Rijkswaterstaat - Circular and Fair ICT (CFIT) Pact

Report: Introduction in EU Legislation of Mandatory Green Public Procurement Criteria for ICT Products

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Summary

The purpose of this study is to provide an analysis of the scope and of the policy development process to implement mandatory Green Public Procurement (GPP) criteria for ICT products, as well as the expected implications for procurement organizations and the market.

The geographical scope of this analysis is the European Union and its Member States. The policy initiatives analysed include the recently approved “Ecodesign for Sustainable Product Regulation (ESPR)” (EU) 2024/1781, the “Battery Regulation” (EU) 2023 / 1542 and the recast of the “Energy Efficiency Directive (EED)” (EU) 2023/1791. These EU policy initiatives have as common element the introduction of provisions on mandatory GPP criteria.

In most of cases (except the Energy Efficiency Directive) the formulation of product-specific GPP requirements foresee secondary legislation such us delegated acts and implementing acts, with policy making processes that could still take additional years before the adoption of these criteria in EU legal acts.

Although the Ecodesign for Sustainable Products Regulation (ESPR) allows for product regulations to include GPP criteria, the interest from both the Commission and Member States in implementing mandatory GPP under this framework remains uncertain. Developing such regulations entails additional work for the Commission, and, at the same time the adoption requires a qualified majority the Member States. Moreover, Member States like the Netherlands prefer to focus on higher-level requirements at the system or service level rather than rigid, product-specific criteria.

Moreover, some of the legal initiatives analysed appear to have limited impact on the public procurement of ICT products:

- The battery regulation has limited applicability to batteries in ICT products (apart from UPS (uninterruptible power supply) batteries).
- the requirements for data centers under the EED are not directly related to GPP but could be leveraged for it. A more significant development would be the introduction of minimum performance standards or an energy label for data centers, as this would automatically impose the requirement for public authorities to use data centers in the top two populated efficiency classes.

Most of the mandatory GPP criteria identified are related to the CFIT Categories “Energy and Climate” and “Circularity”. On the other hand, mandatory GPP Criteria are expected to have limited impacts on other CFIT categories such us “Chemicals” and “Fairness”.

The study also highlights the fact that, while the most of the new mandatory GPP criteria are still in preparation, the Commission is currently not updating the existing voluntary EU GPP Criteria Guidance for ICT products.

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Content

1 Introduction

The current EU Procurement Directive (2014/24[1]) allows contracting authorities to include environmental and social criteria in their procurement tenders. The European Commission has developed voluntary guidance documents for Green Public Procurement (GPP)[2], and contracting authorities can make use of such criteria when drawing up their tender specifications, or when establishing minimum mandatory GPP criteria at Member State level.

Recently, the European Commission has approved new policy measures introducing mandatory GPP criteria (or enabling the Commission to establish mandatory GPP by secondary legislation). These initiatives cover a wide range of product groups, including devices in the Information and Communication Technology (ICT) sector. The mandatory GPP approach raises questions among stakeholders regarding the potential application and outcomes, including concerns about the development process for such criteria and their ambition level.

In this context, this study aims to:

- provide clarity on the legal basis, applicability and ambition level of these initiatives (Task 1)
- map these initiatives and criteria in the context of the CFIT impact categories: circularity (& critical raw materials), fairness, energy, and chemicals (Task 2)
- describe the development process of mandatory GPP criteria, identifying opportunities for stakeholder input throughout the development process. Additionally, this task aims to outline the expected implementation timeline (Task 3)
- identify the most relevant Directorates-General (DGs) for each initiative (Task 4)

This report provides an updated status of the policy background for mandatory GPP in Europe. The scope of this report is limited to policy initiatives relevant to ICT products and other areas for mandatory GPP are not analysed (e.g. packaging, construction sector). The results are mainly based on literature review and the analysis of the policy measures. In the context of this study, the team has also interviewed an officer from DG ENV on the specific topic of the future of the voluntary GPP guidelines.

[1] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC
[2] https://green-business.ec.europa.eu/green-public-procurement/gpp-criteria-and-requirements_en

2 Task 1: Detailed overview of the policy context

2.1 Ecodesign for Sustainable Products Regulation - Regulation (EU) 2024/1781

2.1.1 Nature of the initiative

The Ecodesign for Sustainable Products Regulation (ESPR) is a regulatory framework developed by the European Union aimed at promoting the sustainability of products placed on the EU market with sustainable designs and reduced environmental impacts.

The ESPR came to replace the Ecodesign Directive 2009/125/EC, which, despite covering all the aspects of the environmental performance of products, has been mainly focused on improving the energy efficiency of products, with aspects related to material efficiency and circularity only implemented to a limited extent. A more systematic inclusion of material efficiency and circularity requirements started with the 2019 ecodesign package[3]. A more advanced example comes from the Ecodesign / Energy labelling regulation for smartphones and tablets that will apply from June 2025[4].

ESPR now builds on the Ecodesign Directive, by defining rules on Digital Product Passports (DPP), green public procurement (GPP) and destruction of unsold products.

With the approval of the new regulation, the European Commission has been putting emphasis on the contribution of the ESPR on circularity, recyclability and durability of products. Nevertheless, the same challenges identified with the Ecodesign Directive could likely limit the adoption of these requirements under ESPR.

The ESPR regulation ((EU) 2024/1781) entered into force in July 2024 but has a transitioning period until 2030, during which the current Ecodesign Directive will remain in effect with a limited scope.

To support its goals, the regulation mandates the development of a Digital Product Passport (DPP), where detailed information about the products must be available electronically, with the aim of improving transparency and facilitating reuse and recycling. Information includes the product's technical information, its materials, repair options, recyclability, and environmental performance but will depend on the specific product in question.

The ESPR also aims to prevent the destruction of unsold consumer products, by introducing reporting requirements for manufacturers and importers to disclose publicly the weight of discarded items, the reasons for discarding them, and their eventual fate – whether they are prepared for reuse, recycled, or processed through other recovery methods.

Finally, the ESPR allows setting mandatory Green Public Procurement (GPP) requirements for specific product categories, which will encourage public authorities to purchase more sustainable products[5].

2.1.2 Nature of the criteria

The GPP requirements expected to be developed under the ESPR will be minimum requirements, meaning public authorities can set additional and more demanding requirements[5]. The GPP requirements should be set in relation to the product aspects addressed in the delegated act regulating the products in question. ESPR requirements can cover the following product aspects:

(a) durability;
(b) reliability;

[3] https://ec.europa.eu/commission/presscorner/detail/en/qanda_19_5889
[4] https://energy-efficient-products.ec.europa.eu/product-list/smartphones-and-tablets_en
[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1781&qid=1719580391746

(c) reusability;
(d) upgradability;
(e) repairability;
(f) the possibility of maintenance and refurbishment;
(g) the presence of substances of concern;
(h) energy use and energy efficiency;
(i) water use and water efficiency;
(j) resource use and resource efficiency;
(k) recycled content;
(l) the possibility of remanufacturing;
(m) recyclability;
(n) the possibility of the recovery of materials;
(o) environmental impacts, including carbon footprint and environmental footprint;
(p) expected generation of waste.

The GPP requirements set for specific product groups should be complied with not only when directly procuring those products in public supply contracts but also in public works or public services contracts, where those products will be used for activities constituting the subject matter of those contracts. In terms of type of criteria, the ESPR allows the Commission to establish the following requirements through implementing acts (Article 65(3):

- technical specifications
- award criteria
- contract performance conditions
- targets

According to the ESPR, the technical specifications for products should ensure they achieve the highest possible environmental performance, such as compliance with the top two performance classes or scores for specific criteria, e.g. carbon footprint (see article 65(3)) . As a result, contracting authorities must enforce these specifications. However, the minimum requirements should avoid artificially restricting competition.

The Commission might also define minimum mandatory award criteria, assigning specific weighting (15%-30%) to environmentally sustainable factors to promote greener products in procurement decisions. In addition, the Commission may set contractual targets, such as requiring that 50% of annual procurement for certain products meet standards like containing more than 70% recyclable material. Also in this case, Member States can establish stricter targets if desired.

The implementing act may mandate that, every year or over several years, at least 50% of procurement by contracting authorities or entities – or at a national level in total – must involve the most environmentally sustainable products[9]. These products will be specified in a related delegated act tailored to the relevant product categories. The targets will be deemed met when the required percentage is achieved in accordance with the standards set by the implementing act.

GPP requirements will be developed in parallel with the corresponding product's delegated act, where feasible and appropriate[9]. These requirements will consider the value and volume of public contracts for the relevant product groups, as well as the economic feasibility for buying more environmentally sustainable products in such public contracts. As a result, not every product regulated under an ESPR delegated act will necessarily also have GPP requirements.

Public authorities must comply with these requirements not only when directly procuring the specific product in public supply contracts but in public works or public services contracts, where these products are used. The requirements must align with specific delegated acts that regulate those product categories.

The GPP procedure should be conducted in compliance with Directives 2014/24/EU and 2014/25/EU of the European Parliament and of the Council. In addition, public authorities will have to comply with the EU's international commitments, including the Government Procurement Agreement and other international agreements by which the Union is bound.

2.1.3 Level of ambition

The ESPR has a high level of ambition for sustainable product policy within the EU, as all products covered by the regulation and introduced to the EU market will need to comply. It will therefore affect product manufacturers, importers, distributors, dealers and service providers.

The regulation aims to prolong the lifecycle of products, by promoting design principles that facilitate reuse, repair and recyclability. The objective is to establish the EU as a global leader in sustainable production and consumption, by setting strict requirements.

The introduction of the DPP is a major step towards transparency, enabling consumers to make informed decisions. Nevertheless, the DPP information requirements are going to be defined at product group level by delegated act and the DPP can be potentially avoided in case the product group is covered by an energy label.

The mandatory Green Public Procurement criteria aim to influence purchasing decisions, assisting in the goal of climate neutrality by 2050. However, the ESPR is meant to be an entry level for the application of green criteria in procurement. As described in recital 101, the ESPR leaves to Member States the responsibility for introducing stricter (more ambitious) national requirements regarding products which fall within the scope of implementing acts setting out green public procurement requirements, provided such measures and requirements are in line with Union law.

Moreover, conditions in Article 65 such as "the minimum requirements shall be set where appropriate, … taking into account the value and volume of public contracts awarded … the economic feasibility for contracting authorities and contracting entities to buy more environmentally sustainable products without entailing disproportionate costs" could further water down the level of ambition of the proposed mandatory GPP criteria.

2.1.4 Applicability

Product groups to be regulated will be included in ESPR Working Plan, which is currently under development. The first ESPR Working Plan will be adopted in the first half of 2025 (see Figure 1). ICT products and other electronics are on the list of product groups the Commission shall prioritise in the first working plan, unless there is a justification for not doing so[6].

While ICT products are included in the ESPR work plan, the practical implications are unclear. ICT products are unlikely to rank high in the work plan's priorities, especially given that several ICT product regulations (e.g., for mobile phones, tablets, computers, servers) already exist and are undergoing revision. Remaining product groups, such as small network equipment, have been previously assessed, with findings that ecodesign requirements offered limited potential. While material impacts might alter this perspective, the overall impact of these product groups remains smaller compared to others like steel, textiles, and plastics.

Where two or more product groups display one or more similarities allowing a product aspect to be effectively improved based on common information requirements or performance requirements, horizontal ecodesign requirements may be set for those product groups ('horizontal ecodesign requirements'). When

[6] https://green-business.ec.europa.eu/implementing-ecodesign-sustainable-products-regulation_en

considering whether to set horizontal ecodesign requirements, the Commission shall also take into account the positive effects of those requirements towards reaching the objectives of this Regulation, in particular the ability to cover a wide range of product groups in the same delegated act. The Commission may supplement the horizontal ecodesign requirements through the setting of ecodesign requirements for a specific product group.

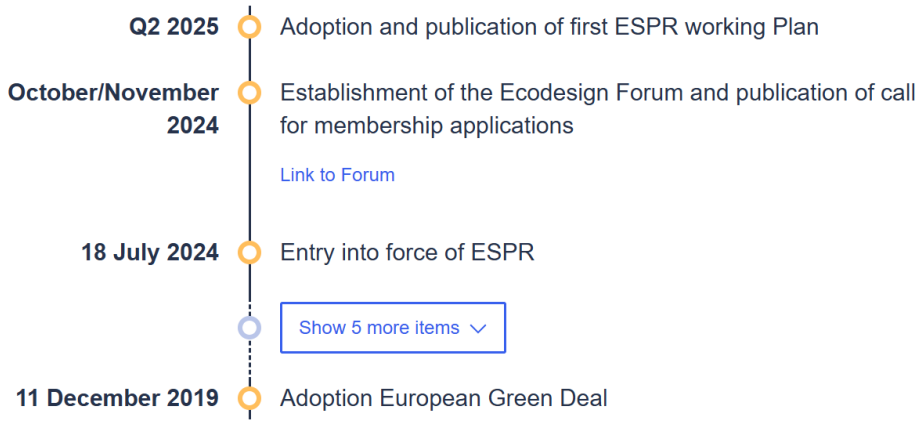

Figure 1: Planning for Adoption and Publication of first ESPR working plan.
Source: https://green-business.ec.europa.eu/implementing-ecodesign-sustainable-products-regulation_en#ongoing-work-under-current-eu-ecodesign-framework

The Commission is currently working on the development and revision of ecodesign requirements for several product categories. Some of these product groups fall into the transitional regime (see Figure 2), valid until 31 December 2026, including ICT products group such as: servers and data storage products, computers, imaging equipment. The only ICT product group for which the Commission is already developing proposal under the ESPR is Electronic Displays, for which a back-to-back approach is applied[7]. For this product group a Public Consultation[8] is ongoing. According to the back-to-back approach, impact assessment and evaluation are carried out in a single study and public consultation covers both the backward- and forward-looking elements. A first Consultation Forum meeting is expected to take place in the first half of 2025.

Finally, ESPR could have little implications for products that are included in the transitional regime. The only possible impact would be through the inclusion of such products in the list for the prohibition of destroying unsold goods.

[7] https://www.ecodesign-displays.eu/
[8] https://energy.ec.europa.eu/news/public-consultation-launched-updating-ecodesign-and-labelling-rules-electronic-displays-2024-11-13_en

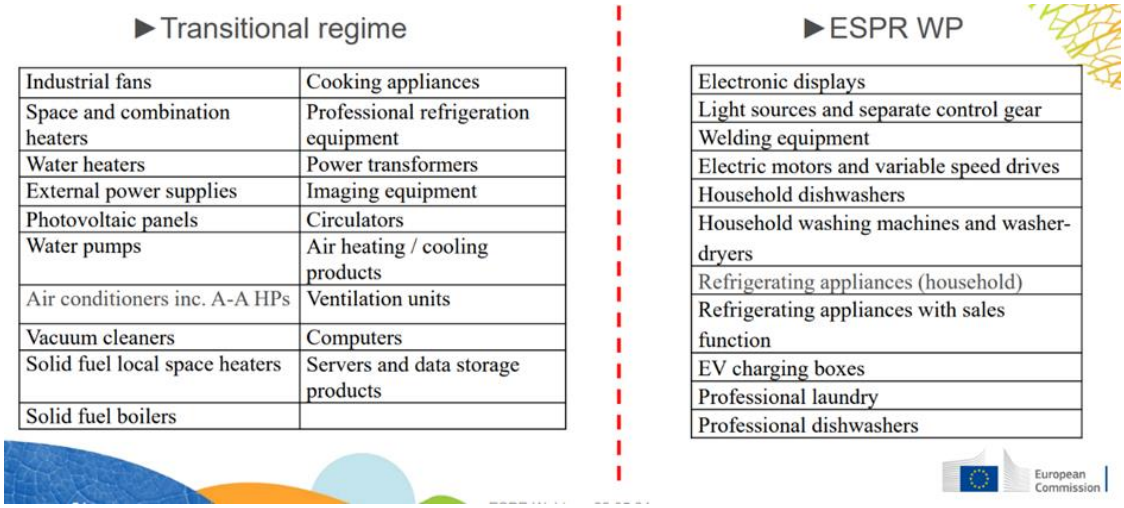

Figure 2: Product under the transitional regime vs products under ESPR WP according to the European Commission.

As for the Ecodesign Directive (2009/125), the ESPR requirements on ecodesign for ICT products will be proposed during the preparatory studies and scoping exercises[9]. Although there are still no specific criteria for ICT products, the ESPR is expected to have direct implications for these products, which are known for their resource-intensive production processes and significant environmental footprints, which are a key focus of the ESPR. All products within the product group will need to comply with the regulation, unless there is a specific exception.

In addition, the DPP will be particularly impactful for this sector, providing detailed information about material content, repair options, and end-of-life recyclability, thereby enabling consumers and stakeholders to make informed decisions.

The ESPR will work alongside other acts dealing with Green Public Procurement (GPP), such as Construction Product Regulation (CPR), Net Zero Industry Act (NZIA), Energy Efficiency Directive (EED). How they interact will depend on the products being procured and the specific rules set for the procurement process. For example, this could involve the types of products mentioned in the contract, the technical requirements, or the performance conditions included in the tender. Essentially, the connection between these acts will be guided by the particular details and requirements of each procurement case.

2.2 Battery Regulation – Regulation (EU) 2023/1542

2.2.1 Nature of the initiative

The Battery Regulation (EU) 2023/1542 establishes comprehensive rules governing the entire life cycle of batteries, from production to disposal. The primary goal of this regulation is to make batteries more sustainable throughout their entire life cycle, reduce their environmental impacts, and ensure that they contribute to the EU's goals of a circular economy and climate neutrality by 2050.

This regulation entered into force in August 2023 and came to replace the EU Directive on Batteries and Accumulators (2006/66/EC) to improve the shortcomings of this directive, by focusing on waste batteries and the whole life cycle of batteries, including design, production and disposal. Unlike the former directive, this initiative is now directly binding across all Member States, without needing national transposition.

[9] https://circabc.europa.eu/ui/group/418195ae-4919-45fa-a959-3b695c9aab28/library/25c48e7c-9ce3-41cb-96ac-d2942a8a29d6/details?download=true

The regulation not only mandates high environmental standards but also provides a framework for public authorities to prioritize the procurement of eco-friendly and durable batteries. This integration of sustainability considerations is designed to guide public procurement decisions, driving demand for more sustainable products and fostering innovation in the industry.

2.2.2 Nature of the criteria

The Battery Regulation lays the foundation for requirements on several areas, such as sustainability, labelling, disassembly, management of waste batteries, digital battery passport, due diligence, among others. In addition, this regulation lays down requirements for green public procurement when procuring batteries or products into which batteries are incorporated.

Green public procurement is addressed in Article 85. According to it, when procuring batteries or products containing batteries, contracting authorities must consider the environmental impacts these products have over their entire life cycle. One point to note is that this requirement is beyond the central procurers but covers all the contracting authorities. This applies to procurement processes covered by the EU Public Procurement Directives 2014/24/EU and 2014/25/EU.

Regarding GPP, the Battery Regulation is expected to be complemented by an implementing regulation setting award criteria, (see article 85(3)). However, this implementing process does not apply to ICT portable batteries, as it refers to aspects covered in Articles 7 to 10 and these articles do not apply to the ICT portable batteries[10]. The only category of batteries in the IT sector potentially affected is batteries for Uninterruptible Power Supply (UPS) systems in data centres.

The aspects and product groups covered in Articles 7 to 10 are:

- **Article 7:** Carbon footprint of electric vehicle batteries, rechargeable industrial batteries and Light Means of Transport (LMT) batteries
- **Article 8:** Recycled content in industrial batteries, electric vehicle batteries, LMT batteries and Starting, Lighting and Ignition (SLI) batteries
- **Article 9:** Performance and durability requirements for portable batteries of general use
- **Article 10:** Performance and durability requirements for rechargeable industrial batteries, LMT batteries and electric vehicle batteries

Public authorities must follow the criteria set in these articles when purchasing batteries or products that contain them. In procurement procedures, contracting authorities will need to refer to these criteria in the technical specifications and award criteria to meet the sustainability goals.

The European Commission will adopt additional delegated acts only after the latest of the delegated acts related to sustainability in Articles 7 to 10 is adopted. These acts will set out specific criteria for awarding procurement contracts for batteries or products containing batteries.

Basically, at the moment, the battery regulation establishes that the contracting authorities shall consider environmental impacts and apply a life cycle approach that shall be used in the large procurement tenders:

"Contracting authorities… or contracting entities… shall, when procuring batteries or products containing batteries in situations covered by those Directives, take account of the environmental impacts of those batteries over their life cycle with a view to ensuring that such impacts are kept to a minimum.

Moreover, according to this regulation, starting 18 August 2025, economic operators, i.e. those placing batteries on the market or putting them into service, must establish and implement due diligence policies

[10] Please note that Article 9 only applies only to 'portable battery of general use' means a portable battery, whether or not rechargeable, that is specifically designed to be interoperable and that has one of the following common formats 4,5 Volts (3R12), button cell, D, C, AA, AAA, AAAA, A23, 9 Volts (PP3).

to address risks in their supply chains. These policies are to be verified and periodically audited by a third party to ensure compliance. Companies must also keep documentation of compliance for 10 years after the last battery under a specific policy is placed on the market.

Economic operators must also establish a supply chain control system that identifies upstream actors and includes third party verification reports. They are required to maintain detailed documentation on the following raw materials, their origin, and quantities: cobalt, natural graphite, lithium, nickel, and chemical compounds based on the listed materials, which are required to produce the active materials of batteries. Furthermore, economic operators must identify, assess, and manage risks in their supply chain, addressing both social and environmental risk categories, which include air, water, and soil pollution; biodiversity loss; hazardous substances; noise; energy use; and waste. Social risks include human rights and labour issues, such as occupational safety, child and forced labour, discrimination, and trade union freedoms, as well as impacts on community life, particularly for indigenous people. Using their due diligence policy, operators must design and implement risk management strategies to prevent, mitigate, or address adverse impacts.

To ensure transparency, economic operators are, among other things, required to publish an annual report detailing the steps taken to comply with the abovementioned requirements, findings on significant adverse impacts, their mitigation efforts and a summary of third-party verifications. If batteries contain recycled raw materials, operators must also publicly disclose relevant details.

Moreover, they are required to make available to its immediate downstream purchasers (Article 52(2)) all relevant information gained and maintained pursuant to its battery due diligence policy, with due regard for business confidentiality and other competitive concerns. This provision in Article 52(2) can be of high relevance to the public procurers, because it provides the legal basis for asking the operators evidence of the due diligence policies.

The Commission will issue guidelines by 18 February 2025 and may update risk categories, raw material lists, and standards to reflect scientific and regulatory advancements.

2.2.3 Level of ambition

The regulation demonstrates a high level of ambition, particularly in its potential to influence design aspects as the removability and replaceability of portable batteries that can directly impact the design of small IT devices. With targets like achieving 73% collection rates for portable batteries by 2030 and setting mandatory recycling quotas for critical materials, the regulation not only pushes manufacturers toward greener practices but also empowers public procurement to act as a promoter of change.

On the other hand, some concerns can be raised about the way the recycling quotas for CRMs can be reached. According to the recital (30) *"the Battery manufacturing waste is likely to be the main source of secondary raw materials … and battery manufacturing waste should be counted as part of the recycled content targets with the objective of accelerating the development of the necessary recycling infrastructure. However, by-products of battery manufacturing that are re-used in the production process, such as manufacturing scrap, do not constitute waste and should therefore not be counted as part of the recycled content targets."* The fact that pre-consumer recycling can be counted toward the objectives raise concerns about the level of ambition of these targets.

2.2.4 Applicability

The Battery Regulation is directly applicable to all batteries sold within the EU, including those used in publicly procured products and infrastructure, such as electric vehicles, energy storage systems, and portable devices. Its requirements influence the selection of batteries in public procurement contracts by ensuring that only products meeting the regulation's sustainability standards are eligible for use. This makes it a powerful tool for public authorities aiming to implement GPP practices, as they can reference

the regulation's criteria in tenders to prioritize environmentally sustainable and socially responsible options. Furthermore, its phased implementation allows procurers and suppliers to adapt while ensuring continuous progress toward greener procurement outcomes. However, several requirements are only applicable to sub-groups of batteries.

While the regulation came into force in 2023, certain requirements will only take effect in the coming years, with specific dates assigned to each type of battery. One key aspect of the regulation is that many of the details necessary for implementing these requirements are not outlined within the regulation itself but will be provided by the European Commission through delegated acts or implementing acts. The regulation therefore sets deadlines for when the Commission must adopt these acts.

Nevertheless, it is important to note that only part of the parameters apply directly to the ICT products in scope. Rules related to carbon footprint (Article 7), recycled content (Article 8), durability (Article 9 and 10) are not supposed to be developed for portable batteries for small ICT devices. However, the criteria above can be relevant for industrial batteries that are typically used in data centre uninterruptible power supplies (UPS).

About the applicability of Article 85 on Green Public Procurement, the obligations apply according to the Directive 2014/24, specifically procurements with a value (net of value-added tax) estimated to be equal to or greater than the thresholds in Table 1 (thresholds (b) and (c) are relevant for the purchase of ICT products and services).

Table 1: Thresholds of applicability for the EU GPP Mandatory Criteria under the Battery Regulation (as defined in Article 2(1), point (1), of Directive 2014/24/EU)

Type of procurement	Threshold (net of the value added tax)
a) public works contracts	EUR 5 186 000
b) public supply and service contracts awarded by central government authorities and design contests organised by such authorities; where public supply contracts are awarded by contracting authorities operating in the field of defence, that threshold shall apply only to contracts concerning products covered by Annex III of the Directive;	EUR 143 000
c) public supply and service contracts awarded by sub-central contracting authorities and design contests organised by such authorities; that threshold shall also apply to public supply contracts awarded by central government authorities that operate in the field of defence, where those contracts involve products not covered by Annex III of the Directive	EUR 221 000
d) public service contracts for social and other specific services listed in Annex XIV of the Directive.	EUR 750 000

2.3 Energy Efficiency Directive (EU) 2023/1791

2.3.1 Nature of the initiative

The Energy Efficiency Directive (EED) is a directive developed by the EU, with the goal of reducing energy consumption across Europe, by setting more ambitious targets for energy savings. This directive is a core element of the EU's broader climate and energy strategy, which aims to reduce greenhouse gas emissions by 55% (compared to 1990) by 2030[11].

[11] https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en

This directive is a legislative update to the previous Directives 2018/2002 and 2012/27/EU, which now has higher ambitions, stronger obligations, and a wider scope of applicability. It now expands the focus to include energy poverty, decarbonization of heating and cooling, and digital infrastructure like data centres. It also introduces more binding targets and improves mechanisms for monitoring, reporting and implementation. This directive is therefore designed to accelerate the EU's energy transition by improving energy efficiency across energy and non-energy sectors.

This directive entered into force in October 2023 and EU Member States have two years to transpose the directive into national law after it entered into force.

There are different focus areas in this directive. On the one hand, it now establishes clear, measurable criteria for energy savings, with annual targets that increase over time. For instance, the directive establishes the binding target of reducing energy consumption by 11,7% by 2030, which EU countries must collectively ensure. These reductions are achieved through cumulative savings obligation that rises from 0,8% in the first phase (2021-2023) to 1,9% by 2028-2030.

The directive also focuses on other areas, such as heating and cooling, energy poverty and mandatory renovation in public buildings.

In addition, Member States are now required to monitor and publicly report the energy use of data centres. Data on energy performance and water footprint of data centres will be collected and published in a European database, prepared by the European Commission.

Finally, there are now requirements on public procurement procedures, which must systematically integrate energy efficiency requirements, ensuring that all public investments support energy efficiency objectives.

2.3.2 Nature of the criteria

The revised EED introduces the obligation for Member States to establish measures ensuring that products and services procured are of high energy efficiency performance. In order to have an adaptative system, that keeps in consideration the diversity of the product groups and can better keep pace with the dynamic nature of technology and market demands, the EED makes reference to several product specific acts:

- the Energy Labelling delegated acts according to the Energy Labelling regulation (EU) 2017/1369[12];
- implementing measures under Directive 2009/125/EC of the European Parliament and of the Council;
- products and services covered by EU green public procurement criteria (EU GPP) or available equivalent national criteria.

Regarding data centres, the EED suggests that Member States need to encourage owners and operators of data centres in their territory with a power demand of the installed IT equal to or greater than 1 MW to take into account the best practices referred to in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency[13].

[12] Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling

[13] https://joint-research-centre.ec.europa.eu/scientific-activities-z/energy-efficiency/energy-efficiency-products/code-conduct-ict/european-code-conduct-energy-efficiency-data-centres_en

Moreover, the recent Commission Delegated Regulation (EU) 2024/1364[14] sets out the information and key performance indicators to be communicated to the European database by the operators of data centres with an installed information technology power demand of at least 500 kW and are necessary for the establishment of a common Union scheme for rating the sustainability of data centres in the Union, as well as a common measurement and calculation methodology. It also defines the first data centre sustainability indicators that will be calculated based on the information and key performance indicators communicated to the European database on data centres.

The information to be reported to the Commission includes:

- Installed information technology power demand
- Data centre total floor area
- Data centre computer room floor area

The key performance indicators established by this regulation (see Annex III) include:

- Total energy consumption
- Total energy consumption of information technology equipment
- Power Usage Effectiveness (PUE)
- Water Usage Effectiveness (WUE)
- Energy Reuse Factor (ERF)
- Renewable Energy Factor (REF)

By 15 May 2025, the Commission shall assess the available data on the energy efficiency of data centres submitted. Based on this assessment, the Commission shall propose, where appropriate, further measures to improve energy efficiency, including establishing minimum performance standards and assessing the feasibility of transitioning towards a net-zero emission data centres sector, in close consultation with relevant stakeholders. Such proposals may establish a timeframe within which existing data centres are to be required to meet minimum performance.

2.3.3 Level of ambition

The EED is quite ambitious in terms of GPP obligations. The only condition that is considered acceptable to not apply the obligations is that “it is not technically feasible”.

The Commission Recommendation (EU) 2024/1716[15] of 19 June 2024 sets out guidelines for the interpretation of the Energy Efficiency Directive, including the concept of feasibility applied to mandatory GPP criteria. The guideline provides the examples of heat pumps in a building. A lack of technical feasibility for procuring energetically efficient heat pumps could occur where the heat distribution system of a building is not suitable to run at the temperatures required for the efficient use of a heat pump, while the building concerned is already possessed or rented. A well-documented assessment, that includes reasoning such as technological limitations, site-specific constraints or technical incompatibility with existing infrastructure or systems is necessary to demonstrate technical infeasibility. This assessment should be carried out in the preparation phase for a purchase and should be included in the authorities’ or entities’ documents and it is recommended to indicate the assessment conclusion in contract notices for transparency and equal treatment reasons. A well-documented assessment substantiated for example by a comparative analysis based on a preliminary market consultation is appropriate to demonstrate and document technical infeasibility.

[14] Delegated regulation - EU - 2024/1364 - EN - EUR-Lex. Available at: https://eur-lex.europa.eu/eli/reg_del/2024/1364/oj

[15] Commission Recommendation (EU) 2024/1716 of 19 June 2024 setting out guidelines for the interpretation of Articles 5, 6 and 7 of Directive (EU) 2023/1791 of the European Parliament and of the Council as regards energy consumption in the public sector, renovation of public buildings and public procurement

Consequently, if procurers determine that all the items belonging to an efficiency category that are to be purchased under Article 7 of Directive (EU) 2023/1791 are not technically feasible, but that other, less efficient items are technically feasible, they would be able to purchase those less efficient items.

In terms of ambition the EED refers to the highest two significantly populated classes of energy efficiency, or at higher classes as laid down in that delegated act. The Commission Recommendation (EU) 2024/1716 clarifies how Member States should define the highest two significantly populated classes, using EPREL[16] as reference. As example, in Figure 3, a search in EPREL done for a specific type of displays: "monitors" + "24 inches". The search resulted in 142 displays available. EPREL allows users to check the model distribution by performance class for the specific query. In this case, class A to C cannot considered significantly populated because they host only 2% of the products and would restrict the competition to only 3 models. The highest two populated classes would be in this case D and E.

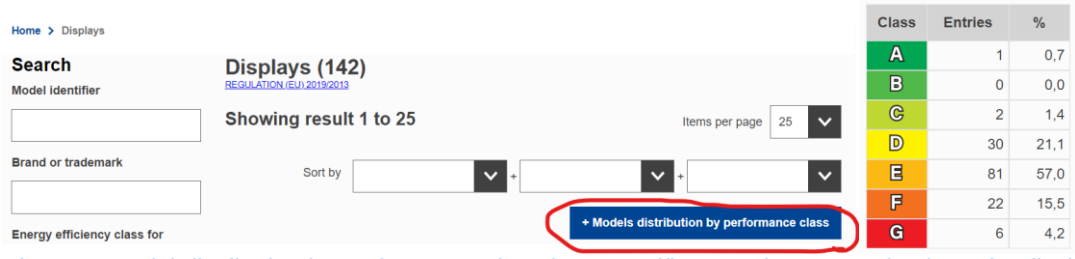

Figure 3: model distribution by performance class for a specific query in EPREL database for displays: "Electronic display category = monitors" + "Screen Diagonal (inch) = 24"

Regarding data centres, by 15 May 2025, the Commission shall assess the available data on the energy efficiency of data centres submitted to it (see key performance indicators above) and shall submit a report to the European Parliament and to the Council, accompanied, where appropriate, by legislative proposals containing further measures to improve energy efficiency, including establishing minimum performance standards and an assessment on the feasibility of transition towards a net-zero emission data centres sector, in close consultation with the relevant stakeholders. Such proposals may establish a timeframe within which existing data centres are to be required to meet minimum performance.

2.3.4 Applicability

Article 7 of Directive (EU) 2023/1791 replaces Article 6 of Directive 2012/27/EU. The objective of Article 7 remains to establish high energy efficiency performance as a requirement in public procurement. However, in comparison with Article 6 of Directive 2012/27/EU, the scope of application has been extended.

The green public procurement requirements in Article 7 and Annex IV are applicable according to the thresholds defined by the Public Procurement Directives (see Table 2).

Table 2: Thresholds of applicability for the EU GPP Mandatory Criteria under the EED (as defined in Article 2(1), point (1), of Directive 2014/24/EU)

Type of procurement	Threshold (net of the value added tax)
a) public works contracts	EUR 5 186 000
b) public supply and service contracts awarded by central government authorities and design contests organised by such authorities; where public supply contracts are awarded by contracting authorities operating in the field of defence, that	EUR 143 000

[16] The European Product Registry for Energy Labelling (EPREL). Available at: https://eprel.ec.europa.eu/screen/home

threshold shall apply only to contracts concerning products covered by Annex III	
c) public supply and service contracts awarded by sub-central contracting authorities and design contests organised by such authorities; that threshold shall also apply to public supply contracts awarded by central government authorities that operate in the field of defence, where those contracts involve products not covered by Annex III	EUR 221 000
d) public service contracts for social and other specific services listed in Annex XIV.	EUR 750 000

Annex IV of the EED sets energy efficiency requirements for public procurement according to the energy labelling regulation. According to these requirements, ICT products covered by the delegated acts under Regulation (EU) 2017/1369 or Directive 2010/30/EU shall follow article 7(2) of energy labelling regulation, it means they shall aim at the highest two significantly populated classes of energy efficiency, or at higher classes as laid down in that delegated act.

On the other hand, ICT products not covered by the energy labelling (but still covered under Directive 2009/125/EC), and for values above the thresholds in Table 2, can be only purchased by public authorities if they meet or exceed the benchmarks set in the applicable ecodesign implementing rule. This is the case of computers servers, that are currently not covered by the energy label but still covered by an ecodesign delegated measure.

Moreover, where a product or a service is covered by the Union Green Public Procurement criteria or available equivalent national criteria contracting authorities and contracting entities shall make best efforts to purchase only products and services that respect at least the technical specifications set at 'core' level in the relevant Union Green Public Procurement criteria or available equivalent national criteria including among others for data centres, server rooms and cloud services, road lighting and traffic signals, computers, monitors tablets and smartphones.

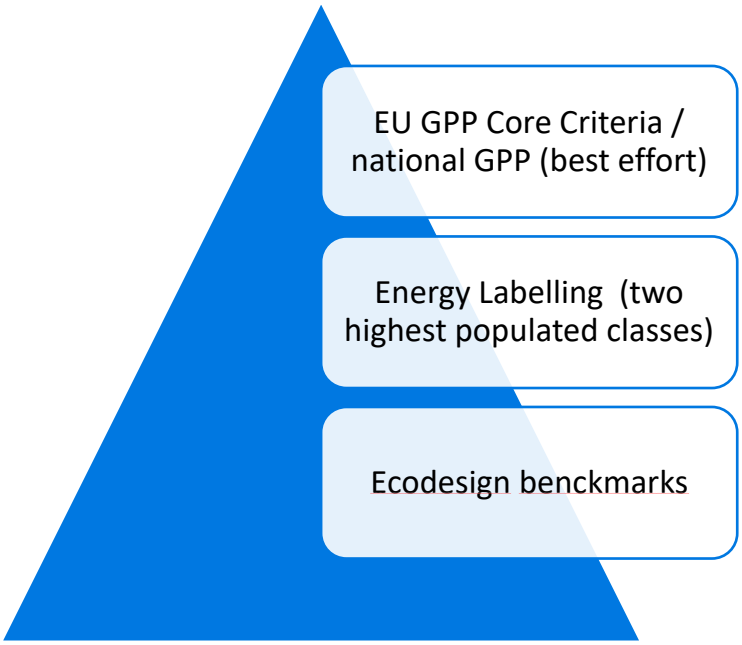

Figure 4: Hierarchy of options for Green Public Criteria according to the EED

Regarding service contracts, providers must use energy-efficient ICT products to deliver the contracted services. New ICT products used in these contracts must meet the energy efficiency standards outlined previously.

2.4 Upcoming Policy initiatives potentially relevant

2.4.1 Circular Economy Act

Among the top priorities of the new European Commission there is the need to make steps to remedy strategic vulnerabilities, minimising dependencies on third countries, including in terms of materials.

In this context, the new Von der Leyen Commission aims to work at a new Circular Economy Act[17] (by 2026), helping to create market demand for secondary materials and a single market for waste, notably in relation to critical raw materials.

This new act provides an opportunity to work at demand side measures as green public procurement. Organisations such as ECOS have already recommended to use this policy initiative to leveraging Green Public Procurement as a market-based solution[18].

[17] Political Guidelines for the next European Commission 2024−2029https://commission.europa.eu/document/download/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en?filename=Political%20Guidelines%202024-2029_EN.pdf
[18] https://ecostandard.org/wp-content/uploads/2024/09/2024-10-04_ECOS_Recommendations-Circular-Economy-Act.pdf

3 Task 2: Linking EU Criteria to CFIT categories

Table 3 below groups the mandatory GPP criteria based on their link with the CFIT impact categories: Energy and Climate, Circularity, Chemicals and Fairness and indicates the ICT product categories covered by criteria under each initiative.

Products are devided in two main groups: office related ICT hardware such as computers, monitors, printers, smartphones/tablets and from the other side the data centres related products, including ICT hardware such as servers and data storage device, but also devices providing electrical services such as the batteries of the UPS systems and the data centres as infrastructure providing services.

It is important to note that most of these mandatory GPP criteria are, at the moment, only “potentially” implementable (shown in the table by an empty check box ☐) and they would need to be proposed by Commission and go through the policy making process for secondary legislation (e.g. implementing/delegated acts). It means that, before being approved the proposed criteria will need to go through impact assessment, stakeholder consultation and opinions from Member States.

Only some of the EED criteria on energy efficiency of products are already established by the Commission (marked with ☑ in
Table 3). These criteria refer to the selection of products with the highest energy efficiency classes available according to the EU Energy Label or fulfilling the Ecodesign Directive energy efficiency benchmarks. These measures shall be implemented by the Member States in national legislations, provided that the product group in scope is covered by the energy labelling or ecodesign regulation.

EED on data centres are not exclusively "Mandatory GPP" Criteria, because they could potentially apply also to the private sector. However, they are requirements that could have a big impact on the public sector and push toward more efficient data centre services (e.g., cloud hosting services).

The ESPR address in a comprehensive way “Circularity” (both in terms of lifetime extension and recovery of resources at the end of life), “Energy and Climate” and “Chemicals”. The Battery Regulation is the only regulation that address, to some extent, social faireness. Also in this case, it is a general requirement and not specific for public procurers. Nevertheless, it can be an important tool for public procurers, because economic operators are required to make available to its immediate downstream purchasers relevant information gained and maintained pursuant to its battery due diligence policy.

Most of the batteries for ICT devices are out of the scope of the mandatory GPP criteria under the Battery Regulation.The only category of batteries that could be directly involved in this process is the batteries to be used for UPS for data centres. These batteries are expected to have a capacity higher than the 2 kWh threshold defined by the battery regulation.

Table 3: Mandatory GPP Criteria per product group vs CFIT impact categories

POLICY INITIATIVE	CRITERIA	PRODUCT GROUP							
		OFFICE RELATED IT DEVICES					DATA CENTRES		
		Computers	Imaging equipment	Electronic displays	Smartphones / Tablets	Batteries of small IT products	Servers and other ICT in data centres	UPS (batteries)	Data centres
ENERGY EFFICIENCY DIRECTIVE ((EED)	Energy Efficiency (linked to the energy label classes, ecodesign benchmark or core voluntary GPP)	☑	☐	☑	☑		☑		
	Power Usage Effectiveness (PUE)*								☐
	Water Usage Effectiveness (WUE)*								☐
	Energy Reuse Factor (ERF)*								☐
	Renewable Energy Factor (REF)*								☐
ESPR	Energy use and energy efficiency	☐	☐	☐	☐	☐			
ESPR	Environmental impacts, including CF and EF	☐	☐	☐	☐	☐			
Battery Regulation	Carbon footprint							☐	
Battery Regulation	Durability							☐	
	Recycled content							☐	
Ecodesign for Sustainable Product Regulation (ESPR)	Durability	☐	☐	☐	☐	☐			
	Reliability	☐	☐	☐	☐	☐			
	Reusability	☐	☐	☐	☐	☐			
	Upgradability	☐	☐	☐	☐	☐			
	Repairability	☐	☐	☐	☐	☐			
	Possibility of remanufacturing	☐	☐	☐	☐	☐			
	Possibility of maintenance and refurbishment	☐	☐	☐	☐	☐			
	Use of materials, including Critical Raw Materials	☐	☐	☐	☐	☐			
	Recyclability	☐	☐	☐	☐	☐			
	Recycled content	☐	☐	☐	☐	☐			
Ecodesign for Sustainable Product Regulation (ESPR)	Presence of substances of concern	☐	☐	☐	☐	☐			
Battery Regualtion	Due diligence (human and labour rights)*					☐		☐	

* Criteria with a scope wider than public procurement but still very relevant for public buyers

☐ Product groups for which mandatory GPP criteria would need to be proposed by Commission and go through the policy making process for secondary legislation

☑ Product groups for which Mandatory GPP Criteria already exist

CFIT Impact Categories

Energy & Climate

Circularity

Chemicals

Fair

4 Task 3: Identification of the process for GPP Criteria definition

4.1 Ecodesign for Sustainable Product Regulation

GPP Mandatory Criteria will be established by Implementing Acts. Article 73 of the ESPR makes reference to the committee procedure according to the Regulation (EU) No 182/2011[19] laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers.

According to Article 5, where the examination procedure applies, the committee shall deliver its opinion by the majority. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in those Articles. 2. Where the committee delivers a positive opinion, the Commission shall adopt the draft implementing act.

According to the recently published ESPR FAQ[9], GPP requirements can be developed in parallel with the corresponding product's delegated act, where feasible and appropriate.

The only ICT product group currently included in the ESPR working plan is electronic displays. This situation raises some concerns on the implementation timeline of mandatory GPP under ESPR for ICT products. The timeline for mandatory GPP criteria for computers, smartphones, tablets, and servers depends on their revision under ESPR. Since ongoing revisions for computers and servers fall under the old Ecodesign procedure, this would apply to subsequent revisions. This delay is a direct consequence of the current framework. Smartphones and tablets already have energy labels, and energy labels for computers are expected in the current revision.

4.2 Battery regulation

The European Commission shall, 12 months after the latest of the delegated acts referred to in Article 7(2), fourth subparagraph, point (a), Article 8(1), Article 9(2) and Article 10(5), (see Table 4) adopt delegated acts establishing mandatory award criteria.

Table 4: Battery delegated acts to be adopted before the adoption of GPP Criteria.

Article	Topic of the delegated act	Deadline
Article 7(2), fourth subparagraph, point (a)	Label indicating the carbon footprint of the battery referred to in paragraph 1, first subparagraph, point (d) and declaring the carbon footprint performance class to which the relevant battery model per manufacturing plant corresponds.	By 18 February 2025 for electric vehicle batteries, 18 August 2026 for rechargeable industrial batteries except those with exclusively external storage, 18 August 2028 for LMT batteries and 18 August 2030 for rechargeable industrial batteries with external storage
Article 8 (1)	Information about the percentage share of cobalt, lithium or nickel that is present in active materials and that has been recovered from battery	From 18 August 2028 of 24 months after the date of entry into force of the delegated act

[19] Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers. Available at: https://eur-lex.europa.eu/eli/reg/2011/182/oj/eng

	manufacturing waste or post-consumer waste, and the percentage share of lead that is present in the battery and that has been recovered from waste, for each battery model per year and per manufacturing plant.	referred to in the third subparagraph of Article 8, whichever is the latest
Article 9(2) and	Mandatory minimum values for the electrochemical performance and durability parameters set out in Annex III for portable batteries of general use, excluding button cells.	By 18 August 2027
Article 10(5)	Establishing minimum values for the electrochemical performance and durability parameters	By 18 February 2026 for industrial batteries By 18 February 2027 for LMT batteries

GPP Mandatory Criteria will enter into force from 12 months after the date of entry into force of the first delegated act establishing award criteria for procurement procedures. Any procurement procedure carried out by contracting authorities or contracting entities for the purchase of batteries, or products containing batteries, that fall within the scope of Articles 7 to 10 shall make reference in its technical specifications and award criteria to that first delegated act to ensure that those batteries, or products containing batteries, are procured with significantly lower environmental impacts over their life cycle.

Some of the delegated acts necessary to implement mandatory GPP are already under preparation:

- Batteries - format of carbon footprint declaration[20]
- Minimum values for electrochemical performance and durability[21]
- Batteries for electric vehicles – carbon footprint label classes (delegated act)[22]

4.3 Energy Efficiency Directive

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 7 (Public procurement) and Annex IV (Energy Efficiency Requirements for Public Procurement) by 11th October 2025. Member States can choose at their discretion the way of transposing and implementing the requirements regarding the exemplary role of the public sector that is best suited to their national circumstances.

In this context, the Commission Recommendation (EU) 2024/1716 helps Member States to interpret the relevant provisions of Directive (EU) 2023/1791 in a consistent way which would contribute to a coherent transposition in national measures.

In the meantime, it is important to monitor and consider the impacts of:

- new or revised regulations for products covered by Energy Labelling delegated acts;
- new or revised regulations for products not covered by an Energy Labelling delegated act but covered by an implementing measure under Directive 2009/125/EC of the European Parliament and of the Council;
- products and services covered by EU green public procurement criteria (EU GPP) (61) or available equivalent national criteria;

[20] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13878-Batteries-format-of-carbon-footprint-declaration_en
[21] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14460-Industrial-batteries-minimum-values-for-electrochemical-performance-and-durability_en
[22] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13877-Batteries-for-electric-vehicles-carbon-footprint-methodology_en

Regarding the energy efficiency requirements on data centres. by 15 May 2025, the Commission shall assess the available data on the energy efficiency of data centres collected by the Member States, and submit, where appropriate, legislative proposals containing further measures to improve energy efficiency, including establishing minimum performance standards and an assessment on the feasibility of transition towards a net-zero emission data centres sector, in close consultation with the relevant stakeholders. Such proposals may establish a timeframe within which existing data centres are to be required to meet minimum efficiency performance.

5 Task 4: Identification of the most relevant policy makers and stakeholders

The table below identifies relevant Directorates-General (DGs) typically involved in these initiatives. This list is mainly based on publicly available information (e.g. the online information session on the new Ecodesign for Sustainable Products Regulation (ESPR)[23].

Topic	Commission DGs typically involved
Ecodesign for Sustainable Product Declaration	The Directorate-General for Environment (DG-ENV) The Directorate-General for Energy (DG ENER) The Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) The Directorate-General for Joint Research Centre (DG JRC)
Voluntary GPP	The Directorate-General for Environment (DG-ENV)
Battery Regulation	The Directorate-General for Environment (DG-ENV) The Directorate-General for Energy (DG ENER) The Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW)
Critical Raw Materials	The Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) The Directorate-General for Joint Research Centre (DG JRC
Energy Efficiency Directive (EED)	The Directorate-General for Energy (DG ENER)

[23] https://webcast.ec.europa.eu/online-information-session-on-the-new-ecodesign-for-sustainable-products-regulation-espr-24-05-22