Governance Reform Fund (GRF) Project
Supporting the Government of Georgia in Enhancing Governance & Policies for a Transition to a Circular Economy

Environmental, Social and Governance Part III

Green Public Procurement and Circular Economy

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Key Objectives of the Seminar

- An Overview of Green Public Procurement (GPP)
- EU GPP Policy & Regulatory Framework
- GPP in practice
- GPP process
- GPP and Circular Economy
  - What is the Circular Economy?
  - What is Circular Procurement (CP)?
  - Who needs to be involved?
  - Examples of CP in practice
  - Guidance for key sectors

Why procurement?

Public procurement is a **powerful market force**

€1.8 trillion

is spent by EU public authorities each year

(14% of EU GDP)

GPP aims to use this power to drive the market for more sustainable goods and services

Why procurement?

Public authorities buy a huge range of goods and services

Computers

Building renovation

Catering services

Road construction

Office stationery

Vehicles

Electricity

Public transport services

Furniture

Cleaning services

Public sector market share typically 5-15% - sometimes much higher

The impacts of procurement

Every product we buy has a huge range of environmental impacts, **across the product life-cycle**

Supply chain	• Consumption of raw materials • Energy/water use, emissions and (toxic) waste from industrial processing and transportation
Usage	• Energy/water consumption • Generation of waste and emissions • Use of consumables (e.g. paper, ink)
Disposal	• Generation of waste • Toxic emissions • Potential new raw material

Impacts: Climate change/CO_2 emissions

Impacts of our purchases:

Electricity used to power our buildings and equipment

Fuel consumed by our vehicles or to heat our buildings

Emissions from **industrial processes** and **transportation** throughout supply chains

How can GPP help?

Require **high energy efficiency standards** for buildings and products

Purchase **green electricity**

Shift to **zero emission vehicles** (and encourage suppliers to do the same)

Impacts: Air and water quality

Impacts of our purchases:

Pollution from **vehicles** owned by the public sector, running our services or delivering our products

Use of **chemical products** (e.g. for cleaning) containing toxic substances

Use of chemical based pesticides and fertiliser in food production

How can GPP help?

Shift to **zero emission vehicles** (and encourage suppliers to do the same)

Require cleaning services to be carried out with **ecolabel compliant products**

Specifying **organic** in food and catering contracts

Impacts: Waste and resource use

Impacts of our purchases:

Disposal of **electrical products** at end of life

Waste materials from **construction and demolition** work

Packaging used in delivery of goods

How can GPP help?

Promote **circular economy** solutions

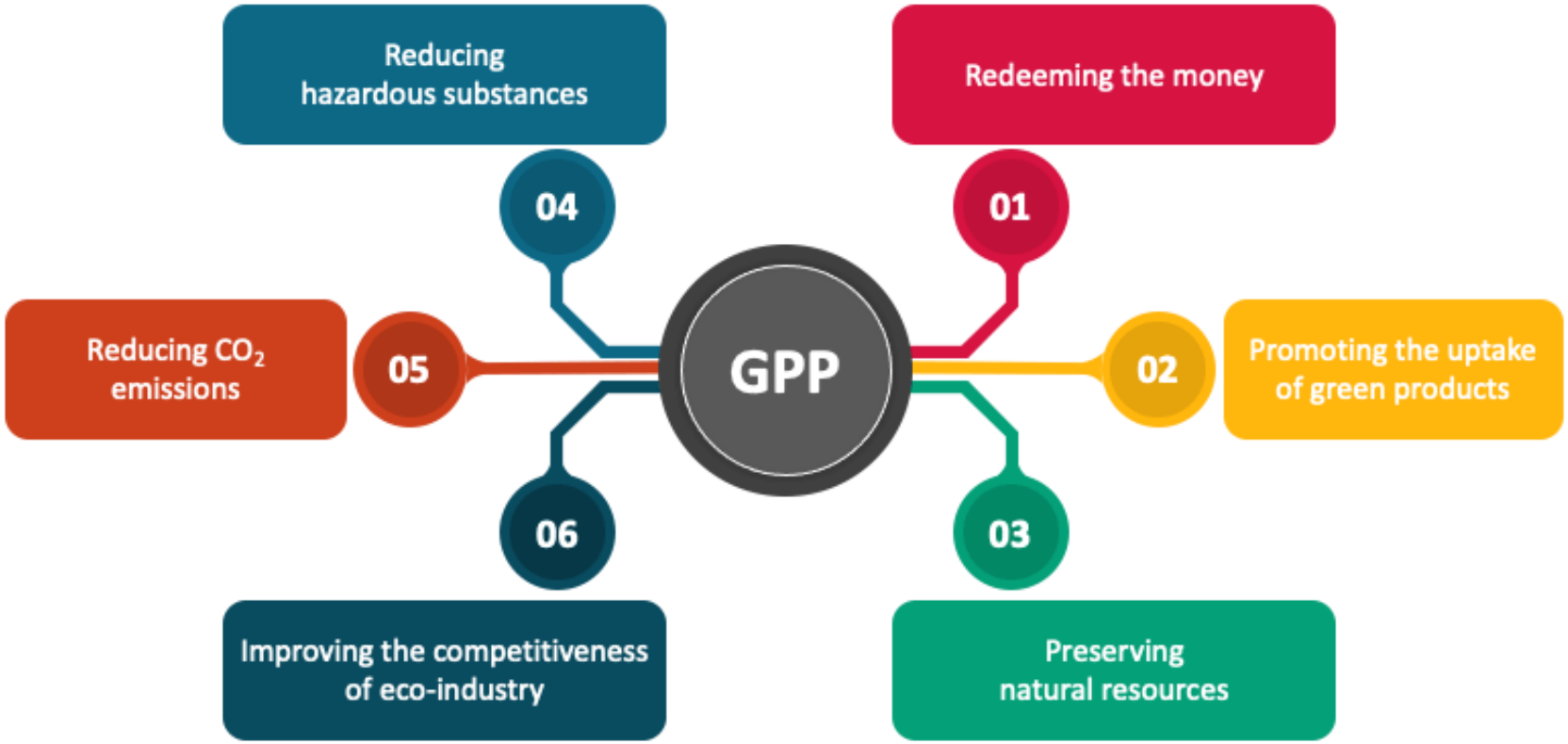
Require **extended product lifetimes**, and **guarantee of spare parts**

Demand **reduced or reusable packaging**

Encourage the use of **recycled materials** in construction

GREEN PUBLIC PROCUREMENT

Benefits of Green Public Procurement



EU GPP Policy & Regulatory Framework

EC Communication (2017): Making Public Procurement work in and for Europe – key priorities include:

- Ensuring wider uptake of innovative, green, and social procurement
- Boosting the professionalism of public buyers

Revised Public Procurement Directives (2014) – key aim to facilitate and ensure the greater inclusion of common societal goals in the procurement process.

Relevant sources of law

- Treaty on the Functioning of the EU (TFEU)
- EU Procurement Directives: 2014/23/EU, 2014/24/EU and 2014/25/EU
- EU Remedies Directives 89/665/EEC and 92/13/EEC as amended by 2007/66/EC and 2014/23/EU
- Regulation on the use of eForms for public procurement notices
- EU sectoral legislation e.g. Clean Vehicles Directive, Energy Efficiency Directive and the New Batteries Regulation
- National implementing legislation
- Case law of Court of Justice of EU + national courts
- WTO Government Procurement Agreement

GPP in practice: Vienna (Austria, 2020)

Procuring healthy and sustainable vegetables for Vienna's nursing homes

- New Framework contract to encourage food sustainability along the entire supply chain, from production to delivery.
  - Contract awarded 30% on price, 40% quality, 5% staff, 15% logistical concept, customer service
  - At least 50% of the vegetables needed to be grown in the bidders own nursery, using renewable energy.

GPP in practice: Ostrów Wielkopolski (Poland, 2020)

Procurement of electric buses and charging system

- Procurement of six new electric low-floor city buses with a dedicated traction battery charging system.
  - The purchase of electric buses is estimated to reduce the average CO2 emissions by 76.6 tons CO2 /per year for each bus replaced.

Image: City of Ostrów Wielkopolski

Further guidance and support

Buying Green (3rd edition, 2016)

EU GPP criteria

Good Practice Examples

GPP Helpdesk

For further support on GPP, contact the EU's free

Helpdesk

What is Green Public Procurement

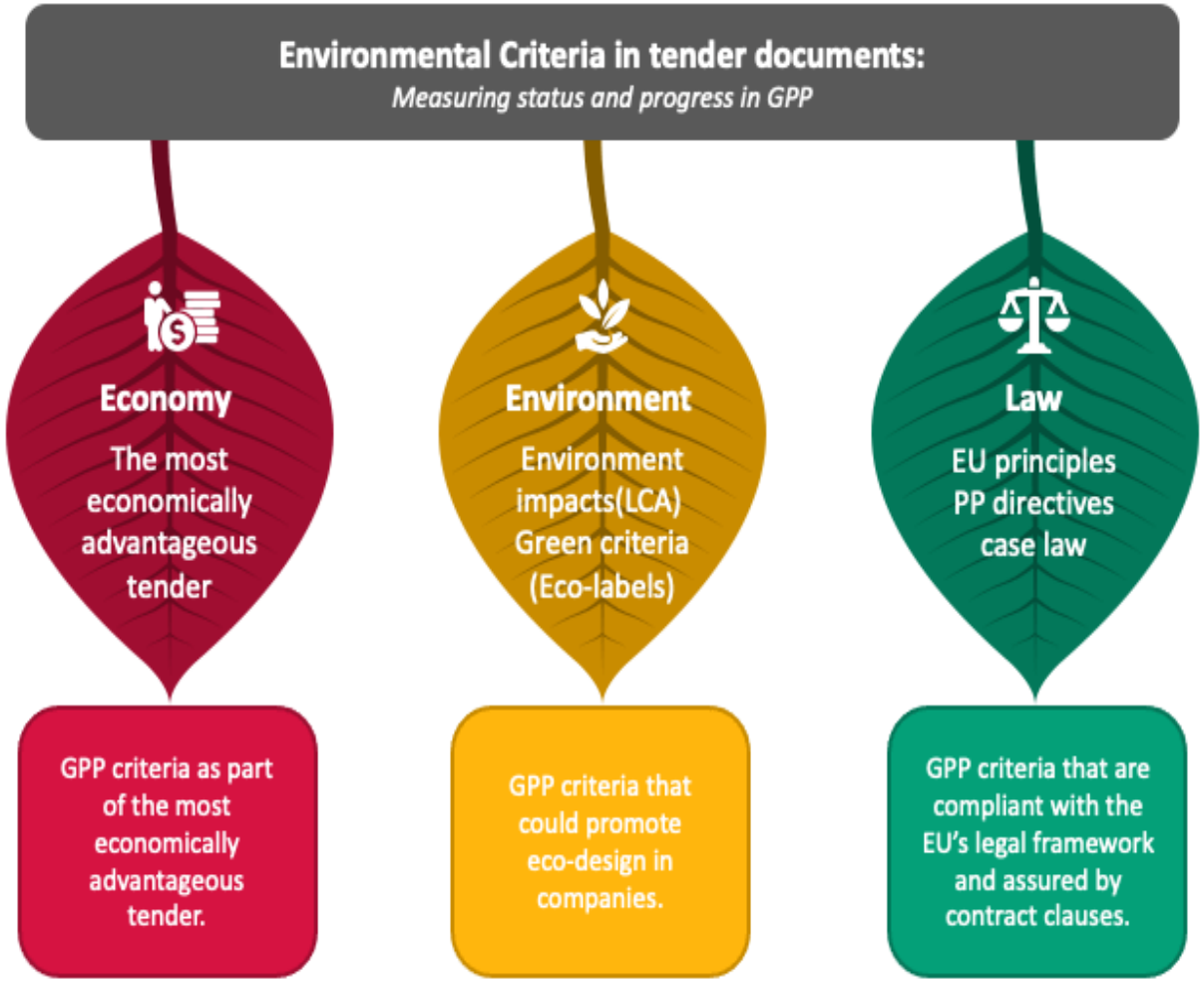
- Green procurement steams from pollution prevention principles and activities. Green procurement compares price, technology, quality and the environmental impact of the product, service or contract. Green procurement policies are applicable to all organisations, regardless of size. Green procurement programmes may be as simple as purchasing renewable energy or recycled office paper or could involve setting environmental requirements for suppliers and contractors.

- "Green" products or services utilise fewer resources, are designed to last longer and minimise their impact on the environment from cradle to grave. In addition, "green" products and services have less of an impact on human health and may have higher safety standards. Whilst some "green" products or services may have a greater upfront expense, they may save money over the life of the product or service.

- Although GPP is a voluntary instrument, it has a key role to play in international efforts to promote a more resource-efficient economy. It can help stimulate a critical mass of demand for more sustainable goods and services which otherwise would be difficult to get onto the market. GPP is therefore a strong stimulus for eco-innovation.

GREEN PUBLIC PROCUREMENT

Framework of Green Public Procurement



What are the key elements of an effective Green Public Procurement (1)

- Effective implementation of GPP requires determining the scope for GPP, setting priorities and targets for the relevant activities, organising appropriate training for staff and monitoring performance.
  - All of these elements may form part of a GPP policy.
  - They should also be supported by the operating procedures and e_procurement systems.
- To be most effective a GPP policy should:
  - Include clear targets, priorities and timeframes;
  - Indicate the scope of the purchasing activities covered;
  - Indicate who is responsible for implementing the policy; and
  - Include a mechanism for appropriately monitoring performance.

What are the key elements of an effective Green Public Procurement (2)

- The GPP policy should be aligned with any existing policies and strategies relating to procurement and the sustainable operation of the organisation.
  - External advice or peer review from other public sector organisations implementing GPP is beneficial.
- Operational implementation plan should be established, outlining specific tasks, responsibilities and a time plan.
  - The policy and implementation plan should be communicated as widely as possible, particularly to the staff most affected and to suppliers who have a role to play in delivering the policy.
- Implementing GPP requires the involvement and cooperation of different departments and staff members across an organisation. Finance, environment and procurement officers will likely need to be consulted, as well as certain specialist departments such as construction, energy or IT.

GPP – Step by Step Approach

- Preparatory stage. Thorough analysis and planning are essential before launching a tender if environmental goals are to be achieved. Different procedures may be used to implement GPP, depending on the subject-matter of the contract and the information gathered during the pre-procurement stage.
- Procedures such as the competitive procedure with negotiation and competitive dialogue may be suitable when there is a need to be able to adapt a solution to your specific needs.
- Life-cycle costing, joint procurement, framework agreements or energy performance contracting, for example, may help to demonstrate cost savings through GPP, or to lower investment barriers.
- 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. A commonly used tool is **Life-cycle costing (LCC)**.
- A very important factor in the effective implementation of the GPP are contract clauses. Contract clauses can address environmental considerations at the performance stage. These must be linked to the subject-matter of the contract and advertised in advance.

What are the benefits of Green Public Procurement - Examples

- Greenhouse gas emissions (through the purchase of products and services with a lower CO2 footprint throughout their life-cycle)
- Deforestation, (through the purchase of wood and wood products from legally harvested and sustainably managed forests)
- Water use (through choosing more water-efficient fittings)
- Energy efficiency and resource use (by choosing products which are more efficient and implementing environmentally conscious design principles)
- Air, water and soil pollution (by controlling chemicals and limiting the use of hazardous substances)
- Waste (by specifying processes or packaging which generate less waste or encouraging reuse and recycling of materials)
- Sustainable agriculture (by purchasing organically produced food)

GREEN PUBLIC PROCUREMENT

GPP Policy

- To be most effective a Client's GPP policy should:
  - Include clear targets, priorities and timeframes
  - Indicate the scope of the procurement activities covered
  - Indicate who is responsible for implementing the policy
  - Include a mechanism for appropriately monitoring performance

- A GPP policy should be aligned with any existing policies and strategies relating to procurement and the sustainable operation of the organisation.
  - External advice or peer review from other public sector organisations implementing GPP is beneficial.

GPP - Setting Priorities

- **Environmental impact** – Select those products or services which have a low impact on the environment over their life-cycle.
- **Budgetary importance** – Focus efforts on areas of significant budgetary implications for the Client.
- **Potential to influence the market** – Focus on areas where there is the highest potential to influence the market. This may be due to the size or visibility of the contract, or the importance for suppliers of having public sector Clients.
- **Political priorities.** Are there particular local environmental priorities, such as urban air quality, energy/water consumption, waste management, or climate adaptation which could be linked to?
- **Market availability of environmentally preferable alternatives.** Market analysis can be useful to determine whether appropriate alternatives are available which offer reduced environmental impact. The Client should carry out a check for relevant environmental labels and certifications.\

Key Considerations

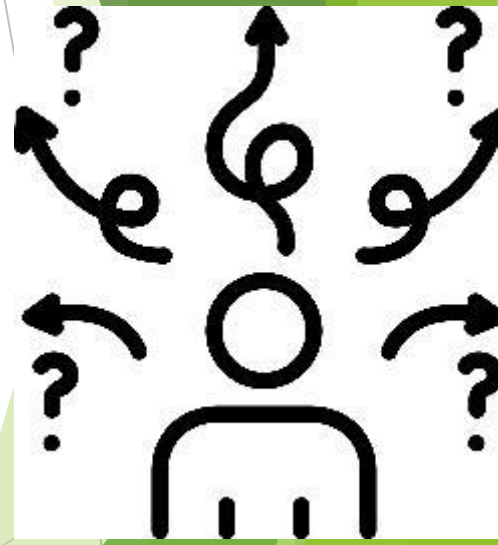
- **Cost considerations**. Are greener alternatives likely to be cost neutral or will they affect the Client's budget? The assessment of "cost" should consider all costs throughout the life-cycle of a product or service: purchase price, usage costs (energy/water consumption, maintenance), and disposal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

- **Availability of criteria**. For many product and service groups, green procurement criteria have been developed which can be inserted directly into the tender, without the need for lengthy research into environmental performance characteristics and market analysis. For example, the EU GPP criteria cover currently 21 product and service groups and are available in both core and comprehensive versions. In many countries national or regional criteria are also available.

- **Visibility**. How visible will the GPP activities be to the public, the market, other contracting organisations and the Client's staff? Will they realise that an effort is being made to improve environmental performance? High-profile changes like the type of vehicles used by an organisation, or a switch to organic food in the canteen, can help build awareness of the GPP policy and improve the image of the organisation.

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

https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm



GPP Targets

- **Clear targets** are critical in order to assess progress, and to communicate the intentions within the Client's organisation and to the general public.

- **Targets may include:**

  - Overall procurement targets – e.g. 80% of procurement (by value and by number of tenders) should include GPP criteria by 2025. Targets can differ for national, regional, local levels.

  - Operational targets – e.g. all procurement staff will receive GPP training by 2025, or GPP guidance will be available to all staff on the organisation's intranet.

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

GPP Training and Guidance

To successfully implement GPP, a Client's 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
- Where to find assistance in developing environmental criteria
- How to assess and verify environmental claims made by tenderers
- How to evaluate life-cycle costs in tendering

GPP Criteria

- Many countries have developed GPP criteria for a number of product and service groups, which are regularly reviewed and updated. One of the most comprehensive lists has been developed by EU. The criteria are designed to be inserted directly into tender documents and include information on verification methods. Most of the criteria are available in English and all official EU languages.
  - For the most up to date list, please check *http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm*
- The GPP criteria are based on data from a variety of sources. A technical background report is prepared for each product group to identify the considerations taken into account. The evidence base uses available scientific information and data, adopts a life-cycle approach and engages a variety of stakeholders

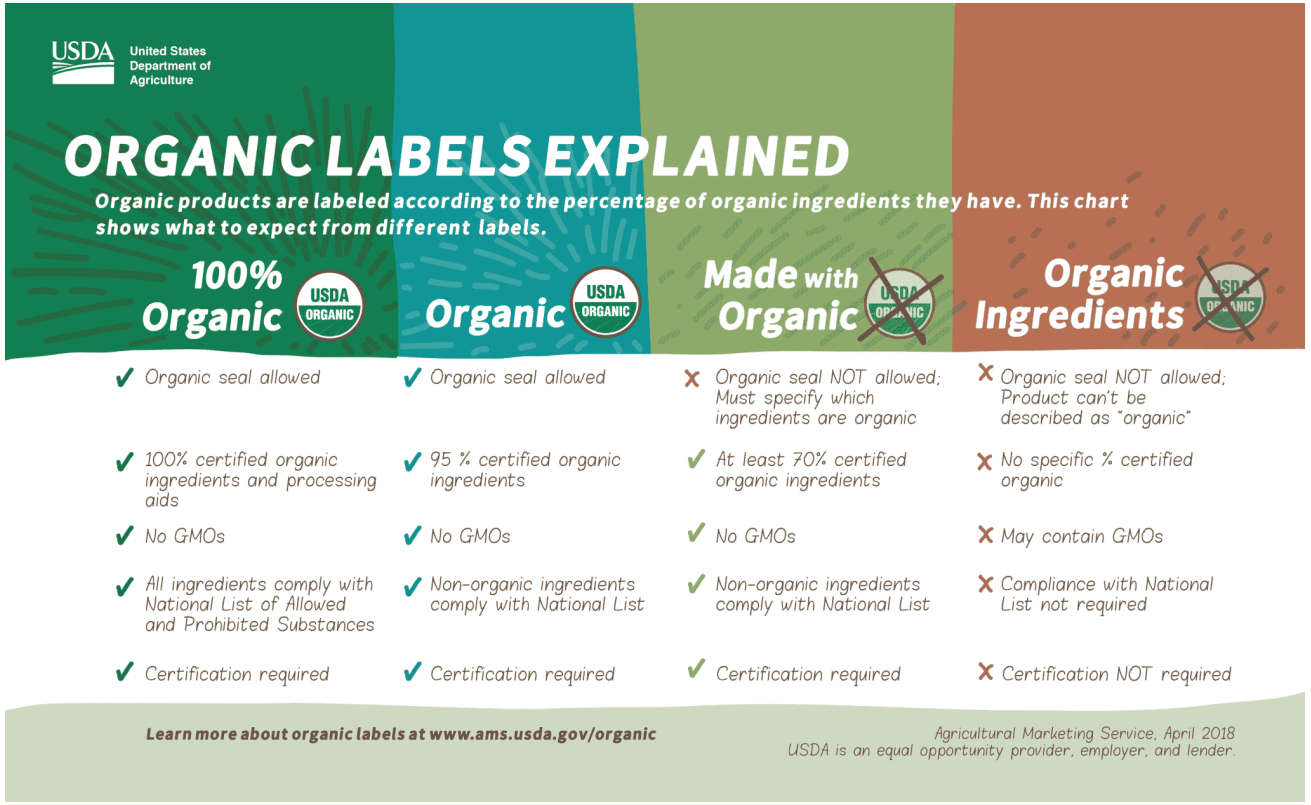
Environmental Labels

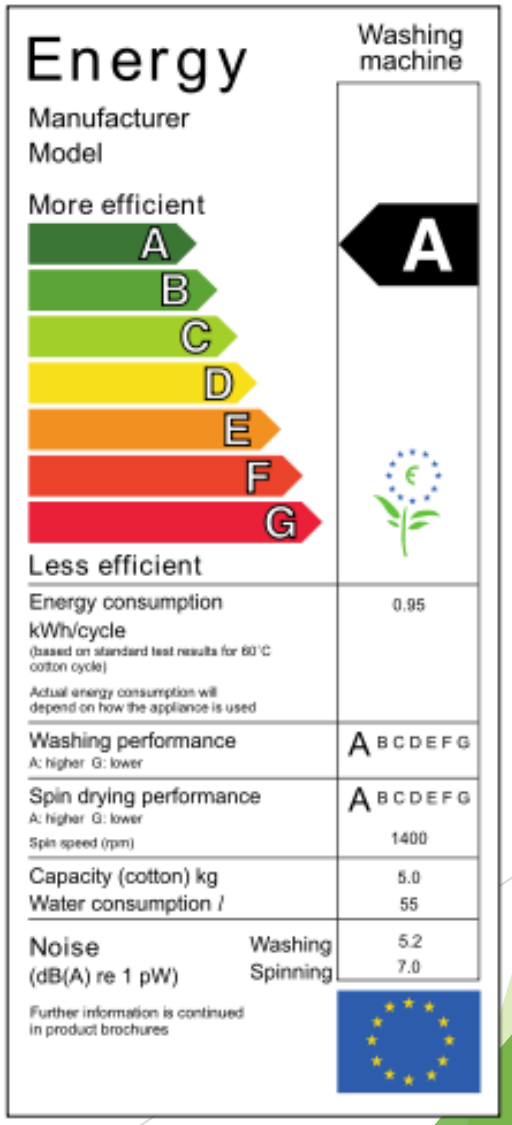
- **Multi-criteria labels** – These are the most common type of environmental label and also the most commonly used in GPP. Multi-criteria labels are based on scientific information about the environmental impact of a product or service throughout its life cycle, from extraction of the raw materials,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

ECO Labels


FSC
ISO14001
Ecolabel
GREENGUARD
clickgreener.com
cradletocradle
GREEN OPTIONS
SG Living
OPPORTUNITY green
babycenter store
ENN ENVIRONMENTAL NEWS NETWORK
Ecological Footprint
ftc
ECO BIND RESIN TECHNOLOGY
Green
eco depo
million trees NYC
A PLANYC INITIATIVE WITH NYC PARKS AND NEW YORK RESTORATION PROJECT
LocalHarvest
green leaves vitamins
GREENFUEL TECHNOLOGIES CORPORATION
ENVIROFIT
making the world fit for humanity
PLENTY
gllgreen
THINK ACT PROTECT
IT'S EASY BEING GREEN
PLAN IT GREEN PRINTING
ecogeek
whole earth
Eco Enrichment
justgreen
Enviro ENTREPRENEUR
Simple Steps to Non-Toxic Kids
eco-t
ecohost.co.uk
CSSmanía
CAS
Crispy Green.
real fruit, real taste, nothing else
naturalpath MEDIA
bp
20 YEARS
EcoComposite LLC
greeniq
GREEN LIGHT PROJECT
epd
GoingGreen
planeteco
we
GAIAM a lifestyle company
green BUSINESS
the ecovillage
heartofgreen
ideal bite
green rewards CLEAN & SIMPLE
eco CERTIFIED Advanced Ecotourism
ECO BUY member
Environmental graffiti
ECO LINE
basil
BRIGHTER PLANET
Got2BeGreen
thedailygreen.com
GREENDRINKS NYC
beyond green
greenblog
VivaTerra
ecorazzi
RecycleBank
eco organics
css based
inhabitat
OEKO-TEX®
PEFC
MÖBELFAKTA

ECO Labels


USDA United States Department of Agriculture
ORGANIC LABELS EXPLAINED
Organic products are labeled according to the percentage of organic ingredients they have. This chart shows what to expect from different labels.
100% Organic
Organic
Made with Organic
Organic Ingredients
✓ Organic seal allowed
✓ Organic seal allowed
✗ Organic seal NOT allowed; Must specify which ingredients are organic
✗ Organic seal NOT allowed; Product can't be described as "organic"
✓ 100% certified organic ingredients and processing aids
✓ 95 % certified organic ingredients
✓ At least 70% certified organic ingredients
✗ No specific % certified organic
✓ No GMOs
✓ No GMOs
✓ No GMOs
✗ May contain GMOs
✓ All ingredients comply with National List of Allowed and Prohibited Substances
✓ Non-organic ingredients comply with National List
✓ Non-organic ingredients comply with National List
✗ Compliance with National List not required
✓ Certification required
✓ Certification required
✓ Certification required
✗ Certification NOT required
Learn more about organic labels at www.ams.usda.gov/organic
Agricultural Marketing Service, April 2018
USDA is an equal opportunity provider, employer, and lender.


Energy
Washing machine
Manufacturer
Model
More efficient
A
B
C
D
E
F
G
Less efficient
Energy consumption
kWh/cycle
(based on standard test results for 60°C cotton cycle)
Actual energy consumption will depend on how the appliance is used
0.95
Washing performance
A: higher G: lower
A B C D E F G
Spin drying performance
A: higher G: lower
A B C D E F G
Spin speed (rpm)
1400
Capacity (cotton) kg
5.0
Water consumption l
55
Noise
(dB(A) re 1 pW)
Washing
Spinning
5.2
7.0
Further information is continued in product brochures

Using GPP criteria and labels

Labels and international and national GPP criteria sets are useful information sources when developing tender requirements. For example, the EU GPP criteria are designed to be inserted directly into tender documents and include information on verification methods. Labels can be used in two different ways in the context of technical specifications:

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

For the use a label, it is necessary to look at the requirements for obtaining the label to confirm that:

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

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 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 price, energy and maintenance costs may be paid by different departments within the Client's structure, establishing LCC within procurement procedures will likely require cross-departmental cooperation. Further information on LCC can be found on the EU GPP website: http://ec.europa.eu/environment/gpp/lcc.htm

- **Energy performance contracting (EPC)** – EPC is a contractual arrangement between a building owner or occupier (including public sector Clients) and a service provider to improve the energy efficiency of a building. The investment costs are typically covered by the service provider or a third party such as a bank, so no financial outlay is required by the public sector Client. The service provider 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 Client. Energy performance contracting is often undertaken in respect of groups of buildings, in order to make the contracts more attractive to potential investors.

Identifying Main Environmental Impacts

- **Supply contracts:**
  - The environmental impact of materials used to make the product (e.g. are the raw materials from renewable sources?)
  - The impact of the production processes used
  - The energy and water consumption of the product during use
  - Durability/lifespan of the product
  - Opportunities for recycling/reusing the product at the end of life
  - The packaging and transportation of the product
- **Service contracts:**
  - The technical expertise and qualifications of staff to carry out the contract in an environmentally friendly way
  - The products/materials used in carrying out the service
  - Management procedures put in place to minimise the environmental impact of the service
  - The energy and water consumed, and waste generated in carrying out the service
- **Works contracts:**
  - In addition to all of the above considerations, works contracts may have significant environmental impacts e.g. in respect of land use or traffic planning
  - According to the EBRD's Environmental and Social Policy, PR1 the Client is required to carry out an environmental and social assessment, the results of which should be taken into consideration in the procurement process

Specifying materials and production methods

- A contracting Client has the right to insist that the product being purchasing be made from a specific material, or contain a certain percentage of recycled or reused content. There can also be a set of requirements regarding the restriction of hazardous substances in the product. As a starting point there should be a reference to legislation which restricts hazardous or dangerous substances, for example the RoHS Directive or REACH and CLP Regulations.

- Include requirements regarding production or provision processes and methods in technical specifications for supply, service and works contracts.

- An analysis of the life-cycle of the goods, services or works to be procured will help to formulate appropriate specifications for production processes and methods. Life-cycle assessment (LCA) allows for cradle-to-grave analysis of the environmental impact of products. It thus includes the extraction and refinement of raw materials, manufacturing and other stages of production through to the use and disposal phase. Carrying out an LCA for an individual contract implies considerable extra effort.

Life-cycle costing (LCC)

- Life-cycle costing (LCC) means considering all the costs that will be incurred during the lifetime of the product, work or service:
  - Purchase price and all associated costs (delivery, installation, insurance, etc.)
  - Operating costs, including energy, fuel and water use, spares, and maintenance
  - End-of-life costs, such as decommissioning or disposal
- LCC may also include the cost of externalities (such as greenhouse gas emissions) under the specific conditions. Where LCC is used, the calculation method and the data to be provided by tenderers should be set out in the procurement documents. Specific rules also apply regarding methods for assigning costs to environmental externalities, which aim to ensure that these methods are fair and transparent.
- LCC may also consider wider spectrum of costs associated with social and health benefits, however at this stage further work is required to determine the criteria and reliable assessment methodology.
- By applying LCC the Client will take into account the costs of resource use, maintenance and disposal which are not reflected in the purchase price. Often this will lead to “win-win” situations whereby a greener product, work or service is also cheaper overall.

Tools for Calculating LCC

1. The European Commission's calculator for LCC for vehicle procurement: http://ec.europa.eu/transport/themes/urban/vehicles/directive/
2. The European Commission's common method for LCC in construction: http://ec.europa.eu/growth/sectors/construction/support-tools-studies/index_en.htm
3. A tool for assessing both LCC and CO_2 emissions in procurement, developed within the SMART-SPP project: www.smart-spp.eu
4. An LCC tool produced by the Swedish Environmental Management Council (SEMCo): www.upphandlingsmyndigheten.se/omraden/lcc/lcc-kalkyler/
5. Swedish Tool — http://www.kkv.se/upphandling/hallbarupphandling/stall-hallbarhetskrav/Livscykelkostnader-LCC/
6. Danish Tool — http://mst.dk/virksomhed-myndighed/groenstrategi/groenne-indkoeb/totalomkostninger/
7. ISO 15686-5 on Buildings and constructed assets — Service-life planning – Part 5: Life-cycle costing

Applying LCC (1)

- **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 the Client wishes to make a life-cycle cost comparison.

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

Applying LCC (2)

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

- http://ec.europa.eu/environment/gpp/lcc.htm

Contract performance clauses for the provision of works or services – examples (1)

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

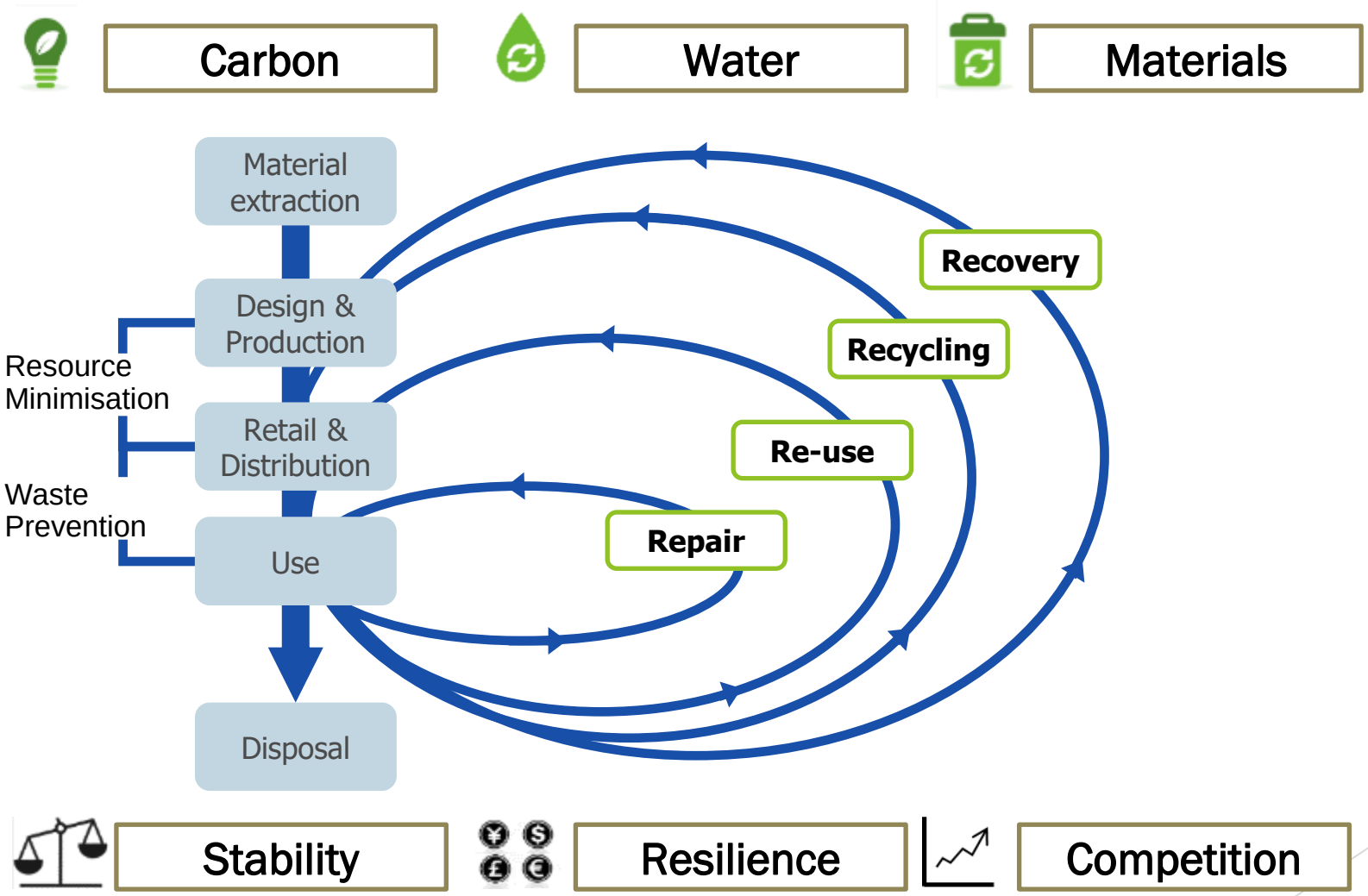
- Training of contractor staff:
  - Staff trained in the environmental impact of their work and the environmental policy of the authority in whose buildings they will be working;
  - Drivers trained in eco-driving techniques to save emissions and fuel.

Contract performance clauses for the provision of works or services – examples (2)

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

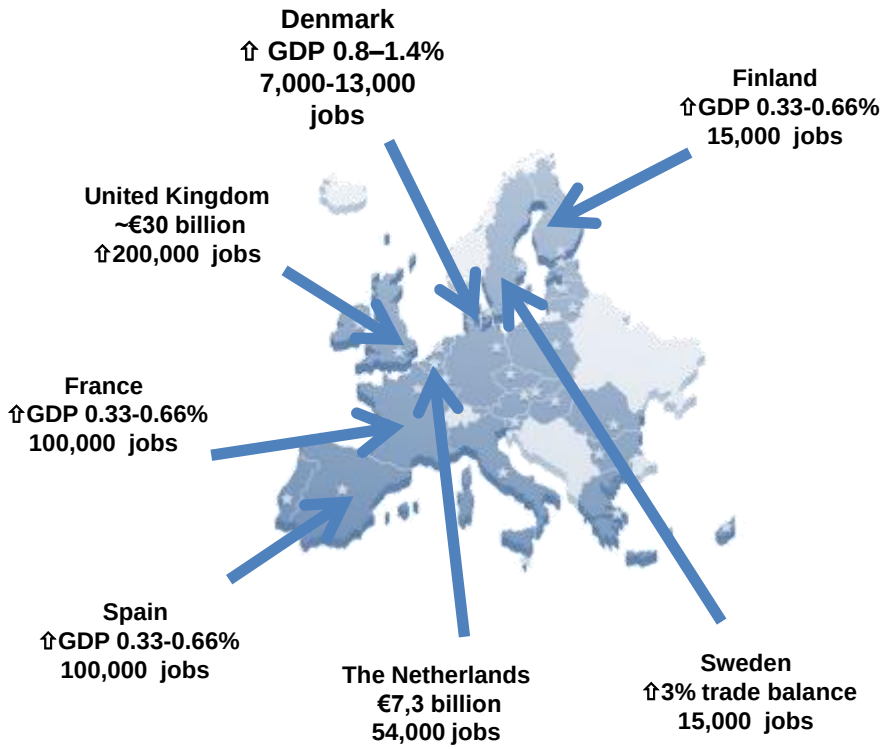
- Disposal of used products or packaging:
  - Products or packaging taken away for reuse, recycling or appropriate disposal;
  - Targets for the reduction of waste-to-landfill.

What is a circular economy?

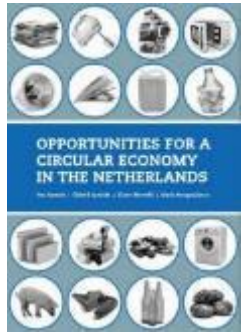


Circular benefits

Studies show the Circular Economy pays:



$630 BILLION (EU)
THROUGH MATERIAL SAVINGS
(ELLEN MCARTHUR FOUNDATION, 2013)



€7.3 BILLION (NED)
BY 54.000 NEW JOBS
(TNO, 2013)

AVAILABLE IN ENGLISH, FRENCH, UKRAINIAN AND POLISH
(CLUB OF ROME, 2015)

+$1200 BILLION (EU)
THROUGH ADDITIONAL BENEFITS
(ELLEN MACARTHUR FOUNDATION, 2016)

Workwear & Textiles

- Rawicz Hospital, Poland – nurses uniforms
- Herning, Denmark – emergency services uniforms
- Rijkswaterstaat, Netherlands – lock-keepers uniforms
- Wales, UK - nurses uniforms

Benefits:

- Innovation in design
- Reduces carbon impacts
- Reduces toxicity
- Increases durability
- Increases reuse and recycling at end of life

ICT & Electricals

Benefits:

- Design for repair
- Recycled content
- Multiple REBMs - e-recovery, take-back, pass or sell on
- Lifetime optimisation
- End of Life – resource security

- Utrecht, Netherlands – IT take-back; secure re-use
- Schiphol Airport, Netherlands – lighting as a service
- DRZ, Netherlands – e-recovery, IT-donations
- UniGreenScheme, UK - Laboratory equipment re-sale and re-use

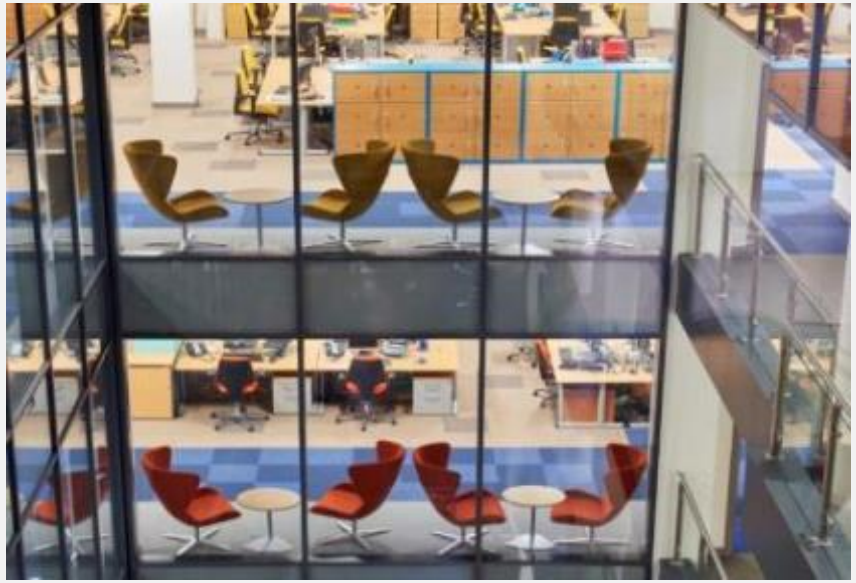
Construction

Opportunities:

- Design for deconstruction
- Recycled content
- Multiple REBMs
- CO_2 reduction
- End of Life - closing material loops
- Refurb & maintenance
- Cost savings

- Brummen, Netherlands - circular Town Hall
- Netherlands – DBFM, Rapid circular contracting
- BAR HQ, Portsmouth, UK – Whole Life Costing & BIM
- Viaduc de Millau, France - build, fund & operate (BFOT)

Furniture



Benefits:

- REBM – furniture as a service
- Resource efficient design
- Circular products & Cradle2Cradle
- Lifetime optimisation
- Reuse & refurbishment opportunities
- Community benefits

- ProRail, Netherlands – furniture and carpeting
- Aalborg, Denmark – school furniture
- Public Health Wales, UK – desk reuse & repurposing
- Netherlands - circular office furniture

Food & catering

Opportunities:

- Waste prevention
- Storage & preparation
- Plate waste
- Reuse
- Recycling - composting & packaging
- Nutritional & healthy diets

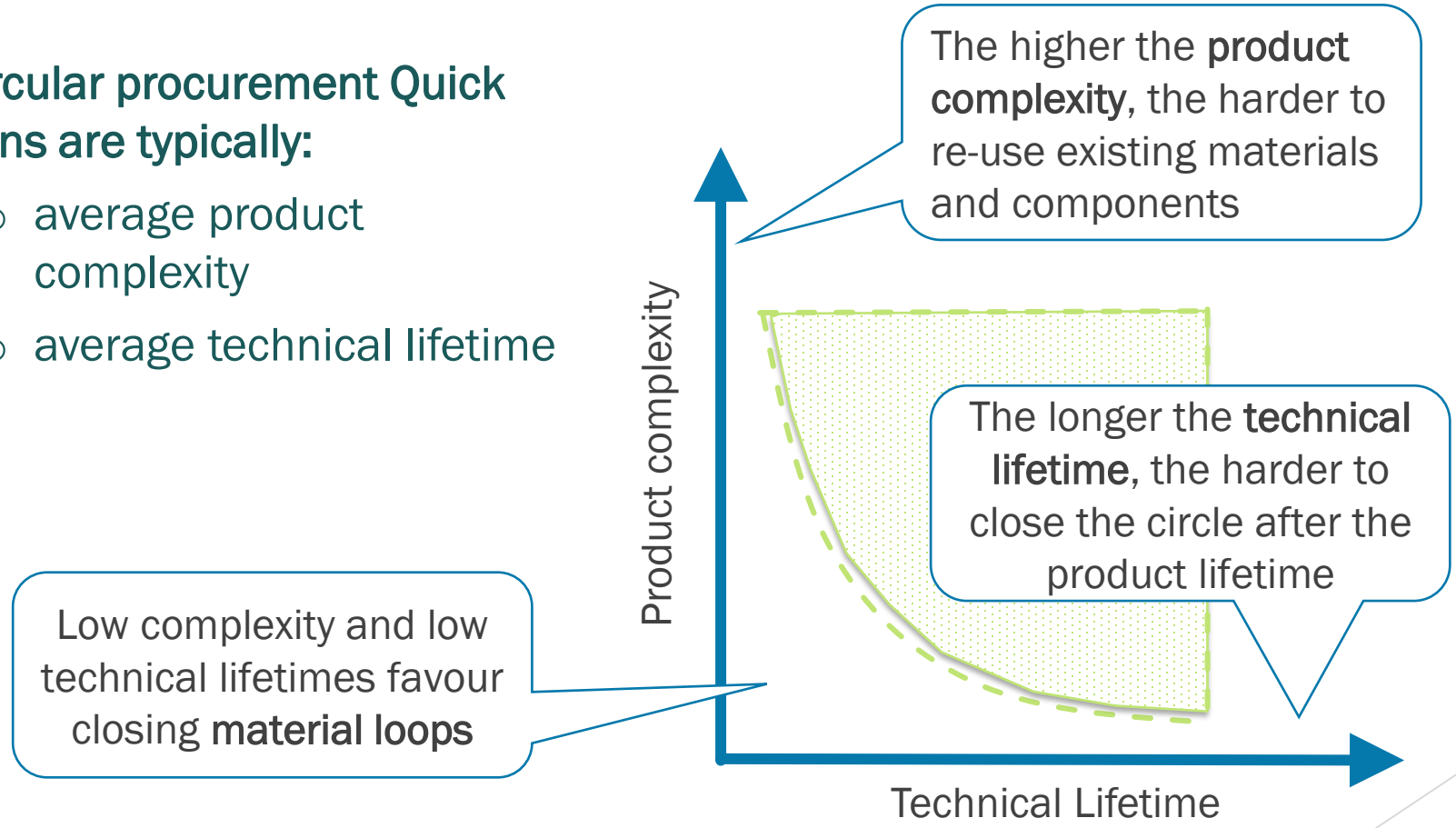
- Ghent, Belgium - catering contracts (INNOCAT)
- Torino, Italy - healthy sourcing
- Copenhagen, Denmark - organic
- UK Public sector catering, waste prevention
- Rijkswaterstaat, Netherlands - food waste recycling

Product categories

Selecting initial high potential product groups

Circular procurement Quick Wins are typically:

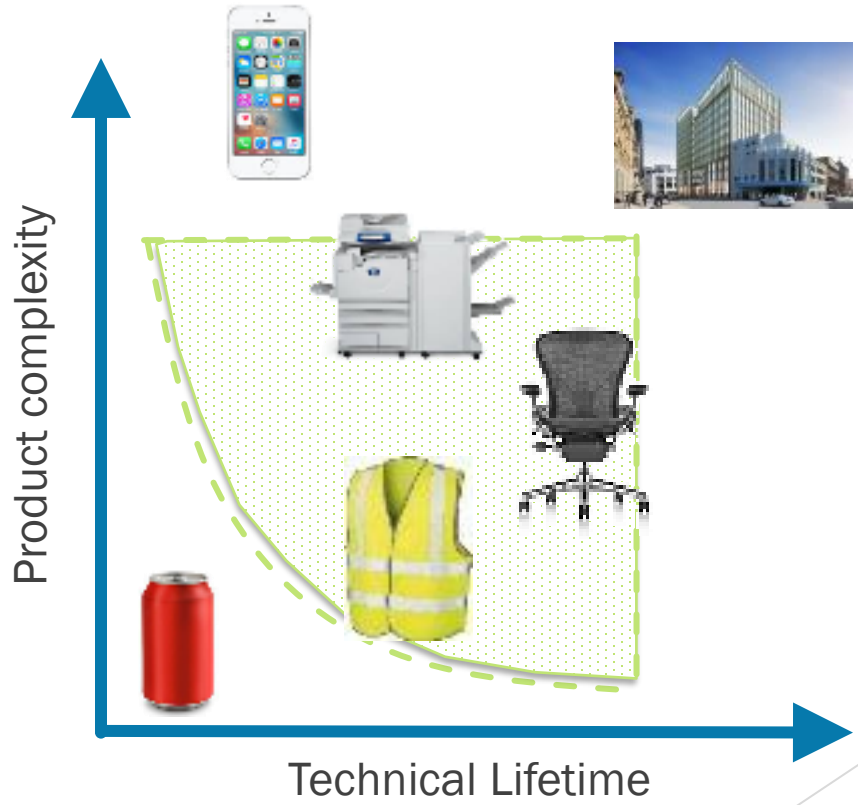
- average product complexity
- average technical lifetime



Some examples

Product complexity vs technical lifetime

- Well-suited for circular procurement:
  - Average product complexity
    e.g. furniture
  - Average technical lifetime
    e.g. workwear



GPP for Buildings

- The EU GPP criteria relate specifically to office buildings (additional criteria are available for building components such as fittings) and cover the following aspects:
  - Include selection criteria for project managers, architects and engineers on experience in sustainable building design, and for contractors in implementing improved designs and specifications;
  - Specify minimum energy performance standards above Energy Performance of Buildings Directive (EPBD) requirements.
  - Include measures to enhance and ensure high performance at each stage of the procurement process.
- The Client should consider cost benefits in the evaluation of tenders for performance beyond the minimum:
  - When specifying materials, include criteria to reduce their embodied environmental impacts and resource use (these may be based on a life-cycle assessment);
  - Designs which incorporate high-efficiency or renewable energy systems;
  - Indoor air quality, natural light, comfortable working temperatures and adequate ventilation;
  - Require the use of water-saving fittings (separate GPP criteria are available for sanitary tapware and toilets and urinals);
  - Install physical and electronic systems to support the ongoing minimisation of energy use, water use and waste by facility managers and occupiers.

GPP for Road Transport Vehicles

- Review the fleet needs to see if it is possible to reduce the number and/or size of vehicles, and to prioritise the replacement of older, heavily polluting vehicles;
- Specify vehicles with the lowest possible CO2 emissions for their class and size and which meet the latest EURO norms for emissions of particulates and NOx;
- Encourage alternative-fuelled vehicles and electric or hybrid options;
- Reduce fuel consumption through eco-driving, tyre pressure monitoring systems and gear shift indicators, using low viscosity lubricants and low rolling resistance tyres;
- Procure vehicles with air-conditioning systems with low GWP (Global Warming Potential) coolants;
- Procure environmentally-friendly tyres and regenerated lubricant oils and ensure the correct collection and management of used lubricant oils and tyres;
- Apply life-cycle costing including the cost of environmental externalities, to compare the real costs of different vehicle.

GPP for Energy Using Products

- **For IT and imaging equipment**

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

- **For lighting**

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

Why is Green Public Procurement Important for Georgia

- Georgia has significantly advanced its transition to the CE.
- Georgia has prepared the mapping of circularity of the Georgia economy with a view to provide recommendations to develop a Road Map to Circularity and adopt a Circular Economy Strategy.
- Within this context, GPP is an essential instrument in greening the current procurement system through which public authorities can play a supporting role in the transition towards a circular economy.
- GPP guidance documents at the international and national levels. For example, the European Commission has developed criteria to facilitate the inclusion of green requirements into public procurement tenders for more than 20 product groups. These include 'core criteria' suitable for any contracting authority and focused on key environmental issues, and 'comprehensive criteria' with a higher level of ambition aimed at purchasing the best environmentally-friendly products available on the market.
- An extensive collection of detailed good practice examples from across Europe are available on the European Commission's website - https://ec.europa.eu/environment/gpp/case.
- The Government of Georgia may consider the development of their own Green Public Procurement Guidance to further accelerate the transition of the Georgian economy to circularity.

Thank you!

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გარემოს დაცვისა და სოფლის მეურნეობის სამინისტრო

Governance Reform Fund (GRF) Project

Supporting the Government of Georgia in Enhancing Governance & Policies for a Transition to a Circular Economy