

Availability of spare parts and product lifetime in Brazilian law

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Abstract

Circular economy, hereinafter 'CE', is high on the political agenda across the globe despite the differences it may assume in the Global South compared with the Global North.

In the CE, repair is an important strategy to extend product lifetime. Factors enabling product repair are manifold, including reparability, affordability of repair services, and information to repairers, whether professional ones or consumers themselves.

This text discusses one of such enabling factors, namely the availability of spare parts, and how it is regulated by Brazilian law. It does so in comparison to the law of the European Union, hereinafter 'EU'.

Differently from some EU ecodesign regulations establishing a fixed minimum period for the availability of spare parts after the placing on the market of the last model of a given product, Brazilian statutory law sets forth that the minimum period should be reasonable and never inferior to product lifetime. Case law, in applying statutory law, determines product lifetime – for the purpose of making spare parts available – in a rather piecemeal fashion. Court decisions are unclear as to whether product lifetime should depend on product use by the consumer or not. Lack of uniformity exists also regarding the criteria or evidence needed to arbitrate product lifetime.

It is argued that Brazilian law does not promote product repair, thus running counter to the aim of its National Circular Economy Strategy of creating a regulatory environment favourable to the CE. Legislation should be improved to provide clear, i.e. fixed time frames for the different product categories.

Global South and circular economy

CE is high on the political agenda across the globe. Yet, the theory and practice of CE are

still dominated by a worldview of the Global North, as opposed to the Global South (Muchangos, 2021).

The Global North/South divide is a construct introduced by development theorists to address the asymmetry of power among nations (Sud & Sánchez-Ancochea, 2022). As a conceptual abstraction, it is based on various – albeit not uncontroversial – criteria Sud & Sánchez-Ancochea (2022) to provide a taxonomy of the world.

For the purposes of this text, a simplified distinction between the Global North and the Global South is assumed, one drawn in terms of wealth and its distribution: the Global South comprises low(er)-income countries still marked by social inequality.

The North-South disparity is reflected in how the CE agenda is shaped. In the Global South, CE still generally concentrates on waste management (Muchangos, 2021; Ospina-Mateus & others, 2023) often in connection with the inclusion of informal waste collectors, which is consistent with a reality of social inequality. Challenges upstream the life cycle of resources such as chemicals and products receive scant attention in the Global South. Regarding product regulation, some authors note that the Global South still draws upon best practice from the Global North, particularly the EU (Haswell & others, 2024).

Circular economy in Brazil: an agenda under construction

In mapping the CE concept in the Global South, one author found that, 'except for [...] China, data and analysis, surveys, discussions, and practical contributions of the CE in [the Global South] have been limited' (Muchangos, 2021). This calls for obtaining more information about CE from other Global South countries, including Brazil.

Brazil is the world's tenth largest economy and the largest economy in Latin America, a subregion of the Global South. As such, the country plays a central role also in shaping CE in both academic and practical terms. To be sure, two bibliometric reviews (Muchangos, 2021; Ospina-Mateus & others, 2023) show Brazil as leading the academic production on CE in Latin America. In practice, the 2025 edition of the World Circular Economy Forum, one of the world's leading events on CE, will be held in São Paulo, the biggest city in the American continent.

Despite the protagonism of Brazil, analyses of its CE policies are still scarce, especially from a legal perspective and to a foreign audience. This text seeks to take a modest step to bridge said gap while reducing the paucity of information about CE in a Latin American country of the Global South.

The first official document on CE in Brazil is the National Circular Economy Strategy, hereinafter 'Strategy', launched by the federal government in June 2024 via Decree No. 12,082.

The Strategy introduces neither rights nor obligations, let alone formulates a policy or an action plan, whether generic or sector specific, in stark contrast e.g. to the EU's action plans of 2015 and 2020, both of which address specific industries and propose concrete measures to advance the CE.

Instead, the Brazilian Strategy only provides a definition of CE and authorises the creation of the National Circular Economy Forum, a consultative body to assist the federal government in achieving several goals, including, but not limited to, the creation of a regulatory and institutional framework favourable to the CE.

Following the Strategy, the draft National Circular Economy Plan for the period 2025-2034, hereinafter 'draft Plan', was out for public consultation from mid-February to mid-March 2025. The draft Plan is a generic, i.e. not sector-specific, document full of commonplace objectives to achieve the goals established by the Strategy.

Based solely on the 2024 Strategy and the 2025 draft Plan, CE policy in Brazil remains wishful thinking, including in legal terms. However, this does not preclude one to analyse whether the existing legislation may be conducive to a CE or even improved to that end.

In this sense, this text revolves around whether and how the availability of repair parts is

regulated in Brazil in comparison to EU law as a strategy to foster product repair and thus extend product lifetime in a CE.

Product lifetime and availability of spare parts in Brazil and the EU: a comparative perspective

There are several reasons for comparing Brazil with the EU. First, given the high mobility of products, their environmental impacts are ubiquitous in a globalised world. Second, as mentioned, product policy is still in its infancy in the Global South, which still draws upon from best practice from the Global North, notably the EU (Haswell & others, 2024). Third and most importantly from a legal perspective, in both the EU (an economic union) and Brazil (a republic federation), powers to legislate over environmental and consumer protection matters are shared between the Union and the (Member) States. The Union sets minimum standards, whereas the (Member) States may adopt more stringent measures. In continent-sized jurisdictions like the EU and Brazil, this system of shared powers serves as a mechanism to accommodate diversity with the necessity of harmonisation.

Availability of spare parts in the EU in a nutshell

Directive (EU) 2024/1799 on common rules promoting the repair of goods requires manufacturers of the products covered by the Union legal acts listed in Annex II to meet the repairability requirements laid down by said legal acts. These are product-specific implementing measures, in the form of regulations, adopted under the framework of Directive 2009/125/EC on ecodesign, replaced by Regulation (EU) 2024/1781, the so-called Ecodesign for Sustainable Products Regulation.

Most of the ecodesign regulations listed in Directive (EU) 2024/1799 impose repairability requirements that include the availability of spare parts for a *fixed* minimum period, which – depending on the spare part or product category – normally vary from seven to ten years after the placing of the last unit of the product model on the market.

Availability of spare parts in Brazilian statutory law

Unlike the EU, where availability of sparts parts is mandated by ecodesign regulations, in Brazil the matter is dealt with by consumer – not environmental – protection law, more specifically by Federal Law No. 8,078/1990, known as the ‘consumer protection code’, hereinafter CPC.

Article 32 of the CPC requires manufacturers and importers to make spare parts available so long as the manufacture and importation of the products that they place on the market have not ceased. After cessation, availability shall be maintained for a *reasonable period of time*.

Article 13 of Federal Decree No. 2,181/1997 elaborates on the availability-of-spare-parts rule of the CPC by adding that the reasonable period of time must never be less than the *lifetime of the product*.

Instead of fixing the minimum period for the availability of spare parts, as EU law does, the Brazilian CPC and its implementing decree leave the decision to be made on a case-by-case basis considering product lifetime. In a civil law country like Brazil, if the lawmaker does not stipulate the time frame, courts are to do so (Benjamin, 2022).

Brazilian case law on product lifetime

Given that statutory law defines neither reasonable period of time nor product lifetime, how is the minimum period for the availability of spare parts to be established in a courtroom?

At least two questions arise. Firstly, is product lifetime to be determined *abstractly* for a whole product category, as is the case of ecodesign regulations in the EU, or *concretely* for a specific product used by a specific consumer? In other words, should product lifetime depend on product use for the purposes of making spare parts available?

Secondly, is product lifetime to be arbitrated based on the evidence provided by the parties to the legal dispute? If so, are judges bound by the evidence produced? If not, or if there is no evidence, how are judges to decide?

A survey of case law in the past decade (2004-2014) has been conducted to understand how courts answer these questions. The database used was Jusbrasil, available at <<https://jusbrasil.com.br>>, and the keywords employed were ‘spare parts’, ‘reasonable period of time’, and ‘product lifetime’ (‘peças de

reposição’, ‘período razoável de tempo’, and ‘vida útil do produto’ in Portuguese, respectively).

Results comprise a total of ten decisions of state courts, most of them from small claims courts. Under Brazilian procedural law, not only are consumer protection matters not dealt with by federal courts, but rulings from small claims courts cannot be challenged by *Superior Tribunal de Justiça*, hereinafter ‘STJ’, the highest court harmonising the application of federal law by courts. As for the products covered by the decisions, they all deal with the lifetime of consumer electronics.

Regarding the first question (abstract vs. concrete determination of product lifetime), only four of the ten decisions determine product lifetime abstractly for a whole product category. Interestingly, they resort to a piece of regulation from Brazil’s Federal Tax Authority on income tax owed by legal persons, which contains a list of products and their respective lifetime for the purpose of calculating depreciation rates and thus deductible tax. By contrast, one court (out of the remaining six) firmly ruled that the lifetime of a product ‘depends on the use and care by the consumer’.

Concerning the second question (determination of product lifetime based on the evidence produced or other criteria), one judgement adopted the product lifetime indicated by the original equipment manufacturer (100,000 hours = ca. 11 years). Differently, in two cases, the decisions were based on the degree of technological development instead of the evidence provided by the parties: for one court, cutting-edge devices should have longer lifetimes, whereas another court found that where technology advances rapidly, lifetimes are shorter. In both instances, product lifetime was arbitrated by the court based on a criterion of its choice.

Discussion

In contrast to EU law, where legislation sets a *fixed* minimum period for the availability of spare parts for an entire product category, thus harmonising the issue across Member States, Brazilian statutory law mandates that spare parts be available for a reasonable period, never inferior to product lifetime. This lack of definition by the Legislative transfers the decision to the Judiciary, which can only be reached case by case.

But case law on product lifetime for the purposes of availability of spare parts is not

coherent. Dealing exclusively with the lifetime of consumer electronics, judgements stem from state small claims courts and lack uniformity in terms of whether product lifetime should be determined abstractly by product category or concretely for an individual product. Besides, rulings do not follow any pattern as to the parameters or evidence necessary to arbitrate product lifetime.

The situation is explained in part by the fact that decisions from small claims courts cannot be challenged at STJ, the final appeal court harmonising the application of federal legislation by lower courts. The absence of consistent criteria to determine product lifetime is far from creating a favourable regulatory environment, as envisaged by the country's 2024 National Circular Economy Strategy. There is room for legislative improvement, which is particularly important in a civil law country like Brazil.

In practice, the lack of coherence in Brazilian statutory and case law creates legal uncertainty that affects consumers, repairers, and manufacturers. Repair may be denied to consumers that did not know that (and how) they should have been more careful. Repairers cannot adequately plan the supply of spare parts and ultimately offer their service. And manufacturers may be found liable for infringing the CDC without knowing that they should have made spare parts available for a longer period.

Conclusions

Availability of spare parts is a necessary, albeit insufficient, condition for product repair. Consumer protection law in Brazil prescribes that once the manufacture or importation of the product ceases, the minimum period for the availability of spare parts must never be less than product lifetime. Instead of determining the time frame, like EU law does, statutory law transfers the task to the Judiciary. But case law is erratic, thus not only running counter to the National Circular Economy Strategy's aim of creating a regulatory environment favourable to the CE but also failing to promote product repair. The CPC or its implementing decree should be modified to provide clearer (i.e., *fixed*) time frames, thereby providing legal certainty to manufacturers, repairers, and consumers.

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