

# Reshaping Consumer Powers and Responsibilities in the European Union's Transition to a Sustainable Circular Economy



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**Abstract** The chapter examines the consequences of the EU's paradigm shift towards a Sustainable Circular Economy (SCE) on the relationship between consumers and businesses in the context of the EU Single Market. First, this study argues that the EU is recalibrating consumer protection rules to empower consumers to make (even more) informed and sustainable decisions, aligned with the EU's climate and environmental objectives. However, it is emphasized that information alone is insufficient to enable consumers to make sustainable choices, especially considering issues such as information overload and insufficient literacy on complex environmental data. Therefore, the chapter further explores the crucial role of consumer education, which is necessary for ensuring that consumers can understand and apply sustainability-related information in their decision-making. The chapter then introduces new consumer rights within the SCE, specifically the right to product longevity and the right to product repairability. Brand new EU laws ensures that goods are designed to last longer, reducing the need for frequent replacements and minimizing waste. Similarly, they address planned obsolescence by requiring manufacturers to provide consumers with access to repair tools, parts, and information, allowing products to be maintained and used for a longer period. Ultimately, this study proposes an integrated vision of how EU reforms can facilitate a transition toward a more sustainable, equitable, and responsible economic model. However, it also argues that the effectiveness of such transition can be undermined by critical gaps—namely, the absence of a legal framework for returning non-sustainable products and the inherent tension between expansive consumer rights and their environmental impact.

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## 1 Introduction

Redefining consumer powers and business obligations within the framework of the EU Single Market, in light of a human-centred circular economy, represents a crucial legal and conceptual challenge for the European Union.

Traditionally, EU consumer law had both the goals to empower consumers giving them the rights and information necessary to act in their own interests, and to compensate consumers' vulnerability and commercial weakness where those prevent consumers from protecting their rights, interests and safety. Evolving consumption and production dynamics, combined with the increasing importance of sustainability and environmental concerns, necessitate a profound transformation of the regulatory framework. The evolution of the regulatory framework for the Single Market must notably align with the EU's ambitions outlined in the European Green Deal,<sup>1</sup> the Circular Economy Action Plan<sup>2</sup> and the New Consumer Agenda,<sup>3</sup> which presents an updated vision of EU consumer policy with the aim of strengthening consumer resilience for a sustainable recovery.

These policy initiatives aim to transform the European economy by encouraging sustainable production and consumption models and promoting circularity.

One of the key aspects of this transformation concerns the obligation for businesses to provide detailed and verifiable information regarding the environmental performance of their products (Sect. 2). Missing or unclear information for consumers on the environmental performance of products, including a proliferation of unverifiable or even misleading 'green' claims contributes to the risk that the transition to a circular economy may fail. To this end, integrating third-party verification or certification requirements for environmental claims is fundamental to protecting consumers and ensuring market transparency.<sup>4</sup> The growing attention to product life cycles—from design to disposal—necessitates the adoption of tools such as sustainability labelling and environmental footprint indicators.<sup>5</sup> These instruments would standardize information on key sustainability factors such as carbon footprint, energy efficiency, reparability, recyclability, and overall lifecycle impact. The implementation of harmonized EU rules would ensure that consumers can easily

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<sup>1</sup>European Commission, COM(2019) 640 final.

<sup>2</sup>European Commission, COM(2020) 98 final.

<sup>3</sup>European Commission, COM(2020) 696 final.

<sup>4</sup>On this, see Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and through better information (ECD), OJ L, 2024/825, 6.3.2024. See also the Proposal for a Directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive), COM(2023) 166.

<sup>5</sup>On this, see Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC, OJ L, 2024/1781, 28.6.2024.

compare products in terms of sustainability, facilitating informed purchasing decisions. The evolution of the Single Market framework must also leverage recent advancements in the digital sphere, where online platforms play a pivotal role in shaping consumer behaviour. The Digital Services Act (DSA)<sup>6</sup> and the Digital Markets Act (DMA)<sup>7</sup> are key regulatory instruments that, if effectively integrated into the Single Market framework, can significantly contribute to ensuring algorithmic transparency and allowing consumers to understand why certain products (or their related information) are more prominently displayed than others.<sup>8</sup>

It has been argued that the information requirements may lack effectiveness because consumers often do not read the information and, even if they do, it frequently fails to consider cognitive abilities and literacy levels. Even when consumers understand the information, they may not be willing or able to process it in a manner that is useful to them at the time it is provided. Therefore, attention must be drawn to the consumers' right to receive education on sustainable consumption and on the benefits of the transition towards a circular economy. In this context, the examination will also consider any measures that the EU intends to introduce, or requires Member States to introduce, to assist consumers in overcoming these barriers and better empower them to make informed, sustainable choices (Sect. 3).

Strengthening existing rights within the so-called *acquis communautaire* is important but cannot be sufficient. A true reconceptualization of consumer rights and business obligations through a sustainability lens is necessary (Sect. 4). The rights to product longevity and repairability will become fundamental consumer right in the transition from a linear to a circular economy. These rights will challenge traditional consumption patterns by imposing stricter obligations on businesses to design for longevity, recyclability, and minimal environmental impact. Recognizing these rights within the EU legal framework is essential to shifting liability, fostering sustainable consumption, and aligning market practices with the principles of circularity and environmental accountability.

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<sup>6</sup>Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act), OJ L 277, 27.10.2022, pp. 1–102.

<sup>7</sup>Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), OJ L 265, 12.10.2022, pp. 1–66.

<sup>8</sup>Within this framework, the AI Act (Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence, OJ L, 2024/1689, 12.7.2024) does not add any additional specific obligations related to the operation of such algorithms if they do not directly affect areas protected by the 'high risk' criteria. Of course, this is not to say that there is no requirement for transparency where an AI system is deployed (see Article 50 AI Act); however, in the context of information on products' environmental performance, this is already well covered by regulations specific to digital services and the marketplace, and the imposition of additional technical and compliance burdens related to risk management for high-impact systems is generally not applicable. Only when, for specific platforms, AI features or algorithms are introduced that go beyond mere recommendation and directly affect critical decision-making processes, in such cases a framing as a high-risk system may be necessary, resulting in integrative AI Act obligations as well (see Article 9 and 13 AI Act).

The objective of this chapter, therefore, is to define and justify the (old and new) essential rights of consumers within the EU Single Market, highlighting how regulatory framework is going to evolve to support sustainable consumption and production models. This study aims to propose an integrated vision in which consumer powers and business obligations are redefined, according to the most recent pieces of EU legislation, to facilitate a transition toward a more sustainable, equitable, and responsible economic model, in which sustainable choices become the norm rather than the exception.

## 2 The Right to Information on Product Sustainability and Circularity

Consumer empowerment in the EU Single Market is intertwined with access to information.<sup>9</sup>

Extensive research has consistently demonstrated that, even with some flaws and limitations, transparent and accurate consumer information actually helps in shaping market dynamics.<sup>10</sup> Policymakers and legislators are even more enthusiastic about the ‘power’ of information.<sup>11</sup> The primary EU law reaffirms the centrality of the right to consumer information, a right that is instrumental both in promoting consumers’ interests and in ensuring a high level of protection (in commercial relationships).<sup>12</sup> Consequently, secondary legislation must introduce the normative instruments needed to preserve this right, for example, setting out an extensive list of pre-contractual disclosure requirements,<sup>13</sup> or prohibiting misleading actions—which include information that is false or likely to deceive the consumer—and misleading omissions, where material information is either not provided<sup>14</sup> or it is ‘hidden’, ‘unintelligible’, ‘ambiguous’, or ‘untimely’.<sup>15</sup> In other words, information

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<sup>9</sup>On the international perspective of the right of access to information, considered as the backbone of consumer’s power of choice, see Dal Monico, Chap. “Rethinking the Role of the Consumer in a Global Economy: The Power of Choice as a ‘Human Right’?”.

<sup>10</sup>Helleringer and Sibony (2017, pp. 607–646), Willett and Morgan-Taylor (2012, pp. 143–163), Howells (2005, pp. 349–370).

<sup>11</sup>Seizov et al. (2019, pp. 149–173).

<sup>12</sup>Article 169 TFEU.

<sup>13</sup>Cfr. Article 5 (Information requirements for contracts other than distance or off-premises contracts) and Article 6 (Information requirements for distance and off-premises contracts) Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights (CRD), OJ L 304, 22.11.2011, pp. 64–88. Other relevant examples of directives containing explicit and mandatory information obligations were the E-commerce Directive (2000/31/EC), the Consumer Credit Directive (2008/48/EC), and the Services Directive (2006/123/EC).

<sup>14</sup>Article 7 (1) Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market (UCPD), OJ L 149, 11.6.2005, pp. 22–39.

<sup>15</sup>Article 7 (2) UCPD.

must be provided; it must be offered in a transparent, complete, or at least adequate manner;<sup>16</sup> and finally, it must be accurate and truthful.<sup>17</sup> Consumers should value such information so they can compare and reflect on the properties of products and understand the main elements of the contract before entering into a contractual relationship with the trader. The final outcome should be for the consumer to feel confident in exploiting the EU Single Market thanks to a high level of legal certainty.<sup>18</sup>

In the context of the transition towards a Sustainable Circular Economy (SCE), the consumer's right to receive clear and transparent information must be strongly protected, particularly with respect to the sustainability aspects of products. As highlighted in previous studies, information on the reparability and durability of products steers consumer choices towards more repairable and durable options.<sup>19</sup> On one hand, there is a clear appreciation for the usefulness of sustainability-related information; on the other hand, this usefulness is too often undermined by the generic, ambiguous, and even false nature of such information. A Commission study on environmental claims in the EU assessed 150 environmental claims and found that a significant share (53.3%) provided vague, misleading, or unfounded information on products' environmental characteristics across the EU and in a wide range of product groups (both in advertising and on the product).<sup>20</sup> As reported in a study commissioned by the European Parliament's Committee on the Internal Market and Consumer Protection, the analysis revealed that the credibility of almost half of the sustainability claims reviewed was doubtful, and that in around 60% of cases, traders did not provide sufficient information to allow consumers to assess the accuracy of the claims.<sup>21</sup>

This paragraph reconstructs the supranational regulatory framework by precisely outlining these aspects—that is, by identifying the informational obligations related to sustainability for businesses, the instruments that channel this information to consumers, and the control mechanisms in place to counteract commercial practices that distort or hinder genuinely informed sustainable consumption decisions.

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<sup>16</sup> Schaub (2017, p. 38), says that 'This transparency requirement implies that the trader has to take into account the manner in which consumers read and process information when they provide the mandatory items of information'. See also Article 8(1) CRD.

<sup>17</sup> 'If they are to be properly empowered, consumers must be provided with clear, reliable and comparable information, and the tools to understand it'. European Commission, A European Consumer Agenda—Boosting confidence and growth, Brussels COM(2012)225 final, 9.

<sup>18</sup> Twigg-Flesner (2016, pp. 183–202).

<sup>19</sup> Cfr. European Commission, Directorate-General for Environment, (2021) Consumer study on the impact of reparability information formats on consumer understanding and purchase decisions: final report: followed by the executive summary. Publications Office, p. 5; European Commission, ConPolicy, Consumers, Health, Agriculture and Food Executive Agency (2018) Behavioural study on consumers' engagement in the circular economy: executive summary.

<sup>20</sup> European Commission, Directorate-General for Environment (2024) *Environmental claims in the EU—Inventory and reliability assessment—Final report*, Publications Office of the European Union.

<sup>21</sup> Collini et al. (2022).

Following this, the analysis reflects on the actual contribution of these measures to achieving the EU's objectives regarding the transition towards the SCE.

## ***2.1 The Consumer's Right to Sustainable Information Before the Implementation of the Circular Economy Action Plan***

Even before the recent wave of dedicated legislative acts, EU consumer law already included provisions that could support consumers' right to receive information on product sustainability.

The provisions of the CRD have significant potential in shaping a well-informed consumer capable of making responsible choices in terms of sustainability and circularity. First, the requirement concerning the 'main characteristics of goods or services'<sup>22</sup> is fundamental: although the text does not explicitly mention sustainability aspects, this element could also include information about the durability, repairability, and recyclability of products. If adequately specified, such data can guide consumers towards products designed for a longer lifecycle and promote reuse. Another crucial aspect is the information regarding after-sales services, commercial guarantees, and available complaint mechanisms.<sup>23</sup> These elements are essential to ensure that, in cases where products do not meet certain sustainability standards or exhibit defects related to their circularity, consumers have access to repairs, replacements, or returns. In a circular economy, the ability to repair or regenerate a product is at the heart of the model; therefore, clarity on these conditions is indispensable.<sup>24</sup> Additionally, information related to the duration of the contract and the conditions for its termination<sup>25</sup> assumes particular importance. In a circular system, a product's lifespan and maintenance directly affect its longevity and the efficiency of resource use. For example, such details could indicate warranty terms that favor repairability and the return of products that fail to meet sustainability criteria.

In order to strengthen consumer rights—particularly the right to information—in an exclusively digital context, the adoption of the DSA<sup>26</sup> and the DMA<sup>27</sup> has marked a significant milestone. Online platforms serve as a fundamental channel for disseminating product-related information, including data on sustainability, repairability, reuse, and other environmental aspects. As such, they play a strategic role not only as informational intermediaries but also as active agents in ensuring transparency and fairness toward consumers.

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<sup>22</sup> See Art. 5(a) and Art. 6(a) CRD.

<sup>23</sup> See Art. 5(e) and Art. 6(m) CRD.

<sup>24</sup> For a more detailed discussion of the so-called 'right to repair', see Calabrese, Chap. "Right to Repair Between Intellectual Property and Servitization".

<sup>25</sup> See Art. 5 (f) and Art 6(o) and (p) CRD.

<sup>26</sup> See above, note 6.

<sup>27</sup> See above, note 7.

The DSA introduces transparency obligations that directly impact the consumer's right to receive clear and verifiable information.<sup>28</sup> Specifically, the DSA imposes requirements on transparency regarding advertising and sponsored content.<sup>29</sup> These obligations can be extended to the field of sustainability so that environmental claims (for example, those related to 'green claims') are accompanied by verifiable data and standardized indicators. Consequently, platforms may be required to remove or correct unverified or misleading information, thereby helping to ensure that consumers are not misled about the true environmental impact of a product.<sup>30</sup>

In contrast, the DMA focuses on regulating so-called 'gatekeepers', i.e. large, influential platforms that control access to numerous digital services, with the aim to prevent anticompetitive practices and promote equal treatment.<sup>31</sup> With regard to consumer rights within the context of the circular economy, the DMA provides equitable access to information based on a 'principle of technology neutrality'. It requires market operators with gatekeeping power to ensure that information is not unjustly favored, explicitly prohibiting practices such as self-preferencing,<sup>32</sup> which guarantees that platforms do not hinder the visibility of sustainable products or services offered by third parties. This is crucial for the circular economy, where innovative startups (e.g., producers of reusable packaging or repair services) might otherwise be marginalized by gatekeeper algorithms. In practical terms, it means that in the presence of search and recommendation algorithms, products or services cannot be promoted at the expense of providing accurate information about their sustainable characteristics, such as reparability indices or reuse data. Technology neutrality helps create an environment in which new companies offering circular solutions can more easily enter and compete with established operators. This aligns with the objectives of the forthcoming EU Circular Economy Act, which aims to standardize the use of secondary materials and reduce waste, thereby facilitating a more open and dynamic ecosystem.<sup>33</sup>

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<sup>28</sup> Article 14, 15, 20, 22, 26, 28, 34, 39, 42 DSA.

<sup>29</sup> Maroni and Hillebrandt (2023, pp. 305–326), Duivenvoorde and Goanta (2023, pp. 1–14), Sevastianova (2023, pp. 1561–1589), Senftleben (2022, pp. 309–324).

<sup>30</sup> All this without prejudice to the forthcoming EU legislation on green claims, in particular the proposed Green Claims Directive currently under negotiation (see above, note 4).

<sup>31</sup> Witt (2023, pp. 625–666).

<sup>32</sup> Art. 6(5) DMA. For a deep analysis on this, see Höppner (2024). In this regard, see CJEU, case C-48/22 P, *Google and Alphabet v Commission*, ECLI:EU:C:2024:726, which provides a concrete example and a judicial interpretation of how self-preferencing practices may conflict with principles of fairness and technological neutrality, which underpin both the DMA and antitrust policies in general.

<sup>33</sup> See the EU Commissioner Roswall's keynote address at the event 'Towards a circular single market: Strengthening EU economic security and competitiveness', held in Brussels on 16 December 2024 (available at [https://ec.europa.eu/commission/presscorner/detail/en/speech\\_24\\_6466](https://ec.europa.eu/commission/presscorner/detail/en/speech_24_6466)). This initiative aims to stimulate market demand for recycled materials and establish a unified framework for waste management, with a particular focus on critical raw materials.

Despite these obligations providing a solid foundation, from a circular economy perspective there is still a notable gap: the explicit obligation to communicate detailed data regarding a product's environmental performance is missing. For instance, consumers are not currently required to receive detailed information on the environmental footprint, lifecycle, or materials used (all data that is essential to assess whether a product complies with sustainability and circularity principles).

Moreover, even though a study conducted by the European Union Agency for Fundamental Rights<sup>34</sup> highlighted that the wide scope of 'commercial practices' defined under the UCPD has allowed several Member States to tackle greenwashing even before the EU introduced specific legislation defining environmental claims, it also revealed notable inconsistencies among Member States in how unfair commercial practices rules are applied to greenwashing. These differences not only concern the interpretation of key terms but also the extent to which measures have been taken to combat greenwashing in the first place.

Another shortcoming is that the traditional approach to consumerism and consumer's rights in the DMA does not reflect the realities of digitalization and sustainability in the context of the circular economy.<sup>35</sup> The shift towards sustainable consumption increasingly relies on platforms that facilitate the reuse, repair, and exchange of second-hand goods, enabling consumers to act not only as buyers but also as 'prosumers', both providing and receiving products within circular business models. The outdated approach does not adequately capture these evolving roles, nor does it address the specific vulnerabilities and unique risks consumers face in digital marketplaces and second-hand markets,<sup>36</sup> such as unclear warranties, product reliability, liability gaps for used goods.<sup>37</sup>

Addressing these issues would have been essential for modernizing EU law to reflect digital realities and sustainability challenges. Therefore, the European Commission proposed to integrate the regulatory framework with specific rights and obligations, with a twofold desired outcome: reinforce the consumer's right to transparent and verified information and encourage businesses to design products that adhere to the principles of sustainability and circularity.

However, no initiative has been taken so far in order to amend the DMA according to the above-mentioned remark.

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<sup>34</sup>European Union Agency for Fundamental Rights (2024).

<sup>35</sup>By referring to Article 2(2) P2B-Regulation (Regulation (EU) 2019/1150), Article 2(5) DMA defines an online intermediation service as meaning services which 'allow *business* users [emphasis added] to offer goods or services to consumers, with a view to facilitating the initiating of direct transactions between those business users and consumers, irrespective of where those transactions are ultimately concluded'.

<sup>36</sup>Moskal (2022, pp. 1113–1119).

<sup>37</sup>See Bergamini (Chap. "Dispute Resolution and Private International Law in the Context of Circular Economy: Effectiveness Beyond Alternatives") for a discussion of these issues from a private international law perspective.

## 2.2 *New Obligations on Sustainable Information and Environmental Claims*

Building on the European Union's commitment to sustainable development and consumer empowerment,<sup>38</sup> the policy tools and regulations developed under the Circular Economy Action Plan<sup>39</sup> are designed to ensure that consumers can make truly informed and responsible choices. Central to this effort was the proposal on empowering consumers for the green transition,<sup>40</sup> aimed at updating existing consumer law to ensure consumers are protected and can actively contribute to the green transition.

The recent Directive on Empowering Consumers for the Green Transition, to be transposed into Member States' national legal systems by 2026, mandates that the environmental attributes of products be communicated to consumers in clear, comparable, and accessible formats (whether on product labels, digital platforms, or within physical retail environments).<sup>41</sup>

First, the reform introduces significant modifications to the CRD, by incorporating new sustainability-related disclosure requirements.<sup>42</sup>

It is now mandatory to explicitly remind consumers of the existence of the legal guarantee of conformity for goods,<sup>43</sup> with a minimum duration of two years,<sup>44</sup> and to communicate it in a prominent manner using a harmonised notice.<sup>45</sup> Additionally, if a producer offers a commercial guarantee of durability<sup>46</sup> beyond two years at no extra cost, this fact—along with the guarantee's duration and a reminder of the legal guarantee—must be prominently displayed using a harmonised label.<sup>47</sup> Similar

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<sup>38</sup>In the European Green Deal (see above, note 1), whose normative value is examined by Harris (2024), the Commission made a commitment to ensure that consumers can make more informed choices and can actively participate in the ecological transition. In particular, the European Green Deal (at para. 2.1.3) aims to address false environmental claims by providing consumers with trustworthy, comparable and verifiable information, enabling them to make sustainable decisions and thereby reducing the risk of greenwashing.

<sup>39</sup>See above, note 2. According to the plan, the Commission should have proposed a revision of EU consumer law to ensure that consumers receive trustworthy and relevant information on products at the point of sale, including on their lifespan and on the availability of repair services, spare parts and repair manuals.

<sup>40</sup>European Commission, COM(2022) 143 final.

<sup>41</sup>See above, note 4. For a detailed analysis of the Directive, see Keirsbilck (2024, pp. 205–217).

<sup>42</sup>In essence, the changes affect Articles 5 and 6 CRD and add a new Article 22a.

<sup>43</sup>Article 5(1), point (e) CRD.

<sup>44</sup>As established by Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods (SGD), OJ L 136, 22.5.2019, pp. 28–50.

<sup>45</sup>As regulated by Article 22a.

<sup>46</sup>'Durability' is 'the ability of the goods to maintain their required functions and performance through normal use', according to Article 2, point (13), of Directive 2019/771.

<sup>47</sup>Article 5(1), point (ea), CRD.

provisions apply for digital content, digital services, and for indicating the minimum period during which software updates will be provided for goods with digital elements.<sup>48</sup> Other new points focus on reparability and spare parts availability, as they require, where applicable, the communication of the reparability score of goods.<sup>49</sup> If such a score is not applicable, producers must provide information on the availability, estimated cost, and ordering procedure for spare parts essential to maintaining conformity, along with repair and maintenance instructions and any repair restrictions.<sup>50</sup>

The ECD also improves delivery and payment information, including in the CRD comprehensive details on payment arrangements, delivery—specifically mentioning environmentally friendly delivery options—performance timelines, and the trader’s complaint handling policy.<sup>51</sup> A similar update concerns the inclusion of a prominent reminder of the legal guarantee of conformity.<sup>52</sup> Moreover, the new rules in this field replicate those already introduced in relation to commercial guarantees, digital content and services, software update periods, the reparability score, and the provision of information on spare parts and repair conditions.<sup>53</sup>

The Directive adds specific communication obligations in distance contracts, now specifically requiring that, prior to order placement, consumers are clearly and prominently informed about key aspects such as payment, delivery (including eco-friendly options), guarantee information, and other relevant points.<sup>54</sup>

In order to ease the understanding and processing of such a huge amount of information, while ensuring consistency for consumers across the EU, the Directive mandates the use of a harmonised notice for the information,<sup>55</sup> and a harmonised label for the information.<sup>56</sup> Nonetheless, while the aim is to enhance transparency, there is a risk that the proliferation of technical details on reparability scores, spare parts information, after-sales services and repair procedures, might overwhelm or confuse consumers, potentially diluting the intended clarity.<sup>57</sup>

However, the reform has the potential to enhance consumer confidence and support informed decision-making and responsible consumption. At the same time, by highlighting commercial durability guarantees, reparability scores, and the availability of spare parts as valuable product features, the regulatory framework creates market incentives for producers to design goods with longer lifespans and easier

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<sup>48</sup>Article 5(1), points (eb) and (ed), CRD.

<sup>49</sup>Article 5(1) point (i) CRD. According to the amended version of Article 2, point (14d) CRD, ‘reparability score’ means a score expressing the capacity of a good to be repaired, based on harmonised requirements established at Union level.

<sup>50</sup>Article 5(1) point (j) CRD.

<sup>51</sup>Article 6(1), point (g), CRD.

<sup>52</sup>Article 6(1), point (l), CRD.

<sup>53</sup>Respectively, see Article 6(1), subpoints (la), (lb), and (lc), points (u) and (v), CRD.

<sup>54</sup>Article 8(2) CRD.

<sup>55</sup>Under Article 5(1)(e) and Article 6(1)(l), CRD.

<sup>56</sup>Under Article 5(1)(ea) and Article 6(1)(la), CRD.

<sup>57</sup>On this topic see Sect. 4 of this chapter.

maintenance, ideally steering consumer preferences towards such products and making them more commercially attractive.

The ECD also introduces changes to the UCPD, clarifying which commercial practices can be deemed misleading (and therefore prohibited) based on a case-by-case assessment.<sup>58</sup> Additionally, it identifies specific misleading practices that are considered unfair in all circumstances and are thus outright banned.<sup>59</sup> Among the targeted practices are greenwashing,<sup>60</sup> which misleads consumers about a product's environmental impact, and false claims regarding a product's durability when its actual lifespan is shorter than what a consumer could reasonably expect.<sup>61</sup>

The list of banned commercial practices now includes misleading claims based on greenhouse gas emissions offsetting. This means professionals are prohibited from declaring that a product has a neutral, reduced, or improved environmental impact if these claims are solely based on unverified offset programs. The text also clarifies that professionals are held accountable for providing accurate information—or for failing to do so—about design features that lead to premature obsolescence, unnecessary software updates, or the unjustified need to purchase original spare parts. However, this responsibility only applies if there is available information showing that the product was designed in a way that limits its longevity or forces additional costs.<sup>62</sup>

Considering that claiming to be 'green' and sustainable has become a competitiveness factor and that if goods and services purchased on the internal market are not as environmentally friendly as presented, this would mislead the consumers and prevent the reduction of negative environmental impacts, the EU Commission has

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<sup>58</sup>Articles 6 and 7 UCPD.

<sup>59</sup>In doing so, the ECD amends Annex I UCPD.

<sup>60</sup>'Greenwashing' refers to the practice of conveying false or misleading information about the environmental friendliness of a company's products. It involves using deceptive advertising or marketing tactics to convince the public that the company's products, goals and policies are environmentally sound. It can be found in advertising, sponsorship and public messaging in the media, including on social media. Examples of greenwashing can range from simply changing the name or label of a product to make it seem more natural, even if it contains harmful chemicals, to launching elaborate and expensive campaigns that portray highly polluting companies as committed to being eco-friendly. On this topic cfr. de Freitas Netto et al. (2020), Bernini and La Rosa (2024, pp. 405–444). According to recital 9 ECD, 'examples of generic environmental claims include 'environmentally friendly', 'eco-friendly', 'green', 'nature's friend', 'ecological', 'environmentally correct', 'climate friendly', 'gentle on the environment', 'carbon friendly', 'energy efficient', 'biodegradable', 'biobased' or similar statements that suggest or create the impression of excellent environmental performance'.

<sup>61</sup>The list now includes: (a) false information and other commercial practices that deceive or are likely to deceive the average consumer, even if the information is factually correct, in relation to (among others) 'environmental or social characteristics, accessories, circularity aspects, such as durability, reparability or recyclability, after-sale customer assistance'; (b) environmental claims related to future environmental performance without clear, objective, publicly available and verifiable commitments, where they cause or are likely to cause the average consumer to take a transactional decision that he would not have taken otherwise.

<sup>62</sup>Recital 19 ECD.

then published the Green Claims Directive Proposal.<sup>63</sup> This proposal requires that any environmental claims made by companies—whether used as part of mandatory disclosure in advertising or other forms of communication—be fully substantiated by robust scientific evidence and corroborated by comprehensive life cycle analyses. Only environmental claims that are reliable, comparable and verifiable, allow consumers to fully leverage their purchasing decisions to reward better environmental performance.

The Proposal aims at complementing the ECD as *lex specialis*.<sup>64</sup> The provisions establish a robust framework for environmental claims and labelling in the EU, requiring traders to conduct a thorough assessment using independent, peer-reviewed scientific evidence to substantiate explicit environmental claims, clearly indicating whether the claim applies to the whole product, parts of it, its life-cycle, or specific activities.<sup>65</sup> Explicit environmental claims may only cover environmental impacts, environmental aspects or environmental performance that are substantiated in accordance with the requirements set by the Proposal.<sup>66</sup> In doing so, the Green Claims Directive Proposal complements the requirements set out in the ECD by addressing specific aspects and requirements for explicit environmental claims. As a consequence, the requirements set out in the amended Directive 2005/29/EC with regard to those aspects are overridden by the requirements set out in Green Claims Directive Proposal.<sup>67</sup> Since at the moment there are over 200 environmental labels on the EU market,<sup>68</sup> each varying widely in transparency, criteria, revision frequency, and auditing rigor, the proposal mandates that environmental labels comply with rigorous requirements and be subject to verification, ensuring transparency and reliability.<sup>69</sup> Moreover, any new environmental labelling schemes introduced by public authorities or third countries must receive timely approval from the

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<sup>63</sup> See above, note 4. At the time this chapter has been submitted, the future of the proposal appeared uncertain, due to the cancellation by the Polish Presidency of the EU Council of the third and final trilogue scheduled for 23 June 2025. The cancellation followed certain statements from the European Commission (later denied) suggesting the EU executive's intention to withdraw the proposal itself, also in response to an explicit request to that effect from the European Parliament's EPP and Conservative groups. In the meantime, the Council of the EU had adopted its 'general approach', with some very significant changes as regards scope and substance of the proposal. See Council, 'Proposal for a Directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive)—General approach', 17 June 2024, 11,312/24. On the Commission proposal see Jung and Dowse (2024, pp. 11–23). The most important amendments adopted by the Council are presented in Evans (2024, pp. 174–187).

<sup>64</sup> See Recital 6 of the Proposal as amended by the European Parliament after its first reading. European Parliament, Legislative resolution on the proposal for a directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive), 12 March 2024, P9\_TA(2024)0131.

<sup>65</sup> Article 3 Green Claims Directive Proposal.

<sup>66</sup> Article 5 Green Claims Directive Proposal.

<sup>67</sup> Recital 14 Green Claims Directive Proposal.

<sup>68</sup> Recital 39 Green Claims Directive Proposal.

<sup>69</sup> Article 7 Green Claims Directive Proposal.

Commission before they enter the EU market, guaranteeing that such labels add real environmental value.<sup>70</sup>

Complementing these measures is the so-called 'Ecodesign Regulation',<sup>71</sup> which introduces detailed rules designed to enhance the environmental performance of products throughout their lifecycle. Companies are now obligated to assess key parameters—including repairability, durability, energy efficiency, and recyclability—during production processes. An innovative feature of the Regulation is the introduction of a Digital Product Passport (DPP),<sup>72</sup> a tool that allows for the continuous tracking of products from production to post-consumer use.<sup>73</sup> This passport provides consumers with essential information about a product's materials, environmental footprint, maintenance and repair instructions, and overall sustainability performance, thereby promoting transparency and informed decision-making.<sup>74</sup>

Retailers are obligated to make the DPP readily accessible, including through online channels.<sup>75</sup> Meanwhile, such obligations are extended to digital platforms,<sup>76</sup> which must adhere to the transparency and compliance standards established by the DSA.

Finally, the brand new EU Regulation on packaging and packaging waste,<sup>77</sup> not only requires clear, harmonized labeling on packaging and waste containers to inform consumers about recyclability and proper disposal locations. It establishes standardized symbols based on packaging materials to simplify waste sorting and recycling.<sup>78</sup> Moreover, the Regulation prohibits misleading labels or symbols that could confuse consumers about how to correctly dispose of packaging waste.<sup>79</sup>

By integrating these diverse policy instruments, the EU not only strengthens consumer protection and transparency but also fosters systemic changes in production and consumption patterns. Through the combination of clear information disclosure, scientifically backed environmental claims, and robust tracking mechanisms, the EU is paving the way for informed consumers and responsible businesses to work together in achieving the transition towards the circular economy.

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<sup>70</sup> Article 8(4) Green Claims Directive Proposal.

<sup>71</sup> See above, note 5.

<sup>72</sup> Article 7, 9-15 Ecodesign Regulation. Furthermore, Article 9 underscores the mandatory nature of the DPP, ensuring that consumers and other stakeholders have reliable access to details regarding the origin, materials, and proper disposal methods of the product. On the DPP see Mittwoch (2024, pp. 62–67).

<sup>73</sup> Article 7(5) Ecodesign Regulation.

<sup>74</sup> The European Commission has the power to adopt delegated acts pursuant to Article 4 of the Regulation, in order to lay down further information requirements related to the product aspects.

<sup>75</sup> Article 31 Ecodesign Regulation.

<sup>76</sup> Article 35 Ecodesign Regulation.

<sup>77</sup> Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC, OJ L, 2025/40, 22.1.2025.

<sup>78</sup> See Recital 66, Article 12 and 13, Regulation on packaging and packaging waste.

<sup>79</sup> See Recital 71, Article 12(8), (9), (10), Regulation on packaging and packaging waste.

### 3 Is Information Enough? The Right to Education on Sustainable Consumption as a Necessary Complement to the Right to Information

The question of whether information is sufficient to effectively empower consumers is multifaceted and complex. Providing consumers with accurate and detailed information is a fundamental step in encouraging more informed choices and thus more sustainable behaviors. However, on the one hand, this alone is not sufficient to ensure that people actually modify their behavior in a sustainable way.<sup>80</sup> On the other hand, excessive or poorly structured information can have counterproductive effects from both a legal and socio-material perspective. The consumer may, in fact, be unable to manage such an influx of information in a way that is useful for the purposes for which it was provided. This is true also, and perhaps especially, in the context of the transition toward circular and sustainable consumption.

First, consider the issue of information overload and ‘information fatigue’.<sup>81</sup> Consumers today are exposed to an ever-increasing amount of data regarding products: details about composition, origin, environmental impact, disposal methods, certifications, and more. Overly detailed or highly technical information can overwhelm the average consumer. Instead of facilitating informed decisions, an overload of data may result in confusion,<sup>82</sup> causing consumers to disregard the information altogether or to base their choices on superficial factors like price or reviews. From a legal standpoint, while EU legislation seeks to protect consumers from misleading omissions, an overload of complex information may paradoxically reduce market transparency, as discussed in relation to the Unfair Commercial Practices Directive.<sup>83</sup>

Moreover, poorly structured or excessive information can lead to ‘choice paralysis’, where consumers struggle to make decisions when faced with too many options or too many data points.<sup>84</sup> For example, if a sustainability label provides ten

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<sup>80</sup>Howells (2005). This is also related to the so-called ‘attitude-behaviour gap’, a phenomenon well documented in psychology and social sciences. In practice, with regard to the role of consumers in the green transition, many people claim to support sustainability (positive attitude), but then fail to translate this belief into concrete actions (actual behaviour). The reasons for this gap can be numerous, including the higher cost of sustainable products, difficulties in accessing eco-friendly solutions, established habits, social and cultural influences, too much information, or conflicting messages that may lead consumers to doubt the effectiveness of their choices. On this topic, see Bray et al. (2010, pp. 597–608), Johnstone and Tan (2014, pp. 311–328).

<sup>81</sup>Cfr. Hwang and Lin (2016, pp. 213–218), Chernev et al. (2015, pp. 333–358), Hu and Krishen (2019, pp. 27–37).

<sup>82</sup>Better Regulation Executive and the National Consumer Council (2007) Warning: Too much information can harm (Interim Report). London: NCC

<sup>83</sup>Duivenvoorde (2015). The UCPD’s benchmark is the ‘average consumer’, a consumer that is ‘*reasonably* [emphasis added] well-informed and *reasonably* [emphasis added] observant and circumspect’.

<sup>84</sup>Jacoby (1984, pp. 432–435).

different environmental parameters without indicating which ones are most critical, the consumer may either choose arbitrarily or ignore the label entirely. This phenomenon undermines the core purpose of consumer protection laws, such as the Consumer Rights Directive, which mandate transparency but do not necessarily ensure that information is presented in an accessible manner. The key issue is that the 'clarity' and 'comprehensibility' required of professionals under Articles 5 and 6 of the UCPD are relative concepts, not necessarily equivalent to 'usability' or 'effective communication'.<sup>85</sup>

An extended right to receive information, on the one hand, strengthens consumer awareness (which does not necessarily succeed in balancing the economic and commercial power of the seller or service provider); on the other hand, the diligent fulfillment of informational obligations by professionals leads to a redistribution of responsibility. In other words, a carefully and extensively informed consumer is expected to take greater responsibility for the actual impact of their choices and behaviors in the market.<sup>86</sup>

The risk is that the right to information and transparency may backfire on the consumer, who, no longer a vulnerable subject at the mercy of an information asymmetry favoring the professional, finds themselves as a mature and attentive 'commercial interlocutor' of the professional. This would be true if we assumed that an informed consumer is indeed an aware consumer, capable of processing and internalizing the information flow, transforming it into power that, if not necessarily advantageous over the counterpart, at least places them in a position of substantial parity. But this is almost never the case: the average consumer 'has a rough idea, but not necessarily a detailed knowledge, about the product or service in question'.<sup>87</sup> Additionally, consumers lack the literacy and knowledge to engage with relevant disclosure texts.<sup>88</sup>

As the transition to the SCE calls for the active engagement of 'responsible consumers', echoing the era in which the then-ECJ grounded the free movement of goods on the notion of a well-informed, critical, and attentive consumer within the Single Market,<sup>89</sup> it is inevitably necessary to invest in the right to sustainable education. The right to education, which was first laid out in a 1975 Council's Resolution<sup>90</sup> and more recently brought into direct relationship with the right to information in

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<sup>85</sup> On this topic see Willett (2010, pp. 247–273). See also CJEU, case C-430/17, *Walbusch Walter Busch*, ECLI:EU:C:2019:47.

<sup>86</sup> In the context of financial services, see Stănescu (2019, pp. 49–67).

<sup>87</sup> Incardona and Poncibò (2007, p. 26).

<sup>88</sup> Mak (2012, pp. 254–263). On consumers' lack of knowledge and inability to differentiate between claims, labels, and other certification standards, see Janßen and Langen (2017).

<sup>89</sup> The development of the concept commenced with the landmark *Cassis de Dijon* judgement (ECJ, case 120/78, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein*, ECLI:EU:C:1979:42).

<sup>90</sup> Council Resolution of 14 April 1975 on a preliminary programme of the European Economic Community for a consumer protection and information policy, OJ C 92, 25.4.1975, pp. 1–1.

2020 by the New Consumer Agenda,<sup>91</sup> must be an essential corollary to the right of information in the SCE.

To truly empower all consumers, information must be complemented by accessible education initiatives and practical tools—such as standardized, intuitive labels or digital applications that offer layered information on demand—ensuring that every consumer, regardless of their background, can make choices aligned with sustainability and circular economy principles. Therefore, it is essential to acknowledge the social inequalities in accessing and interpreting complex information. Consumers with fewer economic or educational resources may not be able to benefit equally, thus widening the sustainability gap between different segments of the population.

Only through targeted training programs can consumers acquire the skills needed to process and internalize information, turning it into real decision-making power. Consumer education should not be limited to providing basic knowledge about products and their impacts but should aim to develop the critical ability to independently and consciously evaluate technical and environmental information, such as sustainability, repairability, and reuse.

This educational dimension is essential to reducing the information asymmetry in favor of professionals, as it allows the consumer to move beyond the mere role of a passive subject and become an active and equal interlocutor in the commercial process. Education not only facilitates the understanding of environmental labels and certifications<sup>92</sup> but also encourages responsible consumption behaviors, contributing to a culture of sustainability that integrates into the circular economy model.<sup>93</sup>

This educational approach is particularly crucial in the digital era, where the quantity and complexity of information can easily lead to information overload and choice paralysis. The supranational instruments currently in place, such as the European Green Deal<sup>94</sup> and the Circular Economy Action Plan,<sup>95</sup> constitute important foundations for guiding change. Investing in educational programs and awareness campaigns, inspired by initiatives such as the European Commission's 'Learning for the Green Transition'<sup>96</sup> and the subsequent Recommendation issued

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<sup>91</sup> See above, note 3. Although it is a non-binding communication, the New Consumer Agenda highlights the need to strengthen consumer empowerment through, among other measures, educational and informational actions to address the challenges posed by digitalization and sustainability.

<sup>92</sup> Grunert et al. (2014).

<sup>93</sup> As shown by Majer et al. (2022).

<sup>94</sup> Para. 2.2.4.

<sup>95</sup> Para. 5, where the Commission states that 'Further investment in education and training systems, lifelong learning, and social innovation will be promoted under the European Social Fund Plus'.

<sup>96</sup> See the Commission proposal of 14 January 2022 for a Council Recommendation on learning for environmental sustainability, COM(2022)11 final, and the Staff working document accompanying the proposal for a Council recommendation on learning for environmental sustainability, SWD/2022/3 final.

by the EU Council to Member States,<sup>97</sup> should enable citizens/consumers to develop the knowledge, skills, and attitudes necessary to promote sustainable consumption patterns, adopt more environmentally friendly lifestyles, and contribute—both individually and collectively—to the transformation of our societies.<sup>98</sup>

However, their effectiveness largely depends on the EU and Member States' ability to translate these tools into concrete actions, integrating targeted training programs and awareness campaigns with support tools. In this sense, complementing accessible education measures with practical tools (e.g., apps or QR codes) to provide in-depth information only to those who seek it—without overwhelming others—could help consumers who feel capable of handling such information apply the knowledge and skills they have acquired. Large online platforms themselves can become active allies of consumers by providing interactive tools such as sustainability search filters or reparability and reuse comparators, in line with the obligations laid down in the DSA and the DMA.<sup>99</sup>

Ultimately, consumer education emerges as a fundamental remedy to ensure that the right to information does not become a burden but instead becomes a true instrument of empowerment, capable of making the consumer a proactive actor in the transition toward the SCE. An integrated approach that leverages digital technologies and interactive tools can be helpful to make information more accessible and comprehensible to all segments of the population, an issue that, as scholarly literature indicates, remains particularly significant. This is essential to avoid the phenomenon of information overload, which risks making the consumer, despite the abundance of data, an inadequately informed interlocutor.

## 4 The Rights to Product Longevity and Repairability

In the context of the transition to a circular economy, qualities such as longevity and reparability have become increasingly prioritized in consumer goods.<sup>100</sup> As a result, the EU has recognized the need to impose obligations on producers and sellers to ensure that products placed on the market not only meet these standards but also that

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<sup>97</sup> Council Recommendation of 16 June 2022 on learning for the green transition and sustainable development 2022/C 243/01.

<sup>98</sup> *Ibidem*, recommendation no. 4(d).

<sup>99</sup> As seen above, under Sect. 2.1.

<sup>100</sup> Combination of longevity plus reparability and the right to sustainable disposal represents an emerging principle within EU environmental and consumer protection law. It encompasses two interrelated elements: ensuring that products are designed for a longer useful life—also thanks to their reparability—, and guaranteeing that, at the end of their lifecycle, they are disposed of in an environmentally responsible manner. This dual approach is fundamental to the EU's broader objective of fostering a circular economy, as outlined in the Circular Economy Action Plan and the European Green Deal. Sustainable disposal practices are regulated under the Waste Framework Directive (2008/98/EC), which sets out the principles for waste management and recycling, thereby ensuring that products at the end of their life are recovered and reused rather than discarded.

consumers receive clear and accurate information about these characteristics. This approach enables consumers to make well-informed choices, reinforcing their role in driving sustainable consumption.

However, as happened in the recent past within general consumer law, EU legislation on the circular economy should evolve beyond merely providing information to consumers and instead focus on actively empowering them. In this regard, it is essential to recognize a genuine right for consumers to access products that are both long-lasting and repairable. By doing so, the legislative framework would not only enhance transparency but also ensure that the goods available in the market truly support sustainable consumption, ultimately fostering a more resilient and environmentally responsible economy.

From a normative standpoint, product longevity is encouraged through legislation like the Ecodesign Regulation, which requires manufacturers to consider factors such as durability, reusability, repairability, and energy efficiency during the design phase.<sup>101</sup> At the same time, the recently adopted Right to Repair Directive<sup>102</sup> occupies a central position, addressing issues that are deemed critical not only by European institutions but also by citizens themselves.<sup>103</sup> Together, these initiatives mark a significant step forward in ensuring that products are designed for a longer lifespan and that consumers have the means to repair them, supporting a more sustainable and circular economic model.

#### ***4.1 The Right to Product Longevity***

The European Union's approach to product sustainability is anchored in a comprehensive regulatory framework that integrates environmental performance with consumer protection. Historically, the Ecodesign Directive<sup>104</sup> served as the cornerstone for embedding environmental considerations into product design. However, in a significant policy shift, the new EU Ecodesign Regulation—effective from July 18,

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<sup>101</sup> See Recital 16 and Article 5 Ecodesign Regulation.

<sup>102</sup> Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828 (R2RD), OJ L, 2024/1799, 10.7.2024. For a more detailed discussion of the Directive's scope, as well as issues related to intellectual property and servitization, see Calabrese, Chap. "Right to Repair Between Intellectual Property and Servitization".

<sup>103</sup> The outcome of the Conference on the Future of Europe also included a call for a right to repair. See Conference on the Future of Europe | Report on the final outcome, May 2022, notably proposal 5 (points 6 and 7) and 11 (point 2). Moreover, according to a Eurobarometer survey (Special Eurobarometer 503: Attitudes towards the impact of digitalisation on daily lives), 77% of EU citizens would rather repair their electrical equipment than throw it away.

<sup>104</sup> Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast), OJ L 285, 31.10.2009, pp. 10–35.

2024—has replaced the Directive. This updated regulation not only reinforces but also expands the scope of ecodesign requirements, mandating that products achieve higher standards of durability, energy efficiency, repairability, and recyclability. The Regulation marks a substantial broadening of its applicability compared to the earlier Ecodesign Directive. Whereas the previous Directive focused solely on energy-related products like washing machines and refrigerators, the new framework now encompasses nearly all physical goods.<sup>105</sup>

At the core of the regulation is the principle that only products meeting specific ecodesign criteria can be placed on the market,<sup>106</sup> meaning that products are permitted free circulation only if they conform to the ecodesign requirements defined in the delegated acts.<sup>107</sup>

A pivotal element of the new Regulation is the imposition of improvements in 16 environmental aspects.<sup>108</sup> Among these, durability and repairability are prioritized. In particular, specific ecodesign requirements—based on the product parameters outlined in Annex I—are laid down to prevent planned (and premature) obsolescence.<sup>109</sup> This provision explicitly targets design practices that deliberately shorten a product's useful life. Such practices include using components that are significantly less robust than alternative options, impeding the disassembly of key components, withholding essential repair information or spare parts. Moreover, the Regulation addresses issues related to software obsolescence, such as software that ceases to function after an operating system update or when updates are no longer provided.<sup>110</sup>

Annex I of the Regulation details a comprehensive set of 20 product parameters that serve as benchmarks for durability and sustainability. These parameters cover multiple dimensions, which can be summarized as follows. The first one is durability and reliability, measured through the product's guaranteed lifetime, technical lifetime, mean time between failures, and resistance to stresses or aging mechanisms.<sup>111</sup> The second is ease of repair and maintenance, evaluated based on the availability, delivery time, and affordability of spare parts, as well as the simplicity

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<sup>105</sup> See Article 1(2) Ecodesign Regulation, for a list of the categories of goods excluded from the scope of the Regulation.

<sup>106</sup> According to Article 3 Ecodesign Regulation.

<sup>107</sup> Article 4 Ecodesign Regulation empowers the European Commission to adopt delegated acts (*ex* Article 290 TFEU) that lay down detailed requirements, including specific parameters for durability, repairability, and overall environmental impact. This delegation ensures that the regulatory framework remains adaptable, allowing for updates as technological and environmental standards evolve. According to Recital 49 of the same Regulation, 'the Commission should prioritise iron, steel, aluminium, textiles, in particular garments and footwear, furniture, including mattresses, tyres, detergents, paints, lubricants, chemicals, information and communication technology products and other electronics, and energy-related products for which ecodesign requirements are to be set for the first time or for which existing measures [...] are to be reviewed'.

<sup>108</sup> Article 5 Ecodesign Regulation.

<sup>109</sup> Article 5(2) Ecodesign Regulation.

<sup>110</sup> *Ibidem*.

<sup>111</sup> Parameters (a) and (s), Annex I.

of disassembly and reassembly, modularity, and the availability of repair instructions.<sup>112</sup> A third dimension is that of ease of upgrading, reuse, remanufacturing, and refurbishment, focused on modularity, the use of standard components, and conditions that allow non-destructive disassembly.<sup>113</sup> The other two dimensions are those of design for recycling and avoidance of detrimental technical solutions. The former emphasizes the use of easily recyclable materials, safe access to recyclable components, and the facilitation of high-purity material sorting,<sup>114</sup> while the latter ensures that design choices do not hinder reuse, repair, or recycling.<sup>115</sup>

These design criteria are not merely aspirational; they are enforceable and verifiable,<sup>116</sup> ensuring that manufacturers cannot employ anti-repair strategies such as incorporating incompatible software or making spare parts inaccessible.<sup>117</sup>

In addition, the Regulation delineates clear responsibilities for various market operators. Importers, for example, must ensure that products comply with these ecodesign requirements before they reach the market.<sup>118</sup>

By embedding these rigorous criteria into product standards, the Regulation seeks to shift manufacturing practices toward creating products that are not only more robust and repairable but also easier to upgrade and recycle, ultimately contributing to reduced waste and a more resource-efficient economy.

## 4.2 *The Right to Product Repairability*

Consumers are often discouraged from repairing damaged products due to a combination of economic, technical, and psychological barriers. High costs, anti-repair design choices, limited access to tools and spare parts, and ingrained habits that favor replacement over repair all contribute to this trend. Together, these barriers create a system in which repairing a product is often more expensive, difficult, or inconvenient than simply replacing it. Addressing these challenges is essential to

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<sup>112</sup>Parameters (b) and (l), Annex I.

<sup>113</sup>Parameters (c) and (k), Annex I.

<sup>114</sup>Parameters (d), (h), (i), (j), (r), and (t), Annex I.

<sup>115</sup>Parameters (e), (f), (g), (m), (n), (o), (p), and (q), Annex I.

<sup>116</sup>Article 5(12), 8(g) and (i), 15, 39 Ecodesign Regulation.

<sup>117</sup>The main legal basis lies in Article 5(2) of the Regulation, which addresses obsolescence resulting from specific design choices made by manufacturers. The provision clearly indicates that any design strategy aimed at limiting repairability constitutes a breach of the principles of durability and sustainability underpinning the Regulation. Accordingly, the provision should not merely discourage, but in effect prohibit, manufacturers from adopting measures that intentionally make the maintenance and repair of products difficult or impossible, thereby directly countering anti-repair strategies.

<sup>118</sup>See Article 29 Ecodesign Regulation.

promoting a more sustainable approach to consumption and extending the lifespan of products.<sup>119</sup>

If the Ecodesign Regulation establishes technical requirements to enhance product repairability, only a genuine right to repair—legally enforceable—can effectively help reduce the environmental impact of consumption, ideally without compromising the quality of the products consumers purchase. Empowering consumers with greater ability to repair their devices ensures that the products they buy not only offer prolonged usability but also contribute to environmental sustainability throughout their entire lifecycle.

In the light of the above, the revision of the Ecodesign Regulation is complemented by the R2RD,<sup>120</sup> which amends the ‘Sale of Goods Directive’<sup>121</sup> as part of the EU’s sustainability strategy.

In general terms, under the SGD the seller is liable to the consumer for any lack of conformity which becomes apparent within a two-year span since the moment of delivery.<sup>122</sup> In the event of a lack of conformity, the consumer shall be entitled to have access to a list of alternative remedies, the first of which is having the goods brought into conformity.<sup>123</sup> In that context, ‘bringing into conformity’ either means to have the good repaired or replaced, unless the remedy chosen ‘would be impossible or, compared to the other remedy, would impose costs on the seller that would be disproportionate’.<sup>124</sup>

While this general Directive rightly recognizes repair as a key remedy, promoting sustainability, it does not grant it priority over replacement. Instead, the European legislator leaves the decision between repair and replacement to the consumer, ensuring flexibility in addressing product defects.<sup>125</sup> Even where consumers choose repair over replacement, that could not be possible if the necessary spare parts and/or repair and maintenance information and/or any repair related tools are not made available by the manufacturers.

In the light of the above, special repair legislation can be a more effective solution,<sup>126</sup> in terms of circularity and sustainability, even beyond the scope and

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<sup>119</sup> See extensively Perzanowski (2021).

<sup>120</sup> See above, note 102.

<sup>121</sup> See above, note 44.

<sup>122</sup> Article 10 SGD.

<sup>123</sup> Article 13(1) SGD.

<sup>124</sup> Article 13(2) SGD.

<sup>125</sup> Staudenmayer (2000, p. 554).

<sup>126</sup> See Terry (2019, p. 867), on EU rules on the right to access to repair information in the vehicles industry.

impact of commercial guarantees,<sup>127</sup> including those on product durability.<sup>128</sup> Following this principle, the R2RD affirms that once the legal guarantee (automatically provided in all Member States under rules implementing the SGD) has come to an end, the manufacturer is now obligated to repair common products that are technically repairable according to EU law.

Repairers may provide consumers with a ‘European Repair Information Form’ before the consumer is bound by a contract for the provision of repair services.<sup>129</sup> Information on repair conditions and services helps consumers assess and compare repair options. Therefore, the repairer must provide complete and accurate information, in compliance with the following requirements: obligations regarding the key characteristics of the repair service, the identity and contact details of the repairer, the price, the methods, and the timeframe for performing the repair service.<sup>130</sup>

Additionally, a repair obligation is imposed on manufacturers at the simple request of the consumer, provided that the repair is not impossible,<sup>131</sup> and only for goods for which EU legislation establishes specific repairability requirements.<sup>132</sup> The repair must be carried out within a reasonable timeframe and either free of charge or at a reasonable cost, which may include the price of spare parts,<sup>133</sup> however, the cost of spare parts must not be set at a level that discourages repair.<sup>134</sup> Importantly, this repair obligation on manufacturers does not correspond to an obligation on consumers to turn exclusively to the manufacturer for repairs. On the contrary, the Directive expressly provides for the establishment of a European online repair platform to connect consumers with repairers, sellers of refurbished

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<sup>127</sup> In addition to the conformity requirement and associated remedies, the SGD also contains a number of rules regarding ‘commercial guarantees’. As better explained in Hawes and Twigg-Flesner (2018), they are voluntary undertakings given by a retailer or manufacturer in respect of the goods, that offers to reimburse the price paid or to replace, repair, or otherwise service the goods if they fail to meet the specifications or other non-conformity requirements set out in the guarantee statement or related advertising. This voluntary tool for repair supports product longevity and contributes to a more circular economy by reducing waste and extending the useful life of products. Article 6(1)(m) CRD, as is particularly clear from its wording, seeks to provide the consumer with pre-contractual information on the existence of such guarantees and the relevant conditions (CJEU, case C-179/21, *absolut-bikes and more - GmbH & Co. KG*, ECLI:EU:C:2022:353, para. 57).

<sup>128</sup> Article 17 SGD.

<sup>129</sup> See again Article 10(1) and (2) SGD.

<sup>130</sup> Article 4 R2RD (recalling the relevant form as set out in Annex I).

<sup>131</sup> Article 5(1) R2RD.

<sup>132</sup> It mainly concerns certain household appliances, electronic displays, servers and data storage products, mobile phones and tablets, goods that incorporate batteries for light means of transport. For a detailed list, see Annex II of the R2RD (but the list of product categories can be extended over time).

<sup>133</sup> Article 5(2) R2RD.

<sup>134</sup> Article 5(4) R2RD.

goods, or buyers of defective goods for refurbishment purposes, as well as to inform them of community repair initiatives.<sup>135</sup>

Regarding products subject to the aforementioned sector-specific EU legislation, the exercise of the right to repair cannot be restricted or denied by manufacturers. Manufacturers cannot rely on legal mechanisms (such as contractual clauses) or technical barriers (such as hardware or software restrictions) to prevent the repair of covered goods,<sup>136</sup> unless justified by legitimate and objective factors, including the protection of intellectual property rights under EU and national law.<sup>137</sup> Similarly, manufacturers cannot prohibit the use of original or second-hand spare parts, compatible spare parts, or 3D-printed spare parts by independent repairers unless such parts fail to meet the requirements established by EU or national law, particularly regarding product safety and intellectual property protection.<sup>138</sup> The rationale behind this provision is to maintain competitive pressure on manufacturers, encouraging them to keep repair costs at levels acceptable to consumers.<sup>139</sup>

In addition, the R2RD introduces amendments to the general Sale of Goods Directive that significantly strengthen the consumer's right to repair within EU law.<sup>140</sup> One of the most important changes is the introduction of an additional 12-month liability period when a product is repaired to bring it into conformity.<sup>141</sup> This means that the consumer who opts for a repair rather than a replacement is not left unprotected once the standard liability period expires. Instead, the seller remains responsible for any lack of conformity that may arise for an extended period. This provision incentivizes businesses to ensure high-quality repairs, as they will remain accountable for the proper functioning of the repaired product. If a country chooses not to apply the 12-month extension, it must still guarantee that the seller's liability or the applicable limitation period for remedies after a repair lasts at least 3 years.<sup>142</sup> This ensures that consumers across the EU benefit from a solid legal guarantee when opting for repair instead of replacement.

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<sup>135</sup> Article 7 R2RD.

<sup>136</sup> Article 5(6) R2RD.

<sup>137</sup> On the critical implications of this provision see Calabrese, Chap. "Right to Repair Between Intellectual Property and Servitization".

<sup>138</sup> See again Article 5(6) R2RD.

<sup>139</sup> Recital 16 R2RD.

<sup>140</sup> See Article 16 R2RD, amending Article 7 and 10 SGD.

<sup>141</sup> See the newly added para. (2)(a) of Article 10 SGD.

<sup>142</sup> See the newly added para. (2)(c) of Article 10 SGD.

## 5 Reshaping Consumer Powers and Responsibilities: What's There, and What's (Still) Missing?

The regulatory framework examined throughout this chapter demonstrates a significant evolution in the field of consumer protection within the European Union, particularly as it aligns with the transition toward a circular and sustainable economy. Recent legislative initiatives—including the Ecodesign Regulation, the Directive on Empowering Consumers for the Green Transition, and the Right to Repair Directive—have collectively enhanced transparency, encouraged the design of longer-lasting and more repairable products, and shifted responsibility towards producers. These instruments rely on detailed disclosure obligations, harmonized labeling systems, and digital tools to mitigate information asymmetries, ultimately aiming to transform consumers from passive recipients into active, well-informed market participants.

Nonetheless, the analysis allows to highlight a few notable regulatory gaps.

The first one is the absence of a specific legal framework addressing the right to return non-sustainable or 'green' products. The right to return—commonly associated with the 'cooling-off' period in distance selling or with defect-based returns—has traditionally been limited to circumstances where products are either defective or fail to match the description provided by the seller. In the evolving context of the SCE, the idea that consumers might have a right to return products when they no longer uphold their sustainability claims could be extremely useful. While the right to repair has been proposed as a mechanism to extend product lifespans, a formalized right to return non-sustainable products would mark a significant departure from existing consumer protection norms *and* align post-purchase consumer rights with sustainability benchmarks, thereby encouraging more responsible design and production practices. This innovative right would extend consumer protection beyond immediate safety concerns, addressing long-term environmental performance and quality. Nevertheless, implementing such a right poses several challenges, first of all the need for a clear legal definition of 'non-sustainable' that encompasses multiple dimensions such as resource efficiency, energy consumption, and environmental impact.

Another regulatory gap is related to the circumstance that the right to return, while a cornerstone of consumer protection, poses significant challenges to environmental sustainability within the framework of a circular economy. On one hand, this right empowers consumers by allowing them to return products that do not meet their expectations, thus fostering confidence in their purchasing decisions. However, its unrestricted application can inadvertently encourage over-purchasing and impulsive buying behaviors.

The critique here centers on the potential paradox that an overabundance of consumer rights might, in some cases, generate counterproductive outcomes for sustainability. Just like an overload of technical information can overwhelm consumers (as seen above), when the right to return is exercised without due consideration for environmental impacts, it may inadvertently foster a culture of disposability and

wastefulness (not to mention higher transportation emissions, excess packaging waste, and additional energy consumption). Thus, the challenge for EU law is not solely to expand consumer rights but to calibrate them in a manner that integrates consumer empowerment with environmental stewardship. To reconcile the consumer benefits of the right to return with the imperatives of environmental sustainability, it is essential to reexamine and reshape this right through targeted regulatory and market-based reforms. One potential measure is the implementation of shorter return periods. By reducing the time frame during which returns are accepted, retailers could discourage impulsive and non-essential returns, ensuring that only genuinely defective or unsatisfactory products are sent back. This reduction in return volume would not only cut down on the carbon footprint associated with reverse logistics—such as transportation and repackaging—but also promote more thoughtful consumer purchasing decisions. Another strategy involves the introduction of restocking fees, which can serve as a financial deterrent to frivolous returns.

The future of EU consumer law may well depend on its ability to integrate mechanisms that not only inform and empower consumers but also actively discourage practices detrimental to environmental sustainability.

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