

Critérios de circularidade nas Compras Públicas Ecológicas

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Sessão: Estratégia Nacional para as Compras Públicas Ecológicas 2020

Lisboa, 2 de fevereiro de 2018

**The European Commission's
science and knowledge service**
Joint Research Centre

The Joint Research Centre at a glance

**The European
Commission's
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**European Commission
Environment Directorate-General
Robert Kaukewitsch**

EU Green Public Procurement (GPP) Policy

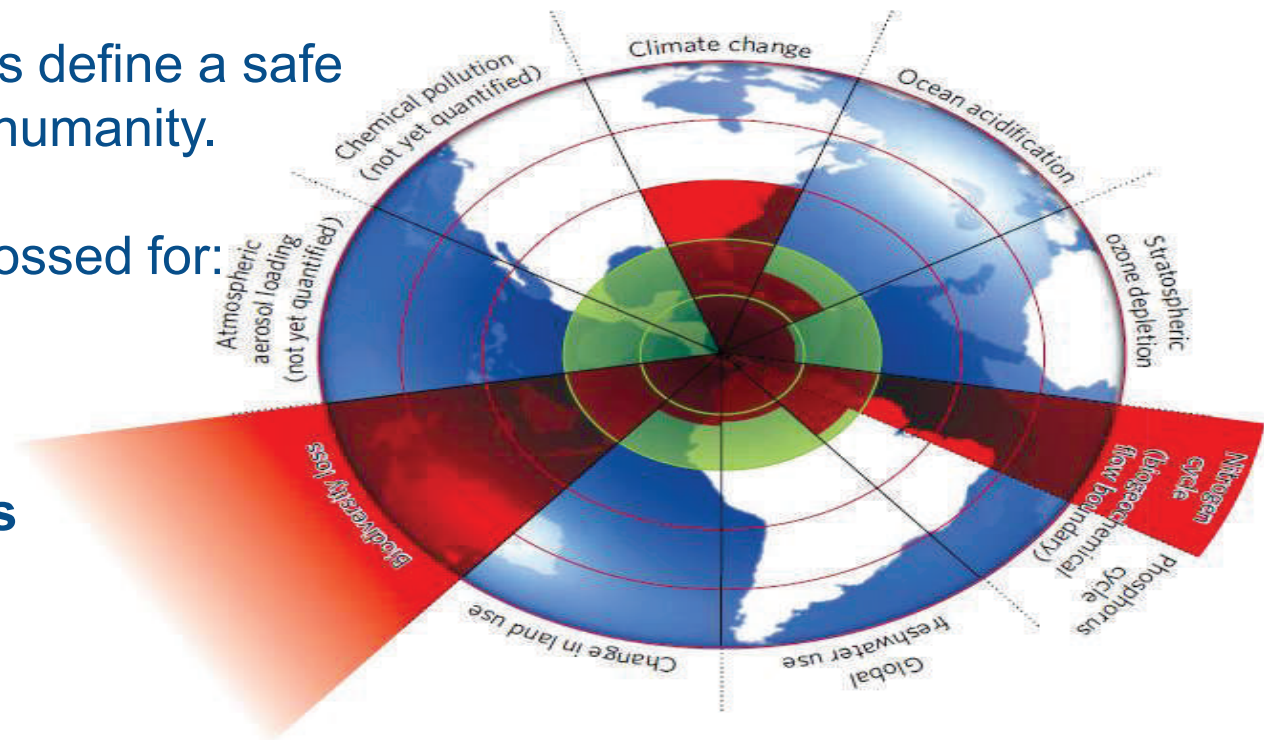
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WHY GPP?

Planetary boundaries define a safe operating space for humanity.

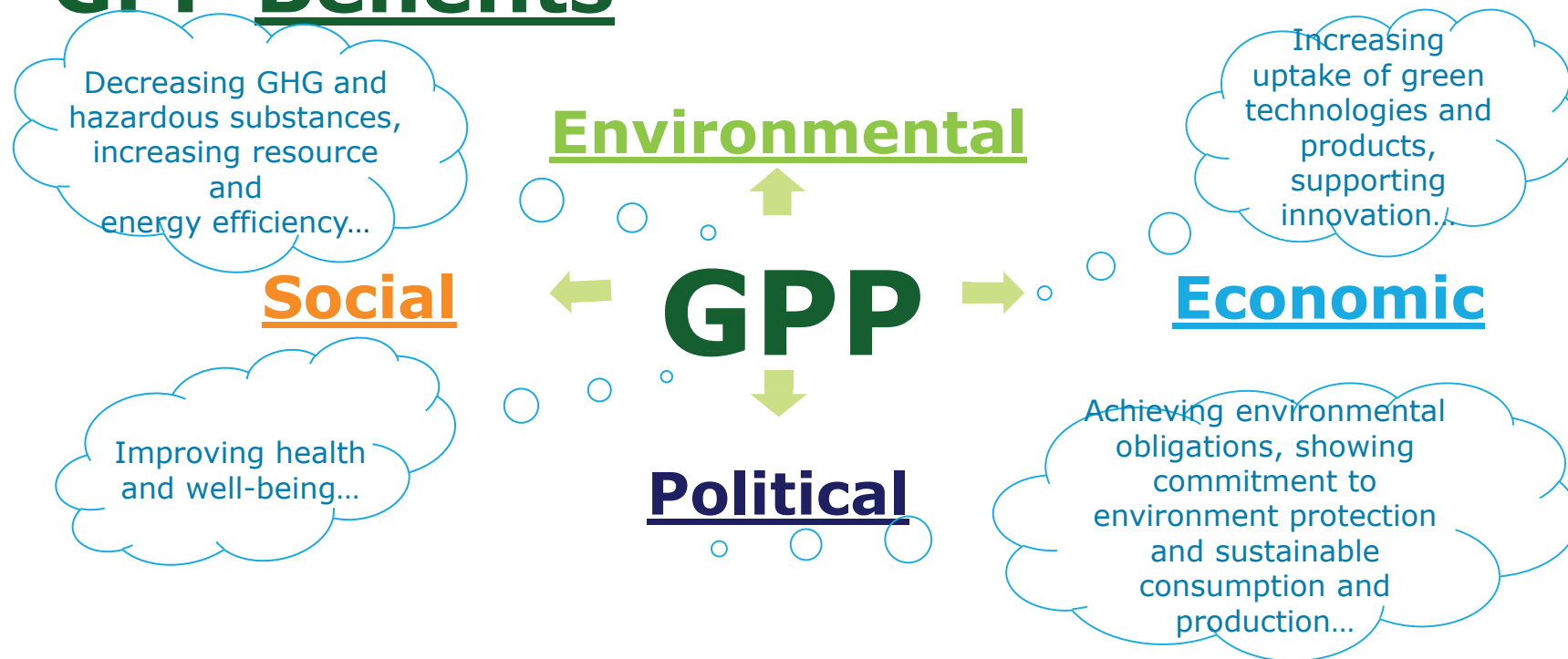
These have been crossed for:

- **Climate change**
- **Biodiversity loss**
- **Nitrogen cycle**



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GPP Benefits



Why GPP?

- Legitimate expectation of citizens
- Strategic use of procurement:
 - E.g., purchasing cleaner buses helps achieving clean air targets



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Obstacles to GPP

- Lack of political support
- Green products are perceived to cost more
- Lack of knowledge on how to verify green criteria
- Lack of awareness of the benefits of green products
- Lack of professional workforce + time



Commission support



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Communication (2008)

Public Procurement for a Better Environment

- Political **target**: **50%** of tendering procedures to be green by 2010
- Common **EU GPP criteria** for priority products and services
- Legal/operational **Guidance**
- GPP National Action Plans





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GPP is voluntary...with some exceptions

- **Energy Star Regulation (2008):** obligation to buy office equipment at least as efficient as the Energy Star standards
- **Clean Vehicles Directive (2009):** obligation to buy environmental friendly vehicles (taking at least CO₂, PM₁₀, NO_x and NMHC), life cycle tool!



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GPP is voluntary...with some exceptions

- **Energy Efficiency Directive (October 2012):**

"soft" obligation to purchase energy efficient buildings and equipment of the highest energy labelling class. ONLY FOR:

- *central government*
- *purchases above the value thresholds*
- *"insofar as this is consistent with cost- effectiveness, economic feasibility, wider sustainability, technical suitability, sufficient competition".*



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GPP support tools

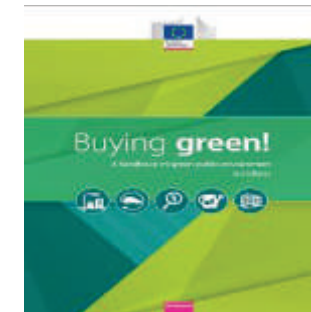
GPP website of the European Commission:

- *Full sets of EU GPP criteria and background reports in 20+ languages*
- Buying Green Handbook
- Circular Procurement brochure **NEW!**
- More than 100 GPP Examples
- News and upcoming events

HELP DESK:

In EN, FR, DE gpp-helpdesk@iclei.org

Newsletter (please sign up!)



Exchange with peers events on GPP



The first ever **Nordic Green Procurement Week** will take place this November with events scheduled in each of the Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden from 2 to 16 November.

The **Danish Forum for Sustainable Procurement** and its Nordic partners are hosting the event, which is supported by the Nordic Council of Ministers. A diverse range of events will provide food for thought on a variety of issues, such as:

as "The Environmental Revolution in Public Procurement" (in Norway), which will address how the new EU public procurement directives will potentially impact on the Green Procurement Award in Denmark and a discussion on eco-labelling in Iceland. The Swedish game Procure, which involves procurers, technical experts and politicians going through a GPP process together, will also see its premiere.

The **Nordic Green Procurement Week** is one of a number of events taking place on green purchasing in Europe this year. Other events include a **three day training workshop on sustainable procurement** organised by the United Nations Environment Programme from 19 to 21 October, and the **European Procurement Seminar** in Barcelona, Spain on 11 November which will see a day of lively interaction on designing procurement for a low carbon future.

Using procurement to improve the sustainability of healthcare a guiding document targeting in particular the health sector to explain how the Directive should be transposed at the national level to achieve the best outcome in terms of both green and ethical procurement.

Do you feel that action in this area is on the increase? We do see an increase in green procurement, but feel it is patchy and by far not ambitious enough to lead to new innovative products saving energy, using less, and/or safer recyclable material. However, a good example of this is the new contract for the Swedish Councils have agreed on a code of conduct ensuring green and ethical procurement, that suppliers have to sign before entering into a procurement contract with the council.

To view the interview in full, click [here](#).



What initiatives are Health Care Without Harm (HCWH) embarking on when it comes to sustainable procurement? HCWH Europe has been working on the implementation of the new EU public procurement directives (specifically Directive 2014/24/EU) together with the **Network for Sustainable Procurement in Public Procurement** (NSPPP). To influence first the development and then the transposition of the Public Procurement (PP) Directive, HCWH Europe organised three workshops and produced

GPP examples

Procurement of energy efficient street lighting in Croatia



In 2014, the Municipality of Zupa Dubrovnik (situated on the Mediterranean coast in the south-east of Croatia) published a tender to improve the quality of its street lighting and decided to publish an open tender requesting the replacement of existing street light fixtures and high pressure mercury lamps, with a new and more sustainable solution.

The Municipality published a tender in May 2014, and has since then calculated the energy and CO₂ emissions saved by the new system using the **GPP 2012** methodology. It will achieve a lifetime of 25 years. This calculation was based on the fact that the old system consumed 330,000 kWh and emitted an average of 100 tonnes of CO₂ a year, while the new LED lighting solution has reduced the CO₂ emissions (from street lighting) by 36%, as it consumes only 210,000 kWh per year and will save the equivalent of 60 tonnes of CO₂ over a 25 year period. The procurement was the first of its kind for the Municipality, which proved far from problematic for the market, and thus sets a good precedent for similar future action.

Download the full case study [here](#).

Low carbon healthcare catering solution, United Kingdom



As part of the EU-funded **ECOQUIP** project, a public procurement process was initiated in 2012 to bring about a step change in the quality of catering at Rotham Hospital, a large acute departmental project team set up at the hospital designed an output based procurement to define their unmet need and engaged the market in a pre-procurement dialogue. The new contract offering a forward commitment to the procurer was signed earlier this year. Financial savings of just over one million euro (800,000 British pounds) in the first five years are expected to be achieved.

In terms of sustainability, the new service will provide progressive carbon reductions over the life of the contract in both the on-site catering provision and the wider supply chain; a reduction in food plate and food preparation waste; and a step-change in the environmental sustainability of catering services. Rotham's approach offers a model, specifications and evaluation criteria to stimulate the supply and wider uptake of innovative and environmentally friendly catering services.

Download the full case study [here](#).

Zoom in on... GPP in the waste sector

The **GPP10Waste** (Public Procurement on Innovation for Resource Efficiency and Waste Treatment) project website was launched in September, with the first meeting of the steering committee on 29 October. The project will be waste management experts from across Europe, as well as public purchasers, project partners and representatives from public waste management service providers. The project is co-funded by the European Commission and will be officially launched at the event.

More information...



Zoom in on... Sweden targets 50%

In 2014 the Swedish Organic Food Council (SOFK) published the results of the 1st national Swedish market study on organic food in the public sector. The study showed that in 2014, on average, 27% of all food purchased by the Swedish public sector was organic. This year, Sofk aims to reach 50% organic food. As Sweden offers lunches in all public schools, preschools, elderly homes and state hospitals, reaching this target would have a significant impact on the environment and public health.

The GPP News Alert is an initiative of the European Commission, Directorate-General Environment published on a



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20+ EU GPP Criteria



Copying and graphic paper



Computer and Monitors



Transport



Street lighting and traffic signals



Textiles



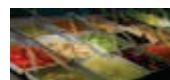
Cleaning products and services



Office Buildings



Furniture



Food & Catering services



Gardening products and services

And many more, both in place - http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm
and under development - http://susproc.jrc.ec.europa.eu/product_bureau/projects.html

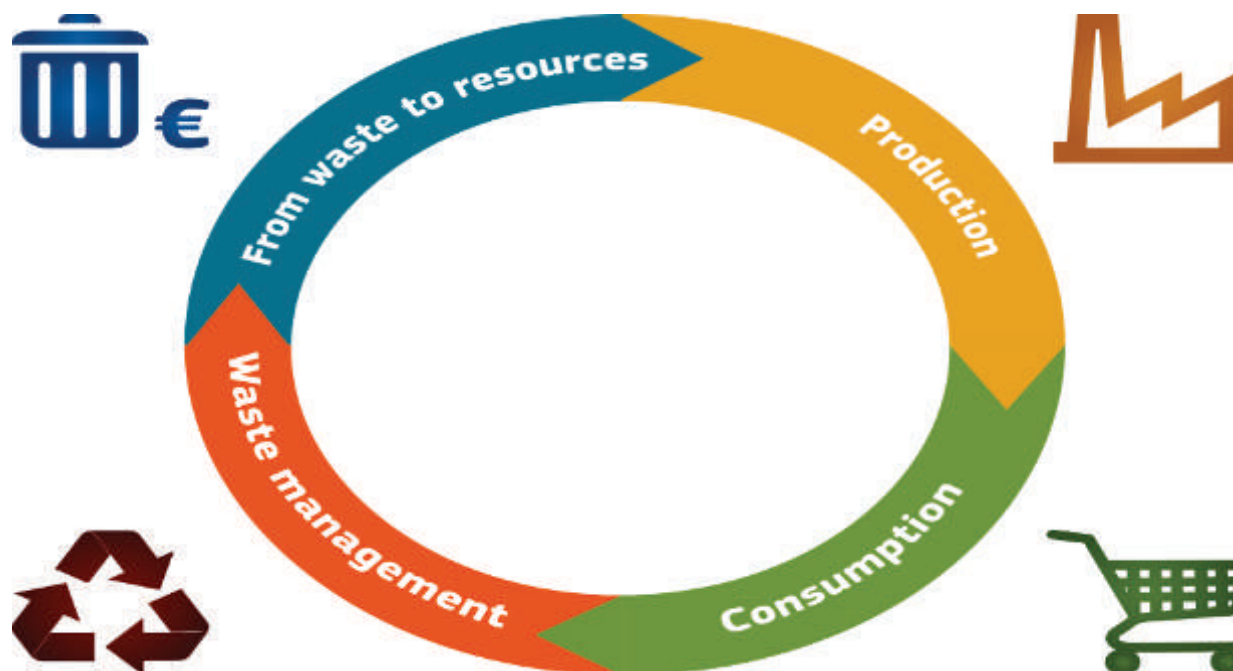
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From a Linear Economy...



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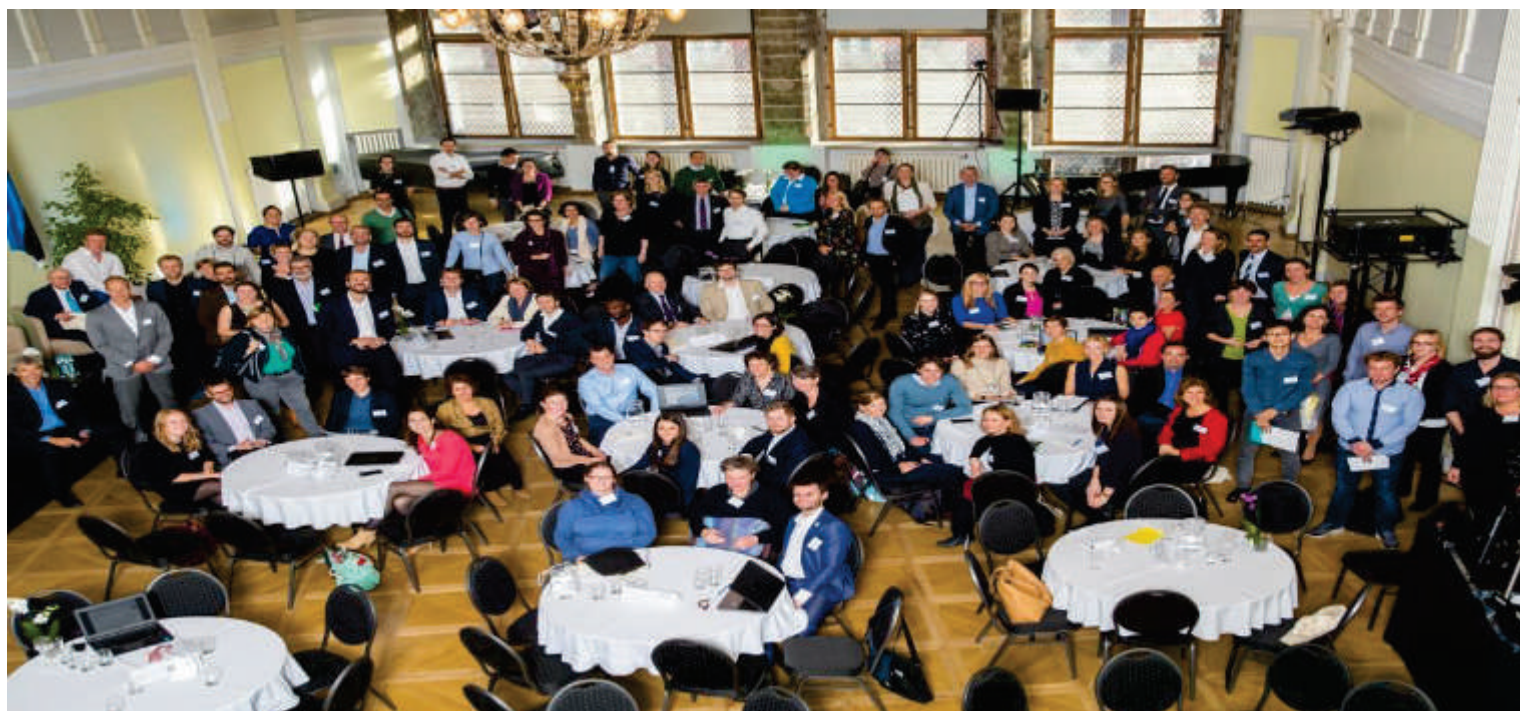
...to a Circular Economy





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Circular Procurement Congress 19 October Tallinn



Green Public Procurement in CE AP

- *Key role for circular economy acknowledged*
- *Special emphasis on circular economy aspects in criteria-setting*
- *Support a greater uptake of GPP criteria by public authorities, e.g. by training*
- *Commission to lead by example - in its own procurement, and **by reinforcing the use of GPP in EU funding***



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Reinforcing CE aspects in GPP criteria Examples

- *Replaceability and longer life-time of batteries in laptops*
- *Easy dismantling of monitors for recycling*
- *Easy repair of furniture, incl. spare part availability*
- *Encourage use of recycled materials in construction*



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Support higher uptake of GPP

- *Training, new training toolkit in 2019*
- *Guidance: Buying Green Handbook published + Circular Procurement Brochure*
- *Technical assistance*
- *Peer-to-peer learning*



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Savings with GPP: life-cycle costing (I)

Higher purchasing prices are often compensated for by lower operating costs

Examples:

- **Computers and Monitors:**

Savings for hardware (indicatively 17-44% of life cycle costs for desktops and notebooks and 87-92% for displays)

- **Roads:**

- Criteria on rolling resistance: 1-2 % reduction in fuel consumption and therefore in GHG emission
- Criteria on environmental noise pollution: External costs of noise emissions from passenger vehicles on roads have been estimated to be on average €2/ 1000pkm (passenger kilometres) and from freight vehicles to be €2.5/ 1000 ton.km
- Criteria on drainage systems ("hard or soft engineering") can help reducing the risk of flooding. Currently, flood damages in the EU are estimated to amount to €5.3-6.4 billion per year, adversely affecting the lives of 200,000 people each year

Savings with GPP: life-cycle costing (II)

Higher purchasing prices are often compensated for by lower operating costs

Examples:

- **Health Care EEE**

CT: Computed Tomography - Annual savings of up to € 3700

Dialysis - 50% less operating costs

MRI: Magnetic Resonance Imaging - Annual savings of up to € 6700 per MRI

- **Heating systems** (cost savings depend on energy prices)

Energy savings (core criteria) - Boilers: 40% (small) 50% (large)

Heat pumps: 45% (small) 55% (large)



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Elements of a strong GPP policy

- *Political support*
- *Well-trained workforce*
- *Strategic procurement function*
- *Long-time planning*
- *Dialogue with the market*
- *Concentration on main environmental impact areas*
- *Monitoring procedures*
- *Networking (EU projects?)*



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GPP Good Practices

The City of Barcelona (2013) adopted mandatory green criteria for vehicles, electricity, food and catering services



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Strategic approach in Ghent

- Procurement Team working directly with Mayor's office
- Cost reductions: Slimming down procurement processes, reducing purchased articles, LCC
- Integrating sustainability elements into all stages of a purchase: needs' assessment, early market engagement, integration of criteria in tender, control of contract
- Cost savings allow higher expenses where politically wanted (e.g. organic food)





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Eco-buy Vienna

Reduction of 15,000 t of CO₂ per year

Cost savings of approximately 1.5 million EUR per year due to modern facility management and energy-efficient appliances

Employee protection and reduction of health impacts through eco-friendly disinfectants and cleaning products - up to 40 % less cleaning products used with an equally good result

Air pollutants and particulate matter reduced through low-emission vehicles and by decreasing the transports on and for construction sites – annual external costs of about 300,000 EUR avoided

GPP 2020 aims to mainstream low-carbon public procurement across Europe.

Starting point: Many successful SPP examples, projects, policies, but little quantified information on impact. Policy makers need this data, GPP 2020 provides it.

GPP 2020 approach: Big Impact – working with big buyers in 8 EU countries and quantified impact - calculating CO2 savings for each tender

- Over 100 GPP tenders for energy related products and services carried out – all documented in Tender Models (46 as of 20.1.16)
- Estimated savings: 250,000 t CO2e (as of 20.1.16)
- Training series run with over 40 training seminars and 600 people reached (as of 20.1.16)
- Further support activities in each partner country: training, helpdesks, networking events, guidance



www.gpp2020.eu
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Procura+ European Sustainable Procurement Network

Procura+ is an initiative designed to offer direct **support** to public authorities in **implementing** sustainable procurement, facilitate **exchange** and **promote** achievements internationally

www.procuraplus.org



PROCURA+
European Sustainable
Procurement Network



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Some ambitious developments in the MS

- **Denmark, UK, NL, DE:** *obligation to buy timber only from sustainably managed forests*
- **Netherlands, Flanders:** *Green Deals on Circular Procurement*
- **Italy:** *2015 Law obliges all public authorities to apply Minimum Environmental Criteria for 10 product groups*
- **Bulgaria:** *aims at including GPP in Funds spending*



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

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Circularity aspects in EU GPP criteria

Miguel Gama Caldas



What is EU GPP?

Main policy framework:

Communication COM(2008)400: Public Procurement for a better environment

Definition (from COM(2008)400):

*"...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..."*

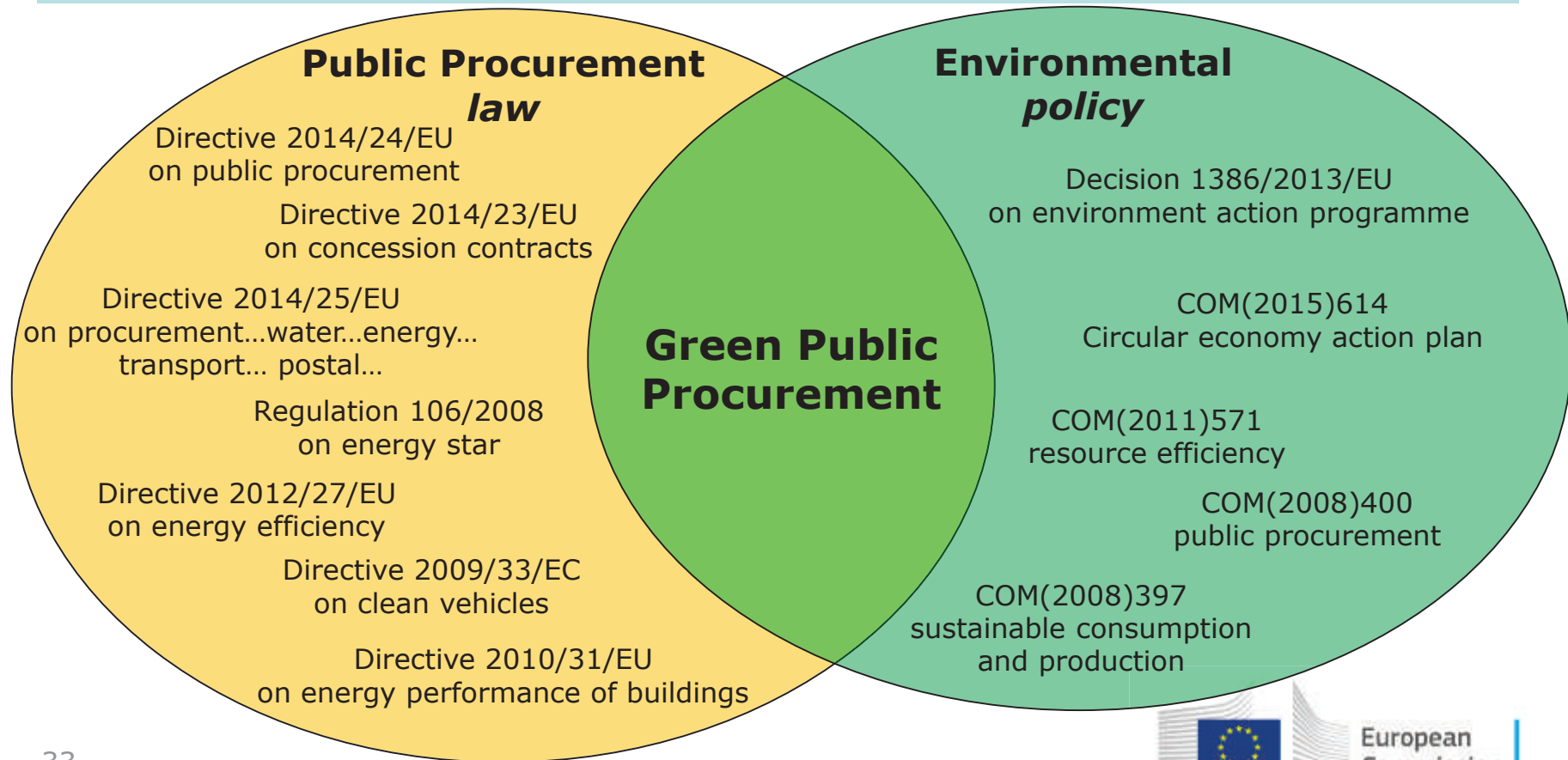
Objectives (from COM(2008)400):

*"...**reduce the environmental impact** caused by public sector consumption..."*

*"...**stimulate innovation** in environmental technologies, products and services..."*

*"...**shape production and consumption trends**..."*

EU GPP as a crossroad



What is considered when developing criteria

When developing criteria, the following aspects are taken into account:

- Expected environmental benefit (including circularity promotion) resulting from the adoption of the criteria.
- Legal aspects of public procurement practice.
- The scope of the EU GPP (e.g., focus on environmental impacts and primary function).
- The fact that EU GPP is a voluntary programme, therefore under the risk of not being adopted case it is too cumbersome to apply.
- Ease of verification.
- Cost considerations (from a life cycle perspective).
- Market availability considerations.

(subject to market data limitations,
which can be significant)

EU GPP criteria development approach

Environmental impacts from product group

Not important

Important (**environmental hotspots**)

Can be reduced without compromising
function (**criteria areas**)

Cost, market availability and
verification considerations

EU GPP Criteria
(worded in a
legally sound way)

EU GPP criteria levels of ambition

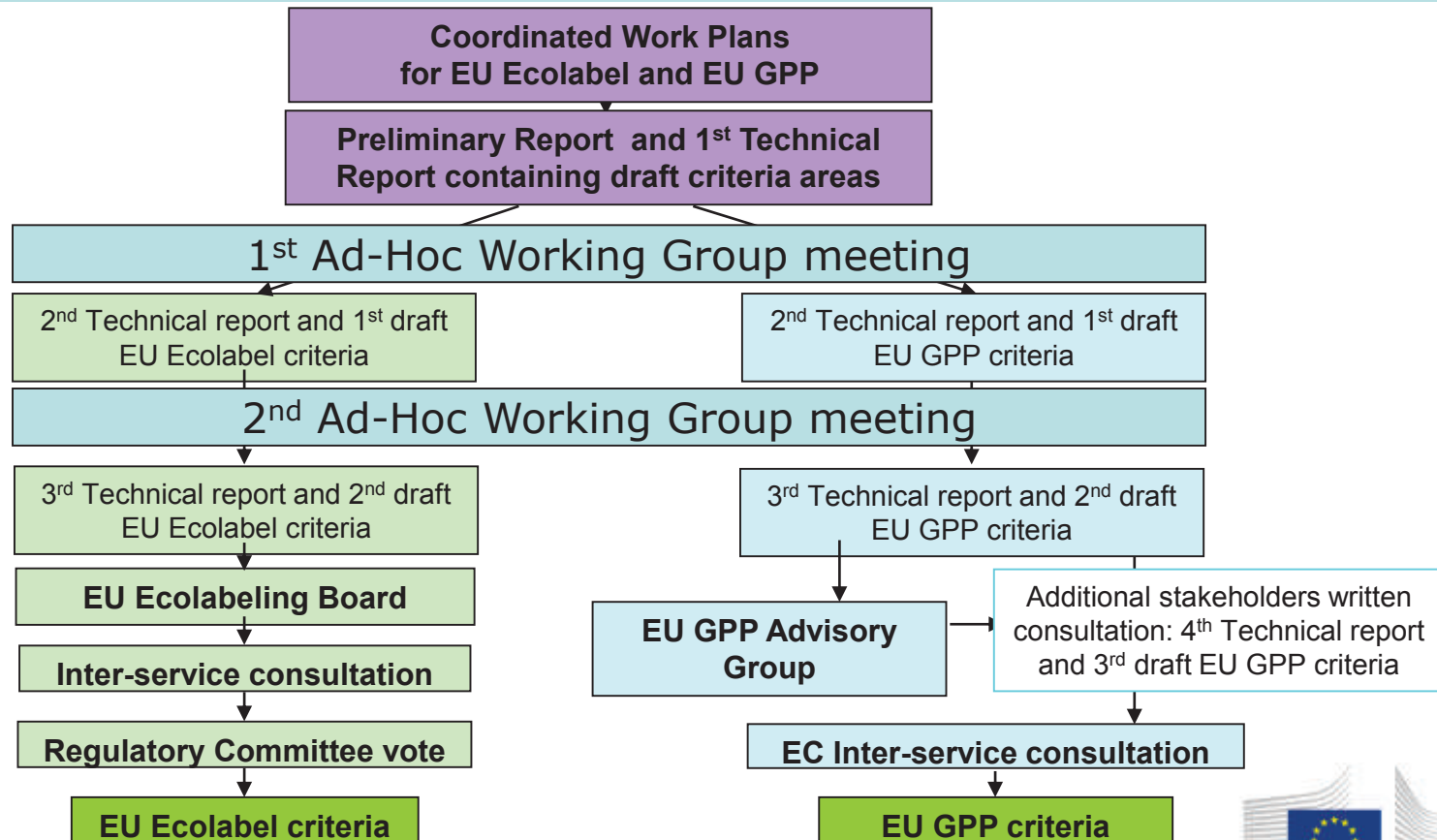
			Environmental level of ambition	
			Core	Comprehensive
Type of criteria	Requirements on Tenderers	Selection criteria		
	Requirements on Goods, Services or Works purchased	Technical specifications		
		Award criteria		
		Contract Performance clauses		

Core criteria: are designed to allow easy application of GPP, focussing on the key areas of environmental performance of a product and aimed at keeping administrative costs for companies to a minimum.

Comprehensive criteria: take into account more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals. Usually aligned with EU Ecolabel for ease of verification.



EU GPP criteria development process



Stakeholders

Actors involved

- *European Commission (JRC, DG ENV, other DGs)*
- *EU GPP Advisory Group: representatives of MSs, Business Europe (Association of MSs Business Federations), UEAPME (European SMEs Association), EEB (European Environment Bureau), BEUC (European Consumer Organisation), ICLEI (Local Governments Network) and observers (Switzerland, Norway, UNEP)*
- *Manufacturers / Service providers (supply side)*
- *Professional associations and networks (supply side)*
- *Public procurers (demand side)*
- *NGOs*
- *Academia*

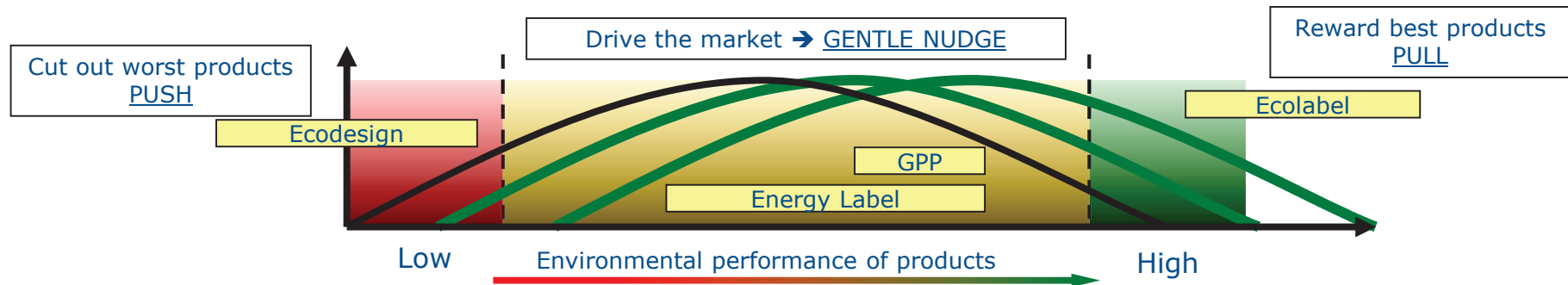
Key objectives

Finding the right balance (ideally consensually) between environmental relevance, cost considerations, market availability and ease of verification.

Product groups

- Office buildings
- Textiles (+Ecolabel)
- Paints and varnishes (+Ecolabel)
- Computers and monitors (+Ecolabel; +Ecodesign)
- Furniture (+Ecolabel)
- Road construction
- Cleaning services (+Ecolabel) (**ongoing**)
- Food & catering (**ongoing**)
- Road Lighting (+Ecodesign) (**ongoing**)
- Transport (**ongoing**)
- Data centres (**ongoing**)
- etc.

Synergies



Main advantages of having an integrated product policy bureau

- For one given product group, the environmental/market background and stakeholders are the same for all the policy instruments, therefore there are efficiency gains in joint development.
- Integrated development of different product policies allow for their consistency and alignment, *i.e.*, GPP core criteria should represent a significant improvement over Ecodesign requirements and GPP comprehensive criteria should be aligned with Ecolabel criteria for ease of verification.

Circularity and material efficiency

Material efficiency become increasingly important for EU GPP after the new **Circular Economy Package** has put an emphasis on GPP as an instrument to promote circularity.

In EU GPP circularity/material efficiency is promoted in several different ways:

- 1) Extend products **longevity**. Mainly by demanding/rewarding **design for reparability** and **increased mean time between failures**, but also by requesting/rewarding **availability of spare parts** and **upgradability**.
- 2) Promote a "second life" for products by encouraging its **reuse** (e.g., through **take-back** schemes).
- 3) Promote the supply of recovered materials by fostering recyclability. Mainly by requesting/rewarding **design for recyclability** (e.g., short dismantling time, marking of plastics, etc.), but also at End-of-Life stage by requesting/rewarding **take-back** schemes.
- 4) Promote the demand for recovered materials by requesting/rewarding a minimum **recycled content** in the products. This is often difficult to verify and usually is dropped for reasons not related to environmental performance.

Examples: Computers and Monitors

AC6. Rechargeable battery life and endurance

Points shall be awarded for improved endurance greater than 500 cycles (with 80% capacity retention) respectively. [...]

TS7. Recyclability of plastics casings, enclosures and bezels

Parts shall not contain moulded-in or glued-on metal inserts unless they can be removed with commonly available tools. Disassembly instructions shall show how to remove them.

TS8. Marking of plastic casings, enclosures and bezels

External plastic casings, enclosures and bezels with a weight greater than 25 grams for tablet and portable all-in-one notebooks and 100 grams for computers and monitors and in all cases a surface area greater than 50 cm² shall be marked in accordance with ISO 11469 and ISO 1043, sections 1 and 4.

AC10. Product dismantling potential

Points shall be awarded for the time efficient manual dismantling and extraction of the following components: [...] Extraction of the relevant components shall be possible using universally available tools. The maximum time required to extract them shall not exceed the following thresholds: [...]

TS1. Secure computer collection, sanitisation, re-use and recycling Tenderers shall provide a re-use and recycling service for a specified inventory of Computers and Monitors that has reached the end of its service life. [...] Collection; Confidential handling and secure data erasure; Testing, servicing and upgrading; Remarketing for re-use in the EU; Dismantling for recycling and/or disposal. [...]

Examples: Furniture

TS6. Design for disassembly and repair

The tenderer shall provide clear disassembly and repair instructions (e.g. paper or electronic copy, video) to enable a non-destructive disassembly of the furniture product for the purpose of replacing component parts/materials. [...] Disassembly and replacement operations should be capable of being carried out using common and basic manual tools and unskilled labour.

TS10. Product warranty and spare parts

The tenderer shall provide a minimum five-year warranty effective from the date of delivery of the product. This warranty shall cover repair or replacement and include a service agreement with options for pick-up and return or on-site repairs. [...] The tenderer shall guarantee the availability of spare parts, or elements which achieve an equivalent function, for a period of at least five years from the date of delivery of the furniture product. Contact details that should be used in order to arrange the delivery of spare parts shall be provided.

TS1. Collection and reuse of existing furniture stock

[...] Tenderers shall collect the furniture directly from a site specified by the contracting authority and provide a reuse and recycling service for furniture that has reached the end of its service life.

The tenderer shall provide a description of how they will extend the service life of the furniture by supplying it for reuse.

Furniture items/parts that are not possible to re-use shall be disassembled into different material streams, as a minimum plastics, metals, textiles and wood before being sent to different recycling facilities. Any remaining materials shall be sent to energy recovery facilities, wherever these are available at the regional level.

Examples: Road construction

B11. Performance requirements for durability of pavement

The nominal minimum service lifetime of the road pavement, excluding the surface course, shall be specified by the contracting authority but should not be shorter than:

- 20 years for the binder course with the option to reduce to no less than 15 years in case of specific conditions (such as an aggressive climate - *to be specified in the ITT*);
- 40 years for the base course for flexible/semi-rigid pavements and for the concrete slab for rigid pavements;
- 60 years for the sub-base.

B15. Incorporation of recycled content

The contracting authority shall award points to tenderers that achieve greater than or equal to 30% by weight of the recycled content, re-used content and/or by-products¹⁰ for the sum of the main road elements in Table (d).

[...] The recycled content as well as the re-used content shall be calculated on the basis of an average mass balance of re-used, recycled materials and/or by-products according to how they are produced and delivered to site (*as applicable*) [...]

E2. Demolition Waste Audit and Management Plan

A minimum of 90% by weight of the non-hazardous waste generated during demolition, including backfilling, shall be prepared for re-use, recycling and other forms of material recovery. [...] The main construction contractor *or* the DB contractor *or* the DBO contractor shall carry out a pre-demolition audit in order to determine what can be re-used, recycled or recovered. [...] The materials, products and elements identified shall be itemised in a Demolition Bill of Quantities.

Examples: Textiles (products and services)

AC5. Design for reuse and recycling

Garments must be designed so that any logos or distinctive identification features can be easily removed or overprinted without damaging the item.

TS2. Maintenance of the textile assets

The tenderer of textile services, as part of their asset management plan, will extend the useful life of workwear and interior textiles by providing ongoing maintenance and repair services. This will, as a minimum, include (*as relevant to the textiles to be provided*):

- provision of basic repairs, including repairing seam splits and stitching, the replacement of broken/lost parts and the fixing/replacement of zips and fastenings;
- fabric panel replacement for workwear;
- the retreating and proofing of functional coatings.

TS3. Take-back system

The tenderer as part of their asset management system must operate a take-back system, or have formal arrangements with a take-back scheme, for the textiles supplied for use within the contract, to include the following elements:

- collection systems installed in the contracting authority's own premises to facilitate (where appropriate) the sorting and classification of textiles;
- training and guidance material to ensure that staff of the public authority have a clear understanding of how to use the system;
- post-collection sorting activities in order to maximise the value obtained from reuse or recycling. This will, at a minimum, include segregation based on fibre, colour and condition of garment.

How to use EU GPP criteria

EU GPP criteria can be seen as a menu of choices :

- We propose a number of criteria alternatives, clarifying what is the rational behind them and the expected resulting environmental benefits (in the Technical Report).
- It is up to the procuring authority to decide which ones of these criteria – and with which level of ambition - to include, or not, in their tenders.
- Public authorities have the right to edit the GPP criteria, *i.e.*, they can use it as an "inspiration" to develop their own bespoke criteria, but:
 - The criteria has been developed in order to achieve a balance between environmental performance, cost considerations, market availability and ease of verification. When a contracting authority edits them, this balance can be broken.
- In the end of the day, responsibility (and accountability) for the procurement procedure always lays with the procuring authority.



Any questions?

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The Product Bureau website: http://susproc.jrc.ec.europa.eu/product_bureau/index.html

The EU Green Public Procurement website: http://ec.europa.eu/environment/gpp/index_en.htm

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