

SUSTAINABLE AND CLIMATE-FRIENDLY PRODUCTS: WHAT ROLE IS THERE FOR PRODUCT STANDARDS?¹

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Abstract: The legal regulation of products within the European Union has witnessed significant developments over time. Originally driven by the imperative to remove barriers to the free movement of goods, it gradually incorporated environmental considerations, albeit to a limited extent. However, the importance of environmental requirements for products is gradually increasing and the effort to ensure that products placed on the market are sustainable and climatefriendly is gaining momentum. This article delves into the fundamental aspects of regulating products in the EU through the establishment of standards. It offers an analysis of the main trends of European standard-based product policy from a historical perspective and discusses various general contemporary issues of product standard-setting in the view of ensuring a high level of environmental protection.

Keywords: EU product policy; product-oriented environmental law; sustainable products; climate-friendly products; standardsetting; ecodesign; life cycle thinking; New Approach to technical harmonisation

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1. THE IMPORTANCE OF PRODUCTS AND THEIR REGULATION

Products of all kinds, industrial, consumer, or other, generally play a fundamental and irreplaceable role in the daily lives of everyone. Products are the source of prosperity of our society, they allow us to fulfil our basic needs as well as enhance the quality of life. Products (or goods) are the backbone of economies worldwide. They are an expression of who we are and how we live. By their very nature, they are supposed to help us interact with the world which surrounds us. In many cases, products also shape and change our surroundings and the environment we live in. They are meant to serve the benefit of individuals. However, they are often also a source of positive and – more importantly – negative impacts on the environment, human health, and other public goods as well as individual rights, including the right to a healthy environment. These impacts can come from various phases of the products' life cycle: from the extraction of natural resources, through the actual production and manufacturing, distribution,

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use, maintenance, modification, and repair up to the end-of-life phase of the product. According to recent studies, the environmental impacts of EU consumption significantly surpass the safe operating boundaries of planet Earth.² Therefore, products bring a significant benefit to people on the one hand, but on the other hand, they cause significant harm to society. We should therefore strive to minimise the negative impacts of products while maintaining their benefits to the greatest extent possible.

In an era marked by growing environmental awareness³ and the imperative necessity to mitigate and adapt to climate change, the need for sustainable and climate-friendly products is obvious. Products may be considered as sustainable as long as all the impacts linked to the whole life cycle of products are such that they meet the needs of the present without compromising the ability of future generations to meet their own.⁴ A balance must be struck between the products' economic, environmental, and societal impacts.⁵ In light of the current situation and prospects,⁶ special attention should be paid to the impacts on climate change and the ability of the society to adapt to climate change. Sustainability, along with climatefriendliness,⁷ shall be among the main objectives of contemporary product policy. These general and rather abstract goals, expressly recognised by the Treaty on European Union⁸ and the Treaty on the Functioning of the European Union (TFEU),⁹ require further specification and definition by way of

² SALA, S. – CRENNNA, E. – SECCHI, M. – SANYÉ-MENGUAL, E. Environmental sustainability of European production and consumption assessed against planetary boundaries. *Journal of Environmental Management*. 2020, Vol. 269, p. 110686.

³ According to a 2022 survey of more than 19,100 respondents across 28 countries, 50% of consumers say they are willing to pay a premium for sustainable brands and 62% of consumers say they are willing to change their purchasing habits to reduce environmental impact. See HALLER, K. – CHEUNG, J. – WALLACE, M. – GUPTA, S. *Research Insights. Consumers want it all: Hybrid shopping, sustainability, and purpose-driven brands* [online]. IBM Institute for Business Value, 2022 [cit. 2023-09-30]. Available at: <https://www.ibm.com/downloads/cas/YZYLMLEV>.

⁴ *Report of the World Commission on Environment and Development: Our Common Future* [online]. World Commission on Environment and Development, 1987, p. 16, para. 27 [cit. 2023-09-30]. Available at: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>.

⁵ FÜHR, M. – SCHENTEN, J. Sustainable production and consumption (SPC). In: KRÄMER, L. – ORLANDO, E. (eds.). *Principles of Environmental Law*. Cheltenham: Edward Elgar Publishing, 2018, pp. 125138.

⁶ LEE, H. – ROMERO, J. (eds.). *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Intergovernmental Panel on Climate Change, 2023. In: *ipcc* [online]. [cit. 2023-09-30]. Available at: <https://www.doi.org/10.59327/IPCC/AR6-9789291691647>.

⁷ In this article, I am using the terms “climate-friendly” and “climate-friendliness” which have no universally accepted definition. Nevertheless, they are useful for the purposes of this article and have no better alternative. Climate-friendly products can generally be understood as products whose impacts on climate change were considered and intentionally reduced, e.g., by using materials with lower carbon footprint for manufacturing or by increasing the energy efficiency of a product. Climate-friendly products may therefore contribute to sustainability, as long as the climate-friendliness is high enough. Terms “climate-neutral” and “climateneutrality” also exist but they have a specific, different meaning [see Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (“European Climate Law”), CELEX: 32021R1119].

⁸ See preamble and Article 3(3) and (5), Article 21(2)(d) and (f) of the Treaty on European Union, CELEX: 12016M/TXT.

⁹ See Article 11 and Article 191(1) of the Treaty on the Functioning of the European Union, CELEX: 12016E/TXT.

more concrete goals in order to be able to monitor progress. This brings us to the important questions of how to define such more concrete goals and how to achieve them.

One might argue that the setting and definition of policy goals is a political question¹⁰ which it certainly is, at least to some extent. Nevertheless, it should be kept in mind that politics in the European Union (EU) always take place within a certain legal framework which steers discussion and decision-making. Law and legal regulation also play a crucial role in influencing and modifying the behaviour of individuals and corporations in order to achieve the specified policy goals. That does not mean that law is the only instrument to pursue the objective of minimising the negative impacts of products. An appropriate mix of legal, economic, technical, technological, and other measures is necessary to protect the environment.¹¹ Legal regulation however occupies a specific place among all instruments because all other instruments – just like in the case of political decision-making mentioned above – are implemented within a certain legal framework, which sets conditions and limits for them.

The legal regulation of products in the European Union [or back then in the European Community (EC)] has a relatively long history. Originally, however, this legal regulation was primarily motivated by the removal of barriers to the free movement of goods. Only later did it gradually begin to include some environmental considerations, but to a rather limited extent. Environmental law and policy historically focused more on industrial processes rather than on the products which were the results of such processes.¹² Only in recent years have efforts been strengthened for the adoption and implementation of a complex and comprehensive product policy which will take due account of all the impacts of the entire life cycle of products on the environment.

It is in this context that this article discusses some of the fundamental questions of regulating products in the EU by setting standards for them. Product standards can be understood as conditions which products must fulfil so that they can be lawfully placed on the market and where, at the same time, the fulfilment of the conditions is not subject to *ex ante* control by public authorities.¹³ To be able to understand the current state of EU standard-based product policy, we must understand its historical development. Thus, the article begins by analysing the main trends of EU/EC standard-based product policy in a historical perspective. This section is followed by a discussion of whether product standards belong to market policy or environmental policy. Next, the article deals with how product standards relate to other policy instruments and what types of standards might be adopted specifically for products in view of pursuing sustainability and climate-friendliness and what should be kept in mind in the process of standard-setting. It should be noted at the outset that the article, due to its scope,

¹⁰ BUTLER, G. In Search of the Political Question Doctrine in EU Law. *Legal Issues of Economic Integration*. 2018, Vol. 45, No. 4, pp. 329–354.

¹¹ An appropriate mix of various regulatory measures, i.e., regulatory pluralism, is necessary as well. See GUNNINGHAM, N. Environment Law, Regulation and Governance: Shifting Architectures. *Journal of Environmental Law*. 2009, Vol. 21, No. 2, pp. 200–202.

¹² MALCOLM, R. Ecodesign Laws and the Environmental Impact of our Consumption of Products. *Journal of Environmental Law*. 2011, Vol. 23, No. 3, pp. 490–491.

¹³ OGUS, A. *Regulation: Legal Form and Economic Theory*. Oxford: Oxford University Press, 2004, p. 150. The concept of regulatory standards is discussed in more detail further below.

deals primarily with the fundamental questions of environmentally oriented product standards as such and their setting, and not with other product policy measures (e.g., labelling, taxation). The article is not meant to be a detailed analysis of one piece of legislation but rather a broad legal discussion.

2. THE MAIN TRENDS OF EU/EC STANDARD-BASED PRODUCT POLICY IN A HISTORICAL PERSPECTIVE

A certain form of product policy dealing with product standards (or requirements)¹⁴ has always been at the very core of European integration. From the very beginning, one of the main goals of European integration was the creation of a common market based on the free movement of goods, people, services, and capital.¹⁵ The free movement of goods was to be ensured by the elimination, between Member States, of customs duties and of quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect.¹⁶ Already back then in the 1950s when the European Economic Community was founded, each Member State had adopted certain requirements for various products in its national law. The aim of these requirements was very often the protection of human health against hazardous properties of products. However, the safety requirements and other product requirements in individual Member States differed. And not only the requirements for the products themselves differed, but also the groups of products which were subject to regulation. As a result, this created significant barriers to the free movement of goods between Member States, and thus barriers to the creation of a common market. Product requirements would usually constitute “measures having equivalent effect to quantitative restrictions”, as foreseen by the founding treaties of the European integration.¹⁷ It was therefore the task of the institutions of the European (Economic) Community to remove these barriers. This happened in two ways: judicial and legislative.

As for the judicial way, the Court of Justice played an important role. The Court of Justice is a judicial body which, with regard to the division of powers and the principle of delegation of powers, could not and cannot create its own harmonised rules for products which would have effects on the territory of all Member States. However, the Court of Justice made a significant contribution to the free movement of goods in another way: by introducing the doctrine of “mutual recognition”. The foundations of this doctrine were laid by the Court of Justice in the famous *Cassis de Dijon* case where

¹⁴ The terms “product standards” and “product requirements” are used interchangeably in this article. Regulatory theory often uses the term “standards” while legislation tends to give preference to the term “requirements”.

¹⁵ See e.g., ENCHELMAIER, S. Free Movement of Goods: Evolution and Intelligent Design in the Foundations of the European Union. In: CRAIG, P. – DE BÚRCA, G. *Evolution of EU Law*. 3rd ed. New York: Oxford University Press, 2021, pp. 546–578.

¹⁶ Article 3(a) of the Treaty establishing the European Economic Community, CELEX: 11957E/TXT.

¹⁷ In its seminal case, the Court of Justice found that “[a]ll trading rules enacted by member states which are capable of hindering, directly or indirectly, actually or potentially, intra-Community trade are to be considered as measures having an effect equivalent to quantitative restrictions”. See judgement of the Court of Justice of 11 July 1974, *Dassonville*, Case 8/74, para. 5.

the Court found that a product lawfully produced and marketed in one Member State may generally be placed on the market in all other Member States.¹⁸ The principle of “mutual recognition” was not absolute and Member States have always been allowed to derogate from it and restrict or prohibit the free movement of goods in cases justified by reasons expressly recognised by the founding treaties of European integration¹⁹ or mandatory requirements recognised by the Court of Justice,²⁰ within the limits of the principle of proportionality.²¹ But it still played a crucial role in the creation of a common market.

The doctrine of “mutual recognition” could apply only in those areas in which product requirements were not harmonised at the European level. This effectively meant that individual Member States were to be the main creators and actors of product policy in Europe. It was therefore up to them what product requirements they would introduce in their national legal orders and to what extent these requirements would take environmental protection into account.²² However, it should be noted that environmental protection in law only began to be established basically at the beginning of the 1970s.²³ Therefore, in the early days of European integration, ecological requirements for products practically did not appear.

The second way to remove obstacles to the free movement of goods in the form of differing product requirements was the adoption of legislation at the European level which would harmonise product requirements for certain product groups. However, this was easier said than done.

After adopting several individual pieces of harmonising legislation, the Council of the European Communities adopted a resolution in 1969 drawing up a programme for the elimination of technical barriers to trade in industrial products.²⁴ This programme was supposed to bring about great progress in establishing a common market for certain industrial products by eliminating technical barriers, i.e., differing product requirements in Member States. This was to be done by the full harmonisation of product requirements by way of directives adopted in the legislative procedure. In reality, however, the implementation of this ambitious programme was not very successful. The progress was rather slow and contributed little to the creation of a common market. The

¹⁸ Judgement of the Court of Justice of 20 February 1979, *Cassis de Dijon*, Case 120/78, para. 14.

¹⁹ These reasons were originally contained in Article 36 of the Treaty establishing the European Economic Community, CELEX: 11957E/TXT. Nowadays, they can be found in Article 36 of the TFEU.

²⁰ Mandatory requirements include e.g., environmental protection. See judgement of the Court of Justice of 20 September 1988, *Danish bottles*, Case 302/86, para. 9.

²¹ *Ibid.*, para. 6.

²² This is important to note because nowadays it is rather the other way around. Nowadays, it is the EU rather than its Member States who is the main creator and actor of product policy in Europe, as will be further elaborated below.

²³ The impetus for creating a distinctive environmental policy in Europe was especially the 1972 United Nations Conference on the Human Environment in Stockholm which was followed by the adoption in 1973 of the first Community action programme for the environment (CELEX: 41973X1220). For more details on the history of European environmental policy, see e.g., KINGSTON, S. – HEYVAERT, V. – ČAVOŠKI, A. *European Environmental Law*. New York: Cambridge University Press, 2017, pp. 1–7.

²⁴ Council Resolution of 28 May 1969 drawing up a programme for the elimination of technical barriers to trade in industrial products which result from disparities between the provisions laid down by Law, Regulation or Administrative Action in Member States, CELEX: 31969Y0617(02).

main reason for the failure was that the legislative procedure was not and is not adapted to the discussion of detailed technical specifications which should be left to specialised bodies. As a result, the adoption of harmonising directives took an inordinate amount of time and little was achieved.²⁵

This initial failure led the Council to adopt the so-called New Approach to technical harmonisation in 1985.²⁶ The main tenets of this programme differed substantially from the previous programme of 1969 and were as follows: (1) harmonisation was to be limited to the adoption, by way of directives, of only the essential safety requirements²⁷ which products had to conform with before being placed on the market, (2) detailed technical specifications were to be prepared by European standardisation bodies²⁸ and eventually endorsed by the European Community as harmonised standards,²⁹ (3) harmonised standards were to be purely optional (voluntary) for producers; conformity with harmonised standards would establish a presumption of conformity with the essential safety requirements; however, compliance with the essential safety requirements could be proved by other means.³⁰

The New Approach meant that legislatures would only define the essential requirements or goals that were to be achieved, such as what hazardous properties products should avoid having. How to fulfil the essential requirements was then left to manufacturers. In order to increase legal certainty and reduce the costs of finding and creating their own solutions, they could follow the voluntary harmonised standards.³¹ At the same time, they had the opportunity to choose a different solution that would be the most suitable and most cost-effective in their case. The New Approach therefore combined total harmonisation of the objectives at issue with flexibility as to the means to achieve the objectives.³²

This New Approach was highly successful in removing obstacles to the free movement of goods but also the obstacle which the legislative procedure faced before. Harmonisation accelerated significantly. This was mainly thanks to the fact that the adoption of technical specifications was delegated to specialised standardisation bodies who not only had the necessary expertise but also whose rule-making procedures fostered

²⁵ LEE, J. The New Approach to Technical Harmonization and Standardization. *Journal of Common Market Studies*. 1987, Vol. 25, No. 3, p. 251.

²⁶ Council Resolution of 7 May 1985 on a new approach to technical harmonization and standards, CELEX: 31985Y0604(01).

²⁷ The new programme made reference only to safety and no other (e.g., environmental) product requirements. However, the New Approach is in principle applicable to other requirements as well.

²⁸ There have been three recognised European standardisation bodies: European Committee for Standardization (CEN), European Committee for Electrotechnical Standardization (CENELEC) and European Telecommunications Standards Institute (ETSI). These European bodies should be distinguished from the International Organization for Standardization (ISO).

²⁹ Harmonised standards prepared by a European standardisation body and endorsed by the European Commission were to be made reference to in the Official Journal.

³⁰ PELKMANS, *c. d.*, pp. 253–270.

³¹ In practice, manufacturers would very often comply with harmonised standards because devising alternative approaches would be too time-consuming and costly. See HOFMANN, H. C. H. European regulatory union? The role of agencies and standards. In: KOUTRAKOS, P. – SNELL, J. *Research Handbook on the Law of the EU's Internal Market*. Cheltenham: Edward Elgar Publishing, 2017, p. 474.

³² PELKMANS, *c. d.*, p. 257.

rational argumentbased discourse rather than political bargaining.³³ Another advantage of the New Approach was better adaptability to technical progress, since technical changes did not have to be approved in the legislative process.

The New Approach to technical harmonisation was so successful that it forms the basis of European product policy up to date³⁴ and many legislative acts were adopted under the New Approach.³⁵ Nonetheless, the New Approach was more about the procedural aspects of product policy rather than the substantive ones. We must therefore now take a closer look on how environmental considerations entered European product policy.

Product policy is closely linked to chemicals policy and waste policy.³⁶ This is because all products are composed of chemical substances and mixtures. When products are discarded or are intended or required to be discarded, they become waste. Therefore, products are, at least indirectly, influenced by chemicals law and waste law as well. And it was through these two areas that environmental considerations first entered product policy, e.g., by specifying which chemicals were prohibited from being used in certain products.³⁷

Later, a huge turning point in environmentally-oriented product policy was the so-called Integrated Product Policy, first presented as a green paper in 2001³⁸ and then officially adopted in 2003.³⁹ The main contribution of the Integrated Product Policy was the introduction of the principle of life cycle thinking (from the cradle to the grave). The principle of life cycle thinking consists in taking into account the entire life cycle of the product and encourages measures reducing environmental impacts to be taken at those stages of the life cycle where these measures are expected to be the most efficient and can contribute the most to the reduction of the impacts of the product on

³³ As Kerler has demonstrated, functionally-differentiated rule-making where rule-making is split between at least two levels (e.g., the Council and a standardisation body) changes the mode of interaction among relevant stakeholders from bargaining to arguing. See KERLER, M. *How Decision-making Procedures Create Good Governance: Technical Regulation in the European Union*. Paper prepared for the 3rd ECPR Conference in Budapest 8–10 September 2005, pp. 1–27. However, it should be acknowledged that decisions taken by standardisation bodies are not always purely technical but to some extent political as well, as noted by HOFMANN, c. d., p. 475.

³⁴ The principles of the New Approach are nowadays expressed in Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC, CELEX: 32008D0768, especially Article 3. Even though this Decision as a secondary act cannot be legally binding on legislators adopting other secondary acts, it is normally followed in practice.

³⁵ For a list of current product legislation which is in line with the New Approach, see: https://single-market-economy.ec.europa.eu/single-market/goods/new-legislative-framework_en.

³⁶ FAURE, M. G. – DALHAMMAR, C. Principles for the Design of a Policy Framework to Address Product Life Cycle Impacts. In: MAITRE-EKERN, E. – DALHAMMAR, C. – BUGGE, H. CH. (eds.). *Preventing Environmental Damage from Products*. New York: Cambridge University Press, 2018, p. 60.

³⁷ On the developments of European chemicals policy, see KANICKÝ, J. Sustainable chemistry under the European Green deal: reinforcing preventive legal regulation. In: RADECKA, E. – NAWROT, F. *Green deal or green disorder*. Toruń: Dom Organizatora, 2021, pp. 81–95. On the developments of European waste policy and its relation to products, see KANICKÝ, J. *Waste Law: Evolving Objectives and Paradigms* [not yet published, copy on file with author].

³⁸ Green paper on integrated product policy, COM(2001) 68 final, CELEX: 52001DC0068.

³⁹ Communication from the Commission to the Council and the European Parliament: Integrated Product Policy – Building on Environmental Life-Cycle Thinking, COM(2003) 306 final, CELEX: 52003DC0302.

the environment.⁴⁰ This was a significant shift in product policy because not only was the need to integrate environmental considerations into product policy officially recognised, but at the same time the need to take into account the impacts of all phases of the product's life cycle, including raw material extraction, manufacturing, distribution, use, maintenance, and end-of-life.

The implementation of the principle of life cycle thinking in practice was somewhat laggard.⁴¹ The 2003 Integrated Product Policy document expressed a tendency *"to work with voluntary approaches, although mandatory measures might also be required"*.⁴² Even though voluntary approaches cannot be dismissed completely, they have had a rather limited impact on environmental protection.⁴³ The need for mandatory measures along with voluntary measures was therefore clear. Mandatory (or command-and-control) measures, however, also had their limits because they often focused more on some stages of the product's life cycle and less on others. To give a few examples, law paid a lot of attention to the regulation of production processes⁴⁴ and to some extent also the endoflife phase of products,⁴⁵ while for example design, use or repairs of product were not regulated at all or only to a small extent.

In this respect, the so-called Ecodesign Directive later became very important. Its scope originally applied only to energy-using products⁴⁶ and was subsequently extended to all energyrelated products.⁴⁷ The Ecodesign Directive was based on the finding that up to 80% of all environmental impacts of products may be addressed by an appropriate design of the products.⁴⁸ In other words, most adverse impacts may be prevented if products are appropriately designed. Therefore, the Ecodesign Directive provided a framework to regulate the design of certain products in order to account for their environmental impacts. Ecodesign requirements under the Ecodesign Directive are laid down by way of implementing measures (regulations) adopted by the European Commission in the comitology regulatory procedure with scrutiny. Implementing

⁴⁰ Even though the principle of life cycle thinking may be viewed as a guiding principle of EU product policy, it has currently no legal definition in EU law.

⁴¹ DALHAMMAR, C. The application of 'life cycle thinking' in European environmental law: theory and practice. *Journal for European Environmental & Planning Law*. 2015, Vol. 15, No. 2, pp. 97–127.

⁴² Communication from the Commission, COM(2003) 306 final, para. 11.

⁴³ Voluntary measures in environmental protection gained significant popularity in the 1990s in the United States which could explain why they were given primacy by the European Commission in its 2003 Communication mentioned above. See GUNNINGHAM, *c. d.*, pp. 186–187.

⁴⁴ For example, Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version), CELEX: 32008L0001, which was later replaced by Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast), CELEX: 32010L0075.

⁴⁵ Through many acts of European waste law.

⁴⁶ Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council, CELEX: 32005L0032.

⁴⁷ 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), CELEX: 32009L0125.

⁴⁸ Recognised also by Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", CELEX: 32013D1386, para. 36.

measures may be complemented by voluntary harmonised standards where appropriate. The Ecodesign Directive therefore follows the logic of the New Approach to technical harmonisation described above. Even though the Ecodesign Directive could in theory be used to address any environmental impact of products, in practice initially only energy efficiency aspects of products were addressed in most cases.⁴⁹ It therefore addressed primarily one aspect of only the use phase of products.

In 2015, the European Commission adopted its first Circular Economy Action Plan.⁵⁰ The Action Plan envisaged several actions to be taken to promote the transition to a circular economy. Among them, the importance of product design was recognised because product design can directly address several circular economy aspects of products, such as material efficiency, durability, repairability, upgradability, recyclability, and others.⁵¹ Since 2019, this Action Plan then became the impetus for the adoption of several implementing measures under the Ecodesign Directive which address some of the above-mentioned circular economy aspects.⁵² This shift means a more consistent application of the principle of life cycle thinking because it addresses more phases of the life cycle of products.

The European Commission then adopted another Circular Economy Action Plan in 2020 which pushes product policy even further.⁵³ The Commission expressed its commitment to present a legislative proposal for a more complex Sustainable Product Policy Framework. Building upon the positive experience with the Ecodesign Directive, the Commission indeed prepared a proposal for the Ecodesign for Sustainable Products Regulation (ESPR) in 2022.⁵⁴ At the time of writing, this proposal is still only a legislative proposal. It is nonetheless interesting to point out some of its basic tenets:

The scope of the proposal is much wider than the scope of the current Ecodesign Directive. Under the proposal, basically all products placed on the market (with only a very short list of exceptions) could potentially be subject to ecodesign requirements.⁵⁵ This

⁴⁹ DALHAMMAR, C. Promoting Energy and Resource Efficiency through the Ecodesign Directive Resource Efficiency. *Scandinavian Studies in Law*. 2014, Vol. 59, pp. 166–176; FABŠÍKOVÁ, T. Aktuální vývoj evropské právní úpravy v oblasti ekodesignu výrobků. *Acta Universitatis Carolinae Iuridica*. 2019, Vol. LXX, No. 3, pp. 69–70.

⁵⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Closing the loop – An EU action plan for the Circular Economy, CELEX: 52015DC0614.

⁵¹ POLVERINI, D. Regulating the Circular Economy within the Ecodesign Directive: Progress So Far, Methodological Challenges and Outlook. *Sustainable Production and Consumption*. 2021, Vol. 27, pp. 1119–1121.

⁵² For an overview of the implementing measures adopted in 2019, see *ibid.*, table on p. 1114. Since 2019, many other implementing measures were adopted as well.

⁵³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A new Circular Economy Action Plan For a cleaner and more competitive Europe, CELEX: 52020DC0098.

⁵⁴ Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC, CELEX: 52022PC0142. The proposal was accompanied by a new policy document: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: On making sustainable products the norm, COM(2022) 140 final, CELEX: 52022DC0140.

⁵⁵ Proposal ..., Articles 1 and 2(1).

might include various products such as textiles or furniture along with energy-related products which are subject to regulation today.

The proposal is still based on the New Approach, since ecodesign requirements are to be set by the European Commission in the form of delegated acts⁵⁶ and may be complemented by voluntary harmonised standards prepared by standardisation bodies.⁵⁷

The proposal also expressly lists the aspects of products which might be addressed: product durability and reliability; product reusability; product upgradability, reparability, maintenance and refurbishment; the presence of substances of concern in products; product energy and resource efficiency; recycled content in products; product remanufacturing and recycling; products' carbon and environmental footprints; and products' expected generation of waste materials. The proposal expressly calls for the Commission, when setting ecodesign requirements, to duly consider all stages of the life cycle of the products in question.⁵⁸ Thus, the proposal strives to ensure an even more consistent application of the principle of life cycle thinking.

What can be deduced from the historical development of the European standard-based product policy discussed above is that, from a procedural point of view, this policy is still based on the so-called New Approach, which has proven successful in practice. At the same time, product policy is no longer only motivated by the removal of barriers to the free movement of goods, but there is an obvious effort to integrate more and more environmental considerations and more consistently in accordance with the principle of life cycle thinking.

3. PRODUCT POLICY, OR ENVIRONMENTAL POLICY?

Above in this article I have used the term “product policy” many times. But the question is: can environmental product standards be seen as part of environmentally-oriented product (market) policy, or rather as part of product-oriented environmental policy? This may seem like an unimportant question, but it has serious practical implications.

In theory, we could certainly find arguments for adopting environmental product standards under both product and environmental policy. However, in the EU each legislative act, whether it directly establishes product standards or creates a legal framework for their setting, must have a particular legal basis, determined currently by the TFEU, which will correspond with the main objective of that act. Sustainable product policy will normally pursue several goals at the same time, namely economic (free movement of goods) and environmental. According to settled case law of the Court of Justice, even where an act pursues a twofold purpose, it shall, as a rule, be based on a single legal basis.⁵⁹ In the area of product policy, the appropriate legal basis must therefore be chosen according to which of the goals pursued by the legislation is the main one: economic or

⁵⁶ *Ibid.*, Article 4.

⁵⁷ *Ibid.*, Article 34.

⁵⁸ *Ibid.*, Article 5.

⁵⁹ See e.g., judgement of the Court of Justice of 30 January 2001, *Danube River*, C-36/98, para. 59.

environmental. If the main goal of the legislative act were to be the creation of an internal market without obstacles to the free movement of goods, then the corresponding legal basis for the given act should be Article 114 TFEU (internal market policy). In the event that the act was supposed to pursue primarily environmental protection, the act should be based on Article 192 TFEU (environmental policy).⁶⁰

The choice of legal basis has serious consequences for the level of environmental protection. In the case of acts adopted in the field of internal market policy, Member States are not allowed, in principle, to deviate from the harmonised rules and thus establish stricter measures in favour of environmental protection at the national level. Harmonisation in the area of internal market policy is based on the principle of maximum harmonisation.⁶¹ In contrast, acts in the area of environmental policy do not prevent Member States from adopting more stringent protective measures at the national level. The environmental policy sets the minimum level of protection, but not its “ceiling”.⁶²

In practice, EU acts in the standard-based product policy are always adopted under the internal market policy which leads to maximum harmonisation.⁶³ The economic goal of legal regulation is seen as the main one, whereas the environmental goal is perceived as rather incidental.⁶⁴ This means that the level of environmental protection related to products is determined ultimately at the European level. Acts in the field of product policy often include the so-called safeguard clauses which allow Member States to introduce more stringent measures at the national level justified by, among others, the protection of health and life of humans, animals, or plants. Nevertheless, such measures can only be provisional and are subject to a strict control procedure. Eventually, they may or may not lead to stricter measures at the European level.

It can therefore be concluded that product policy is still motivated primarily by economic goals, as in the early days of European integration, although nowadays it also increasingly includes environmental considerations. At the same time, this means that the creation of an internal market with harmonized standards is preferred over different national regulations and the principle of mutual recognition. Environmental product standards therefore form part of environmentally-oriented product policy rather than product-oriented environmental policy.

4. WHY PRODUCT STANDARDS?

As mentioned above, product standards can be understood as conditions which products must fulfil so that they can be lawfully placed on the market and where, at the same time, the fulfilment of the conditions is not subject to *ex ante* control

⁶⁰ In specific cases, other legal bases may also appear appropriate. However, for the purposes of this article, I am leaving them aside.

⁶¹ More stringent measures at the national level are permissible under very limited conditions set out, in particular, by Article 114(4) and (5) TFEU.

⁶² Article 193 TFEU.

⁶³ Including the proposal for the Ecodesign for Sustainable Products Regulation discussed above.

⁶⁴ See also Article 11 and Article 114(3) TFEU.

by public authorities.⁶⁵ If the fulfilment of such conditions were to be subject to prior control by public authorities, it would amount to licensing. However, licensing would naturally only be possible for a narrow sector of products, mainly due to reasons of limited regulatory capacity because the number of products placed on the market greatly exceeds the possibilities of licensing by public authorities. In the case of standards, it is the duty of designated entities (usually manufacturers and importers) to ensure that the products placed on the market are in accordance with the established product standards. Compliance with standards is monitored *ex post* as part of administrative market surveillance.

Standards represent one form of command-and-control regulation. Even though command-and-control regulation has often been harshly criticized in literature,⁶⁶ it plays an irreplaceable role in the field of environmental law, and thanks to it, it was possible to achieve a significant increase in the level of environmental protection.⁶⁷ Command-and-control regulation and especially standards may not be the most appropriate regulatory tool in all cases, however each tool has its strengths and weaknesses.

Thus, for example, legal liability also contributes to the protection of the environment against the negative effects of products to a certain extent, as it stimulates natural and legal persons to prevent the occurrence of unjustified damage. However, legal liability is not entirely effective in preventing damage for various reasons, as its enforcement in practice is difficult or even impossible (e.g., the law does not necessarily grant rights from environmental damage to private entities, and if it does, it can be difficult to quantify such damage, prove the causal link etc.).⁶⁸

Another example are economic instruments. Although economic instruments for environmental protection (e.g., Pigouvian taxes, subsidies, or tradable permits) have been analysed in theory in great detail from different perspectives and in different contexts, setting them up, in practice, so that the desired goals are actually achieved remains difficult.⁶⁹ This does not mean that we should abandon the use of economic instruments altogether, but rather that we should not rely solely on them. Economic, as well as all other measures, should be combined with standards and command-and-control regulation in general. They should be complementary rather than replacements of command-and-control regulation.⁷⁰

Regulatory intervention in the form of product standards is also necessary and justified because in the absence of product standards, environmental requirements are not taken into account to the necessary extent in the design of products. This is mainly due to the fact that the costs of the adverse impacts of products on the environment are, in

⁶⁵ OGUS, *c. d.*, p. 150.

⁶⁶ See e.g., SUNSTEIN, C. R. Paradoxes of the Regulatory State. *The University of Chicago Law Review*. 1990, Vol. 57, No. 2, pp. 407–441.

⁶⁷ SACHS, N. Can We Regulate Our Way to Energy Efficiency? Product Standards as Climate Policy. *Vanderbilt Law Review*. 2012, Vol. 65, No. 6, pp. 1661–1664.

⁶⁸ See e.g., STONE, CH. D. The Place of Enterprise Liability in the Control of Corporate Conduct. *Yale Law Journal*. 1980, Vol. 90, No. 1, pp. 14–16.

⁶⁹ BAUMOL, W. J. – OATES, W. E. The Use of Standards and Prices for Protection of the Environment. *The Swedish Journal of Economics*. 1971, Vol. 73, No. 1, pp. 42–43.

⁷⁰ SACHS, *c. d.*, pp. 1645–1646.

the absence of regulatory measures, usually not borne by the producers of products. They constitute externalities whose costs are borne by others. As a result, producers of products lack the economic incentives to prevent or reduce the negative impacts of their products. This leads to a market failure which consists in higher than optimal production of products (higher than it would be if the producers bore all the costs) and suboptimal investment in ecodesign. The introduction of product standards is therefore a way of correcting a market failure.⁷¹

5. WHAT FORM FOR PRODUCT STANDARDS?

Standards in general may take various forms based on how prescriptive they are. In product policy, it is useful to distinguish two types of standards: performance standards and specification standards.⁷² Performance standards prescribe certain conditions of quality (properties) which products must achieve but leave the producers free to choose the best (least costly and burdensome) means on how to fulfil the standards. In contrast, specification standards make it mandatory for certain materials or processes to be used or avoided for products. They are thus more prescriptive, as they do not give the opportunity to achieve the pursued goals by other appropriate means.

In most cases, performance standards shall be given preference over specification standards, for both economic and non-economic reasons. Inflexible specification standards may not only be inappropriately costly for some producers, but they may also hinder innovation, which is undesirable.⁷³

In some cases, however, specification standards may be justified. One such case may be the prohibition of the presence of certain chemical substances in products. Such specification standards are used quite often in practice and have helped, for example, to increase the level of recycling in the field of batteries. Achieving the same result using a performance standard in the form of a recyclability requirement could arguably be more difficult given the more difficult enforceability of such a performance standard. Another justified case may be the determination of minimum secondary raw (or recycled) materials content for products. In this case, specification standards serve to create market demand for secondary raw materials which would otherwise be limited even though it is desirable from an environmental point of view. Nonetheless, these examples cannot be generalised. The introduction of specification standards in individual cases should always be preceded by a detailed analysis of their possible impacts.

Both performance and specification standards may be based either on the current state-of-the-art technology or on estimates of future technology developments. In the first case, product standards mandating the use of the best available techniques serve

⁷¹ See in general STEWART, R. B. Regulation, Innovation, and Administrative Law: a Conceptual Framework. *California Law Review*. 1981, Vol. 69, No. 5, pp. 1263–1264 and 1281–1282.

⁷² Various authors distinguish basically the same types of standards or add more categories to these two. See e.g., OGUS, *c. d.*, pp. 150–151; SACHS, *c. d.*, p. 1640; STEWART, *c. d.*, pp. 1268–1269; STONE, *c. d.*, p. 36.

⁷³ OGUS, *c. d.*, pp. 209–211.

to diffuse such techniques across the market.⁷⁴ This basically leads to the elimination of the worst performing products from the market and does not give rise to significant issues. In contrast, the second case, based on assumptions about the future, is in itself quite problematic and leads to technology-forcing which may not always work as intended.⁷⁵ The regulatory standards will be too ambitious and therefore unenforceable. The regulated entities will then be able to seek judicial review and argue that the adopted standards are invalid for being impossible to fulfil. Or the regulatory standards will not be ambitious enough and thus will inhibit invention which would otherwise occur in the absence of standards.

While this will not be true in absolute terms, regulation requiring innovation in the form of diffusion will generally be preferable from the perspective of protecting the environment and human health against the negative effects of products.⁷⁶

The question of amenability to judicial review is also relevant in relation to the legal form of acts that directly establish product standards. Initially under the New Approach analysed above, product standards were set by legislative acts (directives) for which judicial review may be sought only by a limited group of entities.⁷⁷ By contrast, the Ecodesign Directive as well as the proposal for the Ecodesign for Sustainable Products Regulation represent a change in that these acts are legislative acts which are supposed to serve as general frameworks for the subsequent adoption of non-legislative acts (implementing or delegated regulations of the European Commission) containing product standards. The review of the legality of nonlegislative acts (or more precisely regulatory acts)⁷⁸ may be sought by a much wider range of subjects, including the regulated entities⁷⁹ or environmental nongovernmental organisations.⁸⁰ The adoption of environmental product standards in the form of non-legislative acts may therefore lead to numerous court cases.

6. CONCLUSION

European standard-based product policy has witnessed great developments over decades. It has managed to find suitable procedural arrangements for the adoption of product standards but it is still struggling when it comes to integrating environmental

⁷⁴ STEWART, *c. d.*, pp. 1282–1283.

⁷⁵ *Ibid.*

⁷⁶ SACHS, *c. d.*, pp. 1665–1666.

⁷⁷ See Article 263 TFEU. Action before the Court of Justice against a legislative act may only be brought by a Member State or by certain institutions of the European Union.

⁷⁸ Judgement of the General Court of 25 October 2011, *Microban*, T-262/10, para. 21.

⁷⁹ According to Article 263 TFEU, any natural or legal person may institute proceedings against a regulatory act which is of direct concern to them and does not entail implementing measures.

⁸⁰ Where product standards include environmental considerations, they will usually be amenable to the so-called internal review and eventually to judicial review under the revised Aarhus Regulation which has opened the internal review to all non-legislative acts which have legal and external effects, and which may contravene environmental law. See Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Union institutions and bodies, CELEX: 02006R1367, as amended.

considerations in a comprehensive manner in line with the principle of life cycle thinking. Standard-setting in individual cases is not simple and requires careful preparation based on robust science and regulatory impact analysis. At the same time, standards should be set in such a way that the targeted goals can be achieved as cost-effectively as possible.

The importance of environmental product standards is gradually increasing. It is no longer just a matter of regulation of the content of chemical substances in products, but through the regulation of energy efficiency we have come to other requirements, related in particular to the transition to a circular economy. This makes environmental product standards more complex and places even higher demands on standard-setting.

In this regard, the initiative of the European Commission aimed at creating a comprehensive legal framework for the adoption of product standards for basically all products that are placed on the market may be welcomed. Such a legal framework will undoubtedly bring about many benefits in the future. However, it will inevitably also lead to new problems that will have to be dealt with. In dealing with such problems, we should make use of the experience gained in adopting product standards under previous legal regimes.

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