External impacts of new EU sustainable product standards

Exploring spillovers of the Ecodesign for Sustainable Products Regulation

The Ecodesign for Sustainable Products Regulation (ESPR) is a flagship initiative that introduces new sustainability requirements for products sold in the EU. While the ESPR holds significant potential to accelerate the transition to a circular economy, its broader implications, particularly spillover effects on international trade, remain underexplored. Given the circular economy's relevance in the EU's new Clean Industrial Deal, which aims to drive decarbonisation and resource efficiency across industries, this policy paper provides foundational insights into the ESPR and its potential trade-related impacts. It examines which products are prioritised in the first Working Plan, outlines the obligations of economic actors, and explores trade implications for major exporters and global supply chains.

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The Ecodesign for Sustainable Products Regulation (ESPR) is a fundamental piece to the puzzle that makes up the European Green Deal's Circular Economy Action Plan (CEAP). The Regulation, which entered into force in July 2024, sets a framework to improve the sustainability of products sold in the EU. As a framework regulation, the ESPR relies on the adoption of Delegated Acts (DAs) for its implementation.

Most notably, the ESPR will set new Ecodesign requirements on product performance and information through DAs. **Performance requirements** target product durability, reusability, repairability, recyclability, upgradability, and environmental impacts.

Information requirements ease access to product information such as performance, traceability, technical documentation, harmful chemicals, and user manuals to facilitate product repair and recycling (Official Journal of the EU, 2024). This product information would be carried on the **Digital Product Passport (DPP)**. The DPP would also authenticate a product's EU Ecolabel to combat imitative Ecolabels that may mislead consumers. This is considered separate from the EU's Green Claims Directive which aims to combat greenwashing and ensure companies can validate their environmental claims (European Commission, 2023). The first DA would cover the technical framework of the DPPs for textiles and furniture. It is expected to be published in January 2026 and enter into force 18 months later. The DAs can be drafted on a product-by-product basis or across product groups through a horizontal requirement relating to product performance and information. Each DA would be preceded by an impact assessment and stakeholder consultation.

A significant advantage of the ESPR is that it can put forward comprehensive standards for high-impact product categories, flexibly tackling several environmental considerations under one framework. Through the DAs, the ESPR can set minimum or maximum requirements throughout a product's life cycle, as opposed to one stage of production. The DAs will either introduce existing standards or require the development of new standards through standardisation requests to the European Committee for Standardisation (CEN) and/or the European Committee for Electrotechnical Standardisation (CENELEC).

For example with textiles, requirements could include life cycle maximum emissions to water and air, water consumption, waste generation, recycled content, carbon footprint, minimum reliability, affordable access to spare parts, and content of sustainable renewable raw materials (Faraca et al., 2024) such as in practice content with sustainability certification. Yet, designing an all-encompassing standard is more challenging in practice, relying on current technologies and calculation methodologies for standards that will apply years from now. Nonetheless, the thoughtful advancement of new Ecodesign standards is preferable to maintaining the status quo.

The ESPR also aims to tackle the unsustainable use of resources. This includes a ban on the destruction of unsold goods (currently only apparel and footwear which will enter into force on 19 July 2026), disclosure requirements of unsold goods, designation of market surveillance authorities to scope out product non-compliance, and minimum sustainability requirements for public procurement. Companies will be obligated to disclose the number and weight of discarded products along with the reasons for discarding these products and the share of discarded products that will be prepared for reuse, refurbishment, remanufacturing, recycling or (energy) recovery. By 19 July 2025, a first Implementing Act will set out the details and format of the disclosure information, and a DA will specify derogations on the ban of destruction of unsold goods such as health, hygiene, safety reasons, not acceptable for donations, or a product not being fit for purpose (Official Journal of the EU, 2024).

1. Scope and inclusion criteria of product groups

Product groups covered by the ESPR could be subject to several Ecodesign requirements to enhance the overall sustainability criteria of a product. Table 1 below provides a summary of some possible product parameters that could be covered by the Ecodesign requirements as outlined in the Regulation's Annex I.

Table 1: Product aspects that can be covered by Ecodesign requirements and potential product parameters

Product aspect	Product parameter
Durability & reliability	Expressed through a product's guaranteed and technical lifetime, mean time between failures, indication of real use information, …
Repairability & maintenance	Characteristics, availability, delivery time, affordability of and compatibility with spare parts, modularity, availability of repair and maintenance, number of materials and (standard) components used, …
Upgradability, reusability, remanufacturing refurbishment	Number of materials and components used, use of standard components, number and complexity of processes and tools needed, ease of non-destructive dis- and re-assembly, guarantees for remanufactured and refurbished products, …
Recyclability	Use of easily recyclable materials, standard components, number of materials and components used, safe and non-destructive disassembly, and possibility of high-purity sorting, …
Hazardous substances	Presence of substances of concern with impacts on human health and the environment during the production process, in the final product or the end-of-life stage.
Consumption & use	Of energy, water and other resources during the product lifecycle stages.
Content & use	Of recycled or recovered materials such as CRMs, sustainable renewable materials, or used components.
Footprint	Covering carbon, material and environmental footprint with one or more environmental impact categories.
Emissions & waste	Released to air, water, and soil, including noise, micro- and nanoplastics and waste generation throughout the product life cycle stages, including packaging and end-of-life.

Performance & design	Product ability to perform as intended, skills required and compatibility with other products, lightweight design through reduction of material consumption

In principle, almost any product group could fall within the scope of the ESPR, though some product groups are likely to generate relatively higher potential improvements in environmental impact than others. A recent JRC study assessed 33 product groups and narrowed down their scope to 18 product groups based on environmental, market and policy considerations. Then, these 18 product groups were ranked based on their scoring on environmental impact categories (water, air, soil, biodiversity, waste, climate change, energy use, human toxicity), currently unexploited potential for material efficiency improvements and contribution to EU Open Strategic Autonomy (Faraca et al., 2024).

The main criteria for assessing a product group's contribution to Open Strategic Autonomy, as defined in the JRC study, are linked to potential supply risks that may lead to price volatility and supply chain disruptions. These risks include the presence of critical or strategic raw materials in the product group, dependence on imported crude oil and petroleum products for manufacturing, high energy consumption during manufacturing and use phases, and the possibility of the product group being subject to trade sanctions (Faraca et al., 2024).

A note on Open Strategic Autonomy

The inclusion of Open Strategic Autonomy as a criterion to prioritise certain product groups in the JRC study is relevant as the ESPR plans to "assess [and prioritise] the potential contribution of those products to the functioning of the internal market and to the Union's economic resilience."

Since 2020 the EU has faced several external shocks to their supply chains, starting with the pandemic, followed by the Russian invasion of Ukraine and subsequent energy crises. Consequently, the political concept of Open Strategic Autonomy has gained traction, with the European Commission featuring the term in various strategies including its 2021 trade policy strategy (European Commission, 2021). The idea is for the EU to balance strategic, technological, and vulnerability considerations while ensuring its capacity to act independently in key policy areas. The EU's aim is still to pursue multilateral cooperation whenever possible, underlining "Open" in the strategy name (Kroll, 2024).

Indeed, the inclusion of Open Strategic Autonomy is a logical dimension to include in the overall exercise of product identification under the ESPR. Especially in light of the European Commission's Clean Industrial Deal which aims to accelerate climate action while improving competitiveness (European Commission, 2025a).

Tables 2 and 3 provide an overview of product groups (final and intermediate products) that were considered in the JRC study, the ESPR's proposed list of product groups to be covered by Ecodesign requirements in Article 18 and the list of products included in the discussion paper of the first ESPR Working Plan, which is planned for adoption by 19 April 2025 (European Commission, 2025b). The tables reveal how the list of products proposed for the first Working Plan largely stems from a narrowed-down list of products listed in both the JRC study and Article 18 of the ESPR, except for ICT Products & Other Electronics and the omission of Footwear from Textiles.

Table 2: List of final products considered in the JRC study, ESPR Article 18 and the first Working Plan

Product Group	JRC Study	ESPR (Art. 18)	1st Working Plan
Final products			
Textiles & Footwear	✓	✓	✓ (Footwear omitted)
Furniture	✓	✓	✓
Tyres	✓	✓	✓
Bed Mattresses	✓	✓ (Under furniture)	✗
Detergents	✓	✓	✗
Paints	✓	✓	✗
Cosmetics	✓	✗	✗
Lubricants	✓	✓	✗
Toys	✓	✗	✗
Fishing Gear	✓	✗	✗
Absorbent Hygiene Products	✓	✗	✗
Energy-Related Products	✗	✓	✗
ICT Products & Other Electronics	✗	✓	✓

The discussion paper on the first Working Plan shares that the first batch of product groups likely to be prioritised are textiles, furniture, tyres (final products), and steel and aluminium (intermediate products) (European Commission, 2025b). The first Ecodesign requirements to be considered in the first Working Plan include repairability, recyclability and recycled content to improve material efficiency in the scope of ICT products. Products with the highest relevance to Open Strategic Autonomy as determined by the JRC study include tyres, iron and steel, commodity chemicals, and non-ferrous metal products, including critical raw materials (CRMs).

The inclusion of ICT Products under the horizontal measures for repairability and recyclability and recycled content is justified as it complements existing legislation (such as the Right to Repair and the Waste Electrical and Electronic Equipment (WEEE) directive), adds value, enables the extended use and/or recovery of valuable CRMS, and it would be a popular measure among EU citizens as appeared from the public consultation.

The Commission notes that the omission of Footwear is due to the sector having "relatively lower impacts, improvement potential as well as market value" compared to apparel textiles and other products considered in the first Working Plan (European Commission, 2025b). Products not covered in the first Working Plan are not excluded from being covered in future working plans. The concentration of products included in the first Working Plan appears to be more of a decision based on feasibility considering the available resources as opposed to political decision-making.

Table 3: List of intermediate products considered in the JRC study, ESPR Article 18 and the first Working Plan

Product Group	JRC Study	ESPR (Art. 18)	1st Working Plan
Intermediate products			
Iron & Steel	✓	✓	✓
(Commodity) Chemicals	✓	✓	✗
Non-Ferrous Metal Products	✓	✗	✗
Aluminium	✓	✓	✓
Plastics	✓	✗	✗
Pulp & Paper	✓	✗	✗
Glass	✓	✗	✗

Under the list of intermediate products, chemicals were not included in the first Working Plan. Commodity chemicals scored high in the environmental impacts, improvement potential and contribution towards Open Strategic Autonomy in the JRC study. Yet, comprehensive regulatory frameworks for chemicals exist including the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), the Regulation on the Classification and the Labelling and Packaging of Hazardous Substances (CLP) and over 40 legislative instruments covering chemicals' environmental impacts (Faraca et al., 2024). The Commission explains the omission of chemicals due to the heterogeneity and complexity of the product group. Instead during the implementation of the first Working Plan, it would be proposed to commission a study to define more precisely the potential scope for the inclusion of chemicals in the following working plan (European Commission, 2025b).

Non-ferrous metal products are not specifically listed in either Article 18 or the first Working Plan. Conversely, ICT Products & Other Electronics were not specifically evaluated in the JRC study. Considering the presence of CRMs in electronics and e-waste, the inclusion of horizontal measures for repairability and recyclability and recycled content for ICT Products partly accounts for the absence of non-ferrous metals.

Plastics, pulp and paper, and glass were neither listed under the ESPR Article 18 nor included in the first Working Plan. These product groups scored relatively lower on environmental impacts compared to iron and steel, chemicals, non-ferrous metals, and aluminium in the JRC study. The study also scored these product groups as mid- to low priority concerning Open Strategic Autonomy. Another possible explanation for their absence could be the inclusion of these product groups in existing regulations. For example, emissions of the glass, paper and pulp industries are covered by the Industrial Emissions Directive and the Emission Trading System (ETS). The glass industry and its final products are also covered by REACH and legislation on packaging products, vehicles, and electrical and electronic products. The plastics industry is covered by the Plastics Strategy and the paper and pulp industry would adhere to the 'New EU Forest Strategy for 2030' (Faraca et al., 2024).

2. What does the ESPR mean for economic actors?

Table 4 below provides an overview of several obligations for manufacturers of products covered by the ESPR placed on the EU market. Logically, manufacturers have the primary obligation to ensure their products are designed, produced and carry the necessary information to comply with the ESPR. Importers or distributors of the same products largely act as an additional compliance checkpoint, verifying that manufacturers have complied with the Regulation before making the products available on the market. However, if an importer or distributor sells a product under their name/trademark or modifies a product in a way that affects its compliance with the Regulation, they must also assume all manufacturer obligations. Moreover, online marketplaces and search engines will be required to cooperate with authorities and remove non-compliant products.

Table 4: Excerpt of manufacturers' obligations under the ESPR (Art. 27)

Product Compliance	Ensure products meet performance and information requirements, and availability of DPP through a conformity assessment.
Marking and Identification	Ensure products are accompanied by a type/batch/serial number and proper labelling, such as the conformity marking.
Digital Product Passport	Ensure availability and accessibility to the DPP including contact information of the manufacturer.
Corrective Actions	Cooperate with national authority concerning corrective actions, recall, or withdrawal of non-compliant products.

The implementation of new standards implies a compliance cost for economic operators that is often passed on to the consumer. Of course, the end goal of the ESPR is not to design a flurry of new sustainability requirements by any means necessary. The Commission will act where EU law or market self-regulation is absent/insufficient or where there is a divergence of product performance for similar products, yet the overall aim is to improve product performance and information while avoiding disproportionate costs. Accordingly, the impact assessments accompanying the DAs will feature cost-benefit analyses to ensure maximal environmental benefits at a minimal cost.

Commonly, the cost of compliance incurred by operators is most strongly felt by small and medium-sized enterprises (SMEs) as they typically have less access to technical expertise or financial support to conform to new requirements. In this context, the Commission states it shall account for the needs of SMEs when drafting and implementing DAs, including a dedicated section in the impact assessment. For example, to ensure predictability, actors must comply with DAs within 18 months of their entry into force. Moreover, DAs will be accompanied by digital tools and guidelines specific for SMEs to support for instance the calculation of product environmental footprint and the implementation of the DPP. Member States may also implement measures to support SME compliance with Ecodesign requirements such as access to finance, fiscal advantages, specialised training, and organisational and technical assistance. Moreover, the Commission emphasises the need for sufficient consultations with stakeholders, especially SMEs, in both the Member States Expert Group and the Ecodesign Forum. The Forum's main tasks include contributing to the preparation of Ecodesign requirements and working plans, evaluating market surveillance effectiveness, assessing self-regulation measures, and reviewing potential bans on the destruction of unsold consumer products beyond those already listed in Annex VII (European Commission, 2025c).

3. Trade implications and global alignment of the ESPR

The following section is divided into subsections, each diving deeper into the trade and international implications of the ESPR. Subsection 3.1 discusses the ESPR compatibility with WTO rules; 3.2 covers compliance costs and trade disruptions; 3.3 analyses trade data of product groups covered by the first working plan; and 3.4 considers the role of international cooperation in mitigating unintended spillovers of the Regulation.

3.1. WTO compatibility

The Ecodesign requirements would apply to all products sold on the Single Market, meaning both foreign and domestic economic operators will be required to conform to the Regulation. The Ecodesign requirements could be non-discriminatory and compatible with World Trade Organisation (WTO) law provided that the requirements are based on objective, scientific, transparent criteria, and not disproportionate vis-a-vis the environmental objective. Accounting for these principles could minimise the possibility of new Ecodesign requirements being challenged at the WTO, however, would not grant the Regulation immunity to such challenges by WTO members.

Despite the Commission's claim wanting to avoid disproportionate costs and barriers brought on by new Ecodesign requirements, the ESPR could face issues at the WTO from members claiming the Regulation discriminates against foreign "like" products based on process and production methods (PPMs) or the literal product end-use (e.g., in the case of the ESPR the ability to disassemble and recycle or reuse a product in a certain manner). The WTO judges "like" products based on four factors; (i) physical product similarities, (ii) similar end-uses, (iii) consumer preference equivalence, and (iv) tariff classification (WTO, 2025b). If a foreign product is barred from being sold in the EU while allowing the sale of a domestic product that shares the same appearance, function and tariff classification, and is interchangeable with its foreign counterpart, the two would be considered "like products" under WTO rules. Treating them differently in this context would likely constitute discrimination. In this case, the ESPR could run into this issue of "like" products as setting rules on PPMs or specific eco-labels as a prerequisite for market access may not sufficiently differentiate sustainably produced from unsustainably produced products.

If the European Commission is adequately prepared to argue how the Ecodesign requirements put in place by the ESPR serve a legitimate environmental objective while being designed and applied fairly, it is possible that Ecodesign requirements could fall under GATT's General Exceptions Article. As discussed earlier, possible Ecodesign requirements are wide-ranging and could touch on varying aspects related to the conservation of exhaustible natural resources (CRMs, biodiversity, freshwater) and serve to protect human, animal, or plant life or health (emissions to air, water, soil, avoidance of hazardous substances). Furthermore, discrimination disputes on the grounds "like" products are reviewed on a case-by-case basis by the WTO Appellate Body which may allow for more favourable interpretations of the Regulation's environmental objectives.

3.2. Cost of compliance and trade disruptions

As previously discussed, all manufacturers intending to sell products covered by the ESPR in the EU must comply with the requirements put in place by the Regulation's upcoming DAs. The imposition of such mandatory EU sustainability requirements risks the development of **regulatory divergence**, resulting in market fragmentation for targeted products.

Generally, new national or regional technical and regulatory barriers brought on by mandatory domestic standards imply **higher compliance costs** for manufacturers and can be a significant barrier to market entry for SMEs. These expenses cover costs related to information gathering, adjustments to the production process and labelling (specification costs), and verification and demonstration of conformity to the national authorities via conformity assessments (OECD, 2017).

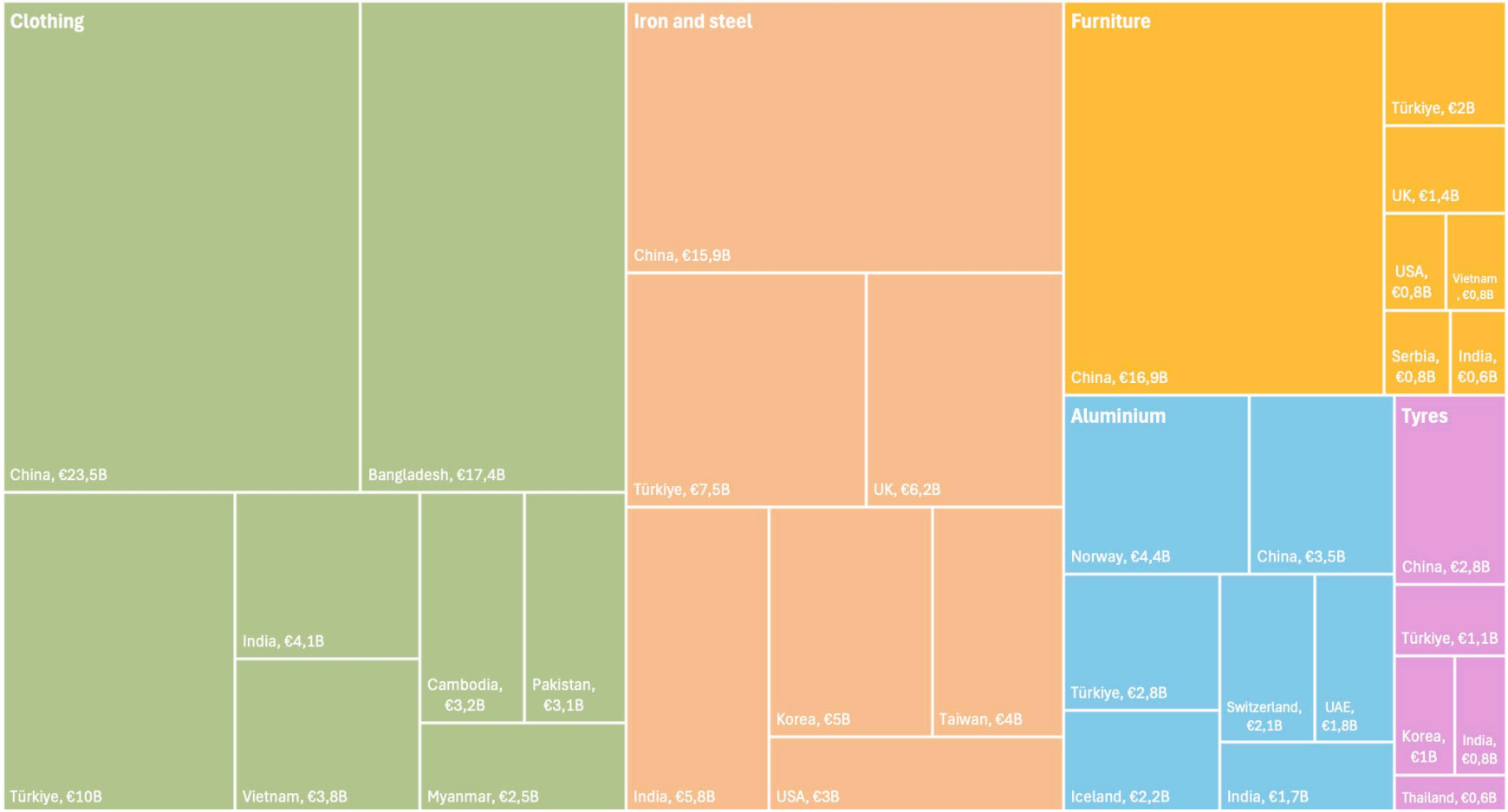
New technical and regulatory barriers paired with market access restrictions for non-compliant products risk generating **trade disruptions**. The severity of trade disruptions varies by sector, through generally, specification and conformity assessment costs arise as the most important trade barrier with the introduction of new standards for goods. The impact on global value chains is particularly prominent where different segments of the value chain are required to comply with an accumulation of international regulatory requirements (OECD, 2017).

Environmental standards and regulations serve to generate beneficial outcomes for people and the planet, for example by ensuring safe and sustainable methods of production or recycling or prohibiting harmful fishing practices. However, from a strictly trade point of view, a systemic review found that manufacturers in countries with stringent environmental regulations faced more difficulties in remaining competitive on the international market where other products face less stringent environmental requirements. Environmental regulations also raise trade barriers for imports from third countries (Swann, 2010). The same study finds that both imports and exports are positively impacted when trading under ISO standards due to the international recognition of these standards. Yet where international standards apply, trade between developed countries intensifies due to the relatively lower cost of compliance due to countries' familiarity with stricter standards. Consequently, where institutional capacity is lacking, developing countries may lose out on market opportunities (Swann, 2010).

3.3. Trade patterns and exposure to ESPR requirements

Figure 1 presents EU imports from its largest exporters of the product groups likely covered by the first Working Plan, i.e., clothing, furniture, tyres, steel and aluminium by value (€) in 2023. The total value of EU imports from the presented countries totals approximately €163 billion. Taken together the displayed countries make up approximately 70% of total EU imports of the product groups clothing, furniture, and tyres. For iron and steel, and aluminium respectively, the displayed countries make up around 54% and 61% share of total EU imports in their product group.

Figure 1: EU imports of product groups covered in the first ESPR Working Plan in billion euros, Eurostat 2023



Note: Data extracted from the Eurostat Database and figures drafted by the author. Import data codes: Clothing (CN 61+62), Iron and Steel (CN 72+73), Aluminium (CN 76), Furniture (CN 94), Tyres (CN 4011).

Figure 2: EU imports of furniture, clothing and tyres from the largest exporters in Mt, Eurostat 2023

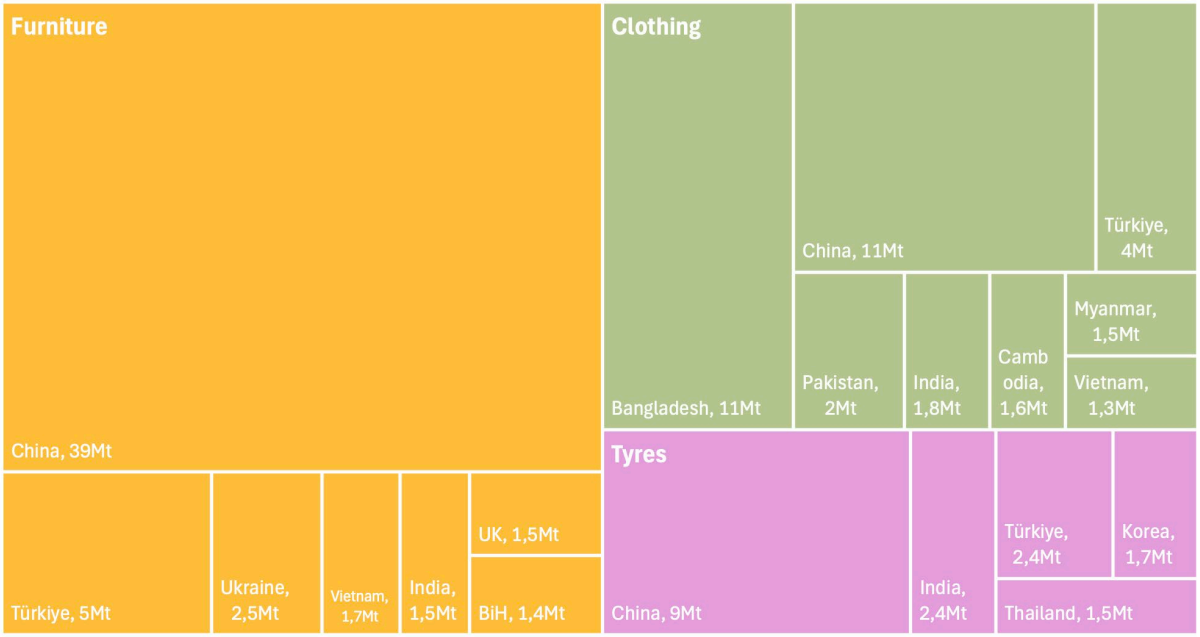
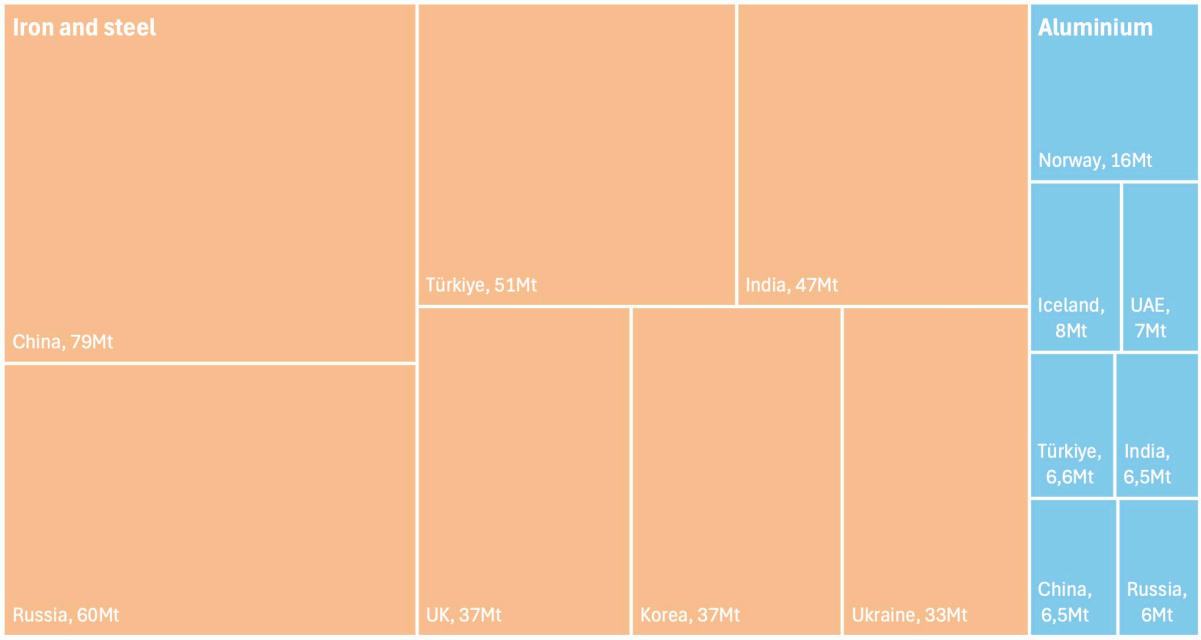


Figure 3: EU imports of iron and steel and aluminium from the largest exporters in Mt, Eurostat 2023



A few things become clear from these figures. By value, clothing imports from the top exporting countries account for more than a third of EU imports of all product groups in the first Working Plan. China is the largest exporter to the EU in all product groups excluding aluminium, and Turkey and India are the second and third most prominent exporting countries.

Figures 2 and 3 above present EU imports from its largest exporters of clothing, furniture, tyres (Figure 2), and steel and aluminium (Figure 3) by weight in megatonnes (Mt) in 2023. Assessing trade in goods based solely on trade value provides only part of the total picture which is the EU's imported consumption patterns. Considering one dimension of the ESPR to effectively lower the EU's material footprint, these figures provide a snapshot of the current situation. Iron and steel, and aluminium were considered separate from clothing, furniture and tyres due to their significantly higher weight differences.

By weight, China still emerges as the largest exporting country for each product group except for aluminium, and clothing as it is tied with Bangladesh. This highlights the need to review trade by weight as it appears that Bangladesh is exporting relatively cheaper apparel items compared to China.

The categories of iron and steel, and aluminium feature other noteworthy findings. By weight, Russia is noted as the second largest exporter of iron and steel to the EU, however, the country is not among the top seven exporters to the EU by value, highlighting the low prices of Russian iron and steel. The opposite finding applies to the USA.

ESPR's challenge for fast fashion and global recycling hubs

Concretely, the case of clothing under the ESPR is particularly interesting as alongside new Ecodesign requirements, the ban on the destruction of unsold goods will apply. Clothing manufacturing is highly concentrated in a handful of specialised countries including China, Bangladesh, Turkey, India and Vietnam where leading fast fashion brands such as Shein, Inditex (owner of Zara) and H&M operate manufacturing hubs.

Together, these three MNCs capture approximately 40% of the global fast fashion market (Masters, 2023). In 2023 alone, their combined net profits exceeded €8 billion: €5.4 billion from Inditex, €1.84 billion from Shein and €775 million from H&M (Lee, 2024; Pons, 2024).

New Ecodesign requirements for clothing would likely require adaptations to their current manufacturing processes such as energy use, material sourcing and product durability. This combination of market and financial concentration makes MNCs key players in the successful implementation of the ESPR. Yet on the flip side of the coin, the concentration of market power of such MNCs means they also have sufficient resources to potentially lobby against ambitious Ecodesign requirements.

Authors Barrie, Lavallée, Walsh, and Schröder (2024) outline the implications of the ESPR on textiles trade, highlighting that although the amount of high-quality ESPR-compliant clothing imports will increase over time there will likely be a surge of low-quality clothing imports before the DA for apparel and textiles enters into force.

More importantly, they discuss the ESPR implications for non-EU countries, in particular those reliant on EU exports of used and unsold textiles for their recycling sectors. In the short term, recycling hubs could face additional pressures on their waste management systems under the ban on the destruction of unsold apparel. In the medium- to long-term, these hubs could face difficulties as their feedstock diminishes and is increasingly made up of lower-quality textiles, as textiles with higher potential remain in the EU for repair and reuse.

3.4. Mitigating fragmentation through international cooperation

Taken together, the implementation of the ESPR must carefully consider its unintended spillover effects. Disproportionate compliance costs risk undermining the global competitiveness of EU products, even when they offer sustainability advantages over like products. While all manufacturers, EU-based or otherwise, will need to invest time and resources to update production processes, carry out conformity assessments, and meet reporting obligations, thereby levelling the playing field within the EU, trade diversion could create unintended strain on secondary markets. This is particularly true for developing countries, where both low- and high-quality goods may increasingly be redirected. The extent to which these countries can adapt to and align with the ESPR will depend largely on their institutional capacity and governance frameworks, ultimately shaping whether they gain from or are disadvantaged by the Regulation's spillover effects.

The possibility of deepened regulatory divergence on the global marketplace resulting from the EU spearheading new Ecodesign requirements could result in market fragmentation for sustainable products. In this light, regulatory cooperation between countries is imperative to avoid severe trade disruptions and the creation of a global two-tier market for products and their ESPR-conform counterparts.

> The ESPR positions the EU in a particular situation with two possible paths arising in response to the same challenge: the EU becomes a global leader and sets the bar for sustainable products or risks intensifying regulatory divergence on the global marketplace, leading to market fragmentation.

The outcome will rely on the EU's ability to cooperate with third countries, bilaterally and at international fora, and standardisation organisations such as the ISO to make a case for international sustainability standards, align on possible mutual recognition of standards, increase transparency of its regulatory framework (OECD, 2017) and where appropriate, support the uptake of these new standards in third countries, particularly in developing countries through technical assistance programs such as Aid4Trade (Barrie et al., 2022; Blot, Oger, & Watkins, 2022).

In April 2024, the Commissioner of DG INTPA announced two circular economy initiatives indicating a positive way forward: the EU Circular Economy Resource Centre under the Global Gateway strategy will facilitate exchanges and partnerships between EU and trade partners, fostering the uptake of circular economy policies and business models. The SWITCH to Circular Economy in East and Southern Africa programme focuses on capacity building and improved access to finance, particularly targeting packaging, electronics, plastics waste and e-waste (European Commission, 2024b).

Furthermore, both the WTO's Trade and Environmental Sustainability Structured Discussions (TESSD) Working Group on circular economy and the Global Alliance on Circular Economy and Resource Efficiency (GACERE) offer multilateral fora to discussions on ESPR compliance and mutual recognition of standards. Ahead of the next Ministerial Conference, the TESSD Working Group on circular economy is focusing on the textiles sector including sharing experiences on textiles recycling, and challenges and opportunities regarding trade and circular textiles (WTO, 2025a). In light of the ESPR, the GACERE also kicked off discussions to consolidate knowledge on policies and instruments to encourage the circular transition of the textiles value chain (GACERE, 2024).

The International Organisation for Standardisation (ISO) has also been developing new international standards for the circular economy (ISO 590XX). The standards include guidance on the principles of the circular economy and its implementation, transitioning to circular business models, data collection and analysis with circularity indicators (International Organisation for Standardisation, 2025). Based on the literature discussed above, the alignment of national standards with international standards could significantly mitigate trade impacts. Currently, the Commission does not foresee a link between new Ecodesign standards, and the work being conducted at the ISO. However, depending on the scope and content of the ISO 590XX standards, future links to these international standards on circularity are not excluded (European Commission, 2024a).

4. Streamlining circularity along the value chain

While the ESPR could see the EU take on a leading role as a standard-setter for sustainable products, the Commission has recently underscored the importance of the circular economy transition related to its industrial policy objectives. The Clean Industrial Deal (CID), announced in February 2025, aims to accelerate climate action and improve industrial competitiveness,

partly relying on a new Circular Economy Act (CEA) to decarbonise the EU's industry and promote resource efficiency and security (European Commission, 2025a).

Enhanced decarbonisation efforts and improved resource security are particularly relevant for the EU's energy-intensive industries and the clean-tech sector, both of which produce or rely on key intermediate products such as steel, aluminium and CRMs. These input materials have a high potential for circularity as scrap metals retain their value and can be recycled with minimal loss in quality, though most CRMs currently face barriers hindering their collection and recycling (Watkins, Bergeling, & Blot, 2023). Moreover, diverse and reliable partnerships with resource-rich countries are critical to achieving the EU's clean transition (Blot, 2024), especially as the demand for CRMs will surge before secondary CRMs become more widely available through improved collection and recycling processes (Blot, Bergeling, Watkins, & Marchetti, 2024).

So far what is known of the CEA is that it aims to facilitate the free movement of circular products, secondary raw materials, and waste, while boosting the availability of high-quality secondary raw materials, increasing demand for high-quality secondary materials and circular products (European Commission, 2025a). Its current emphasis lies on recovery and recycling, both key elements for developing and promoting secondary markets. While this focus is essential, it is not sufficient to ensure EU industries fully take on circular practices throughout their value chain.

A well-functioning secondary raw materials market is only one component of a truly circular economy. Without stronger integration of upstream strategies, such as reusing, repairing, repurposing, and reducing, the CEA risks reinforcing a system where circularity begins only after a product's first use. This would be a missed opportunity to fully unlock the environmental and economic benefits of circularity (Blot et al., 2024; Ellen MacArthur Foundation, 2023).

In this context, the ESPR plays a critical role as it is the main legislative vehicle for shifting circularity upstream by embedding sustainability requirements at the design phase before products ever reach consumers. Therefore, the ESPR and CEA must be complementary and cohesive. If the CEA is to support downstream circularity, it must be matched by an ambitious ESPR that transforms upstream value chains. Only then can Europe reduce its material footprint and accelerate a meaningful transition to a circular economy.

5. Concluding remarks

The ESPR allows for the ambitious design and implementation of Ecodesign requirements to improve the overall sustainability of products sold on the EU market. The first batch of product groups and requirements likely to be featured in the first ESPR Working Plan are clothing, furniture, tyres, steel, and aluminium, along with horizontal repair, recycling and recycled content requirements for ICT products. The inclusion of ICT products in the scope of the first Working Plan aimed at extending material use and efficiency is encouraging.

Economic actors including manufacturers, importers and distributors of products covered by the ESPR will face new obligations to adhere to the Regulation. The primary obligation to ensure their products are designed, produced and carry the necessary information to comply with the ESPR falls on the manufacturers, while importers and distributors act as an additional compliance checkpoint. To mitigate the cost of compliance for SMEs, the Commission would make digital tools and guidelines available that may aid with the calculation of product environmental footprint and the implementation of the DPP. Moreover, the Member States may decide to further support SMEs by aiding with access to finance, fiscal advantages, specialised training, and organisational and technical assistance.

With both foreign and domestic economic actors required to adhere to obligations under the Regulation, the implementation of the ESPR could have significant repercussions beyond EU borders. **While it promises to raise sustainability standards, it also risks introducing trade barriers that disproportionately affect countries with lower institutional capacities.**

These unintended spillovers underline the importance of regulatory cooperation. Without efforts to align standards and provide technical assistance, the ESPR may contribute to market fragmentation and a two-tier global system for sustainable products. However, by actively engaging in multilateral fora like TESSD and GACERE, cooperating on standardisation with the ISO, and by supporting capacity-building programmes such as SWITCH Africa and the EU Circular Economy Resource Centre, the EU can shape a more inclusive global transition.

The roll-out of a new industrial strategy anchored in circularity alongside the ESPR will be key to shifting the EU towards a circular economy and addressing its high levels of resource use. This emphasises the need for the EU to ambitiously incorporate Ecodesign requirements that will **meaningfully extend product lifespans and reduce resource use while cooperating with third countries to kick off a global circular transition.**

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