



Are Soft Legal Measures in Circular Economy Action Plans Enough to Permeate EU Strong Economic Core Regulations Bringing Systemic Sustainable Change?

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Abstract

This paper provides a legal assessment of the EU circular economy action plans [2015, 2020] to determine whether their implementation aims at transformative change or is embedded in the prevailing neoliberal ideology. Measures intended to promote the circular economy (CE) are classified according to their public or private nature, the degree of public or private intervention (command and control, economic instruments, information, self-control). It also analyzes how core EU economic policies shield a narrow, technocratic conception of the CE.

Keywords Legal measures · Core economic legislation · Circular economy · EU action plans · Soft law · Instruments assessment

Introduction

The European Union has made a commitment to the circular economy (CE) since it approved a first Action Plan in 2015 (Closing the loop, COM [1] 614 final), followed by another in 2020 (A new circular economy Action Plan, COM [2] 98 final) that try to make an ecological transition from a linear economy to a circular economy. The two action plans are accompanied by annexes detailing a set of measures that will allow to walk towards this paradigm shift [3, 4]. This article aims to make a legal analysis of these measures along with the type of policy instruments chosen to implement them to determine whether they are consistent with the stated level of ambition of the CE and can lead to a sustainable transition.

There is abundant critical literature on the CE, its many focal points [5–7] and the extent and ambition of the concept itself [8, 9, 10]. Some papers have already evaluated the transformative ambition of the first CE action plan [5]. However, there are no studies from a legal perspective that systematize and critically analyze

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the transformative potential of the proposed EU measures found in both EU action plans regarding the type of policy instruments envisaged. The relevant legal research addresses precise regulatory limits and changes involving eco-design [11], planned obsolescence [12], repair, reuse and refurbishment [13], consumption patterns [14, 15] and extended producer responsibility [16], but provides no overall assessment of the EU-driven measures in the two action plans that contextualizes the typology of policy instruments, their scope and transformative potential.

This paper is based on a comprehensive review of the measures set forth in the two EU CE action plans [17, 18], their general or specific scope and classification along the mandatory-voluntary axis according to the type of instruments chosen. Instrument typology is used to assess the transformative capacity of the measures envisioned for the CE. It also examines if those policy instruments can be effective to override obstacles to key CE measures coming from Private and Economic Law that preserve the core of EU's project with a clear neoliberal accent that might be contradictory to a systemic sustainable change.

The Neoliberal Drift in EU Environmental Law and Its Impact on the Policy Instruments and Conceptualization of the CE

There is abundant economic, political and technical literature on CE' conceptualization, approaches and evolution but there is not much legal literature 'despite the fact that ensuring the right legal framework for a CE is of the utmost importance' [19]; 246]. 'CE regulation is often taken-for-granted and treated mainly as a technical matter where social dimensions have to adapt to the technical solutions offered by CE models' [20]; 4]. Legal scholars [11, 12, 16, 19, 21–25] have made decisive contributions on key issues for the CE but a complete legal assessment on how the choice of policy instruments to implement EU Action Plans might be drivers or barriers for a sustainable transition is not yet done.

The choice of policy instruments is a relevant issue for the analysis of the transformative potential of CE. There is a certain consensus [26]; 153; 27; 2; 28; 11] that a combination of instruments is necessary to achieve effective results and the adherence of the different actors involved. However, it cannot be ignored that the choice of instruments and the weight given to each type of measure is not neutral [28]; 21]. No instrument is *per se* superior to another, but we know that they have advantages and disadvantages that must be assessed to decide how to act. Regulatory measures are mandatory in terms of compliance as they incorporate control and sanction systems and apply equally to all sectors and actors involved. However, this general scope may make them less adaptable to specific situations, face resistances because they are not the result of a consensus and slow innovation. Economic or market measures seek to influence by means of incentives, taxation, concession rights, etc. They can internalize environmental costs more adequately but are generally voluntary in nature, so there is a risk of low effectiveness if stakeholders do not obey these stimuli. Information and communication instruments 'try to influence behavior through disseminating information to actors on certain issues in the hope that this will entice them to change their behavior' on a voluntary basis, which would be their main disadvantage [28];

23]. Self-regulation includes an array of instruments that have in common that rules (standards, codes of best practices) and/or control measures (environmental agreements, environmental auditing, eco-labels...) are private based. Self-regulation 'has aroused considerable interest from policymakers as a result of the ideological push towards deregulation and smaller government' [29]; 530].

Neoliberalism 'is an overlapping set of arguments and premises that are not always entirely mutually consistent, and that are united by their tendency to support market imperatives and unequal economic power in the context of political conflicts that are characteristic of the present historical moment' [30]; 2]. Grewall and Purdy point out several features about neoliberalism and Law that are consistent with EU CE discourse: 'anti-regulatory politics' (p.1), 'market modelled concepts of efficiency and autonomy shape policy, doctrine, and other discourses of legitimacy outside of traditionally 'economic' areas' (p.3), a focus mainly on 'consumer choice' (p.13).

Since the early 1990s, the EU has quietly promoted environmental deregulation under the banner of neoliberalist better regulation [31]; 425]. Some scholars have even argued that the first generation of directives with clear objectives is a 'paradise lost' that was sacrificed in favour of good regulation strategies based on a logic of deregulation. In other words, 'the law was called upon to climb down from its pedestal to engage with market requirements' [32], 216–217). Market fundamentalism is behind a 'juridification of an essentially economic conception of European integration' [30]; 18] and a dramatic economization shift in the interpretation of European Competition Law that can cause tensions with circularity [24]; 130, 132]. Bowma et al. [28]; 27] identify three trends in EU environmental policy: 'a movement from compulsory settings towards 'due diligence system' (DDS), a movement from regulatory to information and agreement based instruments and an increasing reliance on self-governance'.

A review of successive EU environmental action programmes makes this shift clear. It affects both the type of instruments that make environmental policies feasible and the actors that drive them forward. The Fourth Action Programme (1987–1992) insisted on 'the imposition of ambitious environmental standards'. It also spoke of improving inspection or opening infringement proceedings where necessary. References to economic or information instruments were still very immature and the programme prioritized those with more public intervention (levies, aids, etc.). The Fifth Action Programme (1993–2000) defined itself as a 'turning point', not 'a programme conceived for the Commission alone, nor one geared towards environmentalists alone' (OJ 17.5.93 C/138, 18). It called for a 'broadening of the range of instruments' (OJ 17.5.93 C/138, 13, 16, 67–68) and stated that 'the new approach implies ... a reinforcement of the dialogue with industry and the encouragement, in appropriate circumstances, of voluntary agreements and other forms of self-regulation' (OJ 17.5.93 C/138, 14). These 'strong' regulatory instruments remained prevalent until the end of the 1990s and then began to coexist with economic instruments introduced in the early 2000s. After, information and self-regulatory instruments clearly deprived of coercive public power were given a decisive boost. 'Soft law' formulas appeared as alternative instruments for promoting environmental protection and behavioural change.

In the EU, the CE was thus born into a context of 'de-publishing' environmental protection instruments that is consistent with the neoliberal paradigm. In this paper, an in depth look and systematization of the measures proposed in the two EU CE

action plans [17, 18] is made to assess if they show a technocratic conception with moderate environmental ambition or on the other hand can boost a sustainable transition. Legal literature on CE so far is ‘fragmented’ and ‘tends to take a de-politicized and under-socialized approach to regulation’ [20]; 1]. Non-legal papers assessing the potential of the EU EC action either critical or not [5, 6, 33] lack an in-depth study of the level of implementation and actual scope of every single measure looking not only to both EU Action Plans and main documents but following each of them through their policy process to see how far words are from facts.

The claim that the CE will drive ‘systemic, deep and transformative’ change (second CE action plan, [18], 21) depends heavily on the choice of instruments and the measures proposed. While regulatory pluralism and a mix of public and private instruments may favour the design of ‘tailor-made’ solutions [27]; 352–353; 19, a clear preponderance of voluntary and self-regulatory measures with little legal changes addressing key issues may reveal the inconsistency between the official discourse and actual ambition when it comes to meeting this challenge. An exclusively depoliticized and technocratic conception of the CE will likely tend to prioritize informative, self-monitoring measures and instruments to seek complicity with business interests by placing the discursive emphasis on economic benefits. However, systemic transformation might require general mandatory measures that can apply equally to all and overcome resistances [28]; 22] to the profound changes needed for sustainability identified in CE policy documents. Studies reveal that ‘public and scientific discourses about using “new” policy means to combat problems of environmental pollution and degradation are somewhat misguided. Rather, governments should invest more in their enforcement capacities’ [34]; 238]. Moreover, difficulties arise to ecological transition unless changes toward sustainable and circular business models also permeate private law (property, intellectual property rights, etc.) [13] so that both the policy instruments and the policy context are taken into account [35]. The pace of transitioning to the CE is thus conditioned by an inadequate legal framework and the postponement, dilution or nonexistence of many regulatory provisions linked to it [19].

Methodology

The paper attempts to frame the measures for the CE listed in the two EU Action Plans into a common typology of instruments used to promote environmental policies. For this purpose, a first approach was made to both plans and, singularly, to the Annexes detailing the measures, and a preliminary classification was made.

Subsequently, using a legal approach—examining the law, legislative history, court opinions, patterns of decision-making—a detailed examination of the legal texts was carried out (a) to determine whether they used command-and-control tools, market instruments, information measures or they relied on self-regulation of the actors involved; (b) to analyze the mandatory/voluntary nature of the proposed measures; (c) to understand whether the measures had a general scope or were just pilot measures in order to evaluate the level of ambition of the CE in the EU; and (d) to assess the level of implementation.

A detailed scrutiny was also made of the grey literature (official monitoring reports¹, evaluation documents², working papers³, official websites⁴) of each of the proposed measures to check the actual level of implementation, the scope of the measure and the degree of compliance with the deadlines. Studying measures from their draft stages to approval and assessment documents helped to identify the contentious issues, contesting interests, shortcomings and the coherence with the political claims on their transformative ambition.

¹ Report on the implementation on the circular action plan COM [36] 33 final; Report on the implementation of the Circular Economy Action Plan SWD [37] 90 final; assessment report of the voluntary pledges under Annex III of the European Strategy for Plastics in a Circular Economy SWD [38] 92 final; staff working document on the impact assessment for ecodesign regulation on light sources SWD [39] 357.

² FR-NL [40], Non-paper from the Netherlands and France on trade, social economic effects and sustainable development, <https://nl.ambafrance.org/Non-paper-from-the-Netherlands-and-France-on-trade-social-economic-effects-and-https://ecostandard.org/wp-content/uploads/CE-Implementation-Response-final.pdf>; EEB [41], Key recommendations for the development of further EU-wide end-of-waste (EoW) criteria, https://mk0eeborgicuyctuf7e.kinstacdn.com/wp-content/uploads/2021/01/ECOS-EEB-comments_EoW-criteria_20210122.pdf

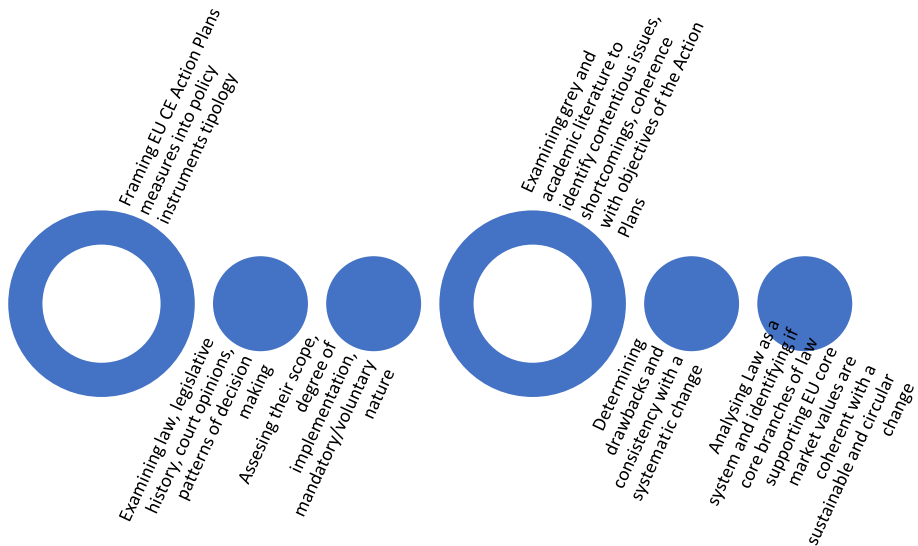
³ Interface between regulations on chemicals, products and waste COM [42] 32 final, New Bauhauss COM [43] 573 final, Strategy for Financing the Transition to a Sustainable Economy COM [44] 390 final, Updating New industrial Strategy COM [45] 350 final, EU green taxonomy COM [46] 188 final, Investing in a climate-neutral future for the benefit of our people COM [47] 562 final, European Union, Report on Critical Raw Materials and the Circular Economy, 2018, https://weee4future.eitrawmaterials.eu/wp-content/uploads/2020/09/09_report-of-CRM-and-CE.pdf, An Open, Sustainable and Assertive Trade Policy COM [48] 66 final, Commission Services (Non paper) [49], Feedback and way forward on improving the implementation and enforcement of Trade and Sustainable Development chapters in EU Free Trade Agreements, 26.02.2018 http://trade.ec.europa.eu/doclib/docs/2018/february/tradoc_156618.pdf, Mauro Cordella, Felice Alfieri, Javier Sanfelix, Analysis and development of a scoring system for repair and upgrade of products – Final report, EUR 29711 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978–92–76–01602–1, doi:10.2760/725068, JRC114337, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC114337/jrc114337_report_repair_scoring_system_final_report_v3.2_pubsy_clean.pdf

⁴ <https://rmis.jrc.ec.europa.eu>
https://ec.europa.eu/info/energy-climate-change-environment/standards-tools-and-labels/products-labeling-rules-and-requirements/energy-label-and-ecodesign/energy-efficient-products_en
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https://ec.europa.eu/environment/topics/waste-and-recycling/batteries-and-accumulators_en
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https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12511-Environmental-performance-of-products-&-businesses-substantiating-claims_en
https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel-home/business/ecolabel-facts-and-figures_en
https://ec.europa.eu/environment/emas/emas_registrations/statistics_graphs_en.htm
https://ec.europa.eu/environment/eussd/smgp/initiative_on_green_claims.htm
https://ec.europa.eu/environment/eussd/smgp/ef_transition.htm
<https://eplca.jrc.ec.europa.eu/sustainableConsumption.html>
https://ec.europa.eu/commission/presscorner/detail/en/inf_21_2743

Academic literature on the outcomes of EC from economic, political or sociological perspective has dealt mainly with what the EU is *saying* on EC but has not done a complete revision on what the EU is really *doing* to drive a systemic change. Legal research methodology was used to study the legal texts, jurisprudence and the documents produced both by the EU, Member States and stakeholders combined with academic literature on the topic to determine deficiencies, problems of efficacy of the instruments and measures for the CE and assess the scope of the EU strategy. A comparative study was also made to explore different legal outcomes in key issues (intellectual property and right to repair in the USA, planned obsolescence in France, environmental agreements and Competition Law in The Netherlands) that show obstacles and different paths for circular transition.

All this information led to a typology of the proposed measures according to the predominant type of instrument for their implementation and their scope (Table 1).

This classification allows a comprehensive (a) analysis of the level of ambition of the proposed measures, (b) assignment into the different stages of the value chain to identify to what extent the EU CE action is something qualitatively distinct from the old waste law promoting changes in the ecodesign, production and consumption stages and (c) assessment of the policy instruments envisaged to implement the set of measures of the EU Action Plans to determine if they can succeed in giving a sustainable shift to the branches of law that support the core market values of the EU (International Commercial Law, Intellectual Property Law, Competition Law) or, on the contrary, they remain untouched.



continued 4

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Autoriteit Consument & Markt (ACM) Guidelines. Sustainability agreements. Opportunities within competition law, <https://www.acm.nl/sites/default/files/documents/2020-07/sustainability-agreements%5B1%5D.pdf>

UNCTAD's Intellectual Property Unit, Impression Products Inc. v. Lexmark International Inc. (Supreme Court of the United States, 30 May 2017)

<https://unctad.org/ippcaselaw/impression-products-inc-v-lexmark-international-inc-supreme-court-united-states-30-may-2017>

Table 1 Sustainability instruments and classification of CE measures in the EU CE action plans [17, 18] Source: Author’s own based on measures described in the annexes of COM [1] 614 final, Brussels, 2.12.2015 and COM [2] 98 final, Brussels, 11.3.2020. Non-waste measures in blue. Waste measures in italics

TYPE	INSTRUMENTS	MANDATORY/ VOLUNTARY	PUBLIC/ PRIVATE	2015 CE ACTION PLAN	2020 CE ACTION PLAN
REGULATORY INSTRUMENTS (COMMAND AND CONTROL)	Prohibitions	mandatory	public	Circularity in the Eco-design Directive requirements Better enforcement of existing guarantees on tangible products, accompanied by reflection on improvements (upcoming Commission proposal for online sales of goods, and consumer legislation fitness check) Reparability in eco-design requirements Implementing regulation on televisions and displays <i>Revised legislative proposal on waste Intensifying enforcement of waste shipment regulations Revised Fertilizer Regulations Proposed legislation reusing water for irrigation Standards for efficient recycling of e-waste, batteries and other complex products</i>	Legislative proposal on sustainable products Legislative proposal for consumer empowerment Right to repair Legislative proposal on green claims Revision of the Industrial Emissions Directive Circular Electronics and Common Charger Initiative Revision of the Directive on restrictions on the use of certain dangerous substances in electrical and electronic equipment New regulatory framework for batteries Restriction of intentionally added microplastics and measures on unintentional release Initiative to replace single-use plastics Regulatory framework for carbon removal certification <i>Revision of the rules on end-of-life vehicles Review of the rules on proper treatment of waste oils Revision of essential requirements for packaging and packaging waste Mandatory requirements on recycled plastic content and plastic waste reduction measures in packaging, construction materials and vehicles Waste reduction targets for specific streams EU harmonized model for separate waste collection Revision of the rules on waste shipment</i>
	Limits (emission limit values; quality standards; product or process standards)				
	Impact assessments				
	Permits Previous communications Responsible statements				
	Inspections				
Penalties (fines, withdrawal of permits or rights)					
NON-REGULATORY STRATEGIES AND POLICIES		voluntary	public	Exploring options for more coherent product policy Plastics strategy Evaluation and possible review of the contribution of the 2012 Bioeconomy Strategy to the CE <i>Waste-to-energy initiative in the framework of the Energy Union Measures aligned with SDGs to reduce marine litter Development of quality standards for secondary raw materials (especially plastics) Ensure coherence and synergies with bioenergy CE</i>	Policy framework for bio-based, biodegradable or compostable plastics EU Strategy for Textiles Strategy for a Sustainable Built Environment Leading efforts towards a global agreement on plastics Proposing a Global CE Alliance and initiating discussions about an international agreement on the management of natural resources
MARKET-BASED TOOLS	Financial, state aid and trade rules	mandatory	public	Knowledge base and support for Small and Medium Enterprises (SMEs) to replace hazardous substances Support for better use and training on green public procurement Key indicators for assessing the life cycle of a building and incentives for use Supporting Horizon 2020 biomass innovation Industry 2020 Initiative and CE in Horizon 2020 Outreach actions to encourage applications for EFSI funding and to support CE investment platforms Supporting Member States and regions to strengthen innovation through smart specialisation	Mainstreaming CE objectives in the context of the rules on non-financial reporting, and initiatives on sustainable corporate governance and on environmental accounting Integration of CE objectives into free trade agreements and EU external policy financing instruments Reflecting CE objectives in the revision of State Aid Guidelines environment and energy Support for the transition to CE (Action Plan for Social Economy, Pact for Skills, European Social Fund Plus...) Support through the Cohesion Funds, the Just Transition Mechanism and urban initiatives.
	Cap-and-trade	mandatory			
	Taxation (taxes, fees, allowances)	mandatory			
	Subsidies, state aid	voluntary			
	Deposit and return systems	voluntary			
	Green public procurement	voluntary mandatory			
				<i>Reward for returning old electronic devices</i> Mandatory criteria and targets for green public procurement. Mandatory reporting on Green Public Procurement Framework to reflect new policy priorities	

Findings

Mandatory Measures for Waste While Nudging and Self-regulation Prevail in Core Issues

Critical academic literature has questioned the consistency of the EU’s stated aims with the measures set forth in European plans to promote circularity. It has been compared with putting ‘old wine into new bottles’, because it merely updates the waste directives and recycling targets rather than seeking transformative change [6]; 996]. Some consider it a case of ‘words versus actions’ because of the gap between declarations and

Table 1 (continued)

INFORMATION MEASURES	Reports, studies, indicators, platforms	voluntary	public	<p>Development of a monitoring framework</p> <p>Analyse the possibility of proposing horizontal requirements on repair information provided in the context of eco-design</p> <p>Assess the possibility of an independent testing programme for planned obsolescence</p> <p>Assess the possibility of launching a platform with the EIB and national banks to finance the CE</p> <p>Open a network of technological infrastructures for SMEs to integrate advanced technologies into their production (information platform)</p> <p>Knowledge base and support for SMEs to replace hazardous substances</p> <p>After evaluation of current pilot programmes, explore the possible uses of the Product Environmental Footprint to measure and communicate environmental information</p> <p>Report on critical raw materials</p> <p>Develop key indicators to assess the life cycle of buildings and incentives for their use</p> <p>Targeted outreach and communication activities to assist Member States and regions in the uptake of Cohesion Policy funds</p> <p><i>Increase interstate cooperation to improve enforcement of waste legislation</i></p> <p><i>Initiative to transform waste into energy (COM, R&D aid).</i></p> <p><i>Chemical/waste interface study and traceability improvement</i></p> <p><i>Development of methodology and indicators for food waste, clarifying waste, food and feed legislation to facilitate the use of food waste for animal feed</i></p>	<p>Updating the CE Monitoring and develop additional resource use indicators, including consumption and material footprints</p> <p>Clarify how the Directive on restrictions on the use of certain hazardous substances in electrical and electronic equipment is linked to REACH and eco-design</p> <p>Improve measurement, modelling and policy tools to capture synergies between the CE and climate change mitigation and adapt these instruments for EU and national levels</p> <p><i>Harmonized information systems for addressing the presence of substances of concern</i></p> <p><i>Methodologies to detect and reduce substances of concern in recycled materials</i></p> <p><i>Scoping the development of further EU-wide end-of-waste and by-product criteria</i></p> <p><i>Improvement of measurement and modelling tools</i></p>
	Information about product or service specifications	mandatory/voluntary	public	<p>Improvement of raw materials information system</p> <p>Improved indication of food date marking</p> <p><i>Electronic exchange of waste shipment data and information</i></p> <p><i>Improved information exchange between manufacturers and recyclers of electronic products</i></p>	Non-legislative measures supporting the right to repair
	Rankings, guides, recommendations, good practices	voluntary	Public/private	<p>Guidance on the CE in best available practice documents (BREFs) for several industry sectors</p> <p>False green claims (guidance for the Unfair Commercial Practices Directive)</p> <p>Biomass best practices</p> <p>Engagement with stakeholders in the implementation of this Action Plan through existing fora in key sectors</p> <p><i>Mining waste management best practices</i></p> <p><i>Good practices in waste collection systems</i></p> <p><i>BREF guidelines water reuse</i></p> <p><i>Best practices for the recovery of critical raw materials from mining and landfills</i></p> <p><i>Pre-demolition assessment guidelines for the construction sector</i></p> <p><i>Stakeholder platform to exchange best practices on food waste</i></p>	
	Labels	mandatory/voluntary	public/private	Eco-label improvement (REFTI)	Labelling to facilitate separate waste collection
SELF-REGULATION	Technical standardisation	voluntary	private/public	European standards for material-efficient recycling of electronic waste, batteries and other relevant complex end-of-life products	
	Certification	voluntary	private	<p>Voluntary certification of waste streams and recycled materials</p> <p>Voluntary recycling protocol for construction and demolition waste</p>	Industry-led industrial symbiosis reporting and certification system
	Environmental audits	voluntary	public (EMAS)/private (ISO 14000)	Improving EMAS efficiency and uptake	

effective measures [5]. The CE strategy has even been labelled as ‘superfluous where the durability of products is curtailed by unregulated planned obsolescence’ [12]; 3].

From a legal point of view, the CE transition should lead to a new area of product law [15]; 1–15] or, from a more limited approach, an update of materials law as a sub-sector of environmental law [19], or directly to the disappearance of waste law [21]; 15]. Although ecological economics informs us that the second law of thermodynamics sets insurmountable limits and perfect recycling (0 waste) is impossible [51], the CE should only residually—if the pun is allowed—focus on waste [52]; 24].

It seems difficult to speak of a *paradigm shift* without a general regulatory umbrella or substantial modifications to the current legal system. The first relevant indicator of the conceptual limitations concerning the CE is that the European action plans [17, 18] to promote it have no binding legal value. Proposals for legal initiatives were scarce in the first action plan and only slightly more numerous in the second plan. The most

recent EU compliance reports COM [53]; 432 final] do not even mention the CE or related regulatory initiatives. Moreover, most of the measures foreseen in the two CE action plans (Table 1, in italics) are waste-related, revealing a limited, rather non-transformative version of the CE. There is no mention of a CE Framework Directive which could harmonize the focus of the sectoral measures that are subject to regulation and make the relevance attributed to this issue visible. The European Green Deal ([54], 640 final, 5), for example, has a ‘Climate Law’ that actually places this priority on the European agenda.

The instruments and measures for promoting the CE, located in the annexes of the two EU CE action plans, are indicative of the orientation and transformative capacity that can be expected. Alongside the conceptual debate [8]; 29 review up to 114 definitions], with its varying visions, ambitions and doubts about the current economic system [7]; 47; 55, exists another that questions the appropriateness of the instruments chosen to deliver it [6]; 996].

Table 1 provides a classification of the CE measures proposed in the two EU action plans. There, the crossed, sometimes blurred lines between instruments cannot be overlooked. They reflect the shift from classical public intervention towards soft formulas that resonate with the neoliberal paradigm. Public support is devoted to promoting economic, informative or even self-regulatory instruments in European environmental law tuned with the neoliberal drift (e.g. EMAS or the European Ecolabel are voluntary instruments promoted by European regulations with public support). The same instrument can also be implemented on a mandatory or voluntary basis. For example, the first CE action provided for green public procurement through voluntary measures, but the second plan acknowledges the limitations of this approach and proposes mandatory circularity requirements for public procurement. Similarly, there are both mandatory (e.g., energy) and voluntary (EU Ecolabel) product labels. Though public regulations exist for eco-design, the EU has also promoted the development of private technical standards.

The measures proposed in both plans are very uneven in scope. Like nesting dolls, other strategies or policies (bioeconomy, plastics, textiles, etc.) are proposed as measures to implement the CE, which will also have to be developed with their own specific measures. This slows down implementation of the CE and makes it difficult to verify what has really been achieved. In contrast to the broad scope of these measures, the Horizon 2020 programme and other funding instruments contain very specific measures such as financing pilot projects or individual studies on contentious issues (e.g. a report on critical materials; exploring the chemical/waste interface and how to improve traceability; a separate test programme to gather more information on premature obsolescence practices...). Also, behind allegedly general measures, very limited actions are put in place (e.g. improving food dating to avoid waste resulted just in a single market study⁵).

Many actions are stated in excessively vague or tentative terms such as ‘leading efforts towards reaching a global agreement on plastics’ or ‘scoping’ the development of further EU-wide end-of-waste and by-product criteria’, (Annex, CE Action Plan 2020). This makes it easy to claim that something has been achieved, even if progress is negligible.

Measures referring to end-of-life (waste, recycling, water reuse) continue to be a very relevant pillar of the two action plans. This challenges the idea of the CE as something completely new or a real paradigm shift (see Table 1, italics). Around 40% of the measures

⁵ https://circulareconomy.europa.eu/platform/sites/default/files/market_study_on_date_marking.pdf

in the first action plan and over 35% in the second address end-of-life for products and materials. Moreover, they constitute almost all the regulatory changes with mandatory targets and measures. However, they imply no sweeping changes, not even for waste-legislation. Instead, they serve as examples of *patching* and *layering* policies, which may facilitate incremental change but bring no significant economic and social transformation [6]. The words ‘review/revise’, ‘strengthen’ and ‘improve’ appear in most of the legal measures. The targets have indeed been tightened and updated in the existing rules, but this has not brought about a paradigm shift consistent with the official claims. The 2018 European waste regulatory package tightened up waste management operations, increased the level of commitment to preparing for reuse or recycling, introduced gradual limitations on landfill waste and improved some concepts (by-product, secondary raw material, municipal waste, non-hazardous waste, construction waste). However, the necessary establishment of new European end-of-waste and by-product criteria (one of the measures included in the 2020 action plan) to give new life to recycled materials has missed its 2021 deadline. Without such a harmonized approach, legal certainty is weakened by differing interpretations in Member States, waste trafficking is encouraged and high-quality secondary raw materials cannot be safely reused [41].

Many of the measures envisioned in the two plans—in fact, half the measures in the first plan—are purely informative (indicators, information platforms, specifications and labelling, good practice guidelines, etc.). The EU seems to assume that information *nudges* will work miracles and force businesses and consumers to transition to circularity [56]. The most far-reaching and cross-cutting information measures are mainly waste-related (exchange of information on the implementation of waste legislation or waste shipment, traceability of chemicals in waste, etc.) and measures that might have affected the entire value chain have also shifted towards waste. Consequently, the Monitoring Framework that measures CE achievements has opted for indicators that focus almost exclusively on waste [57].

End-of-Life New Regulations While Ecodesign, Consumption and Right-to-Repair Measures Strive to See the Light

Without going into a detailed assessment of the level of achievement of the objectives contained in the two plans (see 58, it can be stated that the regulatory measures are limited and very focused on the end-of-life for products and materials (fertilizers, single-use plastics, food or electronic waste, packaging, waste shipment, etc.). Provisions for regulatory changes increased somewhat in the second action plan, but implementation clearly lags behind the established timeframes (e.g. the legislative proposal due in 2021, to ensure ‘that all products entering the EU market become increasingly sustainable and stand the test of circularity’ was presented in 2022 (COM(2022) 142 final) and is still not approved). Measures such as the *right to repair* (planned for 2021, but not achieved) or those linked more to the production and consumption phases are included, but the regulatory objectives are mainly updates of waste and packaging rules. In fact, the most recent amendments to EU consumer law hardly seem to be in dialogue with the thrust of the CE [14].

Sectoral reforms of eco-design regulations in 2018 and 2019 (e.g. refrigerators, washing machines, light sources) addressed some necessary issues concerning the right to repair, but the regulatory process has watered down some of the initial objectives. Access to spare

parts information and repair instructions is limited to authorized repair technicians who may be required by the manufacturers to register and pay fees, thereby hindering independent and do-it-yourself repair activities. Proposals to facilitate disassembly operations have also been toned down to aim only at recycling instead of also facilitating repair. On the positive side, in almost all the revised rules the period of existence of spare parts was extended from the 7 years proposed in the initial drafts to 10 years in the adopted regulations. However, these only address capital goods with a long life span; eco-design standards are still pending for fast-use goods that generate a lot of waste (mobiles, tablets, computers, etc.) [5]; 347] and for all non-energy products.

Measures against planned obsolescence have been postponed to future revisions that will not begin before 2025. However, the EU Omnibus Regulation 2021/341 of 23 February 2021 represents a step in the right direction. It contains multiple amendments to all the eco-design regulations revised just two years earlier⁶ and introduces a provision to penalize obsolescence through software that distorts testing by market surveillance authorities. It also requires that the performance and energy consumption parameters listed in the declaration of conformity will not worsen after a software or firmware update. Though it only affects these product categories, this is probably the first time that European legislation has established binding rules to limit some form of obsolescence.

Main Market Instruments Are Unexplored

Paradoxical as it may seem, the market-based instruments so often referred to as the most appropriate solutions for bringing about change in economic operators are not very prominent either. There are no fiscal measures to boost the CE [60], even though the European Green Deal (2021, 4.20) considers ‘far-reaching’ fiscal reforms necessary for sending ‘the right price signals and providing the right incentives for sustainable behaviour by producers, users and consumers’.

As far as green public procurement is concerned, the second action plan finally talks about introducing mandatory circularity criteria from 2021 on, given the clear failure of the voluntary approach of the first plan (in line with the 2014 Procurement Directives). However, the reluctance expressed so far by procurement authorities to incorporate social or environmental criteria that take more than price into account leaves little room for optimism [61]. Most of the economic measures included in the two plans are subsidies of very restricted scope in terms of amount, objectives or participants.

Empowering Consumers Just Through a Lot of Information

Information measures make up the bulk of the two plans, especially the first one. These include the development of all kinds of indicators, creation of electronic platforms for the exchange of data or experiences, dissemination of good practices or doing studies to improve knowledge. Even ‘empowering consumers’, a main slogan of the second plan, seems closely linked to providing copious information (reparability data, ecological footprint indicators,

⁶ Regulations (EU) 2019/424, (EU) 2019/1781, (EU) 2019/1782, (EU) 2019/2019, (EU) 2019/2020, (EU) 2019/2021, (EU) 2019/2022, (EU) 2019/2023 and (EU) 2019/2024 are amended as regards ecodesign requirements for enterprise servers and data storage products, electric motors and variable speed drives, refrigeration appliances, light sources and stand-alone control gear, external power supplies, electronic displays, household dishwashers, domestic washing machines and domestic washer-dryers and refrigeration appliances with a direct vending function [59].

etc.) and hoping that those nudges will promote more sustainable and circular consumption choices and behaviour, although some studies argue otherwise [62]; 13; Horne, 2009, 181].

In fact, planned obsolescence, which is crucial to extending product durability, was just mentioned in the first action plan, not in the second, with an information measure of a very limited scope. The ‘assessment of the possibility of developing an independent testing programme for planned obsolescence’ will be carried out as a mere pilot project funded through Horizon 2020 running until 2023 (COM [63] 190 final, 4). Member States such as France are taking the lead in establishing regulatory measures that include sanctions for manufacturers who limit product’s durability.

Self-regulation in Key Issues

As part of the neoliberal drift, self-regulation plays a prominent role with relevant transversal measures that affect key aspects of circular transformation. Standardization bodies have been entrusted with the development of technical standards for eco-design. The first action plan (COM [17], 33 final, 6) emphasized the importance of technical standardization and the European Commission has mandated European standardization organizations⁷ to develop generic standards for the durability, reusability and recyclability of certain products. As a result of their work, eight standards have already been developed for energy-related products⁸, aiming to generate more than 20 standards. Industrial technical knowledge must be incorporated into circularity standards, but this should not prevent us from cautioning that the bulk of the regulatory apparatus is delegated to voluntary private standards developed by economic operators while advanced regulatory obligations for circularity in EU directives and regulations have been postponed. In fact, extending Ecodesign Directive to non-energy products was received with scepticism by the European Commission [19]; 251].

Self-regulation was already central in existing eco-design regulations and the most recent reforms (2019) reinforced this tendency. The governance model of Directive 2009/125/EC of 21 October 2009, which establishes a framework for setting eco-design requirements for energy-related products, revolves around voluntary instruments, self-regulation and direct corporate involvement in the regulatory process. Manufacturers participate in an Advisory Forum that plays a decisive role in defining product categories and setting eco-design standards. Self-regulation is encouraged ‘as an alternative to an implementing measure in the context of this Directive’ (Annex VIII), which states that ‘priority should be given to alternative courses of action, such as self-regulation by industry where such action is likely to deliver the policy objectives faster or in a less costly manner than mandatory requirements. Legislative measures may be needed if market forces fail to evolve in the right direction or at an acceptable speed’ (Recital 18). EMAS and ecolabelling, two voluntary tools, can therefore serve as an alternative to mandatory eco-design regulations. In contrast, in the USA, the debate on the *right to repair* led the US Congress to commission a report from the Federal Trade Commission. The report confirmed the need to make regulation and enforcement more robust and expressed scepticism about the effectiveness of self-regulation, given the scarcity of successful precedents. It

⁷ <https://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.detail&id=564>

⁸ https://standards.cencenelec.eu/dyn/www/f?p=205:32:0:::FSP_ORG_ID,FSP_LANG_ID:2240017,25&cs=10B7B067CC7107748A52C1C034BB4CFD3. ISO also launched a standard-setting process for circularity: <https://www.iso.org/news/ref2402.html>

also highlighted contrasts between current US standards and the new European ecodesign standards for energy-related products, noting particularly how certain parts and repairs are only accessible through authorized technicians in Europe [50]; 6–7, 49].

Compliance with eco-design requirements is controlled through market surveillance, a self-assessment by which the manufacturer or importer is allowed to use the CE marking. It is encouraging that Regulation (EU) 2019/1020 of 20 June 2019 on market surveillance and product conformity, which establishes the control structure for placing ‘compliant products fulfilling requirements providing a high level of protection of public interests’ on the EU market, has introduced circularity-related concerns among the monitorable risks. However, to prevent placing products on the market when ‘the duration of use and, where applicable, its putting into service, installation and maintenance requirements’ (Art.3)—a clear pro-circular feature—those conditions would have to be ruled in harmonized legislation (by product category for all EU countries). Non-compliance with the public interests protected by these conditions would likewise have to occur ‘to a degree which goes beyond what is considered reasonable and acceptable in relation to their intended purpose or under normal or reasonably foreseeable conditions of use of the product in question’.⁹

Bearing in mind that the market surveillance mechanism is random and not systematic, many of the products placed on the market are not subject to surveillance that might entail sanctions or market withdrawal. EU legislation refers to administrative controls as ‘burdens’. According to Recital 32 of Regulation (EU) 2019/1020, ‘given that controls may represent a burden for economic operators, market surveillance authorities should organize and conduct inspection activities on a risk-based approach, taking the interests of those economic operators into account and limiting said burden to what is necessary for the performance of efficient and effective controls’. The bulk of risk analysis to ensure that products comply with certain standards before they are placed on the EU market is a self-monitoring procedure and manufacturers can—but are not obliged to—use harmonized standards from standardization organisms to generate a ‘presumption of conformity’ or refer to other technical specifications. Based on this assessment, they can use the EU marking without ex-ante public control. In some cases, they also need to be certified by an independent conformity assessment body. Thus, the architecture for controlling compliance with the eco-design requirements of products entering EU markets relies heavily on self-regulation and conformity compliance functions carried out by private actors. The public control structure is subsidiary and aimed at correcting non-compliance that is detected by random inspections. Self-regulation is also the means chosen to encourage industry to set up information exchange platforms that promote industrial symbiosis (2nd Action Plan) or voluntary certification of material and waste streams (1st Action Plan).

The Choice of Instruments Might Hamper the Transformative Potential of the CE

In short, the actions intended to move the European Commission towards a CE reflect a progressive loss of momentum in European environmental policies. New legislative initiatives are decreasing and tend to focus on adapting previous texts. The REFIT dynamics of simplification and regulatory slimming have generated about as much regulatory

⁹ Annex I of the Regulation contains Union harmonization legislation comprising up to 70 categories of substances and manufactured products other than food, feed, medicinal products for human and veterinary use, live plants and animals, products of human origin and products of plant and animal origin directly related to their future reproduction.

improvement as a deregulatory strategy [64]. Meanwhile, the preponderance of end-of-cycle measures and information and self-regulation instruments in the two action plans indicate that the EU is opting for a light version of CE. Its transformative potential is heavily subordinated to, and dependent on, private decisions of manufacturers and consumers but lacks regulatory momentum to address key issues (right to repair, extending ecodesign to non-energy products, interface chemical-product-waste regulations, pre-market extended producer responsibility).

The limited role of command-and-control instruments is combined with a CE management structure that gives companies great influence in core subjects (technical standardization, ecodesign committees, market surveillance mechanisms, etc.), thus reflecting the technocratic soul of the EU. In fact, after their initial reluctance towards CE, companies became actively involved in developing standards when they realized that it was impossible to avoid them [65]; 141]. Clearly, the participation of manufacturers, distributors and consumers is essential for limiting the consumption of raw materials, extending the life of products or keeping materials in use. In the current institutional structure, however, the central role of economic operators in a wide range of spaces and core forums contrasts rather sharply with the limitations on public regulatory tools to boost circularity.

As a matter of fact, those risks have been also noticed by the Commission in different working documents. On one side, the dangers of excessive weight of certain corporate interests in the European standardisation decision-making processes seems that will lead to reforms of existing Regulation (EU) No 1025/2012 to limit the uneven voting power of corporations when developing standards at EU request (COM (2022) 31 final, 4). On the other, the second CE Action Plan confirms that the choice of instruments is crucial and points out the limited impact of some voluntary measures: ‘instruments such as the EU Ecolabel or the EU Green Public Procurement criteria are broader in scope but have reduced impact, due to the limitations of voluntary approaches’ (COM [2] 98 final, 3). It should be noted that the EU Ecolabel (which was to be bolstered under the first action plan) has only approved about 2000 licences in thirty years¹⁰, almost a quarter of which were for tourism services and not for goods. Since 1993, the EMAS has not managed to gather more than 4000 organizations¹¹, almost a thousand of them administrations and educational services (which are indifferent to a circular product policy). Mandatory green procurement criteria and green taxation measures arising from the 2nd CE Action Plan and the Green Deal are far from scratch period in a clear sign that far reaching market instruments with transformative potential are not in the agenda.

Some authors argue that for the CE to advance with the pace and ambition that its advocates expect, it needs to challenge the orthodoxy of neoliberal environmental governance and existing market relations by rethinking instruments such as standardization [66]; 1266]. The question is not so much whether the CE is a ‘good’ policy but whether the current European governance system can provide the precise public tools to implement it. Fitch-Roy et al. [6]; 996] expressed no great optimism about this in their analysis. Non-mandatory measures, corporate intervention in regulatory decisions, private standards, self-regulation and self-assessment of compliance largely displace public regulation and control. This regulatory retrenchment coexists with an unrestricted reliance on consumers’ behaviour to drive change, aided by exponentially increasing product information tools.

¹⁰ https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel-home/business/ecolabel-facts-and-figures_en

¹¹ https://ec.europa.eu/environment/emas/emas_registrations/statistics_graphs_en.htm

Discussion: Soft Circularity Measures vs. Strong and Untouched Economic Regulations

We have seen how the choice of instruments to promote circularity revolves predominantly around information and voluntary mechanisms to trigger ‘consumer empowerment’ and company involvement. In other words, it relies on the eventual transformative capacity of private decisions. An analysis of the regulatory framework that preserves the core of the European economic project and neoliberal globalization only accentuates the doubts raised by this strategy. Nothing seems to have significantly altered the existing balances. Neither sustainability nor circularity seems to have entered ‘non-environmental policymaking sectors such as industrial production, trade, energy and agriculture where the upstream and downstream determinants of unsustainable resource use decisions invariably reside’ [6]; 996). Private law, which is the basis of business law, has ignored sustainability issues [13]; 8]. Although the second CE action plan concluded that ‘the transition to the circular economy will be systemic, deep and transformative, in the EU and beyond’, European trade policy, competition and state aid rules and consumer and industrial property regulations show that a systemic change permeating economic legislation remains still a distant horizon. The regulatory spheres that underpin the European and global economic, trade and commerce model seem impervious to social or environmental considerations.

Since the approval of the CE action plans, various statements by European authorities have revealed that EU economic law rationale remains rather immune to sustainability issues and that systemic changes are unlikely. The European Commission itself questions the monitoring and deliberative function of the World Trade Organization partly because environmental degradation or climate change are considered ‘taboo’ [67] Annex COM [48]; 66 final, 2]. This implies a difficult path for circularity in globalized value chains. The European Commission’s preclusion or clear opposition to greening competition law, along with its unreserved support of industrial property law and consumer legislation that seeks to facilitate trade with little regard for its environmental impacts, are examples of neoliberal encapsulation and sterilization of CE ambition.

Trade Agreements and the WTO

World trade is not going green. More than two-thirds of world trade happen through global value chains where production often crosses several borders before finally being assembled ([68], 1) or consumed. It is difficult to achieve circularity if changes do not permeate the entire value chain. In legal terms, this globalized reality requires globalized rules with a circular perspective at all stages (extract-manufacture-buy-use-dispose) that internalizes both pollution costs at origin and long-distance transport emissions. However, WTO trade rules and trade agreements are nowhere near to incorporating environmental or sustainability considerations, let alone circularity issues.

Regulatory cooperation introduced in the most recent trade agreements allows business to participate in rule-setting through institutionalized consulting mechanisms and even to lower stringent European/national environmental standards for products. Regulatory cooperation began to gain strength with early warning mechanisms and evolved from setting guidelines and institutionalizing cooperation organisms to embedding binding mechanisms into free trade agreements [69]; 472, 474]. This goes much further than tariff agreements because it seeks homogeneous trade regulations that jeopardize domestic legislative sovereignty and social and environmental values, as the German Environment Agency [70] pointed out.

Moreover, sustainability in EU trade agreements has a promotional rather than a sanction-based approach, as was demanded by the European Parliament and some Member States [71]; 25). The European authorities themselves recognise that the sustainable development provisions in free trade agreements have very limited impact [49]. However, this observation has not led to a change of approach, as France and the Netherlands requested in their 2020 ‘Non-paper on trade, social economic effects and sustainable development’¹². They asked for measures to ensure compliance with environmental commitments through incentives such as tariff reductions, linking agreements to the adoption of measures for effective compliance with the Paris Agreement against climate change and improved mechanisms for reporting non-compliance. The recent amendment of the Enforcement Regulation (Regulation (EU) 2021/67 on the exercise of the Union’s rights to apply and enforce international trade rules) to overcome the effects of the WTO dispute settlement crisis does not include mechanisms to reinforce sustainability commitment breaches [71]; 40]. In fact, references to the CE or provisions to improve circularity in trade are still scarce and limited in the agreements being signed or negotiated by the EU [72]; 24–25].

Competition Law

Competition law is the distinctive area of EU law on which the single market is based. However, the Directorate General for Competition and the competition authorities of some Member States (Germany, Czech Republic, France, Sweden) remain ‘sceptical’ about whether competition law should play a role in promoting sustainability [73, 74]; 517]. Meanwhile, consumer associations and companies perceive competition law as a clear barrier to pursuing sustainability objectives through agreements along the value chain or to achieving economies of scale [75]; 144–5]. The current version of the EU Interpretative Guidelines on horizontal agreements implementing Art. 101 TFEU does not include a chapter on environmental agreements as the 2001 version did, confirming the economic shift of current competition law, which alienates it from societal concerns [24]; 127, 130]. The European Commission is currently revising its Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements. This could be an opportunity to expand the interpretative focus for assessing exemptions to include non-price variables that promote sustainability and circularity [76]; 8–9]. Gerbrandy [23]; 199] believes it unlikely that the interpretation of competition law by the European Commission and national authorities will expand from an economic conception of ‘consumer welfare’ to include non-economic values. Transition to a CE and a sustainable organization of society would challenge the very foundations of market law.

The legal uncertainty generated by the absence of criteria governing the admissibility of environmental agreements between companies, together with ‘conservative advice’ from law firms that are mindful of the restrictive criteria of the competition authorities [77], leads many companies to renounce collaborative strategies that could contribute to the environmental challenges identified in the European Green Deal [75]; 144]. The Commission places ‘consumer benefits’ at the centre of its assessment of eligibility conditions for agreements, but does not take into account future benefits (e.g. material savings, reduced pollution) or benefits elsewhere (e.g. less pollution where raw materials are extracted). This purely quantitative

¹² <https://www.permanentrepresentations.nl/documents/publications/2020/05/08/non-paper-from-nl-and-fr-on-trade-social-economic-effects-and-sustainable-development>, <https://nl.ambafrance.org/Non-paper-from-the-Netherlands-and-France-on-trade-social-economic-effects-and>

assessment does not evaluate the more qualitative aspects of environmental improvements and benefits that extend beyond consumers to benefit society [24]; 132].

Such a narrow conception of competition law hinders cooperative innovation strategies, environmental improvement agreements along the value chain, industrial symbiosis and the implementation of deposit and return systems for packaging, to give a few examples. Cases such as the agreement between government, farmers and trade to improve the food quality of chickens [78] in the Netherlands are pointed out as ‘deterrent examples’ for companies [75] 145]. The initiative was vetoed by the competition authority, based on a rigid interpretation that took only price into account when considering what was beneficial for consumers. Other cases reveal also how environmental solutions find difficulties to overcome rigid competition rules. Even if European competition authorities have sometimes admitted, for actors with political weight such as Germany, more flexible interpretations [79]; 46] when implementing extended producer responsibility systems for waste, in contrast, the Austrian ‘green dot’ system was sanctioned for anti-competitive practices and the Spanish Competition Authority also warned in a report [80]; 12–17] on the same issue.

Competition rules don’t favour second CE action plan’s proposal (2020,4) of exploring complementary legislation to ‘incentivize “products as services” or other similar models where producers retain ownership of the product or responsibility for its performance throughout its life cycle’. Previous cases before state and European competition authorities and before the CJEU show inconsistencies. Limitations on access of independent repair shops’ repair activities and spare parts might be seen as territorial restrictions leading to fines for anticompetitive practices (Vaillant Group, repair of gas boilers CNMC 2019)¹³, but there have also been cases in which the CJEU did not find anti-competitive practices when independent repairers were prevented from accessing spare parts (Case T-712/14 Confédération européenne des associations d’horlogers-réparateurs (CEAHR) vs. European Commission, CJEU 23 October 2017)¹⁴.

In short, despite the resistance of European competition authorities to include sustainability issues in their assessments, aspects linked to collaborative agreements, the right to repair and new models of consumption and ownership should lead to a circularity-attuned redefinition of competition law.

Industrial Property

Industrial property also obstructs the fight against planned obsolescence and any ambitious push for repair. Companies have lobbied intensively against the right to repair—a flagship measure of the second CE action plan—and seek to protect their interests under industrial property law in various ways. Branding all parts of their devices, including the tiny ones, makes it difficult to replace them with parts from other providers. The tech giant Apple uses this strategy to ensure control over its products and prevent repair by unauthorized technicians. It has denounced non-brand components as counterfeits in the highest courts;

¹³ <https://www.cnmc.es/prensa/multa-reparacion-calderas-cnmc-20191126>

¹⁴ <https://curia.europa.eu/juris/document/document.jsf?jsessionid=07CA73772BD75E85F63BC7ADA DAD766AE1?text=&docid=195810&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=219510>

a case was even decided by the Norwegian Supreme Court in June 2020¹⁵. Companies also seek to block the import of reconditioned parts¹⁶, which limits product durability and complicates repairs. There is also strong corporate activism against the attempts of several US states [81] and the European Commission¹⁷ as well to regulate the right to repair.

Companies also hinder repair work by preventing ‘handyman’ consumers or independent repair technicians from accessing disassembly information, product instructions or the tools needed for disassembly or repair. Here again, intellectual property issues and allegations of safety risks from product mishandling make repair more difficult. The many recent EU eco-design regulation reforms show how this has prevailed in limiting access to information for a wider range of repair workers. Such restrictions undermine the objectives of repairing, remanufacturing, refurbishing or recycling products. In a globalized market, it is difficult (and costly) for manufacturers to provide repair services for all their products worldwide and using intellectual property barriers to prevent independent repair can turn products with a potentially longer life span into unusable waste.

Similarly, patents are being used to prevent access to software that enables product repair and refurbishment or to directly protect programming that shortens the life of products and accelerates planned obsolescence. In a ground-breaking decision concerning *Impression Products Inc. v. Lexmark International Inc.* (30 May 2017)¹⁸, in which Lexmark sought to prevent reuse and refilling of its cartridges by other companies, the US Supreme Court ruled in favour of patent exhaustion once the product is sold.

With no hint of criticism or reflection on these issues, in the second CE action plan, the European Commission promotes ‘an intellectual and industrial property strategy that will ensure that intellectual property is defended as a key factor in boosting the circular economy and the development of new business models’ (COM [2] 98 final, 20).

Consumer Law

Striking as it may seem in the EU, consumer empowerment and construction of the right to repair (R2R)—the stars of the second CE action plan—had little impact on consumer legislation that was being revised by the EU at the same time. The approval of directives 2019/770, 2019/771 and 2019/2161 confirms that consumer law approaches sustainability with a ‘light touch’ [82]; 230]. It nudges consumers to change their lifestyles but does not force them to reduce consumption through mandatory rules that discourage unsustainable or misleading practices. The European Commission screening of commercial websites in 2021¹⁹ concluded that half of the green claims were unfounded (*green washing*). However, the sustainability section in the new Guide on the interpretation and application of Directive 2005/29/EC on unfair competitive practices with consumers (December 2021)²⁰ shows how easy it is to make misleading environmental claims in the absence of any particularly dissuasive regulatory provisions.

Consumer legislation could play a decisive role in encouraging more circular behaviour, given that Directive 2011/83/EU of 25 October on consumer rights is a maximum harmonization directive which generally does not allow Member States to

¹⁵ <https://repair.eu/news/apple-crushes-one-man-repair-shop/>

¹⁶ <https://repair.eu/news/apple-uses-trademark-law-to-strengthen-its-monopoly-on-repair/>

¹⁷ <https://repair.eu/fr/news/apples-internal-emails-prove-theyre-conflicted-about-repair/>

¹⁸ <https://supreme.justia.com/cases/federal/us/581/15-1189/>

¹⁹ https://ec.europa.eu/commission/presscorner/detail/en/ip_21_269

²⁰ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC1229\(05\)&from=ES](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC1229(05)&from=ES)

introduce different provisions. However, its provisions do not combine adequately with sustainability objectives. In relation to the supply of goods, for example (Art. 18), it does not prevent aggressive e-commerce competition practices such as express deliveries, deliveries to wherever the consumer chooses (last mile delivery) or deliveries of several goods separately (basket splitting), which impact the environment considerably by increasing emissions [14]. Terryn and Van Gool [83] are critical about the regulation for passing on risk (Art. 20) and the right of withdrawal (Art. 9–16). While it is very favourable to consumers (in terms of deadlines, possibility of handling the goods, etc.), it means that consumers do not bear the environmental costs of failed deliveries and can return goods purchased long distance too easily. They suggest solutions for a sustainable approach that include extending the exceptions to the right of withdrawal, limiting the withdrawal of goods already used, making it compulsory to provide information on the impact of the different delivery options, prohibiting free returns or removing the mandatory nature of this right. Modulation and extension of legal guarantee periods according to the type of good purchased (a fridge is not the same as a headset) or a remedy hierarchy in relation to repair (legislation should prioritize repair of a defective new product over replacement) might also provide greater circularity in regulatory solutions.

The legal changes in the areas of law that shield the European economic project are outside the intended systemic change that an ambitious conception of the CE should represent. There even seems to be strong resistance to circularity and sustainability forcing a redefinition of the exclusively economic logic that has been behind trade, competition or intellectual property policy in the past decades. Similarly, rethinking consumption patterns for sustainability requires a change in consumer legislation. Transitioning to a CE 'is not only a question of environmental policies; it will also require a reassessment of all public policies and investments, and a fundamental reform of the economic model as a whole' [84]; 219].

Conclusions

It does not seem possible for the CE to bring about systemic change if the legal toolbox is limited to revisions of existing rules (many of them 'end of life' measures) while binding measures are renounced and the economic rules that support neoliberal globalization and unsustainable production and consumption patterns are left untouched. This approach is consistent with the prevailing technocratic concept of CE [5]; 350; 7. The resistances to permeate core economic regulations with sustainability concerns seem to confirm that 'if the current consumption culture will not change, CE will remain as a technical tool that does not change the course of the current unsustainable economic paradigm' [85]; 43].

An expression of legal commitment to the CE should not lead just to indicative COM documents as the two Action Plans 2015, 2020 are, but to a binding piece of legislation that establishes the institutional architecture, principles and mandatory objectives for circularity while providing for transversality in all EU policies. Most of the measures in the two CE action plans rely on soft law. Voluntary, informative instruments, self-regulation and private standards take the lead and the weight of change

apparently rests on consumer ‘empowerment’. This greatly curtails the transformative potential of the CE. As the EU Commission observed in the second CE action plan, we have little evidence of significant sustainability impact from voluntary tools and non-binding commitments (ecolabel, EMAS, green public procurement). The United States Federal Trade Committee had arrived at the same conclusion when it called for regulations to support the right to repair. More recently (COM(2022) 31 final), the EU Commission has expressed concern on big corporations capacity to determine the standardisation agenda.

A transformative CE approach requires shifting measures towards prevention and the upstream stages of the value chain (ecodesign, production, consumption). The long list of pending legislative changes has been mentioned and postponed in European Commission documents on different occasions. Sectoral standards should move towards mandatory criteria to promote more circular production and consumption or directly reduce consumption patterns. The proposal (COM(2022) 142 final) to generalize ecodesign rules to all range of products should make a clear step for mandatory durability and reparability criteria. Consumer regulations should incorporate circularity (deadlines and scope of legal guarantees, preference for repair, penalizing behaviour that increases emissions, etc.). Public procurement should finally introduce mandatory circularity criteria. The interaction between hazardous substances legislation and product and waste legislation needs to be legally addressed. Criteria with environmental and health safeguards need to be developed for the end-of-waste status. Extended producer responsibility should be revised to require preventive measures rather than simply financing waste collection.

Claiming a paradigm shift with hardly any substantial regulatory changes or public command- and-control instruments to support transformation of production and consumption phases seems like wishful thinking. Meanwhile, the EU’s orthodox interpretation of prevailing market laws in areas such as trade agreements, competition, intellectual property or consumption hinders ecological transition. Socio-environmental concerns and legally binding public tools to boost circularity have given way to self-regulation, nudging, private standardization, private law and corporate regulations that mainly protect private/business interests and might be slowing the path to a sustainable transition.

Some Member States, along with internal EU documents and critical literature, show signs of resistance to integrating circularity at the heart of the European Economic Constitution and the economic policies protected by private law. The choice of measures and the types of instruments in the two CE action plans reveal a great gap between the grandiloquent talk of systemic change and the bold facts. The CE must be more than a refurbished waste law. An ambitious result requires transversality with other policies, different instruments and public momentum proportional to the commitment.

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Declarations

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