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Buying **green!**

A handbook on green public procurement
2nd Edition

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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 September 2011.

The second edition of the Handbook has been compiled under Contract N° 07.0307/2010/579463/SER/CI between the European Commission and ICLEI – Local Governments for Sustainability.

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Luxembourg: Publications Office of the European Union, 2011

ISBN: 978-92-79-19930-1
doi: 10.2779/74936

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Printed in Belgium

Printed on recycled paper that has been awarded the EU Ecolabel for graphic paper
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Contents

INTRODUCTION	4
GREEN PROCUREMENT: THE ESSENTIALS	8
CHAPTER 1 – IMPLEMENTING GPP	9
1.1 GPP Policy	9
1.2 Setting priorities and targets for GPP	10
1.3 Training and guidance	11
1.4 Sources of GPP criteria	12
1.5 Monitoring & reviewing GPP	14
1.6 Networking	15
CHAPTER 2 – THE PROCUREMENT PROCESS	16
2.1 Introduction	16
2.2 Basic principles of public procurement	16
2.3 Choosing the procedure	17
2.4 Consulting the market	18
2.5 Making a business case for GPP	19
2.6 Contract or framework agreement?	21
CHAPTER 3 – DEFINING THE REQUIREMENTS OF THE CONTRACT	22
3.1 Defining the subject matter	22
3.2 Environmental technical specifications	25
3.3 Specifying materials and production methods	28
3.4 Use of variants	29
3.5 Using eco-labels and GPP criteria	30
3.6 Verifying compliance	32
CHAPTER 4 – SELECTING SUPPLIERS AND SERVICE PROVIDERS	33
4.1 Introduction	33
4.2 Exclusion criteria	33
4.3 Selection criteria	34
CHAPTER 5 – EVALUATING TENDERS	37
5.1 General rules for awarding a contract	37
5.2 Applying environmental award criteria	40
5.3 Life-cycle costing (LCC)	42
CHAPTER 6 – CONTRACT PERFORMANCE CLAUSES	46
6.1 Rules governing contract clauses	46
6.2 Contract performance clauses for the supply of goods	47
6.3 Contract performance clauses for the provision of works or services	47
6.4 Monitoring contract compliance	48
CHAPTER 7 – KEY GPP SECTORS	49
7.1 Buildings	49
7.2 Food and Catering services	50
7.3 Electricity	51
7.4 Timber	52
ANNEX - RELEVANT LEGISLATION AND POLICY	53

Introduction

Green Public Procurement (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

GPP is a voluntary instrument, which means that individual Member States and public authorities can determine the extent to which they implement it. It can be applied to contracts both above and below the threshold for application of the EU Procurement Directives.²

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. For practical reasons 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

This handbook 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 environmental and social criteria in their purchasing decisions. This handbook looks specifically at the environmental aspects of tendering. The European Commission has published in 2011 *Buying Social: A guide to taking account of social considerations in public procurement*.⁴



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Why buy green?

Public authorities are major consumers in Europe, spending some 2 trillion Euros each year (equivalent to 19 % of the EU's GDP). 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.

Examples of green contracts

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



Image: Shutterstock

¹ COM (2008) 400 at page 4

² Directives 2004/17/EC and 2004/18/EC of the European Parliament and of the Council

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 <http://ec.europa.eu/social/BlobServlet?docId=6457&langId=en>

GPP can be a major driver for innovation, providing industry with real incentives for developing green products and services – particularly in sectors where public purchasers represent a large share of the market (e.g. construction, health services, or public transport).

GPP may also provide financial savings for public authorities – especially if you consider the full life-cycle costs of a contract and not just the purchase price. Purchasing low-energy 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, as well as political and binding targets for reduction of greenhouse gas emissions, energy efficiency and in other environmental policies.



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The benefits of GPP

- The City of Vienna saved €44.4 million and over 100,000 tonnes of CO₂ between 2004 and 2007 through its EcoBuy programme⁵
- Three million tonnes of CO₂ 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%.⁶
- If all IT purchases in Europe followed the example of Copenhagen City Council and the Swedish Administrative Development Agency, energy consumption would be cut by around 30 terawatt hours – roughly the equivalent of four nuclear reactors⁷
- £40.7 million (€47.2 million) could be saved in the UK if the proposed Government Buying Standards (GPP criteria) are applied by all central government departments and executive agencies, according to a cost-benefit analysis which monetised the potential impacts⁸
- CO₂ emissions would be cut by 15 million tonnes per year if the whole EU adopted the same environmental criteria for lighting and office equipment as the City of Turku, Finland – reducing electricity consumption by 50%⁹

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,¹⁰ as interpreted by the European Court of Justice. From an international perspective the EU is bound by the conditions of the General Procurement Agreement (GPA) of the World Trade Organisation (WTO).

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.

⁵ Klimaschutzprogramm "ÖkoKauf Wien" spart CO₂ und Geld (City of Vienna, 2008) available at: <http://www.wien.gv.at/rk/msg/2008/0326/011.html>

⁶ De impact van het programma duurzaam inkopen anno 2011 at page 4 (Dutch Ministry of Infrastructure and Environment, 2011)

⁷ Green procurement makes a difference: Prime examples from the Nordic countries at page 5 (Nordic Council, 2009) available at <http://www.norden.org/da/publikationer/publikationer/2009-740>. The criteria applied relate to energy consumption, noise, recycling and dangerous substances.

⁸ 11 year, net present value best estimate from Revised Government Buying Standards for Furniture: Impact Assessment, page 23 (Department for Environment, Food and Rural Affairs, 2010) available at: <http://sd.defra.gov.uk/documents/20100607furniture-ia.pdf>. The savings would accrue from an increased ability to repair, remanufacture and recycle materials and from increasing the reuse of furniture, in addition to other benefits such as reducing both greenhouse gas emissions and waste.

⁹ Green procurement makes a difference: Prime examples from the Nordic countries (Nordic Council, 2009) at page 5.

¹⁰ Directives 2004/17/EC and 2004/18/EC (hereafter "the procurement directives")



Sectoral legislation

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

- **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)¹¹
- **Road transport vehicles** - all contracting authorities must take into account the operational energy 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** - From 2013 at the latest, minimum energy performance requirements will need to be applied in all new build and major renovation projects.¹² 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))

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 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. Europe 2020, the EU’s strategy for smart, sustainable and inclusive growth,¹³ highlights GPP as one of the measures in achieving such growth.

In 2008 the European Commission adopted a Communication on GPP,¹⁴ which as part of the Sustainable Production and Consumption Action Plan,¹⁵ introduced a number of measures aimed at supporting GPP implementation across the EU. The key features are outlined in the box on the next page.

A detailed list of EU policies, strategies and legislation related to GPP can be found in the Annex.

¹¹ This applies to supply contracts valued above the threshold for application of the Procurement Directives

¹² “Major renovation” is defined as either more than 25% of the surface envelope of a building undergoing renovation, or renovation which costs more than 25% of the value of the building, excluding the value of land (see Article 2(10) of the Directive). The minimum energy efficiency requirements applicable to different types of building and building elements must be set by Member States by 2013, following a common methodology

¹³ COM (2010) 2020 *Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth*

¹⁴ COM(2008) 400 *Public procurement for a better environment*

¹⁵ COM(2008) 397 *Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan*

GPP resources at EU level¹⁶

• EU GPP criteria

To assist contracting authorities in identifying and procuring greener products, services and works, environmental procurement criteria have been developed for 18 product and service groups, which can be directly inserted into tender documents.¹⁷

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.

• Helpdesk

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

• Monitoring

The European Commission has commissioned several studies aimed at monitoring the implementation of GPP at all governmental levels. The most recent study was published in 2009, and examined implementation in seven countries – Austria, Denmark, Finland, Germany, The Netherlands, Sweden and the UK. The results can be found on the GPP website:

http://ec.europa.eu/environment/gpp/studies_en.htm

A further monitoring study is being carried out in 2011.

• 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 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, training materials and this handbook. All are available for download from the website:

<http://ec.europa.eu/environment/gpp>

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.¹⁸ Most have set targets for GPP or SPP, either in terms of overall procurement, or for individual product and service groups.



Image: scchi

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.¹⁹ Links to many of these criteria sets and accompanying guidance are included on the EU GPP website.

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 these examples can be found at:

http://ec.europa.eu/environment/gpp/case_en.htm.

¹⁶ Please refer to the EU GPP website: http://ec.europa.eu/environment/gpp/index_en.htm

¹⁷ The EU GPP criteria are being progressively translated into all official EU languages.

¹⁸ http://ec.europa.eu/environment/gpp/action_plan_en.htm

¹⁹ 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 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.

- Familiarise yourself with the **scope and potential benefits of GPP**, as well as the resources which are available (→ *Introduction*).
- Commit to the process, and secure political support, by adopting a **GPP policy** with clear **definitions** and **targets** appropriate to your organisation (→ *Chapter 1*).
- Set **priorities** for the product and service groups you will address by consulting existing **GPP criteria**, **eco-labels** and other sources (→ *Chapter 1*).
- Put in place **information, training, networking** and **monitoring** activities to ensure you reach your goals (→ *Chapter 1*).
- 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** (→ *Chapter 2*).
- 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 2*).
- 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 (→ *Chapter 3*).
- Apply, where appropriate, selection criteria based on **environmental technical capacity** or **environmental management measures** and **exclude tenderers who have committed serious breaches** of environmental requirements (→ *Chapter 4*).
- 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 (→ *Chapter 5*).

- Set **contract performance clauses** which underline the environmental commitments made by suppliers or service providers, and provide appropriate **remedies** where they fall short. Ensure there is a system for **monitoring** these commitments (→ *Chapter 6*).
- Identify specific GPP approaches to tendering in high-impact sectors such as **construction, food and catering, electricity and timber** (→ *Chapter 7*).



Image: majnos / stockphoto.com

Chapter 1 – Implementing GPP

GPP implementation will first require 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.

The guidance presented in this chapter is applicable to any individual public authority wishing to implement GPP. In many EU countries GPP National Action Plans (NAPs) have been established, 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. Moreover, high level support is generally considered to be an important factor in determining the success of GPP implementation.

To be most effective such a 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 overall responsibilities for implementing the policy
- Include a mechanism for appropriately monitoring performance (see section 1.5)

The GPP policy should be aligned with any existing policies and strategies and developed in consultation with key stakeholders such as internal users, suppliers and management.

Once a policy is in place some form of operational implementation plan should be established, outlining

Committing to GPP in Cyprus

In 2008 the municipality of Strovolos, the second largest in Cyprus, created its own GPP Action Plan and guide book. The first step was to educate municipal officers regarding GPP and the targets set. The city's external advisors for procurement documents and evaluation were also informed by letter of changes to the technical conditions of contracts. Examples of actions taken to date under the Plan include procurement of a pilot system to reduce the intensity of lighting in a city park and a decision by the Mayor's office to reduce paper consumption by sending event invitations by e-mail

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.

1.1.1 Establishing a working group

Implementing GPP requires the involvement and co-operation of different departments and staff members across an organisation. Finance, environment and procurement officers will likely need to be involved, 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 all needs are met.

1.2 Setting priorities and targets for GPP



Introducing GPP into procurement practices will typically require a step-by-step approach. One approach 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 mind²⁰:

- **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 value placed by suppliers on 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, or waste management, 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.
 - **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).
 - **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 cover 18 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.

²⁰ 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.

- **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?

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. 75% of procurement (by value and by number of tenders) should include GPP criteria by 2015. Targets can differ for national, regional, local levels.
- Product/service specific targets – e.g. by 2013 50% of meals served in school canteens should be organic, or by 2015 all cleaning services should use products meeting the EU Ecolabel criteria
- Operational targets – e.g. all procurement staff will receive GPP training by 2013, 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



Image: lay7274/dreamstime.com

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 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.

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

Capability Development in North-East England

The UK's North East Improvement and Efficiency Partnership has run an integrated series of training courses on sustainable procurement for procurers, other relevant officers (including senior staff) and elected politicians for local authorities across the north-east region. The core course is the UK's new national 3-day sustainable procurement training module which was trialled in the region and has since been delivered to over a hundred regional staff. In addition linked half-day courses for elected members and a train-the-trainer course have been run, as well as more specialised sessions on timber and wood procurement, the use of life-cycle costing and carbon footprinting.

Some public authorities have also produced guidance on how GPP should be implemented within the authority's procurement activities. This guidance may include, for example, specific GPP criteria which should be applied for certain product and service groups.

Manuals and tools are often available at the national level on websites dedicated to GPP and in some cases national GPP helpdesks exist. The European Commission developed guidance in 2008 which included modules on preparing a GPP action plan, the legal framework for GPP and practical implementation. The Commission also established a help desk in 2010 and produced material for training public procurers in GPP implementation.

Romania trains public purchasers in GPP

In 2009 a GPP training programme was initiated in Romania by the Ministry of the Environment and Forests. The objective of the training was to raise awareness about the environmental benefits of GPP, train individuals within the central public administration who could then act as trainers for other authorities, and disseminate GPP tools, methods and good practice. Outcomes of the training programme include a report on the green criteria used in tender documents, a GPP-focused network of public procurers within the central public administration, a Trainers' Handbook on GPP and 49 individuals able to act as trainers.



Image: Imacida / iStockphoto.com

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 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. These criteria are being progressively translated into all official EU languages.

The current product and service groups covered are:²¹

- Copying and graphic paper
- Cleaning products and services
- Office IT equipment
- Construction
- Transport
- Furniture
- Electricity
- Food and catering services
- Textiles
- Gardening products and services
- Windows, glazed doors and skylights
- Thermal insulation
- Hard floor-coverings
- Wall panels
- Combined heat and power (CHP)
- Road construction and traffic signs
- Street lighting and traffic signals
- Mobile phones

The GPP criteria are based on data from an evidence base, on existing eco-label criteria and on information collected from stakeholders in industry, civil society and the Member States. The evidence base uses available scientific information and data, adopts a life-cycle approach and engages stakeholders who meet to discuss issues and develop consensus.

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

- The **core criteria** are those suitable for use by any contracting authority across the Member States and address the key environmental impacts. They are designed to be used with minimum additional verification effort or cost increases.
- The **comprehensive criteria** are for those who wish to purchase the best environmental products available on the market. These may require additional verification effort or a slight increase in cost compared to other products with the same functionality.

All of the EU GPP criteria, together with the technical background reports setting out the main environmental impacts taken into consideration

in their formulation, 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.

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 Eco-labels

Eco-labels set out the environmental requirements which must be met by products or services in order to carry the label. They involve certification of the product by a third party (i.e. not by the producers or service providers themselves). They can be used in a number of ways in procurement – although it is not allowed to require products or services to carry a particular eco-label.



The specific application of eco-labels in developing specifications,²² verifying compliance with specifications,²³ and awarding points for environmental characteristics²⁴ are considered in the relevant sections of this handbook.

²¹ In 2011, further criteria will be made available for indoor lighting and tissue paper.

²² (Section 3.5)

²³ (Section 3.6)

²⁴ (Section 5.2.3)

The different types of eco-labels which exist are outlined below:

Multi-sector, Multi-criteria labels - These are the most common type of eco-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 pass/fail 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)²⁵, the **Nordic Swan**²⁶ and the **Blue Angel**.²⁷

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 Ecolabel carry the flower logo, allowing consumers - including public and private purchasers - to identify them easily. Today the EU Ecolabel covers 28 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.1:

1.4.4 Other Labels

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)²⁸ or **PEFC** (Programme for the Endorsement of Forest Certification).²⁹

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, with A+++ as the most efficient and G as the least efficient.³⁰



The criteria underlying each of the labels mentioned above are publicly available.

1.5 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.

²⁵ For more information, see <http://ec.europa.eu/environment/ecolabel>

²⁶ For more information, see <http://www.svanen.se/en>

²⁷ For more information, see <http://www.blauer-engel.de/en>

²⁸ For more information, see <http://www.fsc.org>

²⁹ For more information, see <http://www.pefc.org>

³⁰ For more information, see http://ec.europa.eu/energy/efficiency/labelling/energy_labelling_en.htm

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.

Monitoring green spend in London

The London Fire Brigade (LFB) has put in place a comprehensive system for monitoring expenditure on green products across the organisation. The organisation's electronic purchase order management system (POMS) collects information on the amount of products classified as green that are ordered. Bigger contracts which do not go through the POMS are monitored individually. The LFB mainly uses the EU GPP criteria, the UK Government Buying Standards and other eco-label criteria to define and classify a product as green. Green spend is measured against overall spend, and a report is submitted quarterly to the corporate management board, which sets targets to be met. Spending on green products has increased from £215 000 (€250 000) in 2006/07 to £5 158 000 (€6 020 000) in 2010/11.



Image: Wojtek Gurak / Flickr.com

1.6 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 co-operation activities with other authorities. Sharing information for example, on the environmental criteria used in tendering or the market availability of green products can help save time and effort.

Slovakia measures progress towards GPP targets

The Ministry for the Environment and Slovak Environment Agency are jointly responsible for monitoring progress under the country's national action plan for GPP. To do this a questionnaire was created and results are evaluated on an annual basis. The questionnaire gathers information from Slovak contracting authorities about:

- Total number of contracts awarded and their value
- The number of green contracts and their value, where 'green' is defined as conforming with the core EU GPP criteria
- The specific environmental requirements applied (e.g. eco-label criteria, environmental management systems, EU Energy Label)

In 2010 the most frequent requirements were for waste management, recycled materials, reduced energy consumption, noise reduction and lower levels of hazardous substances.

Several networks with a focus on green and sustainable procurement have been established at the national or regional level. For example, the PIANOo network (<http://www.pianoo.nl>) in the Netherlands allows procurers to exchange expertise, as does the French regional network for the Greater West (<http://www.reseaugrandouest.fr>). At the European level, the Procura+ Campaign aims to share GPP experiences across borders, and supports individual participants in local implementation (<http://www.procuraplus.org>).

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

Chapter 2 – The procurement process

Summary

- *Public purchasers have an obligation to get the best value for money and to be fair in procurement procedures. Best value for money can include environmental considerations. Being fair means providing equal opportunities and guaranteeing transparency.*
- *The preparatory stage is crucial. Thorough analysis and planning is essential before launching a tender if environmental goals are to be achieved.*
- *Informing the market about your plans early enough allows suppliers to prepare. Engaging with the market allows procurers to learn about alternative solutions available.*
- *Life-cycle costing, joint procurement, framework agreements or energy performance contracting, for example, may help to demonstrate cost savings through GPP, or lower investment barriers.*



Image: leongedhart / iStockphoto.com

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.

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. Two basic principles apply:

- Value for money
- Acting fairly

Value for money

Contracting authorities have an obligation to get the best value for taxpayers' money for everything they procure. Best value for money 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 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.

Acting fairly

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. 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.³¹

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

- **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 prices should receive different marks in the cost evaluation.
- **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.³²
- **Proportionality** - implies 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.



Image: OZinOH / Flickr.com

³² Article 41(2) of Directive 2004/18/EC

³³ Article 44(3) of Directive 2004/18/EC

³⁴ For the conditions under which these procedures may be used, please refer to Articles 21, 29, 30 and 31 of Directive 2004/18/EC. Contracting entities within the meaning of Directive 2004/17/EC may use these procedures generally.

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. An advantage of this procedure is the shorter time for conducting it.
- 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.³³ 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 **negotiated and competitive dialogue** procedures can be used by public authorities in special circumstances.³⁴ These procedures may offer certain advantages in the context of GPP, as they introduce elements of flexibility not available in the open and restricted procedures. These procedures allow in particular 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.

Competitive dialogue may be used for particularly complex procurements (e.g. where a contracting authority is not objectively able to define the technical means capable of satisfying its needs).

This allows the selected participants to propose solutions which can then be refined in successive stages leading to selection of the most economically advantageous tender.³⁵

Social housing – meeting the passive house standard in Finland

VASO is a non-profit company procuring social housing on behalf of a number of municipalities in southwest Finland. In 2010, it launched a competitive dialogue to procure the construction of 37 apartments to be built to passive house standard in Naantali. The dialogue allowed for a number of environmental and user requirements to be progressively addressed with the selected competitors.

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

- Subject matter and technical specifications
- Selection criteria (i.e. exclusion criteria, financial capacity and technical capacity criteria)
- 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.



Image: reives / fotolia.com

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.³⁶ 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 “technical dialogue” with suppliers in order to get advice which may be used in the preparation of the tender documents.³⁷ Such a process must be carried out in a transparent and non-discriminatory manner. The results of the dialogue (i.e. the final tender documents) may not confer an unfair advantage on any of the suppliers who participated.

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.

35 See Article 29 of Directive 2004/18/EC. Further guidance and information on the competitive dialogue procedure can be found in an explanatory note produced by the European Commission: http://ec.europa.eu/internal_market/publicprocurement/docs/explan-notes/classic-dir-dialogue_en.pdf

36 The Court of Justice indicated in the *Stadt Halle* case that ‘acts which constitute a mere preliminary study of the market or which are purely preparatory and form part of the internal reflections of the contracting authority with a view to a public award procedure’ are not amenable to judicial review.

37 Recital (8) of Directive 2004/18/EC

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.

Pre-commercial procurement – buying innovation

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 16(f) of Directive 2004/18/EC are fulfilled.³⁸ 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.



Image: Mark Hudson / iCLEI

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 co-operation. Further information on LCC can be found in Chapter 5 and on the EU GPP website (<http://ec.europa.eu/environment/gpp/lcc.htm>).

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 an eco-label)
- You ask for appropriate proof from the supplier for the environmental performance they claim (see Section 3.6)

38 For more information on PCP see COM (2007) 799 *Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe*

- **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, where environmental skills and knowledge of the market for green products and services may be limited. 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.
- **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.

Joint energy performance contracting in Styria

A group of local authorities in Styria, Austria, identified a total of 21 buildings in 2001 with the potential for energy consumption reduction, to be the subject of a joint energy performance contract. The buildings were split into two pools for the tender. The energy savings contracted from the selected service provider range from 15–44% with a contract period of 12 years. Carrying out the activity jointly addressed the problem that EPC for smaller buildings with low energy costs is less attractive for energy service companies and involves high effort by the community itself.



Image: fulvalve / istockphoto.com

Dutch municipalities jointly tender cleaning services

In 2009 eight municipalities in the Dutch region of Gooi en Vechtstreek decided to join forces in renewing their cleaning services contracts for municipal buildings. The environmental criteria applied in the tender included maximum levels of specific chemicals in cleaning products, the reduction of generated waste and the use of micro fibre technology in specified aspects of the cleaning programme.

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 (€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, ECF, eco-labels).

2.6 Contract or framework agreement?

One way of increasing the efficiency of tendering while implementing GPP can be to award framework agreements.³⁹ A framework agreement may be established with one or multiple operators and allows for multiple contracts to be awarded without repeating the whole procurement process.⁴⁰ 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.

French framework for greener IT equipment

In 2008 the urban community of Dunkerque in north France established a framework to procure desktop computers, laptops, workstations and monitors. Award of the framework was on the basis of the most economically advantageous tender, including an assessment of the environmental performance of the offer. The criteria applied for individual contracts address energy performance, eco-design (to minimise end-of-life impacts and facilitate recycling), restriction of hazardous substances and disposal of waste equipment. The framework may also be used to purchase upgrades for existing equipment to improve performance.

Framework agreements save resources in Portugal

The Portuguese National Agency for Public Procurement (ANCP) establishes and operates national framework agreements for a range of products and services including supply of paper and stationery, vehicle fleets, construction and cleaning services. Currently eight of these frameworks include green criteria, accounting for over 50% of ANCP's procurement in 2010 (measured both by number of contracts awarded and their value). The aggregation of these requirements at national level has led to considerable cost savings (estimated at €168 million in 2010) – as well as the opportunity to introduce ambitious green criteria. For example, the framework agreement established in 2011 for paper and stationery awarded marks based upon the percentage of recycled fibres included in products and the percentage of fibres sourced from sustainably managed forests. Thirty companies were admitted to the framework, which is worth approximately €30 million per annum.



Image: danestefes / istockphoto.com

³⁹ For more information on framework contracts: see http://ec.europa.eu/internal_market/publicprocurement/docs/explan-notes/classic-dir-framework_en.pdf

⁴⁰ Article 32 of Directive 2004/18/EC and Article 14 of Directive 2004/17/EC

Chapter 3 – Defining the requirements of the 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.*
- *Allowing tenderers to submit variant bids can assist in finding the most economically advantageous tender which also delivers high environmental performance.*

Technical standards, eco-labels and the EU and national GPP criteria sets are all valuable sources of information when developing a specification, and can be included directly in tender documents. It is not allowed however to require tenderers to be registered under a particular eco-label.

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).

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 not so much concerned with what contracting authorities buy, but mainly



with how they buy it. For that reason, the procurement directives do not restrict the subject matter of a contract as such.

However, freedom to define the contract is not unlimited. 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 provisions of the Treaty on non-discrimination, the freedom to provide services and the free movement of goods apply in all cases, and therefore also to public procurement contracts under the thresholds of the directives or to certain aspects of contracts which are not explicitly covered by the directives.⁴¹

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.⁴² A second

⁴¹ For further information on the rules and principles which apply, ⁴¹ please refer to the Commission Interpretative Communication 41 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).

⁴² For example, operators from countries that are bound by the WTO Government Procurement Agreement. You can find a list of these countries at http://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm

safeguard is that, according to public procurement rules, technical specifications must not be defined in a discriminatory way. Further guidance on how this obligation can be met when applying environmental specifications is given in Section 3.2 below.

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.

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 paperless (i.e. electronic) invoicing system if this has been broadly accepted within the organisation and the necessary administrative adjustments made. Similarly, prior agreement regarding the acceptable indoor temperature of a building will

set the parameters for implementing higher energy standards 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. For other contracts, a market analysis carried out prior to procurement will help identify potential solutions to minimise the environmental impact of the goods or services procured. These can then be compared with the needs you have identified.

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 impacts of materials used to make the product, and the impact of production processes
 - The use of renewable raw materials in making the product
 - The energy and water consumption of the product during use
 - Durability/lifespan of the product
 - Opportunities for recycling/reusing the product at the end of life
 - The packaging and transportation of the product
- Service 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



Image: scchu

- 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

Assessing solar potential in Poland

Częstochowa lies in one of the sunniest areas of Poland, with an average annual solar radiation of 1,025 kWh /m². In order to reduce energy consumption in a local hospital, a procurement process was launched for the installation of solar collectors and economisers (units which use the solar energy to heat water). The average annual energy cost savings realised by the hospital since installation of the system amount to 254 000 PLN (€63,500).

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.

A green title in Bremen, Germany

In 2010 the public property company of Bremen published a tender with the title “Framework Agreement for Environmentally Friendly Office Equipment.” The tender criteria included the application of environmental management measures and meeting eco-label criteria such as those set out in the Energy Star regulation and Blue Angel label. The framework can be accessed by all departments and agencies of the City of Bremen. The green title signalled the City’s environmental priorities from the outset.

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 analysis and chosen an appropriate title for your contract, you are ready to develop a specification of your requirements.



Image: Kativ / iStockphoto.com

3.2 Environmental technical specifications

3.2.1 Technical specifications

Once you have defined the subject of the contract, this needs to be expressed in measurable technical specifications which are included in the contract notice or tender 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.

Technical specifications need to be related to characteristics of the work, supply or service being purchased itself – and not to the general capacities

or qualities of the operator.⁴³ It is also very important that they be clear, understood 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 tender documents themselves.⁴⁴

Technical specifications may be formulated by reference to European, international or national standards and/or in terms of performance or functionality.⁴⁵ They may also refer to appropriate specifications that are defined in eco-labels.⁴⁶ The procurement directives allow you to formulate technical specifications in terms of environmental performance levels of a material, product, supply or service.⁴⁷ For example, you may require that a computer 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.

Estonian Ministry applies green specifications for cleaning

The Estonian Environment Ministry tendered for cleaning services in 2010, including the following in its technical specification:

- Cleaning services to be delivered in accordance with ISO 14001 or equivalent
- All plastic bags must be biodegradable
- Waste shall be sorted (packaging, organic waste, etc.)
- Toilet paper and hand towels shall be made from recycled paper

A near 10% decrease in the cost of the service was achieved from the previous contract, which applied the same technical specifications.

⁴³ Annex VI of Directive 2004/18/EC and Annex XXI of Directive 2004/17/EC. See also Case C-532/06, Emm. G. Lianakis AG v Dimos Alexandroupolis, at paras 25-32.

⁴⁴ See Case 225/98 Commission v France at paras 81–83 in which technical specifications defined solely by reference to classifications in French legislation were found to be indirectly discriminatory.

⁴⁵ Article 23 Directive 2004/18/EC and Article 34 Directive 2004/17/EC

⁴⁶ Recital (29) Directive 2004/18/EC and Recital (42) Directive 2004/17/EC

⁴⁷ Annex VI Directive 2004/18 and Annex XXI Directive 2004/17/EC

3.2.2 Environmental technical standards



Image: Tom Schinder / dreamstime.com

Standards have a major role in influencing the design of products and processes, and many standards include environmental characteristics such as energy-use or waste management procedures.

References to environmental technical standards can be included directly in your specification, helping you to define the subject matter in a clear way. The procurement directives refer to European or national standards as one of the means by which specifications can be defined.⁴⁸ When reference to a standard is used, it must be accompanied by the words 'or equivalent'.⁴⁹ This entails that tenders based on equivalent arrangements (equivalent standards or equivalent solutions not certified according to a specific standard) must be considered by contracting authorities. To demonstrate equivalence, tenderers should be permitted to use any form of evidence (such as a technical dossier of the manufacturer or a test report from a recognised body).⁵⁰

Technical standards can take a number of forms. These extend from full European standards (ENs), through European technical approvals, common technical specifications, international standards and

other technical reference systems established by the European standards bodies, to national standards, national technical approvals and national technical specifications. Standards are useful in public procurement as they are clear, non-discriminatory and usually developed using a process which includes a wide range of stakeholders, including national authorities, environmental organisations, consumer associations, and industry. This gives a broad acceptability to the technical solutions provided by standards which are adopted in this way.

At European level, standards are prepared by the European standards bodies: the European Committee for Standardisation (CEN), the European Committee for Electrotechnical Standardisation (Cenelec)⁵¹ and the European Telecommunications Standards Institute (ETSI).⁵² These bodies actively promote the inclusion of environmental considerations in standards. For example, CEN has developed a 'toolbox' used by the Technical Committees responsible for the standards, known as the Environmental Framework. A Strategic Advisory Body on the Environment (SABE) has overall responsibility for ensuring coordination on environmental matters, including links to European environmental policy.⁵³ The European Commission itself is also committed to 'greening' technical standards. It has adopted a communication on the integration of environmental aspects into European standardisation.⁵⁴

3.2.3 Performance-based or functional specifications

The procurement directives explicitly allow contracting authorities to choose between specifications based on technical standards or on performance or functional requirements.⁵⁵ A performance-based/functional specification will

48 Article 23 (3)a of Directive 2004/18/EC and Article 34 (3)a of Directive 2004/17/EC

49 Article 23 of Directive 2004/18/EC and Article 34 of Directive 2004/17/EC

50 Article 23 (4) Directive 2004/18; Article 34 (4) Directive 2004/17; 50 See also Case 45/87 *Commission v Ireland*

51 More information can be found at <http://www.cenelec.org>

52 More information can be found at <http://www.etsi.org>

53 More information can be found at <http://www.cen.eu/sh/sabe>

54 COM(2004)130 on *Integration of Environmental Aspects into European Standardisation*

55 Article 23 of Directive 2004/18/EC and Article 34 of Directive 2004/17/EC

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 will not prescribe the inputs, nor a work method for the tenderer. The tenderer is free to propose the most appropriate solution. A performance-based approach usually allows more scope for market creativity and in some cases will challenge the market into developing innovative technical solutions.

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 should 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 bid installed solar panels and wind turbines, producing a total of 35,000kWh over the first ten months of the contract.



Image: sxc.hu

Specifying the end result, but not how to achieve it

If you want to keep offices in a building at a certain temperature you could do this by setting very detailed specifications for a heating system. Alternatively you could state that the offices must have a constant temperature of 20°C and leave it to suppliers to come up with different options. The suppliers could then opt for innovative heating and ventilation systems which reduce dependence on fossil fuels.



Image: E_B_E / stockphoto.com

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 bidding documents. In the above example, you might ask tenderers to describe how they would maintain the desired room temperature, and 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.

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 production methods can explicitly be taken into account when defining technical specifications.⁵⁶

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, without necessarily being visible. 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.



Image: scchu

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 specify that none of the materials or chemical substances contained should be detrimental to the environment or health. This is most commonly done by reference to legislation which restricts hazardous or dangerous substances, for example the RoHS Directive⁵⁷ or REACH and CLP Regulations.⁵⁸

Typical GPP examples would include restricting certain hazardous substances in cleaning products and textiles, or requiring a certain percentage of post-consumer recycled content in copying paper.

To ensure that the Treaty principle of non-discrimination is respected, such restrictions should be based on an objective risk assessment. Eco-labels and GPP criteria are a useful source, 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.

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. For the control of the mosquito population substances that prevent the reproduction of the mosquito are preferred to toxic chemicals that eliminate the insects. These requirements are built into the technical specifications of the city's tender documents.

⁵⁶ Annex VI of Directive 2004/18/EC and Annex XXI of Directive 2004/17/EC

⁵⁷ Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (currently under revision)

⁵⁸ 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 (currently under revision) 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.



3.3.2 Production processes and methods

The procurement directives allow you to include requirements regarding production processes and methods in technical specifications for supply, service and works contracts. You can only include those requirements which are related to the production of the good, service or work being purchased and contribute to its characteristics, without necessarily being visible.

You can, for example, specify that electricity should be produced from renewable sources or that food be produced using organic methods, as these methods of production are widely available to economic operators across the EU. 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 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 actually contribute to 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 a LCA for an individual contract implies considerable extra effort. The criteria underlying eco-labels typically draw upon a LCA for the products 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, food and furniture.

European Commission sets high bar for furniture suppliers

The European Commission includes a number of environmental requirements in its contracts for supply of furniture (for offices, catering areas, meeting rooms and childcare facilities), which address the entire life-cycle. Suppliers must undertake to comply with sustainability criteria for each stage in the lifetime of the furniture concerned: origin of the wood used, absence of heavy metals, elimination of manufacturing waste not reused on site, reduction of volatile organic compound (VOC) and formaldehyde emissions, packaging systems, optimisation in respect of congestion during transport and storage, and use of road-rail integrated transport. Each item of office furniture must be accompanied by an information sheet on its maintenance and end of life handling.

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. 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. 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, for example, you are unsure about the cost impact of an alternative product or service, or, for example, about whether introducing higher insulation standards in a works contract will delay the completion date. You can also allow tenderers to submit more than one bid – a standard and variant solution.

To be able to accept variants in a public procurement procedure, you need to:⁵⁹

- Indicate in the contract notice that variants will be accepted
- Specify the minimum requirements which the variants have to meet
- Identify any specific requirements for presenting variants in bids (such as requiring a separate envelope indicating variant or stipulating that a variant can only be submitted combined with a non-variant bid)
- Award the contract on the basis of most economically advantageous tender (MEAT)

3.5 Using eco-labels and GPP criteria

As outlined in Section 1.4, eco-labels and EU and national GPP criteria sets are useful information sources when developing your tender requirements.

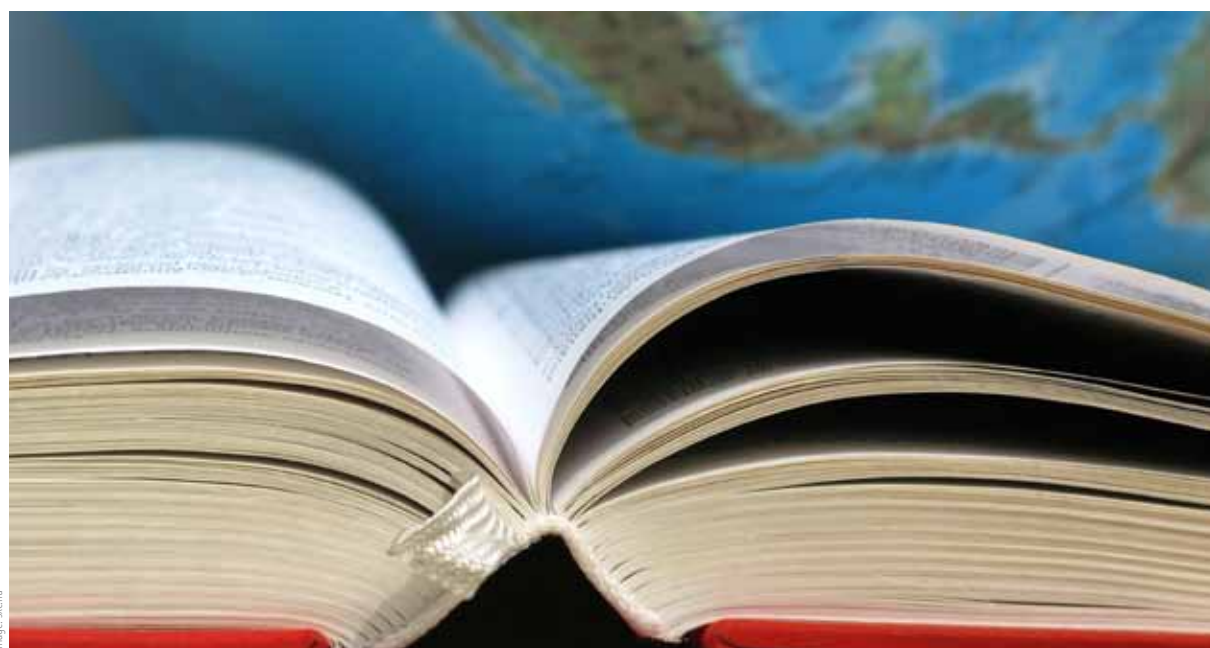
The EU GPP criteria are designed to be inserted directly into tender documents and include information on verification methods. They are updated regularly and progressively translated into all official EU languages.

Eco-labels can be used in two different ways in the context of technical specifications:⁶⁰

- 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

⁵⁹ Article 24 of Directive 2004/18/EC and Article 36 of Directive 36/17/EC

⁶⁰ The potential uses of eco-labels in assessing award criteria are discussed in Chapter 5.



3.5.1 Conditions for using eco-labels

In order to use eco-labels in technical specifications, certain conditions must be met:

- They must be appropriate to define the characteristics of the product or service. This entails that only those specifications of the eco-labels which relate to the subject-matter of the contract can be used. If eco-labels contain criteria that relate to the general management practice of the company making the product or offering the service, these generally are ineligible as technical specifications.
- The requirements for the eco-label must be based on scientific information
- The requirements must have been adopted using a participatory approach,⁶¹ and be accessible to all interested parties
- You cannot require tenderers to be registered under a certain eco-label scheme, and must always accept equivalent means of verifying compliance with your requirements (such as a technical dossier of the manufacturer or a test report from a recognised body).

⁶¹ Article 23(6) of Directive 2004/18/EC specifies that all stakeholders such as government bodies, consumers, manufacturers, distributors and environmental organisations should be able to participate in the procedure for adoption of eco-labels.

Czech GPP includes eco-labelled products

A 2010 decision of the Czech government confirmed an instruction for national ministries to include environmental criteria in tenders. The same practice was recommended for other state bodies and the Ministry of the Environment is responsible for collecting data on this. Specific methodologies have been developed for the purchase of IT products and furniture with reduced environmental impacts. Latest figures show that some 20 million euro is spent annually by ministries on eco-labelled products, with boilers, IT equipment and paper and stationery accounting for the largest share of eco-label purchases.

Danish city goes for eco-labels

The City of Kolding, Denmark, incorporates the EU Ecolabel 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 licence 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: jinda75 / istockphoto.com

3.6 Verifying compliance

Whether you draw upon technical standards, eco-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:

- The EU and other GPP criteria reference mandatory environmental legislation with which all EU operators must comply, such as the RoHS Directive or REACH and CLP regulations. Evidence of compliance with such legislation, or the relevant national implementation, will normally be available from the tenderer as this is a basic condition for doing business in the EU.
- When using the criteria underlying an eco-label, products or services which carry that eco-label can be deemed to comply. Test results, a technical dossier or a declaration from the manufacturer, supplier or service provider can also prove compliance.
- Environmental product declarations can be a useful way of assessing compliance with environmental technical specifications. These provide information on the life-cycle environmental impacts of a product or service. An ISO standard⁶² exists for environmental product declarations, and reference may be made to this and equivalent standards.
- When applying environmental technical standards, you can make use of the conformity assessment procedures in place for the relevant standard, by accepting certification as one form of evidence that the product conforms. Different standards prescribe different kinds of certification systems, which should be listed on the website of the standardisation body.

A further discussion of verification in the context of award criteria, based on relevant case law of the European Court of Justice, is contained in Chapter 5.

⁶² ISO/TR 14025 *Environmental labels and declarations – Type III environmental declarations – Principles and procedures*

Chapter 4 – Selecting suppliers and service providers

Summary

- *It is possible to exclude companies that have breached environmental law if this constitutes professional misconduct according to national legislation.*
- *In the technical capacity criteria, the past experience of a company and the professional qualifications of its personnel offer good opportunities for including green considerations.*
- *In order to check whether companies can perform the environmental management measures prescribed by the contract, contracting authorities may ask them to demonstrate their technical capacity to do so.*
- *Environmental management systems, such as EMAS, can serve as a (non-exclusive) means of proof for that technical capacity. Setting requirements to comply with any particular environmental management system is not allowed.*

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 also exclude operators who are in breach of environmental law in some cases, and - for service and works contracts only - ask specifically about their ability to apply environmental management measures when carrying out the contract.

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.⁶³

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.⁶⁴

Two provisions in the exclusion criteria can be used to take into account operators' behaviour to the detriment of the environment:

- Conviction by final judgment of an offence concerning professional conduct⁶⁵ or
- Proven grave professional misconduct⁶⁶

A case of non-compliance with environmental legislation may under national law amount to professional misconduct, allowing the company concerned to be excluded. This exclusion ground may not be used by purchasers if no national legislation equates the specific breach with professional misconduct. Moreover, when applying these grounds of exclusion, the public authority must take account of the proportionality principle and to this end, consider all relevant circumstances and any measures



⁶³ For example, if the operator:

- is bankrupt or has been wound up,
- has committed serious professional misconduct,
- has not paid taxes or social security contributions.

⁶⁴ For example, if the company or one of its representatives has been convicted of participation in a criminal organisation, corruption, fraud or money laundering (Article 54 of Directive 2004/17/EC and Article 45 of Directive 2004/18/EC)

⁶⁵ Article 45(2) c of Directive 2004/18/EC and Article 53(3) of Directive 2004/17/EC

⁶⁶ Article 45(2) d of Directive 2004/18/EC and Article 54(4) of Directive 2004/17/EC

taken by the economic operator to remedy a negative situation affecting its eligibility (for example how long ago the professional misconduct took place, whether the responsible individuals are still with the company, etc.) Many contracting authorities require candidates or tenderers to sign declarations to ensure that none of the grounds of exclusion apply to them.

Exclusion from tenders for repeated breach of environmental law

For example, on the basis of the public procurement directives, a waste disposal company that has repeatedly breached environmental provisions, resulting in several administrative fines, could be excluded on grounds of grave professional misconduct. This would apply where breach of the environmental provisions is indicated in national legislation as professional misconduct.

Environmental technical competence could 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 concerns questions such as those listed below.

- Does the company have previous experience with executing environmental contracts?
- 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 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)?

In the criteria concerning technical capacity, a useful instrument for integration of environmental criteria is

4.3 Selection criteria

4.3.1 Environmental technical capacity



The public sector procurement directive contains an exhaustive list of means of evidence which can be required by the contracting authority to check the technical capacity of companies to execute the contract.⁶⁷

Environmental building design and construction

If a contracting authority wants to ensure that a new public building is built to a high standard in terms of its environmental performance, it makes sense to ask the tendering architects to provide proof of previous experience in designing similar buildings. This may be for example a reference from a previous public or private sector client.

Equally if a municipal facility needs to be built in an environmentally sensitive area, the contracting authority could ask for proof that the company has previous experience of managing construction projects in such conditions.

⁶⁷ Article 48 of Directive 2004/18/EC. Articles 53 and 54 of Directive 2004/17/EC require that the selection of tenderers be done in accordance with "objective rules and criteria which are available to interested economic operators."

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. In doing so you should ensure you set out clearly what type of information is considered relevant and what means of proof will have to be provided.



In other cases, environmental aspects can be addressed by examining the educational and professional qualifications of the staff responsible for carrying out the contract. These qualities are especially important in contracts that can only achieve their environmental objectives through the proper training of personnel.

Finally, for service and works contracts only, the procurement directives allow you to ask specifically

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.

at selection stage about the environmental management measures that the company will be able to apply in performing the contract.⁶⁸ This is restricted to “appropriate cases” – so if environmental management measures are not relevant to the contract in question you cannot ask the company to demonstrate their ability to apply them. Asking, for example, about a company’s ability to apply energy saving measures in a construction contract could be considered to be related to the subject-matter of the contract. One means of demonstrating the ability to apply such measures is certification under an environmental management system.⁶⁹

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),⁷⁰ or the European/international standard on environmental management systems (EN/ ISO 14001). The EMAS scheme is primarily

⁶⁸ Article 48 (2) f of Directive 2004/18/EC and Article 52(3) of Directive 2004/17/EC

⁶⁹ Article 50 of Directive 2004/18/EC and Article 52(3) of Directive 2004/17/EC – other evidence of the ability to apply equivalent environmental management measures must also be accepted.

⁷⁰ Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)

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. The ISO scheme is open to organisations across the globe. In Europe, there are around 89,000 ISO 14001-certified organisations and around 4,500 organisations and 7,500 sites certified under EMAS.

EMAS certification incorporates the requirements of EN/ ISO 14001, and includes additional elements related to review and audit, involvement of employees, continual improvement of environmental performance, and communication with the public and employees.

4.3.3 Environmental management systems and technical capacity

The procurement directives explicitly recognise that environmental management measures can serve as a means of proof for companies to demonstrate their technical capacity for services and works contracts, in appropriate cases.⁷¹ Appropriate cases are those in which the nature of the works and/or services justifies applying environmental management measures or schemes during the performance of a public contract. Naturally, those measures are directly linked to the performance of the contract. It is not permitted to ask for compliance with selection criteria which are unrelated to the performance of the contract.

EMAS certificates can be used as means of proof to demonstrate company's ability to apply environmental management measures. EN/ISO 14 001 or other systems which conform to the relevant international or European standards on certification and environmental management should also be recognised. Companies may also be able to demonstrate that they apply equivalent environmental management measures, even without certification. What is important is the substance of the measures to be applied, and you should consider the evidence supplied of this.

This means that contracting authorities can never require companies to possess an EMAS or ISO registration or comply (fully) with the requirements of registration.

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.⁷² 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.



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.

⁷¹ According to Article 48(2)(f) of Directive 2004/18', only in appropriate cases, an indication of the environmental management measures that the economic operator will be able to apply when performing the contract', may be used by the contracting authority as a selection criterion. Article 50 Directive 2004/18/EC and Article 52 (3) Directive 2004/17/EC refer to environmental management standards such as EMAS.

⁷² In Case T-331/06 *Evropaiki 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 point is found in Chapter 5.

Chapter 5 – Evaluating tenders

Summary

- *It is possible to apply environmental award criteria, provided those criteria:*
 - *are linked to the subject-matter of the contract*
 - *do not confer unrestricted freedom of choice on the contracting authority*
 - *are expressly mentioned in the contract notice and tender documents, together with their weightings and any applicable sub-criteria*
 - *are not selection criteria (e.g. experience or general capacity)*
 - *comply with the fundamental principles of EU law*
- *You may allocate points during the award stage to recognise environmental performance better than the minimum requirement 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 costs, maintenance and disposal costs in your evaluation may indicate that the greener option is also the cheaper option over the full life-cycle.*



Image: AllTC / iStockphoto.com

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 public procurement directives, you have two options: you can either compare offers on the basis of lowest price only, or you may choose to award the contract to the **'most economically advantageous' tender (MEAT)**, which implies that other award criteria will be taken into account, as well as the price.

The additional award criteria under MEAT can include environmental criteria. Indeed, the non-exhaustive list of examples in the directives allows contracting authorities to assess: quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion.

It is not necessary for each individual award criterion to give an economic advantage to the contracting authority.⁷³ Factors which are not purely economic may influence the value of a tender from the point of view of the contracting authority, including a range of environmental factors.

As the best offer will normally be determined on the basis of a number of different sub-criteria, you can use several techniques for comparing and weighing up the different sub-criteria. These techniques include matrix comparisons, relative weightings and bonus/malus systems.

⁷³ See Case C-513/99 *Concordia Bus Finland Oy Ab v Helsingin kaupunki*, at para 55 (the Concordia Bus case.).

It is up to each contracting authority to determine which award criteria to apply, and what weighting to assign to each of them. Some key rules about award criteria have been developed in case law:

1. Award criteria must have a link to the subject matter of the contract

While contracting authorities are free to define the subject matter of the contract and choose award criteria accordingly, it is not permitted to apply award criteria which relate to considerations outside the scope of the tender procedure.

The presence or absence of a link

In a ruling of the European Court of Justice on the purchase of buses (the Concordia Bus case), the Court 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.⁷⁴

In a ruling on the purchase of electricity, 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.⁷⁵

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

Award criteria must never confer unrestricted freedom of choice on contracting authorities.⁷⁶ 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.⁷⁷

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.

The specificity and measurability of the award criteria in the Concordia Bus case

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 certain levels of noise and nitrogen oxide emissions.⁷⁸ This system was considered by the Court of Justice to be adequately specific and objective.



Image: kankhoon / iStockphoto.com

⁷⁴ Judgment of the Court of Justice in Case C-513/99 *Concordia Bus*, at para 65

⁷⁵ Judgment of the Court of Justice in Case C-448/01 *EVN AG & Wienstrom GmbH v. Austria*. It should be noted, however, that the Court at the same time accepted the possibility of an award criterion related to the amount of electricity stemming from renewable energy sources (as part of the electricity effectively supplied to the contracting authority).

⁷⁶ See Case 31/87 *Gebroeders Beentjes BV v State of the Netherlands* at para 26; Case C-513/99 *Concordia Bus*, at para 69

⁷⁷ Case C-19/2000 *SIAC Construction Ltd v County Council of the County of Mayo*, at para 42

⁷⁸ In this case, extra points were awarded among other things, 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).

The verifiability of the award criteria in the EVN Wienstrom case

In the *EVN Wienstrom case*,⁷⁹ the contracting authority applied an award criterion relating to production of renewable electricity, without requiring any proof from tenderers of their sources of supply. The Court of Justice found that this breached the principles of equal treatment and transparency, as the authority neither intended nor was able to verify the extent to which suppliers met this award criterion.



3. Award criteria must have been advertised previously

The procurement directives require that award criteria be set out either in the contract notice or in the tender documents. 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:

- Whether the contract will be awarded on the basis of lowest price only or MEAT
- The criteria and sub-criteria you will apply (if you are using MEAT)⁸⁰
- The weighting which you will apply to each of the criteria in the evaluation.⁸¹ When the contracting authority can demonstrate that weighting is not possible the award criteria may be indicated in descending order of importance.⁸²

4. Award criteria must not be selection criteria

Award criteria must not examine matters which are more properly assessed at selection stage, or which have already been assessed at selection stage. This precludes award criteria related, for example, to the previous experience of tenderers or their technical and financial capacity.⁸³

5. Award criteria must respect Community law

Award criteria must comply with all the fundamental principles of Community law. The Court of Justice has explicitly mentioned the importance of the principle of non-discrimination, which is the basis of other provisions, such as the freedom to provide services and the freedom of establishment.

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 Community of Helsinki were discriminatory because the Community's own bus company HKL was the only company with 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.⁸⁴

⁷⁹ Case C-448/01 *EVN AG & Wienstrom GmbH v. Austria*

⁸⁰ Case C-532/06 *Lianakis and others v Dimos Alexandroupolis and others*, at para 38.

⁸¹ Case C-532/06 *Lianakis and others v Dimos Alexandroupolis and others*, at para 38. In case C-331/04 *ATI EAC and others v ACTV Venezia Spa*, the ECJ confirmed that it is not necessary to attach in advance specific weight to the subheadings of an award criterion.

⁸² Article 53 (2) Directive 2004/18/EC; Article 55 (2) Directive 2004/17/EC.

⁸³ Case C-532/06 *Lianakis and others v Dimos Alexandroupolis and others*, at paras 25-32

⁸⁴ One of the facts in this case was that the complainant was awarded a different lot in which the same requirement of gas-powered vehicles was applied.

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 criteria). 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 weighting given to each award criterion determines the influence it has in the final evaluation. The weight given to environmental award criteria⁸⁵ 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 weighting in evaluation and vice versa.

There is no set maximum for the weighting 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 on the market conditions. For example, if there is not a large degree of price variation for a product, but environmental performance varies greatly, it makes sense to allocate more marks to assess environmental characteristics.

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.

⁸⁵ In the *EVN Wienstrom* case (C-448/01), it was found that a weighting of 45% of the total marks available for a criterion related to the production of electricity from renewable sources was acceptable, provided the other rules regarding award criteria were met.

5.2.3 Using eco-labels

The environmental criteria underlying eco-labels, which refer to the environmental characteristics of the product, work or service, may also be used to help draft and assess award criteria.

Eco-labels typically have a large number of environmental requirements which the product or service must meet. One approach is to use certain eco-label criteria as minimum requirements in the specifications, and then award additional points during the evaluation stage for products or services which meet more of the relevant criteria included in eco-labels.

As when using eco-label criteria to set specifications, you cannot insist on a particular certification or label at award stage, but must consider any other evidence of meeting the underlying criteria.

5.2.4 Using environmental management systems

In some cases 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.

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 for a company with a third-party certified environmental management scheme than 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.⁸⁶ It is important to note that the EEA is not covered by the procurement directives. However the endorsement by the Court of a qualitative approach to assessing environmental award criteria is worth noting.

⁸⁶ 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 *Evropaiki Dynamiki v European Environment Agency*, at para 76)



Image: AITG / iStockphoto.com

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, commissioning, etc.)
- Operating costs, including energy, 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.

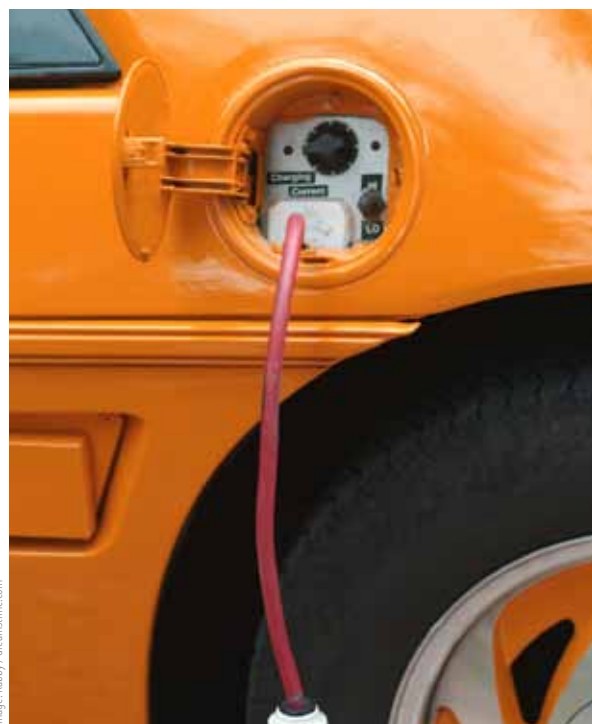


Image: Kabby / dreamstime.com

Slovenian Ministry assesses operational costs for vehicles

The Slovenian Ministry of Public Administration includes GPP criteria when purchasing vehicles on behalf of public authorities. The approach taken in 2009 and 2010 was to set maximum threshold amounts for average CO₂ emissions for six categories of vehicles. In 2011, the Ministry moved to implement a more comprehensive operational lifetime costing model by assessing emissions of CO₂, NO_x and particulate matter as well as average fuel consumption/km. This approach is in line with the Clean Vehicles Directive (2009/33/EC).

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 that are not considered within the purchase price. Often this will lead to 'win-win' situations whereby the greener product, work or service is also the 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 and water

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

Greek city saves on lighting costs

The City of Amaroussion in Greece examined the potential savings from replacement of its street lighting equipment before going to tender. It found that replacement of its old high-pressure mercury lamps with metal halide lamps would lead to savings of approximately 40% per annum in terms of electricity consumption. A technical specification was developed and 2500 of the new-technology luminaires were purchased and installed. Even taking into account the higher purchase price, the lifetime cost savings for each lamp are calculated at €315, with lifetime CO₂ emission savings of some 2.9 tonnes.



Image: iH5man / Flickr.com

Savings on maintenance and replacement

In some cases the greenest alternative will be one which is designed to maximise the period until replacement and minimise the amount of maintenance work which needs to be done. For example, the use of ground granulated blast furnace slag in concrete may increase the lifespan of buildings, and at the same time reduce the amount of efflorescence (saltpetering) requiring maintenance. This could reduce the total life-cycle cost when compared with other types of concrete.

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 in some cases turn a bargain into an expensive purchase. Disposal costs can range from the cost of physical removal to paying for secure disposal. Frequently, disposal is governed by very strict regulations, such as those in place under the WEEE Directive.⁸⁷

Planning the disposal phase intelligently: the example of the building sector

One of the areas where a lot of waste is produced is the building sector. 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 profits to be made from using recycled waste materials, such as used asphalt or demolished building materials.



Image: USACE / Flickr.com

⁸⁷ Directive 2002/96/EC on waste electrical and electronic equipment. (currently being recast)

5.3.2 Assessing external environmental costs

As well as financial costs directly borne by the contracting authority, under certain circumstances you may also take into account environmental externalities - the costs for society of specific environmental impacts, such as climate change or acidification. LCC which takes **environmental externalities** into account is sometimes referred to as “whole-life costing” (WLC).

In order to use external costs in procurement they must meet the requirements for award criteria set out above (in particular, the requirement for a link to the subject matter of the contract) and be expressed in monetary terms. These may then be evaluated alongside other costs in order to determine the lowest offer. One example of how this can be done is set out in the Clean Vehicles Directive (2009/33/EC).

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 (CO₂), nitrous oxide (NO_x), non-methane hydrocarbons (NMHC) and particulate matter.⁸⁸ 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.

If you assess externalities as part of life-cycle costing you cannot assess the same elements elsewhere in your award criteria.

⁸⁸ 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).



5.3.3 Applying LCC

An increasing number of public authorities in Europe are using LCC to determine the lowest cost in evaluating offers, and a variety of tools of different complexity and scope have been developed (see box).

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 capital is expected to accrue a certain amount of interest over time.⁸⁹ This factor needs to be taken into account when comparing the life-cycle costs. This is done through applying a discount rate to future costs, which is typically your country’s national interest rate. This gives each cost a net present value (NPV), which allows a straight comparison of all present and future costs.
- **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 tendering companies is therefore important. In some cases, where future costs are within the control of the supplier (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.

⁸⁹ €100 was invested today at 5% interest would be worth €105 in 1 year’s time. Therefore €105 spent in 1 year’s time is only “worth” €100 at the present time.

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://www.cleanvehicle.eu>
- The European Commission’s common method for LCC in construction: http://ec.europa.eu/enterprise/sectors/construction/files/compet/life_cycle_costing/final_report_en.pdf
- A tool for assessing both LCC and CO₂ emissions in procurement, developed within the SMART-SPP project: <http://www.smart-spp.eu>
- An LCC tool produced by the Swedish Environmental Management Council (SEMCo): http://www.msr.se/en/green_procurement/LCC/
- An LCC tool developed within the BUY SMART project: <http://www.buy-smart.info>



Chapter 6 – Contract performance clauses

Summary

- *Contracting authorities can use contract clauses to include environmental considerations at the performance stage. These must be linked to the tasks necessary for the production and provision of the goods or services that the contracting authority intends to purchase.*
- *The contracting authority 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 bonuses under the contract. In order to discourage breaches of the environmental commitments, contracting authorities can provide for adequate sanctions under the contract.*
- *Compliance with contract clauses should be carefully monitored during the execution of the contract, with responsibility for compliance and reporting clearly indicated in the contract.*
- *Contract performance clauses may not be used to introduce environmental requirements which amount to a material amendment of the contract as tendered – i.e. which would have changed the outcome of the competition.*



Image: daram / istockphoto.com

6.1 Rules governing contract clauses

Contract performance clauses are used to specify how a contract must be carried out. It is recognised that environmental and social considerations can be included in contract performance clauses, provided they are published in the contract notice or the specifications and comply with Community law.⁹⁰

- Contract clauses should not be disguised technical specifications, award or selection criteria. In other words, the economic operator may not be requested to prove compliance with the contractual clauses during the procurement procedure. Compliance with the contractual clauses should only be monitored during the execution of the contract.
- Contract clauses may however include the specific commitments which have been made as part of the procurement process (e.g. enforcing compliance with the environmental performance levels claimed in the tender)
- Contract clauses must be set out clearly in the call for tenders to ensure companies are aware of all the obligations laid down in the contract and are able to reflect this in the price of their bids.⁹¹ The contracting authority may provide that economic operators will be excluded from further participation if they do not assent to the contractual clauses.
- Contract clauses should be linked to performance of the contract. This means they must relate to the tasks which are necessary for the production and the provision of the goods, services or works purchased.
- Contract clauses may not result in discrimination in favour of contractors from any particular Member State

⁹⁰ Article 26 of Directive 2004/18/EC and Article 38 of Directive 2004/17/EC

⁹¹ Case C 496/99 P *Commission v CAS Succhi di Frutta*, at paras 115–121

6.2 Contract performance clauses for the supply of goods

For supply contracts, the main opportunity for the use of environmental clauses is often to specify how the goods will be delivered. Simple ways to improve the environmental impact of the 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 also be another way of achieving the same result.
- Requiring that goods be delivered outside 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 deliver regular information 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. This would not apply to one-off supply contracts.



Image: Bernhard Benke / Flickr.com

Sustainable furniture packaging in Ireland

The Office of Public Works (OPW) in Ireland concluded over 200 contracts to supply office furniture between 2007 and 2010, worth up to €10 million per year. Contract clauses require contractors to employ good environmental practices on site with regard to waste reduction, waste recovery, minimisation of packaging, use of recoverable packaging materials, control of environmental emissions, and the efficient use of materials and transport. For example, one supplier began delivering the goods wrapped in blankets, rather than using plastic-based wrapping. Use of such recoverable packaging materials is now standard practice for the Furniture Division's suppliers. Another company now shreds its hardwood waste materials for use in its own heating system.

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.

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

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
 - Minimisation of waste associated with the contract, e.g. by including specific targets or maximum amounts accompanied by penalty or bonus clauses
 - Efficient use of resources such as electricity and water on site
 - 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
- **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 CO₂ 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 by the contractor



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.

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.



Monitoring compliance with CO₂ reductions in Latvia

The Latvian Ministry for the Environment awards approximately €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 CO₂ emission reductions with the amount indicated in the project application and contract, 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.

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, electricity and timber. 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 greener alternatives. The approaches outlined are based on the EU GPP criteria.⁹²

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.



Image: Stephan Köhler / ICEE

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.⁹³

7.1.1 GPP approach

- Include selection criteria for architects and engineers on experience in sustainable building design, and for contractors in applying appropriate environmental management measures.
- Specify minimum energy performance standards⁹⁴ for the final building at each stage of the procurement process. Consider providing additional points during award of design contracts for performance beyond the minimum.
- Consult standards such as the TC/CEN 350 (Sustainability of construction works) and 351 (Construction products – Assessment of release of dangerous substances)⁹⁵ to determine if compliance with these or equivalent standards should be included in your specification
- Give preference to designs which incorporate renewable energy systems
- Restrict the use of hazardous substances in building materials
- Encourage the use of sustainably sourced timber and other natural materials, recycled and reused materials and the recyclability of materials at their end-of-life
- Give importance to indoor air quality, occupant wellbeing and adequate ventilation

⁹² http://ec.europa.eu/environment/gpp/gpp_criteria_en.htm

⁹³ 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 <http://www.sci-network.eu>

⁹⁴ As outlined in the introduction, the Directive 2010/31/EU on the Energy Performance of Buildings (recast) will make certain minimum energy performance standards compulsory for all new build and major renovation projects from 2013.

⁹⁵ <http://www.cen.eu> for further information on the development and application of these standards.

- Require the use of water-saving installations and encourage the reuse of grey water and rainwater
- Include contract clauses related to waste and resource management and transport of construction materials
- Give contractors responsibility within the contract for monitoring energy performance for several years after construction, and for training users of the building on sustainable energy use

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.

7.2 Food and Catering services

According to a study carried out for the European Commission, the food and drinks sector is responsible for between 20 and 30% of the most significant environmental impacts in Europe.⁹⁶ The most significant environmental impacts in this sector relate to the use of harmful chemicals in the production and manufacture of food, and food transportation. Many public authorities are looking to increase the share

of organic food served in school and office canteens – as well as reducing the share of high-impact meat products. The unsustainable use of marine resources and packaging waste are also important considerations.



Image: iStock

7.2.1 GPP approach

- Specify a minimum percentage of food which must be organically produced.⁹⁷ 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, and sustainably harvested marine products
- 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

Sustainable food in Malmö

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, for fish products to comply with the Marine Stewardship Council criteria (or equivalent), 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.

⁹⁶ European Commission Joint Research Centre, *Environmental Impact of Products (EIPRO)*, 2006 at page 15. This study looked at the influence of different market sectors in relation to the following environmental impacts: abiotic depletion, acidification, ecotoxicity and global warming, eutrophication, human toxicity, ozone layer depletion and photochemical oxidation.

⁹⁷ 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.

7.3 Electricity

Electricity generation from fossil fuels is one of the principal sources of greenhouse gas emissions globally. Many European public authorities are now purchasing electricity from renewable energy sources. A definition is provided by Directive 2009/28/EC on the promotion of the use of energy from renewable sources. This Directive also obliges Member States to issue a Guarantee of Origin certificate for green electricity whenever this is requested by electricity providers. This is intended to ensure that green electricity is not sold twice, as it is physically indistinguishable from non-green electricity. This is an important factor in ensuring the credibility of green energy supply.

7.3.1 GPP approach

- Require electricity (or a proportion of electricity) to be generated from renewable energy sources. Request Guarantee of Origin certificates.
- Consider including an award criterion for complementary energy saving activities offered by the electricity supplier, such as an energy audit of your existing consumption patterns.
- Assess the efficiency of electricity generation by requesting information from suppliers and including minimum efficiency factors into your contract.



Image: scchu

Purchase of renewable electricity in Rivierenland

In 2009 the ten municipalities of the Dutch region of Rivierenland decided to join forces to renew their electricity supply contracts. Framework contracts were set up to allow the municipalities to choose between fossil-fuel based electricity and electricity generated from renewable sources. To date the purchasers have all chosen green electricity, which with consumption of 12.5 GWh per year, amounts to approximately 5,500 tonnes of saved CO₂ emissions, equivalent to the annual emissions of 600 EU citizens.

Intelligent energy in Luxembourg

The municipality of Beckerich in Luxembourg is aiming to become energy self-sufficient and to reduce its CO₂ emissions. In order to become independent from fossil-fuel energy sources, two biogas plants, one wood chip plant and a district heating network have been built. Today more than 90% of its energy and more than 40% of its heat come from renewable sources. All municipal buildings are equipped with intelligent management systems and connected to a central control unit. A remote-controlled public lighting system has been installed in several villages, which allows for a significant reduction in energy consumption.

7.4 Timber

Many public contracts involve the procurement of wood or wood products, for example as part of construction works, furniture or flooring. The concepts of sustainable and legal timber have been acknowledged in the EU as being of key importance, leading to the adoption of a number of legislative and voluntary measures to regulate the traceability of timber.

The EU Timber Regulation adopted in 2010⁹⁸ sets a requirement that all timber and timber products placed on the EU market come from legal sources, and requires operators to ensure traceability and proof of compliance throughout their supply chain. Under the EU's Forest Law Enforcement, Governance and Trade (FLEGT) action plan bilateral Voluntary Partnership Agreements are being put in place with timber producing countries, allowing the legality of exports to the EU to be verified by licensing.⁹⁹ Timber and timber products which meet the requirements of the FLEGT licensing scheme are considered to be legally harvested for the purpose of the Timber Regulation.

It is broadly agreed that sustainable forest management implies management with a view to, amongst others, sustaining biodiversity, productivity and vitality. Many also refer to specific social considerations relating to the management of the forest such as respecting the rights of indigenous groups to manage the forest, and safeguarding the basic rights of forest workers. Certification systems such as the FSC (Forestry Stewardship Council) or PEFC (Programme for the endorsement of forest certification schemes) exist, and may be used to demonstrate compliance with some or all of these criteria.

7.4.1 GPP approach

- Require all timber products to be from legal and sustainably managed sources. Proof of compliance may include third party verification through certification schemes such as FSC or PEFC or licensing schemes such as FLEGT. Alternative evidence must also be accepted.

- Include contract clauses which require the supplier to respect the rights of forest workers and indigenous groups who are responsible for forest management (see UK example below).

Sustainable timber procurement in the UK¹⁰⁰

The UK Government's timber procurement policy requires all central government departments to only procure timber and wood-derived products originating from either legal and sustainable or FLEGT licensed or equivalent sources. Local government is encouraged to comply.

In addition, since April 2010 this policy has been expanded to require the inclusion of contract clauses addressing specific social issues. All products shall originate from a forest source where management of the forest has full regard for:

- Identification, documentation and respect of legal, customary and traditional tenure and use rights related to the forest
- Mechanisms for resolving grievances and disputes including those relating to tenure and use rights, to forest management practices and to work conditions
- Safeguarding the basic labour rights and health and safety of forest workers.

French city sets high standards for wood purchases

The city of Cognac in France decided in 2005 to implement sustainability criteria in its timber purchases. This was in response to concern about the use of rare and endangered wood species in outdoor furniture. Requirements regarding certification of origin, compliance with international agreements and the use of treatment agents and adhesives have all been incorporated into recent tenders – without any adverse effect on costs. The criteria have been applied to wood for construction, wall panels and door units. Criteria for paper and printed material are now being introduced.

⁹⁸ Regulation (EU) No 995/2010 laying down the obligations of operators who place timber and timber products on the market.

⁹⁹ more information on FLEGT see <http://ec.europa.eu/environment/forests/flegt.htm>

¹⁰⁰ For further information see <http://www.cpet.org.uk/uk-government-timber-procurement-policy>

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 2004/18/EC on the award of public works contracts, public supply contracts and public service contracts	Public sector procurement directive
Directive 2004/17/EC on the procedures of entities operating in the water, energy, transport and postal services sectors	Utility sectors procurement directive
Regulation (EC) No 1177/2009 amending Directives 2004/17/EC, 2004/18/EC and 2009/81/EC of the European Parliament and of the Council in respect of their application thresholds for the procedures for the award of contracts	Sets monetary thresholds for the application of the EU Procurement Directives for contracts for goods, services and works
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.
Action Plan for Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) COM (2008) 397	Provided a strategic framework for EC activities in support of GPP, as well as measures including updates to the Ecodesign Directive, EU Ecolabel Regulation, EMAS Regulation and Energy Labelling Directive
Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe COM (2007) 799	Introduces a new methodology for the procurement of research and development services
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 179/2	Provides an interpretation of the Treaty principles and other law applicable to below-threshold contracts, concessions etc.

Sectoral requirements and other relevant regulations

Legislation/policy	Relevance
Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles	The Clean Vehicles Directive sets mandatory GPP requirements for vehicle purchases
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 establishes new energy efficiency classes. It specifically encourages authorities to purchase only higher classes. In transcribing the Directive Member States may set minimum standards for contracting authorities to demand in procurement
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 2002/96/EC on waste electrical and electronic equipment (WEEE) (currently being recast)	Directive providing for the separate collection, treatment and recovery of waste electrical and electronic equipment, and setting relevant design requirements
Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) (currently under revision)	The public sector has to make sure that the hazardous substances identified in the Directive are removed from public buildings and are not contained in any electrical or electronic equipment purchased.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (currently under revision)	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."

EU GPP website

The handbook is available on the GPP website of the European Commission (<http://ec.europa.eu/environment/gpp>), which also contains:

- Further information on the legal and policy background for GPP
- The full sets of EU GPP criteria and background reports, as well as information on the criteria-setting process
- Information on National Action Plans for GPP adopted by the Member States
- More detailed examples of GPP from contracting authorities across Europe
- Links to studies, projects, networks and organisations relevant to GPP
- A list of FAQs and glossary of key terms
- News-Alerts with the latest GPP news from across Europe, and upcoming events

Eco-labels and GPP

An eco-label provides information about the environmental characteristics of the product or service which carries it. This information normally reflects a full life-cycle assessment (LCA) of the product or service.

As such, they are valuable tools in GPP and to promote sustainable production and consumption more widely.

A large number of eco-labels have been developed in the EU and other jurisdictions for various products and services. The criteria underlying these labels can normally be found on the website of the body responsible for the eco-label.

A list of the main eco-labels in use in the EU, and links to the relevant websites, is available on the EU GPP website.

European Commission
Buying Green! A Handbook on Green Public Procurement

2011 — 56 pp. — 21 x 29,7 cm

Luxembourg: Publications Office of the European Union

ISBN: 978-92-79-19930-1
doi: 10.2779/74936

