy-efficiency standards.

In addition, some Member States have specific rules which create mandatory GPP standards for particular sectors or types of contracts. While a consideration of these laws falls outside the scope of this handbook, procurers should ensure they are up to date with national requirements.

GPP resources at EU level

EU GPP criteria

To assist contracting authorities in identifying and procuring greener products, services and works, environmental procurement criteria have been developed (at time of writing) for 21 product and service groups which can be directly inserted into tender documents. These GPP criteria are regularly reviewed and updated to take into account the latest scientific product data, new technologies, market developments and changes in legislation. Most of the criteria are available in all official EU languages.

Helpdesk

The European Commission established a Helpdesk to disseminate information about GPP and to provide answers to stakeholder enquiries. Contact details are available on the GPP website at:
http://ec.europa.eu/environment/gpp/helpdesk.htm

Information

The GPP website is a central point for information on the practical and policy aspects of GPP implementation. It provides links to a wide range of resources related to environmental issues as well as local, national and international GPP information. This includes a list of past and on-going GPP-related projects, a News Alert featuring the most recent news and events on GPP, a list of responses to Frequently Asked Questions (FAQs), a glossary of key terms and concepts, studies, GPP examples and this handbook.

All are available for download from the website:
http://ec.europa.eu/environment/gpp

8 This applies to supply contracts valued above the threshold for application of the Procurement Directives.

9 Directive 2012/27/EU on energy efficiency. Annex III of the Directive defines the measures which must be taken by central government authorities, and which can be voluntarily adopted by other public authorities.

Image: sxc.hu

GPP in EU policy

GPP has been endorsed in a number of EU policies and strategies, reflecting its recognised potential to encourage a more sustainable use of natural resources, establish behavioural changes for sustainable consumption and production, and drive innovation. The Circular Economy Action Plan, adopted in December 2015, highlights GPP as one of the measures necessary to ensure more effective and efficient use of resources.

The box outlines the specific materials, which have been developed at EU level to support GPP. A detailed list of EU policies, strategies and legislation related to GPP can be found in the Annex.

10 *http://ec.europa.eu/environment/gpp/action_plan_en.htm*

11 See Evans, Ewing, Mouat and Nuttall *Assessment and Comparison of National Green and Sustainable Public Procurement Criteria and Underlying Schemes* (2010) *http://ec.europa.eu/environment/gpp/studies_en.htm*

Green Tenders in Ireland

In 2012 Ireland adopted its GPP action plan entitled ***Green Tenders***. This set targets for fifty per cent of all procurement in eight product and service groups to be green. In 2014, the Environmental Protection Agency published a comprehensive set of criteria and guidance to help authorities meet this target. The criteria draw upon those set at EU level but take into account the specific purchasing patterns and market structure in Ireland. The guidance also addresses both EU and national environmental legislation.

National and local actions

At the national level, most EU Member States have now published GPP or SPP National Action Plans (NAPs) which outline a variety of actions and support measures for green or sustainable public procurement.[10] Many have set targets for GPP or SPP, either in terms of overall procurement, or for individual product and service groups.

A number of countries and regions have also developed GPP or SPP criteria sets. In many cases these are similar to the EU GPP criteria, with adjustments to reflect the particular circumstances or priorities of the authorities developing them. Most of the criteria sets rely upon life-cycle assessment (LCA) data where it is available, together with eco-labels and the evidence which these are based upon.[11]

Individual contracting authorities at the local, regional and national level have also adopted green and sustainable procurement practices. In some cases their actions have inspired the NAPs, or been taken up as examples in other Member States. Many such examples are featured in this handbook, and more good practices are continuously being put into place across the EU. A collection of over 100 of these examples can be found at:
http://ec.europa.eu/environment/gpp/case_en.htm

Green procurement:
The essentials

This handbook explains how to buy green, looking at each stage of the procurement process. The basic steps are listed below with a link to the section of the handbook providing more information.

Introduction

Familiarise yourself with the **scope and potential benefits of GPP**, as well as the resources which are available

Chapter 1
Implementing GPP

- Commit to the process, and secure political support, by adopting **a GPP policy** with clear **definitions** and **targets** appropriate to your organisation
- Set **priorities** for the product and service groups you will address by consulting existing **GPP criteria**, **eco-labels** and other sources
- Put in place **information**, **training**, **networking** and **monitoring** activities to ensure you reach your goals

Chapter 2
The procurement process

- Consider how green requirements will affect the **procurement process** for the goods and services you have chosen, and how you will implement them in line with **legal obligations**
- Get an overview of the products and services available on the market by **engaging suppliers** and **make a business case** for GPP based on **life-cycle costing**

Chapter 3
Defining the requirements of a contract

When tendering, define the **subject matter** and **technical specifications** for contracts in a way which takes into account environmental impacts throughout the life-cycle of the goods, services or works you are buying, and consider using **labels** to define your requirements

Chapter 4
Selecting and excluding tenderers

Apply, where appropriate, selection criteria based on **environmental technical capacity** or **environmental and supply chain management** measures, and **exclude tenderers who do not comply with applicable environmental laws**

Chapter 5
Awarding a contract

Set **award criteria** which encourage tenderers to deliver even higher levels of environmental performance than those you have specified, and apply these in a transparent way. Assess **life-cycle costs** when comparing tenders and reject **abnormally low tenders** if these do not comply with environmental law

Chapter 6
Contract performance clauses

Set **contract performance clauses** which underline the environmental commitments made by contractors, and provide appropriate **remedies** where they fall short. Ensure there is a system for **monitoring** these commitments and that they are also applied to **subcontractors**

Chapter 7
Key GPP sectors

Identify specific GPP approaches to tendering in high-impact sectors such as **buildings**, **food and catering**, **vehicles** and **energy-using products**

Chapter 1
Implementing GPP

GPP implementation requires some planning: determining the scope for GPP in your organisation, setting priorities and targets for your activities, organising appropriate training for staff and monitoring performance. All of these elements may form part of a GPP policy. They should also be supported by your organisation's operating procedures and e-procurement systems.

The guidance presented in this chapter is applicable to any public authority wishing to implement GPP. In most EU countries, GPP National Action Plans (NAPs) have been established,[12] which will likely have an impact on the strategic approach to implementation for authorities in that country, for example in terms of targets set, priority product groups and monitoring requirements.

1.1 GPP Policy

Many public authorities in Europe have taken the approach of establishing a GPP policy, or including commitments to GPP implementation within other policies. GPP requires effective co-operation between different departments and staff members within an organisation. High-level support is generally considered to be an important factor for the success of GPP.

To be most effective a GPP policy should:

- Include clear targets, priorities and timeframes (see section 1.2)
- Indicate the scope of the purchasing activities covered (i.e. does it cover the whole authority, or just certain departments? Which product and service groups does it cover?)
- Indicate who is responsible for implementing the policy
- Include a mechanism for appropriately monitoring performance (see section 1.5)

GPP policy should be aligned with any existing policies and strategies relating to procurement and the sustainable operation of the organisation. The input of internal users, suppliers and management is normally needed to ensure the policy can be implemented. You may also wish to seek external advice or peer review from other public sector organisations implementing GPP, or from the networks described in section 1.7.

Image: iStock / Izabela Habur

Once a policy is in place some form of operational implementation plan should be established, outlining specific tasks, responsibilities and a time plan. The policy and implementation plan should then be communicated as widely as possible, particularly to the staff most affected and to suppliers who have a role to play in delivering the policy.

12 Further information regarding NAPs is available at: *http://ec.europa.eu/environment/gpp/action_plan_en.htm*

1.1.1 Establishing a working group

Implementing GPP requires the involvement and cooperation of different departments and staff members across an organisation. Finance, environment and procurement officers will likely need to be consulted, as well as certain specialist departments such as construction, energy or IT.

In many authorities, purchasing responsibilities are dispersed across the administration. Setting up a working group involving representatives from different departments when developing a GPP policy, establishing priorities and targets, and assessing training needs can help to ensure the commitment of all those involved and that these needs are met.

Planning for sustainable food procurement in the UK

In 2014 the UK Department for Environment & Rural Affairs (Defra) created a framework for sustainable food procurement entitled ***A Plan for Public Procurement***.[13] Endorsed by the Prime Minister of the UK, the plan sets out a specific vision, goals and outcomes for sustainable food procurement. This includes engaging with and supporting suppliers to produce and provide sustainable food and catering. The policy includes a Balanced Scorecard approach to Value for Money, which accounts for use of resources such as energy, water and waste, environmental impacts, variety and seasonality, animal welfare, and fair and ethical trade.

13 For more information, see: ***www.gov.uk/government/uploads/system/uploads/attachment_data/file/332756/food-plan-july-2014.pdf***

14 These factors were considered by the European Commission and most EU Member States when selecting product and service groups for the development of GPP criteria.

1.2 Setting priorities and targets

Introducing GPP into procurement practices will typically require a step-by-step approach. One method is to select a small range of product and service groups to focus on initially. Pilot activities within specific departments, which are most willing to participate can help to demonstrate successful implementation and gain wider acceptance.

1.2.1 How to prioritise

In identifying which product, service and works sectors to prioritise, three main factors should be initially kept in mind[14]:

- **Environmental impact** – Select those products (e.g. fleet vehicles) or services (e.g. cleaning services) which have a high impact on the environment over their life-cycle.
- **Budgetary importance** – Focus efforts on areas of significant spend within the authority.
- **Potential to influence the market** – Focus on areas where there is the most potential to influence the market. This may be due to the size or visibility of the contract, or the importance for suppliers of having public sector clients.

A number of further factors should then also be considered in making your final selection of sectors:

- **Political priorities**. Are there particular local environmental priorities, such as urban air quality, energy/water consumption, waste management, or climate adaptation which you could link to?
- **Market availability of environmentally preferable alternatives**. Market analysis can be useful to determine whether appropriate alternatives are available which offer reduced environmental impact. Check for relevant environmental labels and certifications.

Chapter 1
Implementing GPP

- **Cost considerations**. Are greener alternatives likely to be cost neutral or will they affect your budget? The assessment of "cost" should consider all costs throughout the life-cycle: purchase price, usage costs (energy/water consumption, maintenance), and disposal costs (see section 5.3). In some cases, grants or subsidies may be available for investment in greener options, so it is worth searching for relevant programs.

- **Availability of criteria**. For many product and service groups, green purchasing criteria have been developed which can be inserted directly into your tender, without the need for lengthy research into environmental performance characteristics and market analysis. The EU GPP criteria at time of writing cover 21 product and service groups and are available in both core and comprehensive versions (see section 1.4.1). In many EU countries national or regional criteria are also available.

- **Visibility**. How visible will your GPP activities be to the public, the market, other contracting authorities and your own staff? Will they realise that you are making an effort to improve environmental performance? High-profile changes like the type of vehicles used by an authority, or a switch to organic food in the canteen, can help build awareness of your GPP policy and improve the image of your organisation.

- **Practical considerations**. Are there any important contracts up for renewal, or are there long-running contracts in place for certain product/service groups? What time and financial resources are available for implementation? Are there any particular product/service groups where there is already some environmental expertise?

Image: dreamstime / Jay Crihfield

1.2.2 Setting GPP targets

Clear targets are critical in order to assess progress, and to communicate your intentions within the organisation and to the general public.

Targets may include:

- Overall procurement targets – e.g. 80% of procurement (by value and by number of tenders) should include GPP criteria by 2018. Targets can differ for national, regional, local levels.
- Product/service specific targets – e.g. by 2017, 60% of meals served in school canteens should be organic, or by 2018, all cleaning services should use products meeting the EU Ecolabel criteria
- Operational targets – e.g. all procurement staff will receive GPP training by 2017, or GPP guidance will be available to all staff on the authority intranet.

When considering procurement targets, it is important to have a clear, operational definition of what counts as green procurement. For many of the targets set at the national level by Member States, tenders are considered green if they include the national or EU GPP criteria.

Flemish Government targets sustainable procurement

The Flemish Government in Belgium has set a target for 100% of its public purchasing to meet defined sustainable procurement criteria by the year 2020. The steps for reaching this target have been or will be set out in a series of action plans covering the years 2009-2011, 2012-2014, 2015-2017 and 2018-2020. Each action plan will contain guidance, criteria and monitoring mechanisms to ensure all government departments are able to meet this goal.

1.3 Training and guidance

To successfully implement GPP, staff must have appropriate practical skills, knowledge and access to information. For example, training and guidance may be needed on:

- How to integrate environmental considerations into tender procedures (see Chapters 2 –7)
- Where to find assistance in developing environmental criteria (see Section 1.4 and Chapter 3)
- How to assess and verify environmental claims made by tenderers (see Sections 3.6 and 5.2)
- How to evaluate life-cycle costs in tendering (see Section 5.3)

This handbook provides an introduction to these topics, and indicates sources of further information and guidance where available. However it is not a replacement for in-depth training on GPP.

Image: iStock / anyaberkut

Chapter 1
Implementing GPP

Many EU countries and regions have training programmes on GPP – either as standalone training modules or integrated within more general public procurement training.

Manuals and tools are often available at the national level on websites dedicated to GPP and in some cases national GPP helpdesks exist. A helpdesk also exists at European level and can be contacted using the details given on the EU GPP website at: ***http://ec.europa.eu/environment/gpp/helpdesk.htm***

GPP training in Sardinia, Italy

GPP Ecosportelli, part of the Sardinia Regional Network for GPP, supports the provincial governments, municipalities, other public bodies and local companies in green and sustainable procurement. Activities include 'Technical Laboratories', which are training workshops organised throughout all the regional territories to help participants in the design and implementation of concrete actions, such as green purchasing procedures, policies, strategies or behaviour. The training has created a high level of involvement in GPP by procurers, including in small municipalities. Analysis also shows an increase in green tender submissions from local enterprises.

Expertise centre on SPP and Innovation Procurement in the Netherlands

PIANOo, the Dutch Public Procurement Expertise Centre, works for and with a network of around 3,500 public procurement professionals. All Dutch public procurement professionals can find information and instruments on sustainable public procurement and innovation procurement. PIANOo provides tools and resources including a private discussion platform, access to learning tools and best practices, implementation coaching, working groups, and a PIANOo Procurement Law Course. PIANOo stimulates the level of professionalism in procurement in the Netherlands, improves the sustainability of procurements, and facilitates interaction with the market.

Image: dreamstime / Benis Arapovic

1.4 Sources of GPP criteria

The term "GPP criteria" includes not only selection and award criteria, but also specifications and contract performance clauses, which can help to green your contract. Identifying sources of GPP criteria is an important step in GPP implementation.

1.4.1 EU GPP criteria

As noted in the introduction, the EU has developed GPP criteria for a number of product and service groups, which are regularly reviewed and updated. The criteria are designed to be inserted directly into tender documents and include information on verification methods. Most of the criteria are available in all official EU languages.

At time of writing, the product and service groups covered are:[15]

- Cleaning products and services
- Copying and graphic paper
- Combined heat and power (CHP)
- Office Buildings
- Electrical and electronic equipment in the health care sector
- Electricity
- Food and catering services
- Furniture
- Gardening products and services
- Imaging equipment
- Indoor lighting
- Office IT equipment
- Road Design, Construction and Maintenance
- Sanitary tapware
- Street lighting and traffic signals
- Textiles
- Toilets and urinals
- Transport
- Wall panels
- Waste water infrastructure
- Water-based heaters

The GPP criteria are based on data from a variety of sources and a technical background report is prepared for each product group to identify the considerations taken into account. The evidence base uses available scientific information and data, adopts a life-cycle approach and engages a variety of stakeholders. Since 2011, the criteria development process for most product groups is led by the Commission's Joint Research Centre in Seville, Spain.[16]

The EU GPP criteria include two 'levels' for each sector covered:

- The **core criteria** are designed to allow easy application of GPP, focus on the key area(s) of environmental performance of a product or service, and aim to keep administrative costs for companies to a minimum.

- The **comprehensive criteria** take into account more aspects or higher levels of environmental performance, and are for use by authorities that want to go further in supporting environmental and innovation goals.

All of the EU GPP criteria, together with the technical background reports setting out the main considerations for the choice of the criteria, can be downloaded from the GPP website (*http://ec.europa.eu/environment/gpp*). Assistance in interpreting and applying the criteria is available from the GPP Helpdesk.

15 Please refer to the GPP website for an up-to-date listing of the criteria: *http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm*

16 Further details of criteria under development are available at: *http://susproc.jrc.ec.europa.eu/product_bureau/projects.html*

1.4.2 Other sources of criteria

In addition to the EU GPP criteria, a number of international, national and regional bodies have developed criteria sets covering a wide range of product and service groups. The processes for adopting these criteria vary, although many are similar to the EU GPP scheme. Links to some of the main criteria sets are available on the EU GPP website.

1.4.3 Labels

Many environmental labels exist which aim to help purchasers identify sustainable products or services. The most valuable labels from a GPP perspective are those which are based on objective and transparent criteria and which are awarded by an independent third party. These labels can play a particular role in developing technical specifications and award criteria, and in verifying compliance. The specific rules, which apply to use of labels in procurement are considered in the relevant sections of this handbook.[17]

The different types of environmental labels are outlined below:

Multi-criteria labels – These are the most common type of environmental label and also the most commonly used in GPP. Multi-criteria labels are based on scientific information about the environmental impact of a product or service throughout its life cycle, from extraction of the raw materials, through production and distribution, the use phase, and final disposal. They apply a number of criteria that set the standard for the label in question. Different sets of criteria are established for each product or service group covered. Examples of this type of label include the **EU Ecolabel** (flower),[18] the **Nordic Swan**[19] and the **Blue Angel**.[20]

The EU Ecolabel

The EU Ecolabel was established in 1992 to encourage businesses to market products and services that are kinder to the environment. Products and services awarded the EU Ecolabel carry the flower logo, allowing consumers – including public and private purchasers – to identify them easily. Today the EU Ecolabel covers 34 products and services including paper, textiles, cleaning products, lubricants, appliances, home and garden products and tourist accommodation.

Further product and service groups are being continuously added.

17 See Sections 3.5 and 5.2.3

18 For more information, see: *http://ec.europa.eu/environment/ecolabel*

19 For more information, see: *www.svanen.se/en*

20 For more information, see: *www.blauer-engel.de/en*

Image: dreamstime / Visivasnc

Single issue labels – These are based on one or more pass/fail criteria linked to a specific issue, e.g. energy efficiency. If a product meets those criteria, then it may display the label. Examples of this type of label are the **EU Organic label** or the **Energy Star** label for office equipment.

Sector specific labels – Sector-specific labels include forestry certification schemes operated by organisations such as the **FSC** (Forest Stewardship Council)[21] or **PEFC** (Programme for the Endorsement of Forest Certification).[22]

Graded product labels – These grade products or services according to their environmental performance on the issue in question, rather than using pass/fail criteria. Examples include the **EU Energy Label**, which grades energy-related products according to their energy efficiency.[23]

The criteria underlying each of the labels mentioned above are publicly available. As discussed in section 3.5, the procurement directives distinguish between labels where all of the criteria are linked to the subject-matter of the contract, and those which contain wider criteria, such as those relating to general management practices.

21 For more information, see: ***www.fsc.org***

22 For more information, see: ***www.pefc.org***

23 For more information, see: ***http://ec.europa.eu/energy/efficiency/labelling/energy_labelling_en.htm.*** In July 2015 the Commission proposed to revise energy efficiency labelling to reintroduce a scale of A-G, with A being the most efficient class and G the least efficient. This proposal is set out in ***COM(2015) 341 final***.

24 Article 22 and Article 90(2) of Directive 2014/24/EU.

1.5 Using e-procurement systems

The 2014 directives provide for a transition to fully electronic tendering by 2018 (2017 in the case of central purchasing bodies.)[24] The use of e-procurement systems is well advanced in most Member States and they can be a valuable tool to support GPP implementation. In particular, e-procurement systems can allow you to track the use of GPP criteria and to verify that suppliers have provided the required information to demonstrate their compliance. This makes it easier to confirm that GPP policy is effective and to feed into your monitoring and review activities as described below.

When choosing an e-procurement system or adapting it to help implement GPP, you may wish to consider the following features:

- Can contracts with GPP criteria be clearly marked and tracked?
- Can the system integrate with sources of GPP criteria (e.g. from a database or label) so that these can be easily incorporated in contracts?
- Does the system facilitate life-cycle costing, e.g. with a built-in tool for this?
- Does the system make it easy for new suppliers to find out about your GPP requirements?

Procurement processes are influenced by electronic systems and so it is important not to overlook their role in facilitating GPP.

1.6 Monitoring & reviewing GPP

Assessing progress towards targets requires an effective monitoring system to be in place. This should produce a record of which tenders and/or awarded contracts included GPP criteria. Ideally, the monitoring system you put in place should also include information about the environmental impact of purchasing decisions made.

Several EU Member States have introduced, or are in the process of introducing, schemes to monitor national GPP implementation, which may set specific procedures to be followed for the gathering of information.

As well as quantified progress monitoring, a regular qualitative review of GPP activities is advisable, focusing on barriers faced, corrective actions and further improvements required, together with an assessment of future targets.

City of Barcelona uses monitoring to evolve GPP

After more than 15 years of GPP commitment and implementation, the City of Barcelona reviewed and developed in a highly participatory way new rules governing the inclusion of sustainability criteria in public contracts. This followed the enactment of a new Municipal Decree for Responsible Public Procurement in 2013. Integrating green requirements is now compulsory for all contracting bodies tendering for vehicles, electricity, food and catering services, construction, timber, and a range of other high priority procurement categories. Monitoring systems have also been updated in many of these high priority areas, and an automatic tracking system is being developed.

Image: dreamstime / Vvoevale

1.7 Networking

Many of the issues faced in implementing GPP are common to all public authorities, and there is a lot to be gained by engaging in networking and cooperation activities with others. Sharing information for example, on the environmental criteria used in tendering or the market availability of green products can help save time and effort.

Several networks with a focus on green and sustainable procurement have been established at the national or regional level. For example, the Partnership on Green Public Procurement (*www.groenneindkoeb.dk*) in Denmark allows procurers to exchange expertise (see box), as does the French regional network for the Greater West (*www.reseaugrandouest.fr*) and a number of regional networks in Italy. At the European level, the Procura+ Campaign aims to share GPP experiences across borders, and supports individual participants in local implementation (*www.procuraplus.org*).

Further information on national and international GPP/SPP networks is available on the GPP website.

Inspiring others towards GPP – showing the effect in Denmark

The Danish Partnership for Green Public Procurement is a coalition of governmental bodies that represents an estimated 13% of the annual public procurement spend in Denmark. All members of the Partnership report once a year on the level of achievement of their Partnership GPP goals, including the implementation of green procurement goals and criteria in their organisation. Each year four of the partners develop a case study showing the effect of a specific green procurement in terms of energy and environmental impacts, as well as financial savings. These cases are used as inspiration to others to practice GPP in their tenders.

Image: dreamstime / Massimiliano Leban

Chapter 2
The procurement process

Summary

- *Public procurement is subject to general principles derived from the EU Treaty and to the specific rules set out in the directives. Both sources of law are relevant to GPP.*
- *The preparatory stage is crucial. Thorough analysis and planning is essential before launching a tender if environmental goals are to be achieved. It can also help to ensure that procedures are run efficiently and obtain best value for money over the entire life-cycle.*
- *Different procedures may be used to implement GPP, depending on the subject-matter of your contract and the information gathered during the pre-procurement stage. Procedures such as the competitive procedure with negotiation and competitive dialogue may be suitable when you need to be able to adapt a solution to your specific needs.*
- *Life-cycle costing, joint procurement, framework agreements or energy performance contracting, for example, may help to demonstrate cost savings through GPP, or to lower investment barriers.*

2.1 Introduction

To make GPP work, it is essential to know how to make the most of public procurement procedures. A GPP policy can, if it is not carefully implemented, falter on practical issues such as which procedure to use, what criteria to apply, and how to properly assess and verify environmental claims.

Image: istock / leongoedhart

2.2 Basic principles of public procurement

Public procurement is about matching supply and demand, in order to deliver the goods, services and works which the public sector is responsible for providing. Value for money is clearly a key consideration, as is the need to ensure a good level of competition and to respect the EU and national legal framework. GPP can be combined with these objectives and in many cases will positively contribute to them – for example by reducing life-cycle costs or encouraging suppliers to update their product or service offers.

Value for money

Contracting authorities have an obligation to get the best value for taxpayers' money for everything they procure. Identifying the most economically advantageous tender does not necessarily mean going only for the cheapest offer. It means finding a solution, which meets the requirements you have identified – including environmental ones – in the most cost-effective way. Best value not only measures the cost of goods and services, but also takes into account factors such as quality, efficiency, effectiveness and fitness for purpose. Protection of the environment can be one of these factors and can therefore act as an equal consideration amongst others for the award of the contract.

Fairness

Acting fairly means applying the principles of the internal market, which form the basis for the public procurement directives and the national legislation based on these directives.

Image: dreamstime / Jorg Hackemann

The most important are the following:

- **Non-discrimination** – contracting authorities must ensure equal access to the contract by operators from all EU countries and from countries with equivalent rights. [25]

- **Equal treatment** – comparable situations must not be treated differently and different situations must not be treated in the same way, unless such treatment is objectively justified. For example, the same deadlines must be applied to all tenderers and the same information provided to each, but tenders with different levels of environmental performance should receive different marks under an environmental award criterion.

- **Transparency** – tender opportunities must be advertised widely enough to ensure competition. The procurement decision-making process must also be transparent, to preclude any risk of favouritism or arbitrariness on the part of the contracting authority. Contracting authorities have the obligation to inform unsuccessful tenderers of the reasons for rejecting their tenders.[26]

- **Proportionality** – means that measures adopted in a procurement process should be appropriate to the objectives pursued and should not go beyond what is necessary to achieve them.

25 The obligation extends to operators from countries, which are party to the WTO Government Procurement Agreement. You can find a list of these countries at: ***www.wto.org/english/tratop_e/gproc_e/memobs_e.htm***

26 Article 55(2) of Directive 2014/24/EU.

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2.3 Choosing the procedure

The preparatory stage of any procurement procedure is crucial. When choosing a procedure, you should consider at what stages you will be able to apply environmental criteria or considerations.

For example:

- In an **open procedure**, any operator may submit a tender. All tenderers who meet the pass/fail conditions you have specified will be eligible to have their tender assessed. You will thus have access to the maximum choice of potential environmentally friendly solutions – but will not be able to select who you invite to tender based on their environmental technical capacity, for example.

- In a **restricted procedure**, you can assess environmental technical capacity in a prior stage and also limit the number of operators you invite to tender. A minimum number of five must be invited to tender, provided there are sufficient suitable candidates.[27] This staged procedure may help you to determine the appropriate level of environmental performance to aim for in your specifications, award criteria and contract performance clauses. By limiting the number of competitors however, it is possible that you will miss out on offers with high environmental performance.

- **The competitive procedure with negotiation and competitive dialogue** procedures can be used by public authorities for purchases which require an element of adaptation of existing solutions; design or innovation; or in certain other circumstances.[28] These

27 Article 65(2) of Directive 2014/24/EU.

28 For the conditions under which these procedures may be used, please refer to Articles 26(4) of Directive 2014/24/EU. Contracting entities within the meaning of Directive 2014/25/EU may use the negotiated or competitive dialogue procedures generally.

Competitive dialogue for an electric ferry in Norway

The Norwegian Directorate of Public Roads wished to procure a new ferry that was 15 - 20% more energy efficient than the one in operation. As part of a two-stage procurement procedure the Directorate entered into a competitive dialogue to explore innovative solutions for energy efficient ferries. An advisory group was established and tender documentation and evaluation criteria developed. The tender did not require any specific technologies. The winning tender, produced in partnership with ferry operators, engineering firms and building yards, was an electrically powered ferry. The new ferry came into operation in 2015, bringing a 70% reduction in fuel costs and 89% reduction in CO_2 emissions per year.

"Competitive dialogue allowed us to engage with suppliers and create innovative and low carbon solutions in partnership."
Edvard Thonstad Sandvik,
The Norwegian Directorate of Public Roads

Image: iStock / andreusK

procedures may offer advantages in the context of GPP, as they introduce elements of flexibility not available in the open and restricted procedures and may allow for the effect of environmental requirements on cost to be better understood and controlled. However, both procedures require some level of skill and experience in engaging with suppliers if the best results are to be achieved.

- Where a contracting authority wishes to purchase goods or services, which are not currently available on the market, it may establish an **innovation partnership** with one or more partners. This allows for the research and development (R&D), piloting and subsequent purchase of a new product, service or work, by establishing a structured partnership.[29] It may be particularly suitable where the current state-of-the-art in a sector is not sufficiently advanced to meet environmental challenges identified by a public authority, such as the need for adaptation to climate change or management of natural resources.

Each of the above procedures offers a number of stages where green considerations can be applied:

- Subject matter and technical specifications
- Selection and exclusion criteria (e.g. compliance with environmental laws, technical and professional ability)
- Award criteria
- Contract performance clauses

The rest of this handbook devotes a chapter to each stage, looking at ways of taking the environment into account within each section, and giving practical examples and recommendations.

Dialogue with furniture suppliers in the Basque country

In 2006, IHOBE (the Basque Environmental Management Authority) engaged in an open dialogue with a group of furniture suppliers to help in the development of environmental criteria, and in order to prepare the market for a future tender. IHOBE now regularly holds supplier seminars where environmental criteria to be applied in upcoming tenders are presented and discussed with interested suppliers.

Pre-commercial procurement

Where no solution exists on the market which meets your requirements, you may also consider directly procuring the research and development (R&D) services that will help you to identify the most appropriate solution. Pre-commercial procurement (PCP) is an approach that contracting authorities can choose to follow for the procurement of R&D services, provided that the conditions of Article 14 of Directive 2014/24/EU are fulfilled. It allows you to progressively identify the best potential solutions by seeking feasibility studies, design and prototyping from a number of companies. The procurement of the actual solution(s) developed must then be carried out on the basis of the regular public procurement procedures.

29 The procedure for establishing an innovation partnership is set out in Article 31 of Directive 2014/24/EU. If you are purchasing R&D services only, you may be able to avail of an exemption from the directives and apply an approach known as pre-commercial procurement (PCP). This is described in COM (2007) 799 ***Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe***

2.4 Consulting the market

In deciding which procedure to use, and how best to include environmental criteria within the sections outlined above, it is useful to have some knowledge of the market – e.g. the availability, cost and possible practical implications of greener alternatives.

Simple online market research can help to provide some basic information. To get a more detailed picture from the market you can also engage in dialogue with potential suppliers prior to tendering. This may be of particular use if you wish to apply ambitious environmental requirements, or consider innovative solutions relatively new to the market.

The procurement directives specifically allow for preliminary market consultation with suppliers in order to get advice, which may be used in the preparation of the procedure.[30] Such a process must be carried out in a transparent and non-discriminatory manner.

The results of the consultation may not confer an unfair advantage on any of the suppliers who participated – to avoid this you should ensure that information is made available to all potential candidates or tenderers and allow adequate time for preparation of tenders.

Letting the market know well in advance about tenders which will include environmental criteria is advisable. This will give suppliers sufficient time to prepare for your requirements. Publishing a Prior Information Notice (PIN), is one way to do this. You may also consider publishing information on your website, or holding an information day for interested suppliers.

Joint procurement of electric vehicles in Sweden

In 2011 a joint procurement of 296 organisations led by City of Stockholm for electric vehicles was started. The joint procurement approach was applied to:

- reduce administrative costs for the participating organisations;
- achieve price reductions;
- send a strong signal of demand to the market;
- ensure that smaller municipalities would have access to such vehicles.

The partners undertook a joint contribution to vehicle specification, including criteria for CO_2 emissions and LCC. The first purchase in 2012 resulted in 34 tonnes CO_2 saved, a 95% reduction, compared with equivalent petrol vehicles.

"Sharing our skills and knowledge, and telling suppliers that the demand is there, is a key factor in making sure our vehicles are as efficient as possible."
Eva Sunnerstedt,
Project manager of Clean Vehicles in Stockholm

Image: dreamstime / Tomas Krist

30 Article 40 of Directive 2014/24/EU.

2.5 Making a business case for GPP

GPP can use a number of procurement tools, which are recognised as contributing to financial efficiency, helping to make the business case for applying higher environmental standards. Such approaches include:

- **Life-cycle costing (LCC)** – Procurement decisions are often still made on the basis of the purchase price. However, for many products and works, costs incurred during use and disposal may also be highly significant – e.g. energy consumption, maintenance, disposal of hazardous materials. Taking life-cycle costs into account in procurement makes clear economic sense. As purchase price, energy and maintenance costs may be paid by different departments within a single authority, establishing LCC within procurement procedures will likely require cross-authority cooperation. Further information on LCC can be found in Chapter 5 and on the EU GPP website: *http://ec.europa.eu/environment/gpp/lcc.htm*

- **Joint procurement** – Joint procurement means combining the procurement activities of a group of public authorities to achieve savings through bulk buying, reduced administrative costs, and pooling environmental, technical, and market knowledge. This type of procurement may be particularly valuable in relation to GPP, so that environmental skills and knowledge of the market for green products and services can be shared. Joint procurement can be put in place, for example, by central purchasing bodies at the regional or national level to carry out procurement on behalf of public authorities.

EPC used to cut energy use in municipal buildings in Vantaa, Finland

In 2011, the City of Vantaa contracted an Energy Service Company (ESCO) to improve the energy efficiency of 14 municipal buildings. Using an Energy Performance Contract ensured that the energy saving measures and associated cost savings would be realised more quickly than would otherwise be possible using investment from the City's budget. Technical specifications included a guarantee from the ESCO on energy saving and repayment periods. The 8 year contract period will see a total of 7,500 tonnes of CO_2 emissions cut and annual savings in energy costs of EUR 200,000 for the city. Surplus savings are divided between the City and the ESCO.

Greening centralised procurement in Hungary

The Hungarian Public Procurement and Supply Directorate General is responsible for concluding contracts used by about 1000 public authorities across the country. In 2010-2011, 12 procedures were conducted which included green criteria, with a total contract value of HUF 90 billion (EUR 338,6 million). The criteria applied relate, for example, to maximum energy consumption levels for personal computers and compliance with the criteria underlying green certification schemes for paper products (e.g. FSC).

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- **Energy performance contracting (EPC)** – EPC is a contractual arrangement between a building owner or occupier (including public authorities) and an Energy Service Company (ESCO) to improve the energy efficiency of a building. The investment costs are typically covered by the ESCO or a third party such as a bank, so no financial outlay is required by the public authority. The ESCO receives a fee, usually linked to the guaranteed energy savings. After the specified contracting period, the savings from energy efficiency improvements to the building will revert to the public authority. Energy performance contracting is often undertaken in respect of groups of buildings, in order to make the contracts more attractive to potential investors.

GPP solutions using a framework agreement in Germany

In 2013 the Procurement Agency of the Federal Ministry of the Interior, Germany published a tender for 50,000 thin client computer systems to the value of EUR 15m. The open tender specified technical standards and contract clauses, including a warrantee of compliance with environmental aspects for components, noise and waste management. The framework agreement was for 24 months with an optional extension of 12 months. The five-year energy savings were calculated to be 58,750,000 kWh of electricity, equivalent to 29,000 tonnes of CO_2.

Image: iStock / cherezoff

2.6 Framework agreements

One way of increasing the efficiency of tendering while implementing GPP can be to award framework agreements. A framework agreement may be established with one or more operators and allows for multiple contracts to be awarded without repeating the whole procurement process.[31] Frameworks can contribute to GPP by allowing greater flexibility in the award of contracts, and in some cases by pooling demand between a number of authorities or over time. They may also increase the incentives for suppliers to offer environmentally enhanced solutions, due to the potential to win multiple contracts and therefore recoup any additional expense involved in implementing these solutions.

Image: dreamstime / Olivier Le Moal

31 Article 33 of Directive 2014/24/EU.

Chapter 3
Defining the requirements of a contract

Summary

- *When defining the subject-matter of a contract, contracting authorities have great freedom to choose what they wish to procure. This allows ample scope for including environmental considerations, provided that this is done without distorting the market, i.e. by limiting or hindering access to it.*
- *A thorough needs analysis involving the relevant stakeholders will help you to define the scope for greening the contract – as well as avoiding unnecessary purchases.*
- *Environmental performance levels and particular materials and production methods may be specified, if relevant. Specifications can relate to any stage of the life-cycle, e.g. raw material extraction, processing, packaging, delivery, use phase or disposal.*
- *Allowing tenderers to submit variant bids can assist in finding the most economically advantageous tender which also delivers high environmental performance.*
- *Technical standards, labels and the EU and national GPP criteria sets are all valuable sources of information when developing a specification. Special conditions apply if you wish to require tenderers to have a label, and equivalent labels must be accepted.*

3.1 Defining the subject-matter

The 'subject-matter' of a contract is about what product, service or work you want to procure. This process of determination will generally result in a description of the product, service or work, but it can also take the form of a functional or performance-based definition (see section 3.2.3). Choice of subject-matter is particularly important because it determines the permissible scope of specifications and other criteria you may apply. This is due to the 'link to the subject-matter' requirement, discussed in Chapter 5.

Image: iStock / khilagan

3.1.1 The right to choose

In principle you are free to define the subject of the contract in any way that meets your needs. Public procurement legislation is less concerned with what contracting authorities buy, than how they buy it. For that reason, the procurement directives do not restrict the subject-matter of a contract as such.

However in some cases the choice of a specific product, service or work may distort the level playing-field in public procurement for companies throughout the EU. There have to be some safeguards. These safeguards lie, first of all, in the fact that the Treaty principles of non-discrimination, free movement of goods and the freedom to provide services apply in all cases where there is certain cross-border interest in a contract, which may also include contracts below the thresholds or which are not fully covered by the directives.[32]

In practice, this means that you have to ensure that your definition of the contract will not affect access to the tender by other EU operators or operators from countries with equivalent rights.[33] A second safeguard is that, according to public procurement rules, technical specifications must not create unjustified obstacles to competition.[34] This includes allowing for equivalents, where a specific standard is referred to. Further guidance on how this obligation can be met when applying environmental specifications is given in Section 3.2.

3.1.2 Assessing your actual needs

A crucial step before starting the procurement process is to assess your actual needs in light of the potential environmental impact of the contract. Proper consultation with internal or end users may reveal that lower volumes, or more environmentally friendly options, can readily be applied. In some cases, the best solution may be to buy nothing at all. For example, you may be able to share

Needs assessment for printing in the UK

In 2012 Portsmouth City Council and WRAP carried out a needs assessment to improve printing resource use, exploring the potential for reduced spend and environmental impact. This was undertaken as part of a ***Zero Waste to Landfill*** strategy. The review of print requirements found potential efficiency savings from design, print and design production. Efficiency factors were then built into an Invitation to Tender (ITT), requiring bidders to demonstrate waste reductions. The council can now, when required, tender for new contracts to deliver print services that add value both financially and environmentally.

Image: dreamstime / Shawn Hempel

32 For further information on the rules and principles which apply, please refer to the ***Commission Interpretative Communication on the Community law applicable to contract awards not or not fully subject to the provisions of the Public Procurement Directives*** (2006/C 179/02).

33 For example, operators from countries that are bound by the WTO Government Procurement Agreement. You can find a list of these countries at: ***www.wto.org/english/tratop_e/gproc_e/memobs_e.htm***

34 Article 42(2) of Directive 2014/24/EU; Article 60(2) of Directive 2014/25/EU.

resources or equipment with other authorities. Purchasing re-used, recycled or re-manufactured products can also contribute to the idea of a Circular Economy.[35]

Gaining consensus regarding the scope of needs can help procurers to make environmentally-conscious decisions at later stages in the procurement process. For example, it will be much easier to implement a more environmentally friendly cleaning, catering or printing contract if users of these services and products know what to expect and understand the reasons behind the change. Similarly, prior agreement regarding the acceptable indoor temperature of a building can help to implement higher energy-efficiency standards – and therefore financial savings – in a retrofitting or facilities management contract.

As needs assessment is normally carried out before beginning the procurement process, you may not have all of the information necessary to assess the environmental impact of the contract. To gain an overview of the lifetime environmental impact associated with a particular product or service, it is often worthwhile to consult relevant GPP criteria (see Section 3.5) at an early stage. A market consultation carried out prior to procurement can also help identify potential solutions to minimise the environmental impact of the goods or services procured (see section 2.4).

Image: iStock / Kativ

3.1.3 Identifying the main environmental impacts

Each individual contract will have a different set of potential environmental impacts to be considered. However supply, service and works contracts will generally entail slightly different considerations:

Supply contracts:

- The environmental impact of materials used to make the product (e.g. are the raw materials from renewable sources?)
- The impact of the production processes used
- 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 contracts:

- 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 service
- 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

Works contracts:

- In addition to all of the above considerations, works contracts may have significant environmental impacts e.g. in respect of land use or traffic planning
- For some projects a formal Environmental Impact Assessment will need to be carried out – and the results should inform your procurement
- For further specific guidance on building contracts see Chapter 7

35 More information about the Circular Economy can be found at: *http://ec.europa.eu/environment/circular-economy*

A good way of gaining an overview of the environmental impacts of a particular contract is to consult the relevant EU GPP criteria and Technical Background Reports, which explain the main impacts and how they can be addressed in purchasing.

3.1.4 Choosing a green title for the contract

This makes it easier for tenderers to quickly identify what is wanted and conveys the message that the environmental performance of the product or service will be an important part of the contract. Using an environmental title sends out a message not only to potential suppliers, but also to the local community and other contracting authorities.

Once you have assessed your actual needs, conducted any necessary market consultation and chosen an appropriate title for your contract, you are ready to develop a specification of your requirements.

Green titles in contracts across Europe

Increasingly green titles are being used in tenders to send a signal that environmental impacts are considered within the contract. The following are examples of this:

- ***Provision of energy-efficient public lighting in Co. Kerry*** (Kerry County Council, Ireland)
- ***Internal finishing works, using environmentally friendly construction materials and products*** (University of Malta)
- ***Service contract for energy savings in 12 schools*** (Catalan Ministry of Education, Spain)
- ***Supply of ecological and recycled paper*** (SCR Piemonte, Italy)

Avoiding greenwash

An increasing number of companies market themselves as being green or sustainable, not always with the evidence to back this up.

For example, suppliers may claim an exaggerated level of energy efficiency, or focus on a relatively minor environmental impact in claiming to be green. For this reason it is important that:

- You familiarise yourself with the environmental impacts of your intended purchase, prior to issuing your tender
- Your technical specification is based on an assessment of environmental impacts across the life-cycle of the product (e.g. from a third-party environmental label)
- You ask for appropriate proof from the supplier for the environmental performance they claim (see Section 3.6)

Image: sxc.hu

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Defining the requirements of a contract

3.2 Environmental technical specifications

3.2.1 Technical specifications

After defining the subject of the contract, you will need to express this in the technical specifications which are included in the procurement documents. This is like turning a sketch into a picture. Technical specifications have two functions.

- They describe the contract to the market so that companies can decide whether it is of interest to them. In this way they help determine the level of competition.

- They provide measurable requirements against which tenders can be evaluated. They constitute minimum compliance criteria. If they are not clear and correct, they will inevitably lead to unsuitable offers. Offers not complying with the technical specifications have to be rejected – unless you have specifically authorised variants.

Technical specifications need to relate to characteristics of the particular work, supply or service being purchased– and not to the general capacities or qualities of the operator.[36] It is also important that they be clear, understandable by all operators in the same way, and that you will be able to verify compliance when assessing tenders (see Section 3.6). The obligation of transparency implies that technical specifications will be clearly indicated in the procurement documents themselves.[37]

Technical specifications may be formulated by reference to European, international or national standards and/or in terms of performance or functionality.[38] They may also refer to appropriate criteria that are defined in labels.[39] The procurement directives allow you to formulate technical

Luxembourg specifies sustainable cleaning products

In 2013, the City of Luxembourg carried out an open tender for the provision of cleaning products and services. The technical specification was developed at an early stage in conjunction with the Luxembourg Environmental Protection Office. Analysis found that only 15% of previously used products were free of harmful substances. The technical specifications for the new tender included a list of substances banned from products, and award criteria to reduce the use of others. The market adjusted quickly and four companies submitted bids. Using this approach the City was able to create a healthier environment for both its employees and citizens.

Image: dreamstime / Fottoo

36 Article 42(1) and Annex VII of Directive 2014/24/EU; Article 60 and Annex VIII of Directive 2014/25/EU.

37 See Case 225/98 ***Commission v France*** at paras 81-83 in which technical specifications defined solely by reference to classifications set out in French legislation were found to be indirectly discriminatory.

38 Article 42(3) of Directive 2014/24/EU; Article 60(3) of Directive 2014/25/EU.

39 Article 43(1) of Directive 2014/24/EU; Article 61(1) of Directive 2014/25/EU

specifications in terms of the environmental and climate performance levels of a product, service or work.[40] For example, you may require that a computer does not consume more than a certain amount of energy per hour; or that a vehicle does not emit more than a certain quantity of pollutants. You may also specify the production processes or methods for a good, service or work – this possibility is discussed in Section 3.3 below.

3.2.2 Standards and other technical reference systems

Standards have a major role in influencing the design of products and processes, and many standards include environmental characteristics such as material use, durability or consumption of energy or water. References to technical standards including such environmental characteristics can be made directly in your specification, helping you to define the subject matter in a clear way. The procurement directives refer to European, international or national standards and various other technical reference systems as one of the means by which specifications can be defined.[41] When reference to a standard is used, it must be accompanied by the words 'or equivalent.'[42]

This means that evidence of compliance with an equivalent standard must be accepted. Such evidence may be in the form of a test report or certificate from a conformity assessment body. A tenderer may also seek to rely upon a manufacturer's technical dossier if it is not able to obtain third-party evidence within the relevant time limits for reasons which are not attributable to it. The contracting authority must then determine whether this establishes compliance.[43]

Image: dreamstime / Nikkytok

3.2.3 Performance-based or functional specifications

The procurement directives explicitly allow contracting authorities to apply specifications based on performance or functional requirements.[44] A performance-based/functional specification will describe the desired result and which outputs (for example in terms of quality, quantity, and reliability) are expected, including how they will be measured. It does not prescribe the inputs or work method for the tenderer. The tenderer is free to propose the most appropriate solution.

A performance-based approach usually allows more scope for innovation and in some cases will challenge the market into developing new technical solutions. When setting performance-based specifications, you should think carefully about how you will assess and compare tenders in a fair and transparent way. You may ask the tenderer to indicate how the desired result will be achieved and meet the level of quality specified in the procurement documents.

40 Annex VII of Directive 2014/24/EU; Annex VIII of Directive 2014/25/EU.

41 Article 42(3) of Directive 2014/24/EU; Article 60(3) of Directive 2014/25/EU.

42 Article 42(3)(b) of Directive 2014/24/EU; Article 60(3)(b) of Directive 2014/25/EU.

43 Article 42(5) of Directive 2014/24/EU; Article 60(5) of Directive 2014/25/EU.

44 Article 42(3) of Directive 2014/24/EU; Article 60(3) of Directive 2014/25/EU.

For example, if you want to keep an office building at a certain temperature you could do this by setting very detailed specifications for a heating system. Alternatively you could state that the building must have a constant indoor temperature of 18-20°C and leave it to bidders to come up with different options. The bidders could then opt for innovative heating and ventilation systems which reduce dependence on fossil fuels. You can ask them to provide technical data to confirm the feasibility of their proposed methods. It is also important to consider how you will incorporate the precise terms of the offer into your contractual clauses. Further guidance on this topic is given in Chapter 6.

Rewarding energy efficiency in Malta's schools

In Pembroke, Malta, the national body responsible for schools (Foundation for Tomorrow's Schools – FTS) required that a new school building be energy self-sufficient through the use of on-site renewable energy production. Tenderers were able to present different solutions for achieving this goal. Certain minimum requirements, for example on energy and water efficiency, were also included in the specification. Additional points were awarded for even better performance during the award stage. The winning bidder installed solar panels and wind turbines, producing a total of 35,000kWh over the first ten months of the contract.

3.3 Specifying materials and production methods

What a product is made of, how it is produced or how a service or work is performed, can form a significant part of its environmental impact. Under the procurement directives, materials and methods of production or provision can be taken into account when defining technical specifications – even if these do not 'form part of the material substance' of what is purchased, for example electricity which is produced from renewable sources or food produced from organic agriculture.[45]

However, since all technical specifications should bear a link to the subject matter of the contract, you can only include those requirements which are related to the production of the good, service or work being purchased, rather than those which relate to the general practices or policies of the operator. As with all criteria, the contracting authority must ensure that the Treaty principles of non-discrimination, equal treatment, transparency and proportionality are respected when specifying materials or production methods.

3.3.1 Specifying materials

As a contracting authority, you have the right to insist that the product you are purchasing be made from a specific material, or contain a certain percentage of recycled or reused content. You can also set requirements regarding the restriction of hazardous substances in the product. As a starting point you should refer to legislation which restricts

45 Annex VII of Directive 2014/24/EU; Annex VIII of Directive 2014/25/EU.

hazardous or dangerous substances, for example the RoHS Directive[46] or REACH and CLP Regulations.[47]

Typical GPP approaches would include restricting hazardous substances in cleaning products and textiles, or requiring operators to demonstrate that timber has been sustainably sourced. To ensure that the Treaty principle of non-discrimination is respected, such restrictions should be based on an objective risk assessment. Labels and GPP criteria are a useful reference point, as they are based on scientific information and life-cycle assessment of the materials and substances found in the covered products and services.

Purchasing 100% Recycled Paper in Bulgaria

The Bulgarian Ministry of the Environment and Water chose to specify 100% recycled fibre when ordering paper for use in its office. A pre-procurement market analysis revealed that this switch to more environmentally-friendly paper could be done without increasing the price. Following the Ministry's successful procurement, the Bulgarian Central Purchasing Body also concluded a framework agreement for the supply of 100% recycled paper to a number of public authorities.

3.3.2 Production processes and methods

The procurement directives allow you to include requirements regarding production or provision processes and methods in technical specifications for supply, service and works contracts. It is not allowed however to insist upon a production process which is proprietary or otherwise only available to one supplier – or to suppliers in one country or region – unless such a reference is justified by the exceptional circumstances of the contract and is accompanied by the words 'or equivalent.'

Of particular importance is the principle of proportionality – how can you ensure that requirements you set regarding production processes are appropriate to achieve the environmental objectives you are trying to promote? A careful analysis of the life-cycle of the goods, services or works you are purchasing will help you arrive at appropriate specifications for production processes and methods. Life-cycle assessment (LCA) allows for cradle-to-grave analysis of the environmental impact of products. It thus includes the extraction and refinement of raw materials, manufacturing and other stages of production through to the use and disposal phase.

Carrying out an LCA for an individual contract implies considerable extra effort. The criteria underlying Type I labels (see section 3.5.1) typically draw upon an LCA for the product and service groups covered and can help in identifying applicable criteria for production processes and methods. The EU GPP criteria take these findings into account and specify relevant production methods for some product and service groups, including electricity, textiles and food.

46 Directive 2011/65/EU ***on the restriction of the use of certain hazardous substances in electrical and electronic equipment*** (RoHS).

47 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 ***concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals*** and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

Chapter 3
Defining the requirements of a contract

Hungarian city chooses less harmful chemicals

The Hungarian city of Miskolc has sought to purchase greener alternatives for a number of its requirements. For example, for winter defrosting of roads the city switched from sodium chloride to calcium magnesium acetate (CMA), a less corrosive substance which does not increase sodium levels in drinking water. These requirements are built into the technical specifications of the city's tender documents.

European Commission sets high bar for furniture suppliers

The European Commission includes a number of environmental requirements in its calls for tender for supply of furniture, which address the entire life-cycle. Bidders must undertake to comply with sustainability criteria for each stage in the lifetime of the furniture. Criteria include:

- the origin of wood must be stated;
- at least 50% certified sustainable content in wood;
- traceability of certified and uncertified wood used;
- limited use of dangerous substances;
- best available techniques in surface treatment of furniture;
- effective treatment systems for waste in air and water in the manufacture of leathers;
- reduction of volatile organic compound (VOC) and formaldehyde emissions (≤ ½ E1).

Other life-cycle criteria relate to packaging materials, optimisation in respect of congestion during transport and storage, and use of road-rail integrated transport. Instruction notices for maintenance and end-of-life handling should accompany each furniture item, with an aim of separating items that weigh more than 50 grams, marking plastic parts with a view to recovery, and collection and recovery of used furniture.

Image: sxc.hu

3.4 Use of variants

Variants are a means of introducing greater flexibility into your specification, which may result in a more environmentally-friendly solution being proposed by bidders. The variants approach means you allow tenderers to submit an alternative solution which meets certain minimum requirements you have identified, but may not meet your full specification. For example, you may specify conventionally-fuelled (petrol or diesel) vehicles but allow alternative-fuelled, electric or hybrid vehicles as a variant. Both variant and non-variant bids are then evaluated against the same set of award criteria to identify the most economically advantageous tender (MEAT).

This can be a useful approach if you are unsure about the cost or other impacts of an alternative product or service – for example: will introducing higher insulation standards in a building works contract delay the completion date? You can also allow tenderers to submit more than one bid: a standard and a variant solution. Variants must of course also be linked to the subject-matter of the contract, i.e. they cannot concern matters which are unrelated to the purchase you wish to make.

To be able to accept variants in a public procurement procedure, you need to:[48]

- indicate in the contract notice that variants will be accepted;
- specify the minimum requirements which the variants have to meet; and
- identify any specific requirements for presenting variants in bids (such as that a variant can only be submitted combined with a non-variant bid)

48 Article 45 of Directive 2014/24/EU; Article 64 of Directive 2014/25/EU.

49 The potential uses of labels in assessing award criteria are discussed in Chapter 5.

Image: iStock / Dusko Jovic

3.5 Using GPP criteria and labels

As outlined in Section 1.4, labels and EU and national GPP criteria sets are useful information sources when developing your tender requirements. The EU GPP criteria are designed to be inserted directly into tender documents and include information on verification methods. Most of the criteria are available in all official EU languages. Labels can be used in two different ways in the context of technical specifications:[49]

- To help you draw up your technical specifications in order to define the characteristics of the goods or services you are purchasing
- To check compliance with these requirements, by accepting the label as one means of proof of compliance with the technical specifications

By providing a means of third party verification, labels can help to save time while ensuring that high environmental standards are be applied in public procurement.

Chapter 3
Defining the requirements of a contract

3.5.1 Conditions for using labels

Third-party labels can be used in several ways under the 2014 directives, and in certain cases it is possible to require a label as part of technical specifications. To use a label in this way, it is necessary to look at the requirements for obtaining the label to confirm that:

i. they only concern criteria which are linked to the subject matter of the contract;
ii. they are based on objectively verifiable and non-discriminatory criteria;
iii. they are established using an open and transparent procedure in which all relevant stakeholders, including government bodies, consumers, social partners, manufacturers, distributors and non-governmental organisations, may participate;
iv. they are accessible to all interested parties;
v. they are set by a third party over which the economic operator applying for the label cannot exercise a decisive influence.[50]

Most labels conforming to the ISO Type I classification[51] will meet these conditions, although they may also contain criteria which are not specific to the product or service being purchased, such as general management requirements. To determine whether this is the case you should review the full criteria underlying the label before referring to it in your documents – most are freely available online.

If you are satisfied that a label does meet the above conditions, it can be included as part of your technical specifications. However you must still accept other labels which have equivalent requirements, i.e. they demonstrate that the same objective criteria are met. If a tenderer can show that they were unable to obtain a label within the relevant time limits[52] for reasons which are not attributable to them, then you must consider alternative evidence submitted by them, such as a technical dossier which demonstrates that the label requirements are met.

Danish city goes for eco-labels

The City of Kolding, Denmark, incorporates the EU Ecolabel criteria together with other eco-labels into all its procurement actions for products covered by the labels, with considerable success. The applicable criteria from the eco-labels are inserted directly into technical specifications and/or award criteria. It is stated that a copy of the eco-label certificate is seen as full verification that the criteria are met, but also that alternative documentation will be accepted. Recent tenders using eco-label criteria include cleaning products, copy paper, uniforms, laundry services (for the detergent used), printing services (for the paper used), tissue paper, and fleet management (for the lubricants used).

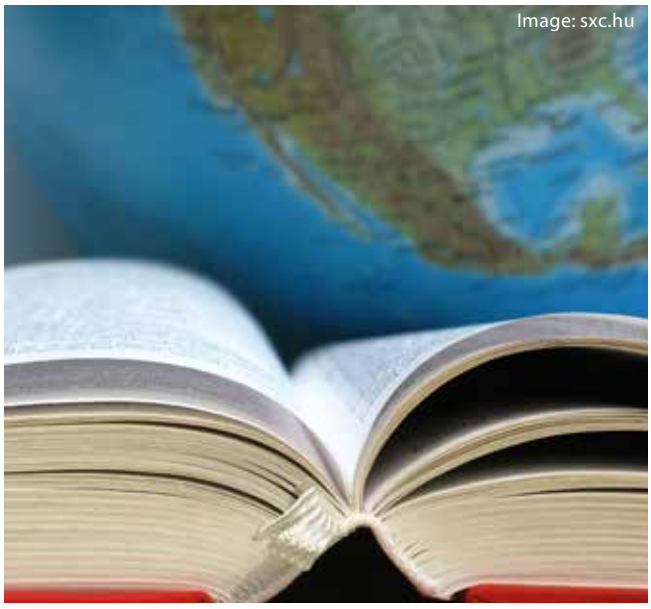
Image: sxc.hu

50 Article 43(1) of Directive 2014/24/EU; article 61(1) of Directive 2014/25/EU.

51 ISO 14024:1999, Environmental labels and declarations – Type I environmental labelling – Principles and procedures

52 In order to maximise the chances that operators will be able to obtain a required label this should be advertised at the earliest opportunity – for example if a Prior Information Notice (PIN) is published it could refer to the label(s) which will be used. In addition, the intention to use labels could be highlighted on the buyer's profile or the contracting authority's website.

If a label contains some requirements which are relevant to your contract but others which are not linked to the subject-matter, such as those relating to general management practices, then you can only refer to the specific label criteria which are linked to the subject-matter and not require the label itself.[53] In fact it may be considered good practice to always refer to the criteria underlying a label, to ensure that they are all relevant and will be clear to all tenderers.[54]

Czech GPP includes eco-labelled products

In the Czech Republic national ministries are required to include environmental criteria in tenders. The same practice is recommended for other state bodies and the Ministry of the Environment is responsible for collecting data on this. Specific approaches have been developed for the purchase of IT products and furniture. Latest figures show that some EUR 20 million is spent annually by ministries on eco-labelled products, with boilers, IT equipment, paper and stationery accounting for the largest share of eco-label purchases.

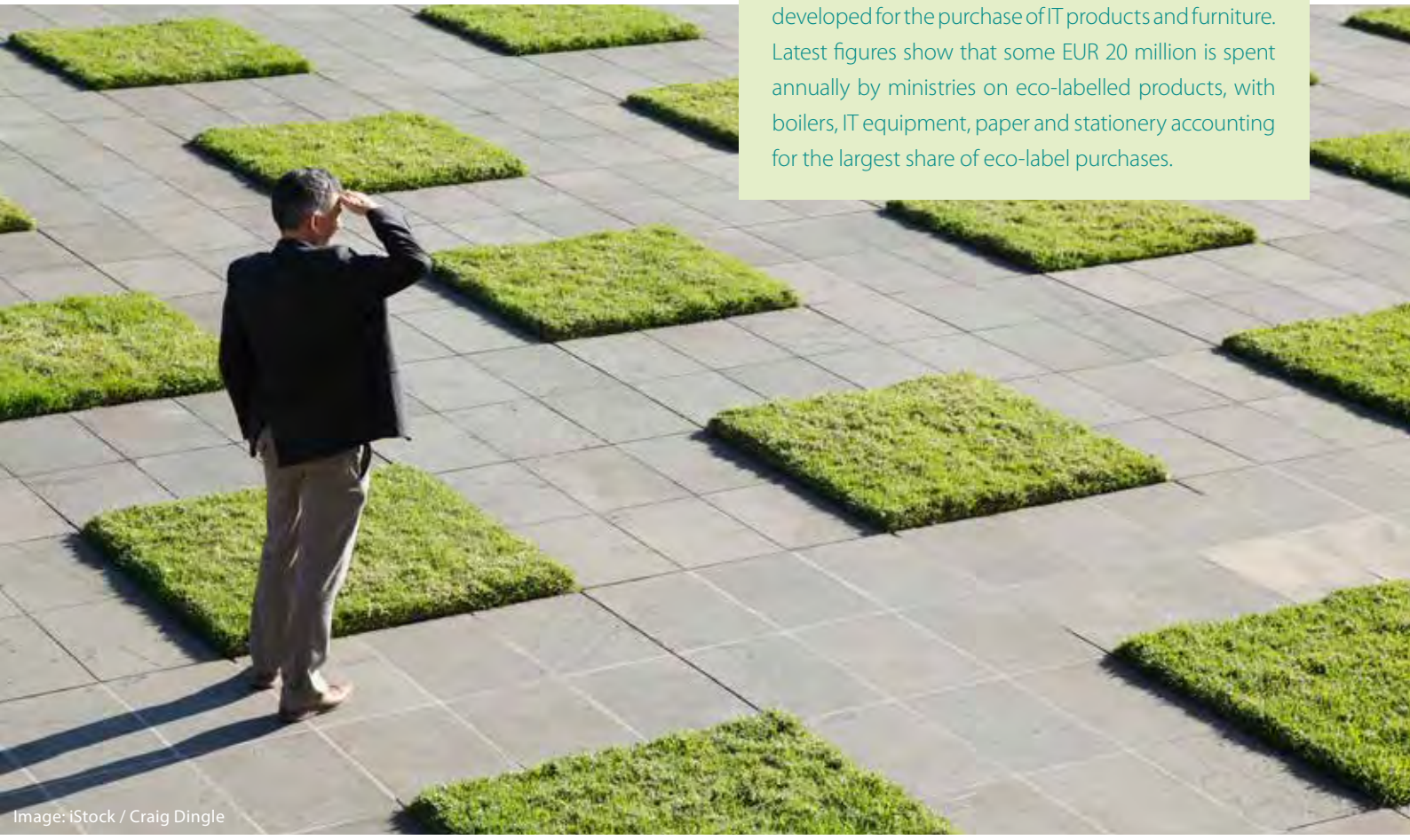

Image: iStock / Craig Dingle

53 Article 43(2) of Directive 2014/24/EU; Article 61(2) of Directive 2014/25/EU.

54 In Case C-368/10 Commission v Kingdom of the Netherlands, the Court of Justice seemed to take the view that technical specifications should always refer to the criteria underlying a label instead of just the label itself, unless those criteria are set out in legislation (paras 67-70 of judgment). Note however that this judgment was delivered prior to the new, more stringent requirements for labels introduced under the 2014 directives.

3.6 Verifying compliance with technical specifications

Whether you draw upon technical standards, labels, the EU or national GPP criteria when developing your specification, special attention should be paid to how you will verify tenderers' claims to comply. You should set out in advance in your tender documents the types of evidence of compliance which bidders can submit. This is often done by providing an indicative list, and stating that other equivalent forms of evidence will also be accepted. Environmental requirements are often complex and assessing compliance may in some cases require technical expertise. However for many environmental specifications, there are means of verifying compliance which do not require the input of technical experts.

For example:

- As a starting point, refer to relevant environmental legislation with which all EU operators must comply, such as the WEEE[55] Directive or Timber Regulation.[56] Evidence of compliance with such legislation, or national implementing laws, will normally be available from the tenderer as this is a basic condition for doing business in the EU.

- Labels can be used to verify compliance with additional environmental requirements in the manner set out above.

- A test report or certificate from a conformity assessment body can be required where appropriate, provided you accept certificates from equivalent conformity assessment bodies. This is one way to establish that a product meets a particular specification or performance level. As with labels, you must consider a technical dossier or other form of proof if a tenderer has no access to a test report or certificate within the relevant time limits for reasons not attributable to the tenderer.[57]

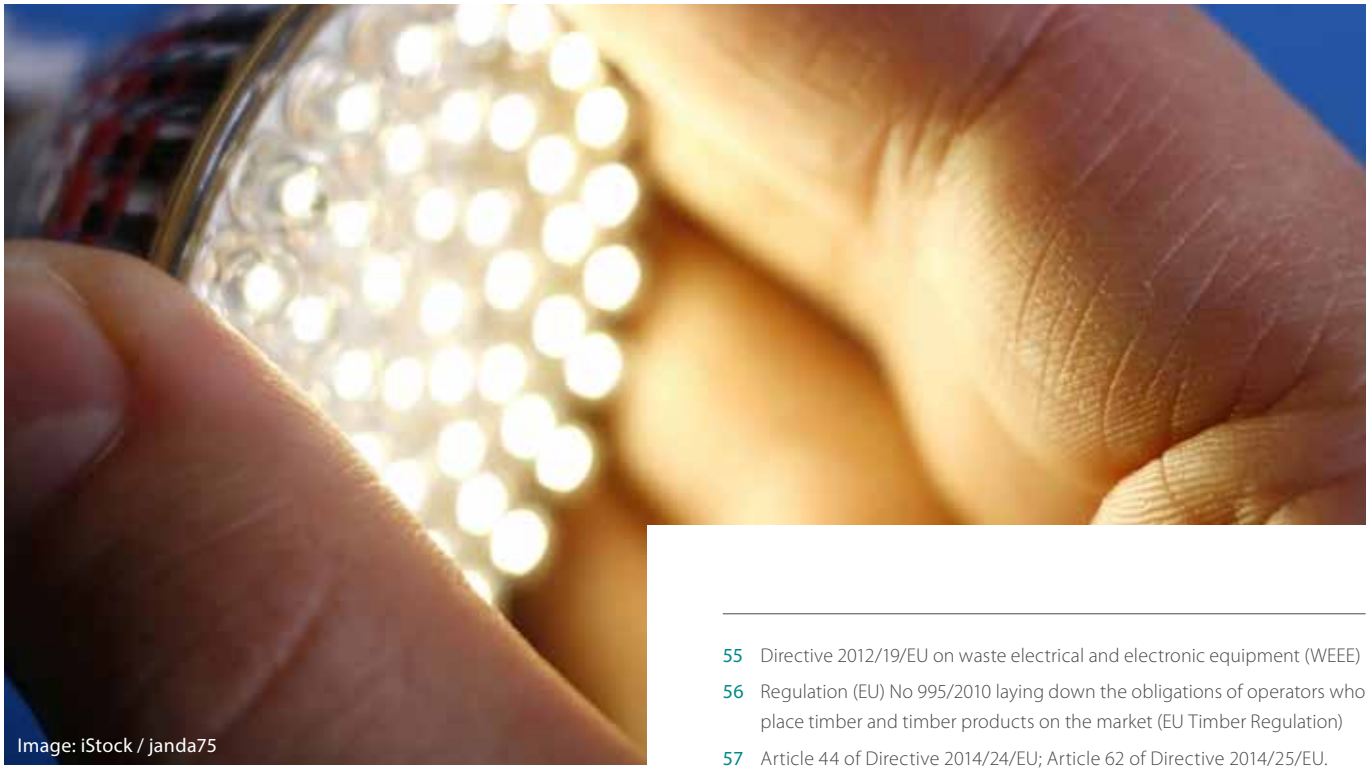

Image: iStock / janda75

55 Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)

56 Regulation (EU) No 995/2010 laying down the obligations of operators who place timber and timber products on the market (EU Timber Regulation)

57 Article 44 of Directive 2014/24/EU; Article 62 of Directive 2014/25/EU.

- In some cases, a self-declaration on the part of tenderers that they comply with environmental requirements may need to be accepted due to the impossibility of proving compliance by objective third-party evidence during a tender procedure.[58] Where this is permitted, you must ensure that you apply the principles of equal treatment, transparency and proportionality, seeking clarification from tenderers where necessary to ensure that you do not unfairly accept or reject a tender.

Further discussion of verification in the context of selection and award criteria, based on relevant case law of the European Court of Justice, can be found in Chapters 4 and 5.

Image: dreamstime / 350jb

58 For example, where a bidder has been unable to attain a label or other evidence within the relevant time limits due to factors not attributable to it.

Chapter 4
Selecting and excluding tenderers

Summary

- *It is possible to exclude companies that have breached environmental law or have other serious defects in their environmental performance, although they must also be given the opportunity to 'self-clean' and cannot be excluded for more than three years on this basis.*
- *The past experience of a company and the professional qualifications of its personnel can be assessed with a view to environmental considerations. The 2014 directives also introduce a new possibility to request evidence of the supply-chain management measures which companies are able to apply, which can be relevant for GPP.*
- *In order to check whether companies can perform the environmental management measures associated with a contract, contracting authorities may ask them to demonstrate their technical capacity to do so. Environmental management systems such as EMAS or ISO 14001 can serve as a (non-exclusive) means of proof for that technical capacity.*

4.1 Introduction

Selection criteria focus on an economic operator's ability to perform the contract they are tendering for. When assessing ability to perform a contract, contracting authorities may take into account specific experience and competence related to environmental aspects which are relevant to the subject matter of the contract. They may ask for evidence of the ability of operators to apply environmental and supply chain management measures when carrying out the contract. They may also exclude operators who are in breach of environmental law.

Image: dreamstime / Taichesco

4.2 Exclusion criteria

Exclusion criteria deal with circumstances in which an operator can find itself, that normally cause contracting authorities not to do any business with it. The cases where a contracting authority may exclude an operator are listed in full in the public procurement directives. In some particularly serious criminal cases, exclusion is mandatory.[59]

From a GPP perspective, the most relevant exclusion criteria are:

- Non-compliance with applicable national, EU or international environmental laws[60]
- Grave professional misconduct which renders integrity questionable[61]
- Significant/persistent deficiencies in performance of substantive requirement under prior contract which led to termination or comparable sanctions[62]
- Misrepresentation of any of the above or inability to submit supporting documents[63]

Exclusion from tenders for breach of environmental law

If an operator has breached applicable environmental laws a contracting authority may seek to exclude it from a tender procedure. For example, a waste disposal company that has dumped waste illegally could be excluded from a tender for rubbish collection services. The contracting authority may demonstrate such breaches by any appropriate means – however the operator must also be given the opportunity to prove that it has met the self-cleaning requirements set out in the directives.

Contracting authorities can exclude an operator where they can demonstrate by any appropriate means that it has violated applicable environmental obligations under EU or national law. The 2014 directives also allow exclusion for violation of a limited list of international environmental conventions, namely:

- Vienna Convention on the ozone layer
- Basel Convention on hazardous waste
- Stockholm Convention on persistent organic pollutants
- PIC Convention (hazardous chemicals/pesticides)[64]

Some Member States may choose to make exclusion for non-compliance with these laws mandatory. Violations of environmental law can also be used as grounds to **refuse to award a contract to an operator**, to **reject an abnormally low tender**, or to **require replacement of a subcontractor** – these possibilities are discussed in Chapters 5 and 6.

The above exclusion criteria are subject to a maximum exclusionary period of three years from the date of the relevant event, unless a shorter period is prescribed in national law or a longer period is prescribed in a judgment against the operator.[65] They are also subject to the ability of operators to 'self-clean' – that is to demonstrate their reliability despite the existence of one of the grounds of exclusion. In order to do this, the operator must show that it has:

- paid or undertaken to pay compensation in respect of any damage caused by the criminal offence or misconduct;

59 For example, if the company or one of its representatives has been convicted of participation in a criminal organisation, corruption, terrorist offences, child labour, people trafficking, fraud or money laundering (Article57(1) of Directive 2014/24/EU)

60 Article 57(4)(a) of Directive 2014/24/EU.

61 Article 57(4)(c) of Directive 2014/24/EU.

62 Article 57(4)(g) of Directive 2014/24/EU.

63 Article 57(4)(h) of Directive 2014/24/EU.

64 Annex X of Directive 2014/24/EU.

65 Article 57(7) of Directive 2014/24/EU.

- clarified the facts and circumstances in a comprehensive manner by actively collaborating with the investigating authorities; and

- taken concrete technical, organisational and personnel measures that are appropriate to prevent further criminal offences or misconduct.[66]

It is up to the contracting authority to assess the measures taken and to determine whether they are sufficient to allow the operator to participate in the procedure, providing reasons to the operator if they are excluded.

4.3 Selection criteria

Selection criteria assess the suitability of an economic operator to carry out a contract. In two-stage procedures, they form part of the initial expression of interest stage, and can also be used to shortlist or reduce the number of candidates invited to tender. In an open procedure they may be assessed on a pass/fail basis, either before or after tenders are evaluated. The procurement directives provide an exhaustive list of the criteria which can be applied to select operators, and the types of evidence which may be requested from them.[67]

The most relevant selection criteria for GPP purposes relate to technical and professional ability:

- Human and technical resources
- Experience and references
- Educational and professional qualifications of staff (if not evaluated as an award criterion)[68]
- Environmental management systems and schemes (e.g. EMAS, ISO 14001)
- Supply chain management/tracking systems
- Samples of products
- Conformity assessment certificates

Each of these may help to establish whether an operator has suitable capacity to carry out the environmental aspects of a contract, as discussed below.

An overriding requirement in relation to all selection criteria is that they must be related and proportionate to the subject-matter of the contract. This means you should tailor your approach to the specific requirements of the contract, including its value and the level of environmental risk involved. For example, the range of environmental selection criteria applied for a works contract will normally be greater than for a simple supply contract, unless the supplies present a particular environmental risk, e.g. chemicals or fuel which must be safely stored.

Green criteria for building maintenance services in Spain

Gipuzkoa Provincial Council awarded a maintenance contract for two buildings, with the contract defined to include the environmental sustainability of the services being provided. The selection criteria included a requirement for bidders to designate an engineer or technical-grade architect responsible for coordinating the maintenance services. This person has the appropriate training, knowledge and experience in environmental matters associated with the maintenance, including energy efficiency and waste management.

66 Article 57(6) of Directive 2014/24/EU).

67 Article 58(1) and 60(1) of Directive 2014/24/EU. Under Articles 78 and 80 of Directive 2014/25/EU, contracting entities may apply the same exclusion and selection criteria or other objective and rules and criteria which have been made available to interested economic operators.

68 Annex XII, Part II (f) of Directive 2014/24/EU specifies that evidence of educational and professional qualifications can only be evaluated at selection stage if they are not evaluated as award criteria.

4.3.1 Environmental technical capacity

Delivering GPP requirements can be complex – whether they relate to the design and construction of energy-efficient buildings or the provision of a printing service which minimises waste. In order to confirm that operators have the ability to deliver such requirements, it makes sense to ask questions about their previous experience and human and technical resources.

Environmental technical capacity can include technical competence in minimising waste creation, avoiding spillage/leakage of pollutants, reducing fuel consumption or minimising disruption of natural habitats. In practical terms, it typically concerns questions such as those listed below.

- Does the company have previous experience with executing contracts sustainably?
- Does the company employ or have access to personnel with the required educational and professional qualifications and experience to deal with the environmental elements of the contract?
- Does the company own or have access to the necessary technical equipment or facilities for environmental protection?
- Does the company have the means to ensure the quality of the environmental aspects of the contract (e.g. access to relevant technical bodies and measures)?

A useful instrument for integration of environmental criteria is the records of contracts carried out. You can use this criterion to ask for past experience of companies in carrying out contracts with similar environmental requirements, and (for works contracts only) certificates of satisfactory execution and outcome. In doing so you should ensure you set out clearly what type of information is considered relevant and how it will be evaluated. The directives set a

Image: dreamstime / Aleksandar Kosev

Ensuring the professional competence of asbestos removers

Asbestos insulation can still be found in many buildings across Europe. When maintenance work is carried out on these buildings, it is important that qualified contractors remove the asbestos safely. In order to provide proof of competence, some Member States maintain licensing schemes for contractors that specialise in such work. Requiring in the selection criteria that contractors have the skills for such work as evidenced by the licence issued by the appropriate authority or an equivalent form of proof is important to minimise the health, safety and environmental risks associated with such work.

maximum 'look-back' period of five years for works contracts and three for supplies or services, unless a longer period is needed to ensure adequate levels of competition.[69]

Educational and professional qualifications of staff and their experience may also be relevant to GPP. For example, if you are buying road transport services you may wish to check that drivers have been trained in eco-driving to reduce fuel consumption and emissions. Staff working on a catering contract will need to have qualifications relating to correct food handling, both to ensure safety and limit food waste. Keep in mind however that it may make more sense to assess some environmental aspects as part of your award criteria, in which case they should not form part of the selection criteria.[70] At award stage, you have greater flexibility regarding how you define criteria and the types of evidence you request (see Chapter 5).

4.3.2 Environmental management systems

Any organisation (public or private) wishing to improve its overall environmental performance can decide to run an environmental management system. Environmental management systems are organisation-related tools, aimed at improving overall environmental performance of the committing organisation. They allow organisations to have a clear picture of their environmental impacts, help them to target those that are significant and manage them well, in the sense of continuously improving their environmental performance. Relevant areas for improvement may be the use of natural resources, such as water and energy; training of employees; the use of environmentally-friendly production methods and purchasing greener office materials.

An organisation running an environmental management system may request certification under one of the two main environmental management systems in use in the EU: the 'Eco-management and audit scheme' (EMAS),[71] or the European/international standard on environmental

Image: sxc.hu

management systems (EN/ ISO 14001).[72] The EMAS scheme is primarily used by organisations with a site in the EU or in the European Economic Area, although it can also be used by organisations and sites located elsewhere (but is always verified under the control of a European Accreditation Body). The ISO scheme is open to organisations across the globe.

Worldwide, there are around 250,000 ISO 14001-certified organisations and over 4,000 organisations and 7,500 sites registered under EMAS. EMAS certification incorporates the requirements of EN/ ISO 14001, and includes additional elements such as verified compliance with environmental legislation, commitment to continual improvement of environmental performance, employee involvement, and mandatory public communication of annual performance (environmental statement) validated by an verification body. This last element strongly differentiates EMAS from other systems since it provides a public and transparent view of the registered organisation's environmental performance.

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69 Annex XII, Part II(a) of Directive 2014/24/EU.

70 Annex XII, Part II(f) of Directive 2014/24/EU.

71 Regulation (EC) No 1221/2009 ***on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)***.

72 ISO 14001:2004(en) ***Environmental management systems – requirements with guidance for use***. This standard is under revision with a new version expected to be adopted by the end of 2015

Under the 2014 directives contracting authorities may require evidence of the environmental management system which an operator has in place for any contract, provided this is proportionate and related to the subject-matter.[73] Equivalent certificates must be accepted, and as with labels and test reports other forms of evidence (such as an in-house system) must be considered where an operator has no access to third-party certification or no possibility to obtain it within the relevant time limits for reasons which are not attributable to it (see section 3.5.1).

The use of an environmental management system (EMS) is not limited to providing proof of technical capacity to perform environmental management measures. If a contracting authority sets other environmental selection criteria as mentioned in Section 4.3.1 (for example requirements regarding technical equipment or training) an EMS could, if it contains relevant information on the particular requirements, serve as a means of proof of capacity.

Again, it is important to look at the actual elements of technical capacity covered by an EMS which are relevant to the subject matter of the contract, and not just the presence of third-party certification.[74] The principle of proportionality should be kept in mind when setting requirements for the environmental management measures to be applied – a low-value, low-impact contract may not be an appropriate case for such requirements.

4.3.3 Supply chain management measures

Many environmental impacts arise not in the delivery of a final product or service but further back along the supply chain. For example, IT equipment typically has components sourced from many parts of the world, including metals and other substances which pose a high risk of environmental damage in their extraction and processing. A construction contractor may work with many smaller companies each of whom will need to implement sustainable practices on a works project.

Image: sxc.hu

Lithuanian Roads Authority (LRA) looks for environmental capacity

When tendering contracts for the construction of roads and highways, the LRA asks for evidence of ability to apply environmental management measures. This is assessed as part of the technical capacity criteria, and EMAS, ISO 14001 or other equivalent certification or evidence is accepted.

73 Article 62(2) of Directive 2014/24/EU; Article 81(2) of Directive 2014/25/EU.

74 In Case T-331/06 ***Evropaïki Dynamiki*** v European Environment Agency, (para 76) the Court found that the presence of third party verification may be the basis for awarding more marks when assessing the quality of a company's EMS. Further discussion of this case is found in Chapter 5.

For these type of contracts, it makes sense for contracting authorities to look beyond the primary or first-tier contractor, to ensure that environmental requirements will be met. One way to do this is by including specific contract clauses relating to subcontractors. This approach is discussed in Chapter 6.

At the selection stage, contracting authorities may request the following information:

- an indication of the proportion of the contract which the economic operator intends possibly to subcontract; and
- an indication of the supply chain management and tracking systems that the economic operator will be able to apply when performing the contract.[75]

Both of these may help to establish how environmental impacts will be managed in the context of a particular contract, and to select operators with strong systems in place.

4.3.4 Product samples, checks and conformity assessment

If a contract includes the supply of products or materials, a sample (or description or photograph) may be requested at selection stage. Certificates of conformity or quality may also be requested.[76] These can be useful in verifying that products meet any specific environmental requirements for the procurement, for example in terms of durability or energy consumption.

A further option available to contracting authorities is to carry out a check on suppliers' production capacities or service providers' technical capacity, as well as their research facilities and quality control measures.[77] This can be done if the products or services to be supplied are complex or, exceptionally, are required for a special purpose. The checks may either be carried out by the contracting authority itself or by a competent body in the country where the operator is established.

Image: dreamstime / Elnur

Engaging suppliers for effective GPP in Italy

In 2013 the City of Turin introduced measures and criteria into its school catering contract aimed at reducing the associated carbon footprint. Suppliers were asked to provide data identifying the parts of the supply chain with the most CO_2e saving potential. For example, urban transportation accounted for just 1% of the total carbon footprint for five of the most commonly consumed food products. Production processes accounted for between 75% and 95% of the total carbon footprint, revealing the significance of agricultural practices when implementing effective GPP measures for the supply of food and catering services.

"*We were surprised by the results of the monitoring, so it shows the value of engaging with the supply chain*".
Elena Deambrogio, Policy Officer, City of Torino

75 Annex XII, Part II (d) and (j).
76 Annex XII, Part II (k).
77 Annex XII, Part II (e).

4.4 Means of proof

While the 2014 directives provide an expanded list of matters which may be examined at selection stage, they also place some limits on the type of evidence which can be requested at the preliminary stages of a procedure. Most notably, contracting authorities are required to accept the European Single Procurement Document (ESPD) as preliminary evidence of compliance with exclusion and selection criteria.[78] This is a form of updated self-declaration which exists in a standard electronic format, and allows operators to confirm their compliance with the grounds of exclusion and selection. It also either contains a link to the database(s) where supporting documents can be obtained, or confirms that the operator will be able to provide these documents upon request and without delay.

The idea of the ESPD as a self-declaration of eligibility is that it reduces the burden of submitting and checking evidences for every procedure. Contracting authorities can still request original documents whenever necessary to ensure proper conduct of a procedure, provided that they do not already possess those documents.[79] E-Certis (***http://ec.europa.eu/markt/ecertis***) is an online service, which helps contracting authorities and operators identify different certificates frequently requested as evidence of eligibility in procurement procedures across the EU, Turkey, Iceland, Liechtenstein and Norway.

4.5 Evaluating groupings

A further consideration when evaluating the technical capacity of operators is that they must be allowed to rely upon the capacity of other entities. This means for example that if two or more companies wish to apply jointly for a contract – regardless of whether they have formed a formal consortium or have any legal links – you must take into account their combined capacity. This is subject to the ability of the operator to demonstrate that it will have at its disposal the resources of the other entity for the performance of the contract, for example by producing a signed commitment to this effect. Where reliance is placed on the capacity of another entity (including a parent or subsidiary), it must also demonstrate compliance with the exclusion criteria and any relevant selection criteria applied for the contract.[80]

Groupings and green contracts

Companies bidding for public contracts may decide to bring in specialist expertise to address green requirements. For example, a facilities management company may work with an environmental advisor to manage buildings in a more sustainable manner. In this case the technical capacity and experience of both companies should be evaluated at selection stage.

78 Article 59 of Directive 2014/24/EU).

79 Article 59(4) and (5) of Directive 2014/24/EU.

80 Article 63(1) of Directive 2014/24/EU; Article 79 of Directive 2014/25/EU).

Chapter 5
Awarding a contract

Summary

- *It is possible to apply environmental award criteria, provided those criteria:*
  - *are linked to the subject-matter of the contract;*
  - *do not confer an unrestricted freedom of choice on the contracting authority;*
  - *ensure the possibility of effective competition;*
  - *are expressly mentioned in the contract notice and tender documents, together with their weightings and any applicable sub-criteria; and*
  - *comply with the Treaty principles.*
- *You may allocate points during the award stage to recognise environmental performance beyond the minimum requirements set in the specifications. There is no set maximum on the weighting you can give to environmental criteria.*
- *Adopting a life-cycle costing approach reveals the true costs of a contract. Considering energy and water consumption, maintenance and disposal costs in your evaluation may indicate that the greener option is also the cheaper option over the full life-cycle.*
- *Labels and other forms of third-party evidence can help you to assess how well a tender performs against your chosen award criteria, and to verify tenderers' claims.*

5.1 General rules for awarding a contract

5.1.1 Award criteria

At the award stage, the contracting authority evaluates the quality of the tenders and compares costs. When you evaluate the quality of tenders, you use predetermined award criteria, published in advance, to decide which tender is the best. Under the 2014 procurement directives, all contracts must be awarded on the basis of most economically advantageous tender (MEAT). A number of different approaches are possible under this general heading, some of which may be considered particularly appropriate for GPP.

Image: iStock / AVTG

Cost or price will form part of the assessment in any procedure,[81] and may be calculated on the basis of life-cycle costs as discussed below. Beyond costs, a wide range of factors may influence the value of a tender from the point of view of the contracting authority, and this includes environmental aspects.

It is not necessary for each individual award criterion to give an economic advantage to the contracting authority.[82] However it is necessary for award criteria (as well as selection criteria, technical specifications and contract performance clauses) to be linked to the subject-matter of the contract. The 2014 directives provide that award criteria shall be considered to be linked to the subject-matter of a contract where they relate to the works, supplies or services to be provided under that contract in any respect and at any stage of their life cycle, including factors involved in:

(a) the specific process of production, provision or trading of those works, supplies or services; or

(b) a specific process for another stage of their life cycle.[83]

These factors do not need to form part of the 'material substance' of what is being purchased, i.e. they do not need to be visible or discernible in the final product or service. What this means is that, as with technical specifications, award criteria may relate to sustainability considerations such as renewable or organic production, or to the greenhouse gas emissions associated with a particular product or service.

The main difference between technical specifications and award criteria is that whereas the former are assessed on a pass/fail basis, award criteria are weighted and scored so that tenders offering better environmental performance can be given more marks.

81 Article 67(2) of Directive 2014/24/EU; Article 82(2) of Directive 2014/25/EU).

82 See Case C-513/99 ***Concordia Bus Finland Oy Ab v Helsingin kaupunki***, at para 55 (the Concordia Bus case).

83 Article 67(3) of Directive 2014/24/EU; Article 82(3) of Directive 2014/25/EU.

It is up to each contracting authority to determine what award criteria to apply, and the weighting to assign to each of them. Some key considerations about what kind of environmental award criteria to apply, and how to determine appropriate weightings, are highlighted in this chapter.

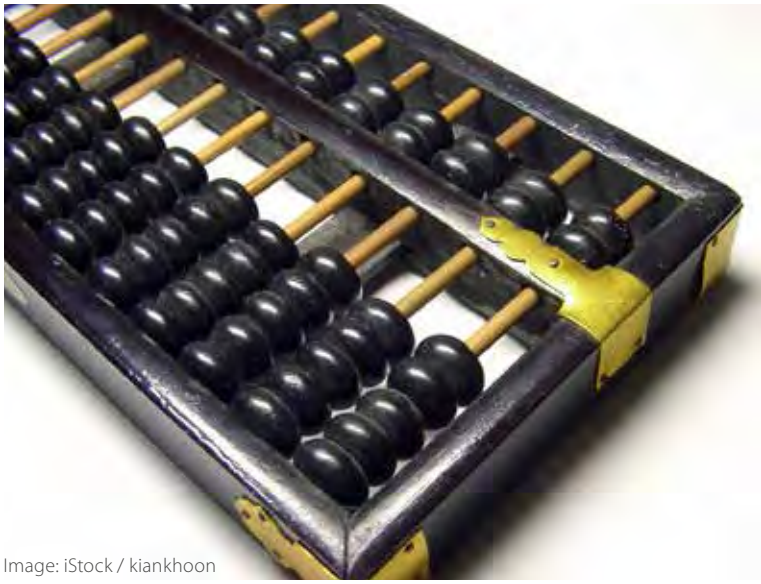

Image: iStock / kiankhoon

The presence or absence of a link

In a case concerning the purchase of bus transport services (the ***Concordia Bus*** case), the European Court of Justice ruled that award criteria relating to the level of nitrogen oxide emissions and the noise level of buses to be used for municipal transport met the requirement of being linked to the subject matter of the contract.

In the ***EVN Wienstrom*** case, an award criterion relating to the amount of electricity produced from renewable sources **in excess** of the expected consumption of the contracting authority was ruled inadmissible, as it was not linked to the subject matter of the contract. In that case, the contracting authority was also not able to verify the criterion effectively.

5.1.2 Formulating and advertising award criteria

The procurement directives set out some basic rules regarding transparency in award criteria. These reflect the case law of the Court of Justice, including the cases highlighted below which concerned environmental award criteria.

1. Award criteria must not confer an unrestricted freedom of choice

Award criteria must never confer an unrestricted freedom of choice on contracting authorities.[84] This means they must provide an objective basis for distinguishing between tenders, and be adequately specific. In the words of the Court, award criteria must be formulated in such a way that allows all "reasonably well-informed and normally diligent tenderers" to interpret them in the same way.[85]

A further element of the objectivity requirement for award criteria concerns **verifiability**. If award criteria relate to factors which cannot be verified by the contracting authority, it will be difficult to demonstrate that they have been applied objectively. This means you should consider in advance what means of proof tenderers can offer under each award criterion and how you will evaluate this.[86]

In the Concordia Bus case, before evaluation of the tenders, the Community of Helsinki had specified and published a system for awarding extra points for lower levels of noise and nitrogen oxide emissions.[87] This system was considered by the Court of Justice to be adequately specific and objective.

2. Award criteria should ensure the possibility of effective competition

Environmental award criteria should not be formulated in a way which artificially forecloses the market. As one of the objectives of award criteria is to encourage the market to develop and deliver environmentally preferable solutions, it should always be possible for different operators to obtain marks under such criteria. One good way to ensure this is the case is to discuss environmental award criteria with potential bidders in the context of a pre-procurement market consultation, as outlined in Chapter 2.

The distinction between specificity and discrimination in the Concordia Bus case

The issue of discrimination was expressly raised in the Concordia Bus case. One of the objections of Concordia Bus was that the criteria set by the City of Helsinki were discriminatory because the Community's own bus company HKL was the only company with natural gas-powered vehicles that could gain full marks under this criterion. The Court of Justice ruled that the fact that full marks under one of the award criteria set by the contracting authority were only attained by one company did not in itself make this discriminatory. When determining whether an award criterion is discriminatory, all the facts of the case must be taken into account.[88]

84 See Case 31/87 ***Gebroeders Beentjes BV v State of the Netherlands*** at para 26; Case C-513/99 ***Concordia Bus***, at para 69

85 Case C-19/2000 ***SIAC Construction Ltd v County Council of the County of Mayo***, at para 42

86 The 2014 directives state that 'In case of doubt, contracting authorities shall verify effectively the accuracy of the information and proof provided by the tenderers.' (Article 67(4) of Directive 2014/24/EU; Article 82(4) of Directive 2014/25/EU) This suggests that it is not necessary to always verify tenderers' claims, although for GPP this may be considered to be particularly important to avoid 'greenwash' and ensure the promised levels of environmental performance will really be provided.

87 In this case, extra points were awarded (amongst other factors), for the use of buses with nitrogen oxide emissions below 4 g/kWh (+ 2.5 points/bus) or below 2 g/kWh (+ 3.5 points/bus) and with external noise levels below 77 dB (+1 point/bus).

88 One of the facts in this case was that the complainant was awarded a different lot in which the same requirement of natural gas-powered vehicles was applied.

Image: sxc.hu

3. Award criteria must be advertised in advance

The procurement directives require that award criteria and their weightings be set out either in the contract notice or in the procurement documents.[89] Case law has helped to establish the level of detail required for the advertisement of award criteria. You must indicate in the notice or documents:

- the criteria you will apply to identify the most economically advantageous tender;
- the relative weightings you will apply to the criteria, either as precise numbers or a range with an appropriate maximum spread;[90] and
- any sub-criteria you will apply and, in most cases, their weightings.[91]

89 Annex 5, Part C (18) of Directive 2014/24/EU.

90 Article 67(5) of Directive 2014/24/EU; Article 82(5) of Directive 2014/25/EU. There are two exceptions to this requirement: i) where the contract is awarded on the basis of price alone or ii) where weighting is not possible for objective reasons, in which case the criteria must be listed in decreasing order of importance.

91 The Court has considered the level of disclosure required regarding sub-criteria in a number of cases including Case C-532/06 ***Lianakis and Others***, Case C-331/04 ***ATI EAC and Viaggi di Maio v ACTV Venezia SpA***, and Case T-70/05 ***Evropaiki Dynamiki v EMSA***. It is permissible to withhold the weightings of sub-criteria only where these i) do not alter the main criteria, ii) do not contain elements which could have affected the preparation of bids and iii) do not give rise to discrimination against any tenderer (Case C-331/04 ***ATI EAC***)

5.2 Applying environmental award criteria

The legal framework allows considerable scope for the use of environmental award criteria and a variety of different methods and approaches may be used:

5.2.1 Specifications or award criteria?

A number of considerations should be taken into account when assessing whether an environmental characteristic should be a minimum requirement (specification) or a preference (award criterion). Applying environmental award criteria may make sense, for example, if you are not sure of the cost and/or market availability of products, works or services which meet certain environmental objectives. By including these factors in your award criteria, you are able to weigh them against other factors including cost.

You may also wish to set a **minimum level of performance** in the technical specifications, and then **allocate extra points** for even better performance at the award stage. This approach is used successfully by a number of contracting authorities to retain flexibility while implementing GPP.

5.2.2 Weighting approaches

The weight given to each award criterion determines the influence it has in the final evaluation. The weighting of environmental award criteria may reflect the extent to which environmental aspects are already addressed in the specifications. If there are strong environmental requirements in the specifications, they may be given a lower weight in award criteria, and vice versa.

There is no set maximum for the weight to be assigned to environmental criteria. To determine an appropriate weighting, you should consider:

- how important environmental objectives are for the contract, relative to other considerations such as cost and general quality;
- to what extent these considerations are best addressed in award criteria, either in addition to or instead of in specifications, selection criteria and contract performance clauses;
- how many of your award-stage marks you can "afford" to allocate – this will vary depending on the product/service and the market conditions. For example, if there is a low degree of price variation for a product, but environmental performance varies greatly, it makes sense to allocate more marks to assess environmental characteristics.

Image: dreamstime / Mike K.

GPP award criteria in the Netherlands

The Rijkswaterstaat tendered for the reconstruction and maintenance of a section of motorway in the Netherlands. The winning tender was selected based on bidding price and quality. One of the MEAT quality criteria was sustainability, including a CO_2 'performance ladder' of working processes and life cycle assessment of products used. These savings were monetised and deducted from the bidding prices. The winning bidder provided an overall design optimisation that will save 8,944 t CO_2e over 50 years.

"***Bidders appreciate the freedom to make their own choices for sustainable design within a technical framework***" Cuno van Geet, Senior Advisor Resource Efficiency, Rijkswaterstaat

Green and healthy cleaning services, Tuscany

In a tender for cleaning services, the Environmental Protection Agency of Tuscany (ARPAT) assessed the tenders according to the most economically and environmentally advantageous offer. 40 points were allocated to price and 60 points for quality. Quality criteria included employing green cleaning techniques, reduced packaging, environmental product performance (share of products complying with ISO Type I labels or equivalent) and the quality of environmental training programmes.

5.2.3 Using labels

Labels which refer to the environmental characteristics of the product, work or service you are purchasing may also be used to help draft and assess award criteria. The same rules apply to use of labels in award criteria as for other stages of the procurement process, i.e.:

- you can only require a label if all of its requirements are linked to the subject-matter of the contract and the label meets certain standards of objectivity, transparency and availability to the market (see section 3.5.1);
- even where such a label is required, you must still accept labels meeting equivalent criteria and, in cases where bidders cannot obtain a label within the relevant time limits for reasons not attributable to them, other appropriate forms of evidence;
- for other types of label, you can refer to individual criteria which are linked to the subject-matter of the contract, but not require the label as such.

Environmental labels can be useful to distinguish products and services which will save energy and water or which are produced in a more sustainable way. By including some or all of their requirements in your award criteria you can weigh these considerations against cost and other factors such as product availability or delivery time.

Using labels: the *Dutch Coffee* case

In case C-368/10 a Dutch contracting authority made reference to certain social and environmental labels in its tender documents for the supply of tea and coffee vending machines. The Court held that the manner in which it referred to these labels did not meet the requirements under the 2004 directives.

However the Court also upheld the principle that labels may be used to define award criteria and to help assess performance. Under the 2014 directives, the rules regarding labels have been refined so that it is possible to ask for specific labels where these meet certain standards of transparency and objectivity and all criteria are linked to the subject-matter of the contract.

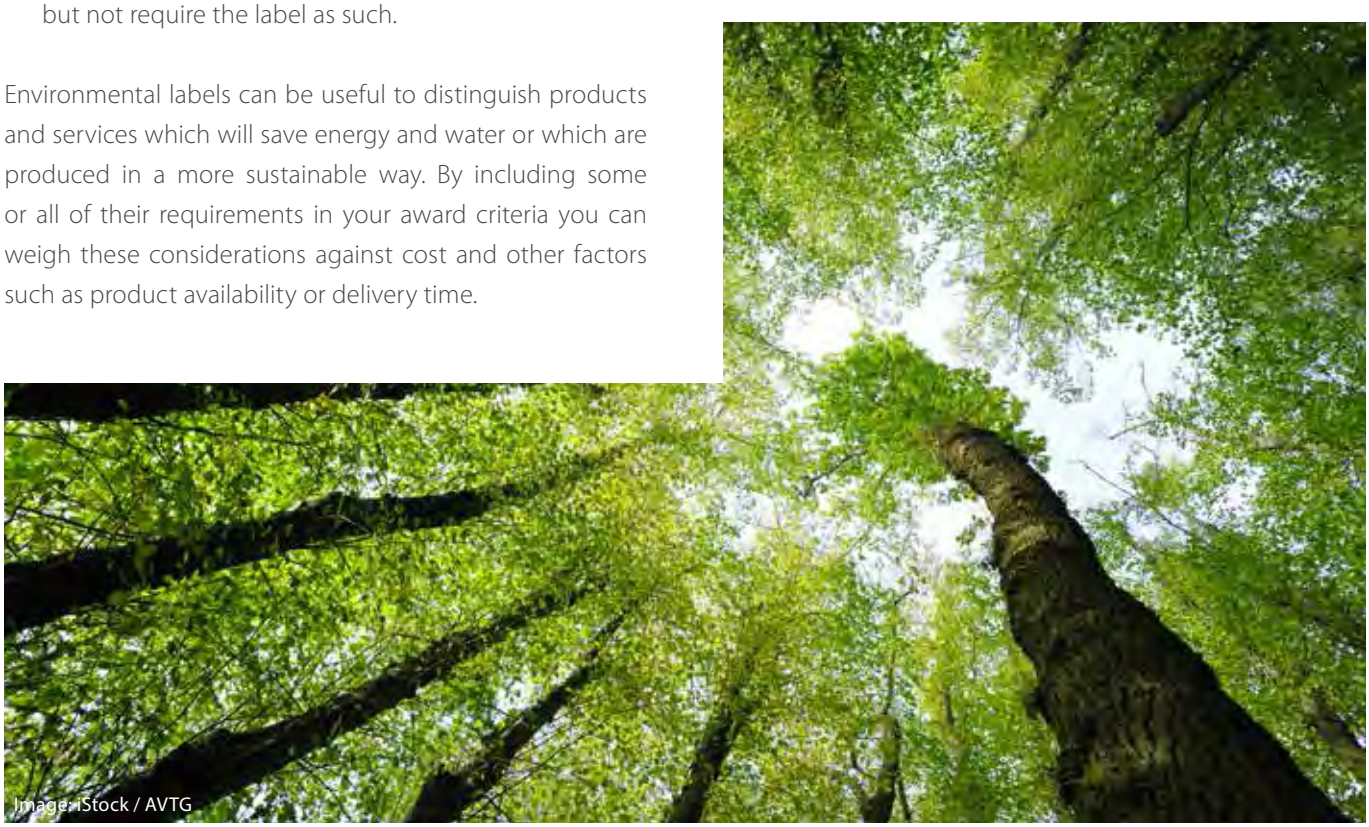

Image: iStock / AVTG

5.2.4 Using environmental management systems

An environmental management system may also serve as evidence when assessing award criteria. At award stage, you are looking at how a contract will be performed, so an offer to carry out certain measures in accordance with an EMS may be relevant. It is important to ensure however that you do not duplicate any assessment which has taken place at selection stage. See section 4.3.2 for more information on environmental management systems such as EMAS and EN/ISO 14001.

Evaluating environmental commitments

In a tender for IT consultancy services, the European Environment Agency (EEA) provided 10% of marks at award stage to assess the environmental policies which the tenderers would apply in carrying out the contract. It awarded higher marks under this criterion to a company with a third-party certified environmental management scheme than to those without. Following a challenge, the General Court ruled that the EEA was entitled to apply its discretion in this way, as it had assessed each offer on its merits.[92] While the EEA is not covered by the procurement directives, this endorsement by the Court of a qualitative approach to assessing environmental award criteria is worth noting.

Greener buses in Romania: an LCC approach

In 2012, the City Council of Baia Mare tendered for the leasing of 30 new EEV (enhanced environmentally friendly) standard buses and 8 trolleybuses. A life cycle costing model was used, which accounted for acquisition price, fuel consumption, maintenance and operational costs. The total cost of procurement is higher than previous purchases but this is partly compensated by lower lifetime costs of the new vehicles. The buses are the first EEV buses ordered in Romania, with greenhouse gas emissions considerably lower than previous diesel buses.

Image: iStock / Peter Booth

92 The Court stated that the EEA had made a "...comparative assessment of the tenders, evaluating whether the environmental policies submitted by the tenderers were genuine, and that it found that only one of them had already put such a policy in place, whilst the others merely indicated good intentions in that respect." (Case T-331/06 ***Evropaïki Dynamiki v European Environment Agency***, at para 76)

5.2.5 Using test reports and certificates

In some cases you may wish to ask for a test report or certificate from a conformity assessment body to demonstrate the levels of environmental performance offered by products. For example, in a contract for lighting you may wish to award more marks to lighting solutions which have a longer time-to-replacement (either a standalone criterion or as part of life-cycle costing). In this case you could ask tenderers to provide a test report or certificate demonstrating this. If bidders have no access to such reports or certificates for reasons which are not attributable to them, then you must also consider other evidence such as a technical dossier and decide if this offers adequate proof.[93]

Image: dreamstime / Alexander Raths

5.3 Life-cycle costing (LCC)

At the award stage of a procurement procedure, the cost of a tender is usually one of the most influential factors. But how do you define the cost?

When you buy a product, service or work, you always pay a price. Purchase price, however, is just one of the cost elements in the whole process of procuring, owning and disposing. Life-cycle costing (LCC) means considering all the costs that will be incurred during the lifetime of the product, work or service:

- Purchase price and all associated costs (delivery, installation, insurance, etc.)
- Operating costs, including energy, fuel and water use, spares, and maintenance
- End-of-life costs, such as decommissioning or disposal

LCC may also include the cost of externalities (such as greenhouse gas emissions) under the specific conditions outlined in section 5.3.2. The 2014 directives require that where LCC is used, the calculation method and the data to be provided by tenderers are set out in the procurement documents. Specific rules also apply regarding methods for assigning costs to environmental externalities, which aim to ensure that these methods are fair and transparent.

93 Article 44 of Directive 2014/24/EU; Article 62(2) of Directive 2014/24/EU.

Chapter 5
Awarding a contract

5.3.1 LCC and environmental considerations

LCC makes good sense regardless of a public authority's environmental objectives. By applying LCC you will take into account the costs of resource use, maintenance and disposal which are not reflected in the purchase price. Often this will lead to 'win-win' situations whereby a greener product, work or service is also cheaper overall. The main potential for savings over the life-cycle of a good, work or service are outlined below.

Savings on use of energy, water and fuel

The costs of energy, water and fuel consumption during use often make up a significant proportion of the total cost of owning a product, work or service, and of its life-cycle environmental impact. Reducing this consumption makes clear sense both financially and environmentally.

Savings on maintenance and replacement

In some cases the greenest alternative will be one which is designed to maximise the period until replacement and/or minimise the amount of maintenance work which needs to be done. For example, the choice of materials on the exterior of a building or bridge can have a large effect on the frequency of maintenance and cleaning activities. The most sustainable option may be one which helps to avoid such costs, and this can be assessed as part of LCC.

Savings on disposal costs

Disposal costs are easily forgotten when procuring a product or tendering for a construction project. Costs of disposal will eventually have to be paid, although sometimes with a longer delay. Not taking these costs into account when you buy can turn a bargain into an expensive purchase. Disposal costs range from the cost of physical removal to paying for secure disposal. Frequently, disposal is governed by strict regulations, such as those in place under the WEEE Directive.[94] In certain cases, there may be a positive return to the owner at the end of life, for example where vehicles or equipment can be sold on or recycled profitably.

Saving on lifetime maintenance costs in Germany

The City of Detmold launched the procurement of a new bus station in 2012. As part of its initial research and market consultation, a sustainability analysis was carried out based on the expected lifetime of the development of at least fifty years. This determined which techniques were most suitable for the project. The open tender then resulted in the use of photocatalytic concrete, which converts air and surface run-off pollutants into harmless salts. This decreases the need for maintenance and reduces costs and environmental effects of cleaning.

Image: iStock / hrstklnkr

94 Directive 2012/19/EU on waste electrical and electronic equipment (WEEE Directive)

5.3.2 Assessing external environmental costs

As well as financial costs directly borne by the contracting authority, you may also take into account environmental externalities – the costs for society of specific environmental impacts, such as those linked to climate change or acidification of soil or water. If you wish to assign a cost to environmental externalities as part of your award criteria, the 2014 directives require that the method you use:

- is based on objectively verifiable and non-discriminatory criteria;
- is accessible to all interested parties; and
- the data required can be provided with reasonable effort by normally diligent economic operators.[95]

While it is possible to develop a bespoke method for calculating LCC which is suitable for a particular contract, this must not unduly favour or disadvantage any operator. Where a common method for calculating LCC has been made mandatory under EU law, you must apply that method.[96] Currently this only applies in relation to road transport vehicles under the Clean Vehicles Directive, which provides both a common methodology and minimum costs to be assigned to certain environmental externalities if these are monetised (see box).

95 Article 68(2) of Directive 2014/24/EU; Article 83(2) of Directive 2014/25/EU. The concept of a 'normally diligent economic operator' here includes those from third countries which are party to the Government Procurement Agreement of the WTO or other international agreements by which the EU is bound.

96 Article 68(3) of Directive 2014/24/EU and Article 83(3) of Directive 2014/25/EU. Annexes to the directives list relevant legislation regarding LCC methods, and may be updated from time to time. by which the EU is bound.

97 Contracting authorities may also choose to assign higher costs to each of the pollutant emissions, provided these do not exceed the costs indicated in the Directive by more than a factor of 2 (Article 6 of Directive 2009/33/EC).

Planning the disposal phase intelligently in the building sector

The building sector produces a high volume of waste. The demolition of old buildings means not only removing a large quantity of debris, but also managing hazardous materials, like asbestos. So in your call for tenders you could ask builders how much hazardous waste they expect to produce during demolition and the cost of removing it. In some cases, e.g. road building, it should also be possible to calculate the savings from using recycled waste materials, such as used asphalt or demolished building materials.

Externalities in LCC: The Clean Vehicles Directive

The Clean Vehicles Directive makes it mandatory for contracting authorities to take energy and environmental impacts into account when purchasing road transport vehicles – either in the specifications or the award criteria. The Directive provides a methodology for the monetisation of these impacts, for the purpose of assessing operational lifetime cost. This model allocates a monetary value to several types of emission – carbon dioxide (CO_2), nitrous oxide (NO_x), non-methane hydrocarbons (NMHC) and particulate matter.[97] The lifetime emissions of each vehicle tendered may then be given a cost, which should be added to other direct costs such as purchase price, fuel costs and maintenance.

5.3.3 Applying LCC

An increasing number of public authorities in Europe are using LCC to evaluate tenders, and a variety of tools of different complexity and scope have been developed. An overview and links to some relevant LCC tools can be found at: *http://ec.europa.eu/environment/gpp/lcc.htm*

In properly assessing LCC, certain issues must be considered:

Lifespan – The frequency with which a product needs to be replaced will have a major impact on its cost, especially over a longer period. A cheap product which needs to be replaced frequently may well cost more over the long term than a higher-priced product which lasts for many years. This should be taken into account when determining over how many years you wish to make a life-cycle cost comparison.

Discount rate – Costs in the future are not 'worth' as much as those incurred today, as society places more weight on positive and negative impacts today than in the future. EUR 100 invested today at 5% interest would be worth EUR 105 in one year's time. Therefore EUR 105 spent in one year's time is only "worth" EUR 100 at the present time – its net present value (NPV). NPV can be taken into account when comparing life-cycle costs by applying a social discount rate to future costs. The rate differs between countries but is usually between 3% and 8% (adjusted to eliminate the effects of inflation).[98]

Data availability and reliability – Assessing life-cycle costs inevitably includes an element of unpredictability regarding costs to be incurred in the future (for example, maintenance costs, energy consumption, as well as the product's actual lifespan). Requesting detailed supporting information for cost estimates provided by tenderers is therefore important. In some cases, where future costs are within the control of the contractor (e.g. they are responsible for maintenance or disposal), you can build maximum future prices into your contract terms, giving greater certainty to your LCC calculations.

LCC tools

This is a non-exhaustive list of tools available for calculating LCC:

- The European Commission's calculator for LCC for vehicle procurement: ***http://ec.europa.eu/transport/themes/urban/vehicles/directive/***
- The European Commission's common method for LCC in construction: ***http://ec.europa.eu/growth/sectors/construction/support-tools-studies/index_en.htm***
- A tool for assessing both LCC and CO_2 emissions in procurement, developed within the SMART-SPP project: ***www.smart-spp.eu***
- An LCC tool produced by the Swedish Environmental Management Council (SEMCo): ***www.upphandlingsmyndigheten.se/omraden/lcc/lcc-kalkyler/***
- An LCC tool developed within the BUY SMART project: ***www.buy-smart.info***

Image: iStock / Adamo Di Loreto

98 The Directorate-General for ***Regional and Urban Policy*** of the European Commission recommends using, as a general rule, a social discount rate of 5% as a benchmark in Cohesion Member States (Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia) and 3% in other Member States (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Spain, Sweden, United Kingdom).

5.4 Abnormally low tenders

Once you have assessed costs for each valid tender these will be compared to assign marks. In certain cases, you may receive a bid which seems unusually low in relation to others or to the expected cost of the supply, service or work. From a GPP perspective, the low costs of a bid may raise doubts about compliance with environmental law and/or the viability of the tender in relation to environmental requirements.

In this situation contracting authorities must seek an explanation from the tenderer(s) in question as to the reason for their abnormally low price or cost. Legitimate factors such as the particular production method or technical solutions applied by the tenderer, or unusually favourable conditions available to it, may explain the cost. However in other cases it may become clear in the course of enquiries that the abnormally low cost is due to the tender not complying with applicable national, EU or international environmental law – for example because certain components or materials have been sourced illegally.

In such cases contracting authorities are **obliged** to reject an abnormally low tender.[99]

Image: iStock / doram

99 Article 69(3) of Directive 2014/24/EU; Article 84(3) of Directive 2014/25/EU.

Chapter 6
Contract performance clauses

Summary

- *Contract clauses can address environmental considerations at the performance stage. These must be linked to the subject-matter of the contract and advertised in advance.*
- *You can specify that goods are to be supplied or services/works performed in a way that minimises environmental impact, and environmental performance may be linked to penalties or incentives under the contract.*
- *Compliance with contract clauses should be carefully monitored during the execution phase, with responsibility for compliance and reporting clearly indicated in the contract. In order to discourage breaches of environmental commitments, adequate sanctions should be provided under the contract.*
- *Subcontractors should also be held responsible for environmental aspects of the work they carry out. If joint liability applies with the main contractor, then this should extend to cover compliance with applicable environmental laws. You can require the replacement of a subcontractor who does not comply with these laws.*
- *Contract performance clauses may not be used to introduce environmental requirements which amount to a material amendment of the contract as tendered – i.e. an illegal modification.*

6.1 Rules governing contract clauses

Contract performance clauses are used to specify how a contract must be carried out. Environmental considerations can be included in contract performance clauses, provided they are published in the call for competition or procurement documents and are linked to the subject-matter of the contract.[100]

Any special environmental conditions should be indicated in advance, to ensure companies are aware of these obligations and are able to reflect them in the price of their bids. The contracting authority may provide that economic operators will be excluded from further participation if they do not assent to the contractual clauses. Where such mandatory conditions are indicated, it is important to apply them to all bidders in the manner set out in the procurement documents.[101]

Image: iStock / doram

100 Article 70 of Directive 2014/24/EU; Article 87 of Directive 2014/25/EU.

101 Case C-336/12 ***Ministeriet for Forskning, Innovation og Videregående Uddannelser v Manova A/S ('Manova')***, para 40 and Case C-561/12 ***Nordecon AS and Ramboll Eesti AS v Rahandusministeerium ('Nordecon')*** paras 37-38.

Modifications can be important for GPP, for example if you wish to switch to a more sustainable product or service model part way through an awarded contract, or if there is a provision for additional payments where waste is reduced or energy efficiency improved. Keep in mind that the 2014 directives set out specific rules regarding the modification of contracts after their award, so contracting authorities should provide for changes in advance where possible, and draft documents accordingly.[102] Contract clauses may also include the specific commitments which have been made as part of the procurement process (e.g. enforcing compliance with the environmental performance levels proposed in the tender and evaluated as part of the award criteria.)

One way of doing this is to provide a draft set of contract conditions with headings covering the various environmental aspects which are expected to arise in performance of the contract, and allow tenderers to propose specific levels of performance under each heading. For example, in a catering contract you may wish to address the provision of sustainable and organic food, reduction of packaging and waste, and the use of energy and water-efficient equipment and methods of food preparation. You can ask bidders to commit to specific targets under each of these headings, which will be assessed under your award criteria and also form part of the final contract with the successful bidder.

Sustainable procurement of office supplies in Belgium

In 2013 the City of Ghent tendered for a new four-year framework contract for paper and office supplies. All products in the tender included green criteria and technical specifications. Contract performance clauses included a requirement for a reduction in deliveries by 85% (from daily to once or twice monthly). Extra points were also awarded for greener solutions, which resulted in sustainable packaging options offered in tenders. The tender achieved lower CO_2 emissions from the decrease in delivery frequency and new packaging options.

"A simple measure can have a big impact. We now apply the reduced delivery frequency systematically in our sustainable public procurement." Aline De Tremerie, Director of Sustainable Purchasing Department

Image: dreamstime / Sascha Preußner

102 Article 72 of Directive 2014/24/EU; Article 89 of Directive 2014/25/EU. Modifications to contracts are permitted, inter alia, where these have been provided for in the initial procurement documents in clear, precise and unequivocal review clauses which do not alter the overall nature of the contract or framework.

6.2 Contract performance clauses for the supply of goods

For supply contracts, environmental clauses may be included in the terms of delivery. Simple ways to improve the environmental impact of a contract include:

- Having the product delivered in the appropriate quantity. This often means a bulk delivery, as this will be more environmentally efficient in terms of transport impact per item than having smaller quantities delivered more often. Specifying a maximum number of deliveries per week or month can be another way of achieving the same result;
- Requiring that goods be delivered outside of peak traffic times to minimise the contribution of deliveries to traffic congestion;
- Requiring that the supplier takes back (and recycles or reuses) any packaging that comes with the product – this has the double advantage of centralising packaging prior to reuse or recycling and encouraging the supplier to cut down on any unnecessary packaging;
- Requiring the supplier to report regularly on the greenhouse gas emissions caused in delivering the product, and an indication of measures taken to reduce these emissions over the course of the contract (the latter would not apply to one-off supply contracts.)

Where you have included specific materials or production processes or methods as part of your specification, these may also form part of your contract clauses for supply contracts. For example, in a contract for paper products the contract could specify that these will be 'elemental or totally chlorine free.'

Supply contracts often involve some service or works elements (e.g. siting, installation or maintenance), for which the clauses listed on the next page may be appropriate.

Image: dreamstime / 123elis

6.3 Contract performance clauses for the provision of works or services

Examples of possible contract performance clauses for works or service contracts include:

How the service or work is performed:

- Application of specific environmental management measures, where appropriate in accordance with a third-party certified scheme such as EMAS or ISO 14001;
- Reporting on any environmental issues arising in the performance of the contract and taking steps to remedy these, e.g. spillages or use of hazardous substances;
- Efficient use of resources such as electricity and water on construction sites;
- Use of dosage indicators to ensure appropriate quantities of cleaning products etc.

Training of contractor staff:

- Staff trained in the environmental impact of their work and the environmental policy of the authority in whose buildings they will be working;
- Drivers trained in eco-driving techniques to save emissions and fuel.

Transport of products and tools to the site:

- Delivery of products to the site in concentrated form and then dilution on site;
- Use of reusable containers or packaging to transport products;
- Reduction of CO_2 or other greenhouse gas emissions associated with transport.

Disposal of used products or packaging:

- Products or packaging taken away for reuse, recycling or appropriate disposal;
- Targets for the reduction of waste-to-landfill.

Environmental performance in contract clauses, Tuscany

A contract for cleaning services awarded by the Environmental Protection Agency of Tuscany (ARPAT) included a clause requiring the successful contractor to implement an informal environmental management system for the service provided.

The contractor was required to put the following three steps into effect:

1) carry out an initial environmental review of the service;
2) initialise an environmental programme;
3) ensure steps are taken to monitor the programme.

The contractor was required to provide data on product volumes used (on a half-yearly basis) in order to ensure that the quantity of products used decreases by a certain percentage each year, while ensuring that the quality of the service does not suffer by carrying out regular quality checks. Training for staff on sustainable cleaning techniques was also required.

Chapter 6
Contract performance clauses

6.4 Monitoring contract compliance

Having environmental contract clauses is only effective if compliance with these clauses is properly monitored. Different forms of contract compliance monitoring can be applied:

- The supplier may be requested to supply evidence of compliance
- The contracting authority may carry out spot checks
- A third party may be contracted to monitor compliance

Appropriate penalties for non-compliance or bonuses for good performance should be included within the contract. For example, many contracting authorities include key performance indicators (KPIs) in contracts, which can be linked to the contractor's entitlement to claim payment. As good performance on environmental issues also helps to establish a contractor's reputation, incentives may take the form of positive publicity which highlights this to the public and other contracting authorities.

KPIs or other forms of monitoring compliance with environmental commitments should take into account the time and resources which will be needed to apply these in practice. It may be better to include a smaller number of such indicators which can be meaningfully enforced if it is unrealistic to monitor a long list of commitments. KPIs should always go beyond basic compliance with environmental law or other obligations which a contractor would have to meet anyway.

Monitoring compliance with CO_2 reductions in Latvia

The Latvian Ministry for the Environment awards approximately EUR 50 million per annum under the Climate Change Financial Instrument (CCFI) for sustainable construction projects. Funding is awarded on a competitive basis and applicants can choose GPP criteria from a check-list to get extra points at the evaluation phase of the project application. These criteria then become legally binding upon the beneficiary as a condition of the funding. All the projects financed under the CCFI have a monitoring period of five years following completion. If the monitoring of the project during the first and second year shows non-conformity of CO_2 emission reductions, the beneficiary submits a plan to correct this and executes the plan from its own resources. If the non-conformity of project results continues, the resources disbursed from the CCFI for the project can be considered ineligible and recovered.

Image: iStock / evirgen

6.4.1 Monitoring subcontractors

If a contract includes elements of subcontracting, you will want to ensure that GPP commitments are enforced along the supply chain and that responsibility is clearly assigned. The 2014 directives provide new opportunities for oversight of subcontracting arrangements, including the ability to:

- require joint liability of the main contractor and any subcontractors for compliance with environmental obligations if provided for in national law;[103] and
- require the replacement of a subcontractor where its compliance with environmental obligations cannot be verified.[104]

For works contracts and services carried out at a facility under the direct oversight of a contracting authority, the main contractor must provide details of all subcontractors and keep this information up to date in the event of any changes.[105]

Image: iStock / wbritten

103 Article 71(6)(a) of Directive 2014/24/EU; Article 87(6)(a) of Directive 2014/25/EU.

104 Article 71(6)(b) of Directive 2014/24/EU; Article 87(6)(b) of Directive 2014/25/EU.

105 Article 71(5) of Directive 2014/24/EU; Article 87(5) of Directive 2014/25/EU.

Chapter 7
Key GPP sectors

This section provides an illustration of how you may consider addressing four important procurement categories through GPP – buildings, food and catering services, vehicles and energy-using products. These sectors have been selected according to the criteria outlined in Chapter 1 – their environmental impact, their budgetary importance, the potential to influence the market, as well as the availability of green alternatives. The approaches outlined are mainly based on the EU GPP criteria.[106]

7.1 Buildings

Given the environmental, economic and social importance of the sector, many public authorities are committed to moving towards more sustainable construction. The most significant environmental impacts relate to the use of buildings, and in particular energy consumption. Other important factors to consider are the materials used in construction, the quality of the air inside the building, water consumption, impacts on traffic or land use, and waste generation during the construction works.

Buildings are highly complex systems, consisting of numerous component parts, which all influence the overall performance of the structure. GPP approaches typically aim to address both the overall impact of a building, and the environmental characteristics of individual components. To gain an integrated view, the use of a dedicated environmental assessment tool can be very useful.[107]

7.1.1 GPP approach

The EU GPP criteria relate specifically to office buildings (additional criteria are available for building components such as fittings) and cover the following aspects:

- Include selection criteria for project managers, architects and engineers on experience in sustainable building design, and for contractors in implementing improved designs and specifications;
- Specify minimum energy performance standards above EPBD requirements[108].
- Include measures to enhance and ensure high performance at each stage of the procurement process. Consider providing additional points during the award of contracts for performance beyond the minimum;
- When specifying materials, include criteria to reduce their embodied environmental impacts and resource use (these may be based on a life-cycle assessment);
- Give preference to designs which incorporate high-efficiency or renewable energy systems;

106 *http://ec.europa.eu/environment/gpp/gpp_criteria_en.htm*

107 Examples of such tools include LEED, BREEAM and klima:aktiv. Further information on the use of environmental assessment tools in the procurement of building renovation works is available at: ***www.sci-network.eu***

108 2010/31/EU on the ***Energy Performance of Buildings (recast)*** makes certain minimum energy performance standards compulsory for all new build and major renovation projects from 2013.

- Give importance to indoor air quality, natural light, comfortable working temperatures and adequate ventilation;
- Require the use of water-saving fittings (separate GPP criteria are available for sanitary tapware and toilets and urinals);
- Install physical and electronic systems to support the ongoing minimisation of energy use, water use and waste by facility managers and occupiers;
- Include contract clauses related to the installation and commissioning of energy systems, waste and materials management and the monitoring of indoor air quality;
- Give contractors responsibility within the contract for training users of the building on sustainable energy use and, where they have ongoing responsibilities, for monitoring and managing energy performance for several years after construction.

A Sustainable New Hospital in Vienna

Construction on the new Vienna North Hospital will be carried out according to a Sustainability Charter to be applied at every stage of the procurement and construction process, as well as to monitor performance once complete. The charter sets out ambitious conditions including those relating to overall energy demand, protection of the environment on site, indoor air quality, accessibility, flexibility of use, use of renewable energy sources, and waste and noise during construction.

Image: Stephan Köhler / ICLEI

7.2 Food and Catering services

Whether for school, hospital or prison meals, staff canteens or catering at meetings and events, the public sector is responsible for procuring large volumes of food and drink every year. Agriculture is an important part of the European economy and also has a high environmental footprint – in terms of greenhouse gas emissions, soil and water degradation, biodiversity and waste. The transport, packaging and storage of food products adds significantly to this footprint.

Many consumers insist on more sustainable options when it comes to buying food, and the public sector is no exception. Organic production, choosing more sustainable alternatives and reducing food and packaging waste have the potential to make a measurable difference. For example, food waste is estimated to account for at least 170 million tonnes of CO_2e each year – equivalent to the emissions of a country the size of Romania or the Netherlands.[109]

7.2.1 GPP approach

- Specify a minimum percentage of food which must be organically produced.[110] Provide additional points during the award stage for percentages above the minimum requirement;
- Specify minimum percentages and/or award points for the use of fruit and vegetables that are in season;
- Include contract clauses on minimising food waste and waste from food packaging;
- Apply selection criteria for caterers based on applying appropriate environmental management measures, such as training for staff.

Note: new EU GPP criteria for food and catering services are due to be published in 2016

109 Source: European Commission (2010) Preparatory Study on Food Waste Across the EU-27 Available at: ***http://ec.europa.eu/environment/archives/eussd/pdf/bio_foodwaste_report.pdf***

110 For a food product to be marketed as organic in the EU it must fulfil certain requirements and be certified by an approved inspection body. These requirements are laid down by Council Regulation (EC) 834/2007 on organic production and labelling of organic products.

Sustainable food in Malmö, Sweden

Malmö's goal is to serve 100% organic food in all of its public catering services by 2020. A pilot procurement for Djupadal school set a number of requirements such as for organic products to be included in the product assortment, and for deliveries to be made once per week, with the vehicles meeting the city's transport sustainability criteria. By the end of the pilot 97% of food served in the canteen was organic. Impact on the budget was minimised by a shift from meat products towards seasonal vegetables.

Organic food for schools in France

The City of Lens required 20% of the food supplied in school catering services to be organic. The food supplied had to be certified organic. The service providers are required to ensure traceability, with contract performance clauses including fines for not providing information on methods of production and product traceability upon demand. This tender had benefits for human and ecological health, and helped to promote and raise demand for organic food.

Image: sxc.hu

7.3 Road transport vehicles

The transport sector is responsible for about 25% of greenhouse gas emissions in the EU, with road transport accounting for the majority of these emissions. While vehicles have become more fuel-efficient and cleaner, the volume of transport has continued to increase and air pollution and other impacts pose a serious problem in many parts of Europe. There are many ways to reduce the environmental impact of vehicle ownership and use, from electric and alternative-fuelled vehicles to car-sharing and encouraging other modes of transport.

Significant cost savings can be achieved for the public sector through fuel efficiency, tax and even health benefits if these alternatives are adopted. In addition to car fleets, the public sector is responsible for a large number of buses, emergency vehicles and waste collection trucks, and specific GPP approaches have been developed for these vehicles.

7.3.1 GPP approach

- Review your fleet needs to see if it is possible to reduce the number and/or size of vehicles, and to prioritise the replacement of older, heavily polluting vehicles;
- Specify vehicles with the lowest possible CO_2 emissions for their class and size[111] and which meet the latest EURO norms for emissions of particulates and NO_x;
- Encourage alternative-fuelled vehicles and electric or hybrid options;
- Reduce fuel consumption through eco-driving, tyre pressure monitoring systems and gear shift indicators, using low viscosity lubricants and low rolling resistance tyres;
- Procure vehicles with air-conditioning systems with low GWP (Global Warming Potential) coolants;
- Procure environmentally-friendly tyres and regenerated lubricant oils and ensure the correct collection and management of used lubricant oils and tyres;
- Apply life-cycle costing including the cost of environmental externalities, to compare the real costs of different vehicles.[112]

111 You can check the CO_2 emissions of available vehicle models using the Clean Vehicle Portal (***www.cleanvehicle.eu***)

112 The Clean Vehicles Directive (2009/33/EC) provides a method for attributing costs to environmental externalities (emissions) when purchasing vehicles. Contracting authorities may use these costs or factors up to two times higher than the values set out in the Annex to the Directive.

Green vehicles in Slovenia

The Public Procurement Agency in Slovenia tendered for road transport vehicles, specifying that all vehicles must meet the latest Euro emissions standard or equivalent and not exceed certain maximum CO_2 emissions levels. The award criteria gave a high weighting to operational Life-Cycle Costing (LCC). The LCC approach and specification led contractors to submit offers for vehicles with lower CO_2 emissions. The decrease in CO_2emissions ranged from 3g/km to 45 g/km per vehicle, depending on the lot.

A green bus service in Reading

In 2012, Reading Borough Council conducted a tender for a contract bus service. The invitation to operators to bid for the service contract set out scoring criteria that encouraged innovative options, including superior emissions regimes. Award criteria were weighted 75% quality and 25% price. The latest Euro emissions standards, environmental issues and innovation represented 8.6% of the total quality points awarded. The winning bidder operates the service, rebranded as greenwave, using CNG powered buses with biomethane purchased from agricultural sources. NOx emissions of biomethane buses are 30%-50% lower than comparable Euro V diesel buses, with additional noise reduction benefits.

"The contract was awarded to the company [that] offered the most economically advantageous tender and this included operating the service with CNG powered buses."
Stephen Wise, Reading Borough Council

Image: dreamstime / Olga Itina

7.4 Energy-using products

Computers, printers, lighting and other energy-using products are procured by most public authorities. Many are also responsible for buying more specialised items such as medical equipment. Electronic and electrical items have a heavy environmental footprint due to the raw materials used and the energy they consume, as well as their disposal at end of life. As the volume and variety of devices used has grown, controlling the costs and environmental impact associated with these products has become a priority.

Fortunately this is also an area where GPP can be seen to deliver real benefits and a number of environmentally preferable products are available. These range from ultra-efficient IT equipment through to LED or other low-energy lighting solutions. Increasingly, these options can be adopted without compromising the quality of user experience and will save costs over their life-cycle.

The introduction of the Energy Efficiency Directive in 2012 created a number of mandatory requirements for central government when purchasing energy-using products.[113] These are being incorporated into the GPP criteria for relevant product groups as they are updated.

7.4.1 GPP approach

For IT and imaging equipment

- Ensure that you are purchasing equipment in the highest energy-efficiency class available for the product category;[114]
- Purchase products which are designed to be resource efficient, and which facilitate reuse and recycling (eg design for disassembly);
- Set minimum requirements for product longevity, spare parts and warranties, and/or award more marks to products with a longer/more comprehensive warranty;
- Restrict the levels of hazardous substances contained in electronic and electrical items;
- Require user instructions and default settings to maximise the energy efficiency of purchased equipment.

For lighting

- At design stage, ensure new lighting installations have low power density while still meeting visual task requirements (i.e. the level of illumination is sufficient for the task(s) to be carried out in the area);
- Purchase replacement lamps with high lamp efficacy;
- Use lighting controls to further reduce energy consumption and encourage the use of dimmable ballasts where circumstances allow;
- At installation stage, ensure system works as intended, in an energy-efficient wa;y
- Choose lamps with a lower mercury content;
- Reuse or recover installation waste.

113 Directive 2012/27/EU on energy efficiency. Annex III of the Directive defines the measures which must be taken by central government authorities, and which can be voluntarily adopted by other public authorities.

114 For central government authorities, this is a legal requirement under the Energy Efficiency Directive for contracts valued above the threshold for application of the procurement directives. This is required insofar as it is consistent with cost-effectiveness, economical feasibility, wider sustainability, technical suitability and sufficient competition. Contracting authorities may use these costs or factors up to two times higher than the values set out in the Annex to the Directive.

Energy efficient street lighting in Croatia

The Municipality of Zupa Dubrovacka published an open tender for new fixed street lighting to replace the existing, non-efficient fittings. The technical specification of the tender stipulated LED lighting, with criteria developed in order to comply with environmental and technical requirements. The procurement resulted in a 36% reduction in CO_2 emissions per year, or a projected 900 tonnes CO_2 over the product lifetime of 25 years.

Energy efficient electrical goods in Austria

The Austrian Federal Procurement Agency (FPA) tendered for EUR 3,75m of brown and white electrical goods on a 24-month framework contract, with the option of a 12-month extension. The tender criteria were developed from:

- EU eco-design and energy label regulations;
- criteria of the Austrian Action Plan for Sustainable Public Procurement, and the rigour of eco-labels;
- market research on products.

Compared to the previous tender, the procurement resulted in a 20% reduction in CO_2e, with savings of 124 tonnes, and a 20% reduction in energy used.

"By researching what the best standards were when developing our criteria, we improved upon our previous tender for low CO_2 emissions of the products."
Johannes Naimer, Federal Procurement Agency

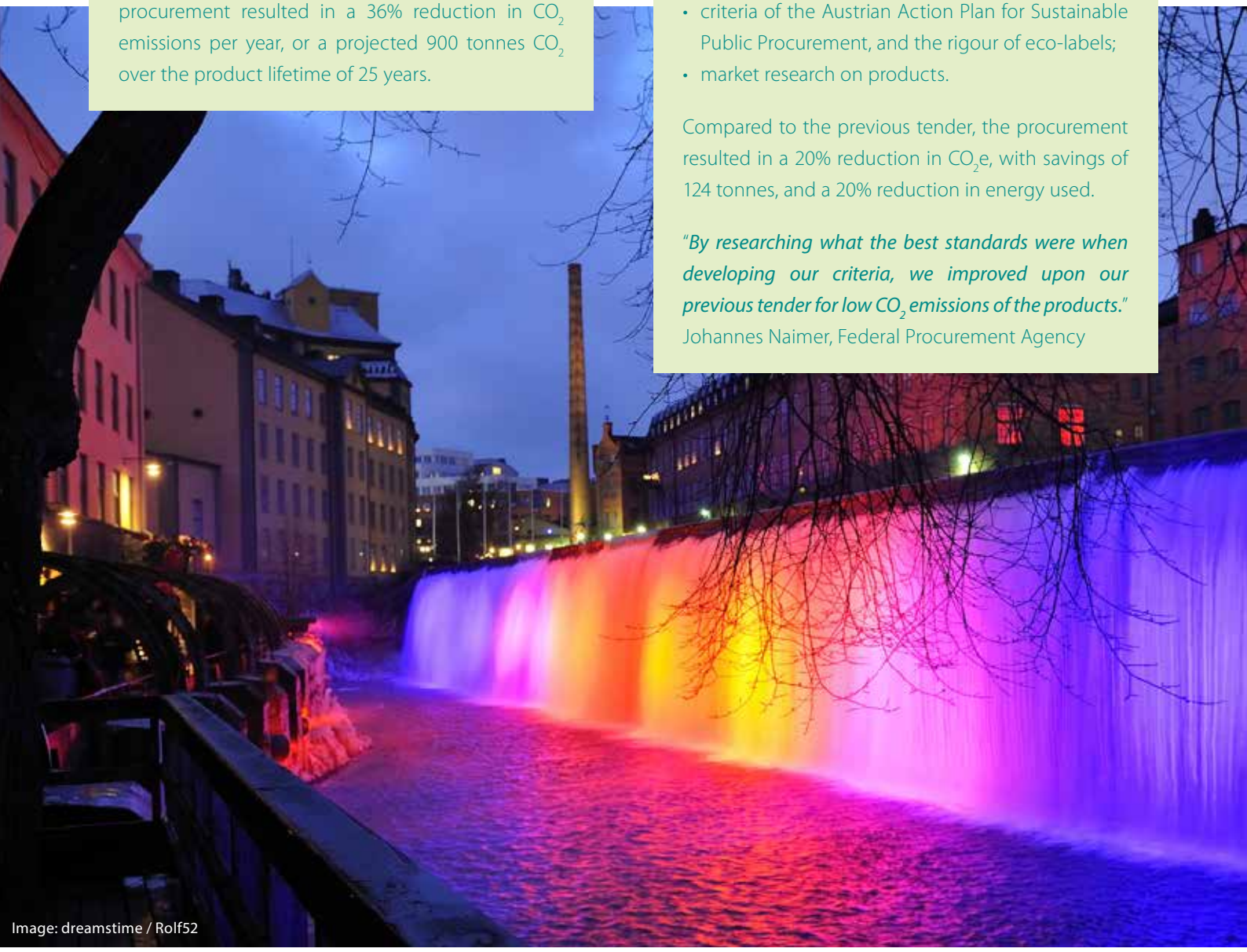

Image: dreamstime / Rolf52

Annex
Relevant legislation and policy

EU Directives and policies

Legislation/policy	Relevance
Treaty on the Functioning of the European Union	Provides the basis for EU procurement regulation and sets out fundamental principles
Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC	Public sector procurement directive
Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC	Utilities sector procurement directive
Directive 2014/23/EU on the award of concession contracts	Concessions directive (applies to both public and utilities sectors)
Europe 2020: A strategy for smart, sustainable and inclusive growth COM (2010) 2020	EU strategy which sets specific targets to be achieved by 2020. GPP is mentioned as one of the measures to achieve sustainable growth and in the **Innovation Union**, **Resource-efficient Europe** and **Energy 2020** initiatives
Public procurement for a better environment COM (2008) 400	Provides guidance on how to reduce the environmental impact caused by public sector consumption and how to use GPP to stimulate innovation in environmental technologies, products and services.
Staff Working Document accompanying COM (2008) 400 SEC (2008) 2126	Provides useful guidelines for public authorities on the definition and verification of environmental criteria, tools for stimulating GPP and examples for a number of product groups. It also offers legal and operational guidance.
Closing the loop - An EU action plan for the Circular Economy COM/2015/0614 final	Identifies GPP as a key component of the circular economy, the need to address issues such as durability and reparability in GPP criteria, and for the Commission to support GPP implementation.
Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe COM (2007) 799	Sets out a methodology for the procurement of research and development services that are exempt from the directives
Directive 2012/27/EU on energy efficiency	The Energy Efficiency Directive requires central government authorities to only purchase highly energy-efficient products, services and buildings. Annex III of the Directive sets out the approach which applies to each product/service sector.
Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles	The Clean Vehicles Directive sets mandatory GPP requirements for road-transport vehicles, relating to emissions and energy consumption

Legislation/policy	Relevance
Regulation No 106/2008 on a Community energy-efficiency labelling programme for office equipment	The Energy Star Regulation sets mandatory GPP requirements for office equipment purchases
Directive 2010/31/EU on the Energy Performance of Buildings	The EPBD provides indicators and thresholds for energy efficient construction, including future mandatory requirements for nearly zero buildings
Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products	The Energy Labelling Directive requires certain products (e.g. air conditioners, dishwashers, lamps) to be labelled with a standardised energy class. These classes are currently subject to revision under a proposal from the Commission.
Regulation No 66/2010 on the EU Ecolabel	The EU Ecolabel and EU GPP criteria are harmonised to the extent possible
Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products (recast)	The Ecodesign Directive provides the main EC framework for the development of environmental criteria for energy-related products
Regulation No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)	The EMAS Regulation provides reference to how EMAS may be taken into account in public procurement
Regulation No 995/2010 laying down the obligations of operators who place timber and timber products on the market	The Timber Regulation provides a framework for ensuring legality of timber available on the EU market
Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)	Directive providing for the separate collection, treatment and recovery of waste electrical and electronic equipment, and setting relevant design requirements
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)	Sets requirements for manufacturers, importers and distributors of electrical and electronic equipment regarding hazardous substances identified in the Directive, and rules regarding the CE marking.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)	Manufacturers are required to register the details of the properties of their chemical substances and safety information in a central database.
Directive 2009/28/EC on the promotion of the use of energy from renewable sources	Sets mandatory national targets for share of electricity from renewable sources, rules on guarantees of origin and sustainability criteria for biofuels and bioliquids.
Directive 2008/98/EC on waste (Waste Framework Directive)	Sets the basic concepts and definitions related to waste management and lays down waste management principles such as the "polluter pays principle" and the "waste hierarchy."

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