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# Measures to reduce the environmental impacts of public procurement

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## Abstract

The public sector can leverage its purchasing power to contribute significantly to achieving sustainability goals. Yet, thus far environmental considerations have been integrated into public procurement only to a limited degree. In this Policy brief, we propose prioritising in the greening of procurement those product groups that have the most significant environmental impacts in procurement. The procurement of these product groups is best addressed with mixes of policy instruments that are tailored to the respective, widely different sectors. Moreover, green procurement necessitates permanent support structures, practical procurement strategies and the monitoring of the environmental considerations all the way from tenders to the actual impacts in nature.

## A cross-cutting approach is key to effectiveness in sustainable public procurement

Public procurement offers an avenue to reduce greenhouse gas emissions and support a sustainable circular economy. By procuring goods, services and works with smaller environmental impacts, the public sector can leverage its purchasing power to contribute significantly to achieving sustainability goals. Yet, thus far environmental considerations have been integrated into public procurement only to a limited degree. The use of the set green criteria, as well as the achievement

of the environmental objectives, are monitored inadequately. The European Commission is in the process of updating the EU regime on sustainable public procurement in the context of the Circular Economy Action Plan, including the Sustainable Products Initiative. **This Policy Brief<sup>2</sup> argues, while supporting the Commission's initiative-taking on the matter, that the deployment of public procurement to decrease environmental impacts requires a cross-cutting approach that consists of five key themes (Figure 1).**



Figure 1. Key themes in developing sustainable public procurement.

### The environmentally most significant product groups

First of all, policies on public procurement should focus in areas where the potential for reducing environmental impacts is the largest for the society in the aggregate. In recent research the approach was tested by creating a tentative classification of procured product groups on the basis of their "environmental impact potential" (Table 1). The potential was calculated by combining the absolute procurement volumes with environmental and carbon

footprint data in procurement in a single country – in this case Finland. Somewhat surprisingly, considering their enormous environmental and economic potential, these types of calculations form the basis of procurement activities only to a very limited degree so far. Although the list of the environmentally most significant product groups (ESPGs) will vary by country, the purchasing practices and environmental impacts are likely sufficiently similar for our systematization to be of value in other contexts in the EU, and beyond.

PRODUCT GROUPS (some combined)*	Types of verified, significant environmental impacts <sup>3</sup>
<b>ENERGY IN BUILDINGS</b>	
Heating	GHG, BIOD
Electricity	GHG
Renting buildings and apartments	GHG
<b>CONSTRUCTION</b>	
Earth works and hydraulic construction; repair and maintenance	GHG
Constructing and renovating buildings	GHG, BIOD
Construction and maintenance services for buildings and built environments	GHG, BIOD
<b>TRAVEL AND TRANSPORT</b>	
Travel and transport services, kilometre allowances	GHG
Fuels and lubricants	GHG
Transport equipment (manufacturing, excluding fuels)	GHG
<b>FOOD, FOOD SERVICES AND ACCOMMODATION</b>	
Food	GHG, BIOD, EUTR
Food services and accommodation	GHG
<b>MACHINERY AND THEIR REPAIR</b>	
Machinery and equipment, supplies and furniture (incl. rentals)	GHG
National defense equipment and weapons systems	GHG, CHEM
Repair and maintenance services for machinery and equipment	GHG, CHEM
<b>CLEANING AND SANITATION</b>	
Cleaning and laundry services	GHG, CHEM
Cleaning materials and products	GHG, CHEM
<b>MEDICINES AND HEALTHCARE SUPPLIES</b>	GHG, CHEM
<b>OFFICE, EXPERT AND RESEARCH SERVICES</b>	GHG, CHEM

Figure 2. Tentative product groups with the most significant environmental impacts in public procurement, in an order of priority.<sup>4</sup>

### **Broad-based development of policy measures and monitoring instruments**

The choice of the most effective means to govern public procurement will depend largely on the phase of the procurement process – or potentially even a context completely outside of the formal procurement process – in which the essential decisions with environmental consequences will be taken. Also relevant is whether the decision is in reality made by the contracting authority, or some other party. The integration of environmental considerations in public procurement cannot for these reasons be limited to the development of procurement law in the narrow sense. It must include other policy instruments such as product specific environmental criteria in different sectors,

the procurement process comprehensively – from the inputs (tender documents) and outputs (the tender that was awarded the contract) to the impacts (caused by the procured products) – the environmental impacts can be addressed effectively. Indeed, also the economic upside of a better-informed procurement process seems promising. The Commission's initiatives on procurement should therefore include clear mandates on monitoring and reporting on the environmental considerations.

The implementation of sustainable procurement is contingent upon the procurement strategies of the contracting authorities. Procurement strategies, in turn, can be derived from the objectives that are set by the government, national or otherwise.

**“ The combinations of policy measures that target each of the environmentally most significant product groups will benefit the environment, but have also great potential to improve the economic sustainability of the public sector in longer term. ”**

eco-labels, environmental footprints, eco-design requirements as well as climate budgets.

The reduction of environmental impacts with public procurement requires, in addition to multiple different policy tools, that such tools are understood as combinations that are tailored for each ESPG. The effects that the policy instruments have on each other must thus also be considered carefully. Due to the several interactions, it is vital to invest in supporting sustainable procurement with more permanent, well-resourced administrative and organisational structures.

Our research has established that the amount of scientifically proven data on the environmental impacts of procurement remains scant – also internationally. Environmental criteria are still applied infrequently, and even more rare are efforts to monitor whether the set criteria are actually complied with, or what the actual impacts of procurement on the environment are. By measuring

The procurement strategies should include a plan for monitoring and measuring the achievement of sustainability goals.

### **Updated list of product groups to support decision-making**

Many policy instruments to govern public procurement would benefit from an official list of ESPGs. We recommend the development and deployment of such a list, to the extent possible, at the European level, making use of the classification of e.g. our research on the matter<sup>5</sup>, and updating it continuously with the most recent scientific data. On the basis of the list, tailor-made policy mixes are to be developed for the procurement of the ESPGs. These mixes of instruments will vary considerably by product group, and will be affected by contextual factors as well. European level benchmarking and requirements on the toolboxes seem nonetheless essential.

## RECOMMENDATIONS ON INDIVIDUAL POLICY INSTRUMENTS ON GREENING PUBLIC PROCUREMENT

A wide range of measures can be taken to materialise the potential of greener public procurement. Their introduction can only be gradual, taking place over the time required for supporting and building up the necessary skills and resources of the contracting authorities and suppliers. The outcomes must also be carefully measured to ensure the effectiveness and efficiency of the measures taken, and to adjust them accordingly.

### Public procurement directives

- We recommend that the **obligation to take environmental and social considerations into account** be explicitly included in the **objectives** of Public Procurement legislation, alongside the other objectives of procurement law. This will underline the **political support** for environmental considerations as part of the procurement process.
- The discretionary criterion for **excluding suppliers** from bids for **environmental crimes** should be made a **mandatory** exclusion criterion. The amendment would increase the obligation of the contracting entity to verify the mandatory suitability requirements. This requirement should be implemented effectively through e.g. electronic information procedures and extended to subcontractors used by suppliers. The change would also support the fight against environmental crime and the fight against **grey economy**.
- Procurement units should be required to draw up a **clear budget for the procurements** of the environmentally significant product groups. The budget should be based on the **life cycle cost of procurement**, and be taken into account in the **planning** and, where possible, in the **tendering** processes.
- The contracting entities should thus be under a gradually expanding obligation to **identify the environmental impacts of procuring ESPGs** and to assess how the environmental impacts of these purchases could be reduced. If the contracting

entity does not take environmental factors into account in these procurements, it should be under an obligation to **explain**, for example in a report, the reasons why not.

### Product and sector-specific environmental requirements

- We recommend that product and sector-specific environmental requirements be set for the public procurement, subject however to the following conditions:
  - 1) the **benefits** of the environmental requirements are **proven** to **outweigh** the **disadvantages** in a product group specific assessment,
  - 2) there is already, or can be expected to soon be, **significant competition** in the market between new solutions that meet environmental requirements through **private demand**,
  - 3) the **share of public sector** demand in the market is significant in relation to total market demand. Alternatively, the public sector may seek to **create markets** and lead by example as an early adopter.
- The implementation of this recommendation **requires support** along the other recommendations in this Brief (e.g. institutionalisation of procurement, use of eco-labels).
- **Mandatory environmental product criteria** should be introduced **gradually**, giving priority to **ESPGs**, where this will not result in substantial **negative** impacts on the **cost, market** and otherwise.
- **We recommend mandating the use of award criteria** in the procurement of ESPGs where the use of mandatory minimum standards as technical specification would have a **negative overall impact**. The criteria for such environmental award criteria should be **easy to apply** by the contracting authority and should, at least initially, have a **moderate** weighting.
- Where there are readily verifiable criteria for



the environmental impacts of the procurement that are based on **performance rather than on technical characteristics**, the former should be used as a priority as mandatory requirements or benchmarks. In addition, efforts should be made to further **develop performance-based requirements** that can be better measured and verified.

- To **avoid fragmentation** on the EU internal market and international markets, mandatory product-specific environmental criteria should, wherever possible, be based on **existing EU or international criteria**, such as Type 1 eco-labels (ISO 14024) or EU GPP model criteria. The application of criteria should ensure **competition** and **non-discrimination** on the market, be easy to use and effective.
- **Failure to comply** with mandatory product or sector-specific environmental criteria should be considered as a nonfulfillment of the procurement procedure, and lead to effective **consequences**.

### Setting product-specific requirements

- We propose setting **product-specific public procurement requirements** through “**framework acts**” in sectoral laws, such as the EU EcoDesign Directive and its implementing regulations. Close cooperation among several sectors is called for, while the environmental authorities are key participants. The cooperation can be supported by the further **institutionalisation of the governance** of procurement activities. Procurement units should be made **aware** of the sector-specific requirements through procurement systems such as the **CPV** codes in tendering systems.

### Other product policy instruments

- We recommend the use of **environmental and energy labels** and their criteria in public procurement, within the limits set by EU Public Procurement law and the framework conditions above. Under the same conditions, the use of the criteria contained in the labels should be gradually made **mandatory**, if the labels concern

**ESPGs** for procurement purposes.

- The minimum requirements of the new **EcoDesign Directive** should include product groups whose environmental **impact is considered significant** from the point of view of public procurement. When defining eco-design requirements for different product groups, it should also be taken into account **which of the product group’s characteristics** are significant for improving the sustainability of public procurement. The implementing measures of EcoDesign Directive can be used for defining minimum product-specific environmental requirements for procurement.
- We recommend **piloting** and further developing the different **tools of environmental impact assessment** - carbon footprint, carbon handprint and product environmental footprint calculations - in public procurement. Pilots should be conducted in ways that ensure **expert support** and strengthening the methodological **skills** of the public purchasers.
- We recommend that governmental organisations, municipalities and other organisations covered by public procurement legislation prepare a climate programme and/or **a climate budget that takes public procurement into account**. The recommendation could be included in **Climate legislation**. Climate budgets should also be considered for medium-term climate planning.

### Measuring and monitoring

- The carbon and **environmental footprint of public procurement should be measured and reported on a systematic basis** at national level. National databases should be set up for the measurement coordinated by the European Commission and largely **automated** using, among other things, **artificial intelligence**. The system should require as few separate administrative measures as possible from procurement units, suppliers or the authorities controlling the system. Contracting entities’ data on environmental impacts, contained in the tendering or other systems should be available

to the database, unless specific reasons of confidentiality prevent this. We recommend the development of **roadmaps** with a step-by-step approach to measuring and reporting on environmental **inputs, outputs and impacts**.

### Administrative and organisational structures

- A **more permanent organisational structure and financial basis** is crucial to ensure adequate support for boosting green public procurement. This support should cover the necessary **knowledge** generation, **skills** improvement and

other development of contracting authorities, as well as the scaling up of **best practices**. This can be achieved by setting up agencies or other permanent organisations or networks with **clear operational objectives**, a well-established **position** among the target group and sufficient **resources** for effective action. It seems probable that in many cases, such institutions have potential to add value in amounts that far exceed the costs of running the institution. **Piloting** such institutions is thus highly recommended.

### Endnotes

<sup>1</sup> For full list of authors, please see the end of the Brief.

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<sup>2</sup> An earlier, Finnish language version of this Policy Brief has been published by VN-TEAS at <https://tietokayttoon.fi/julkaisu?pubid=37201>.

<sup>3</sup> The considerable environmental impacts are abbreviated as follows: GHG = greenhouse gas emissions; BIOD = biodiversity; EUTR = eutrofication of waters; CHEM = chemicals with adverse effects; MULTI = multiple confirmed environmental impacts.

<sup>4</sup> Kalimo et al. (2021) Hiili- ja ympäristöjalanjälki hankinnoissa – lainsäädäntö ja mittaaminen (The law and measurement of carbon and environmental footprints in public procurement), Research Report; Nissinen & Savolainen 2019. The table summarises the full list of product groups used for the calculation.

<sup>5</sup> *Id.*

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