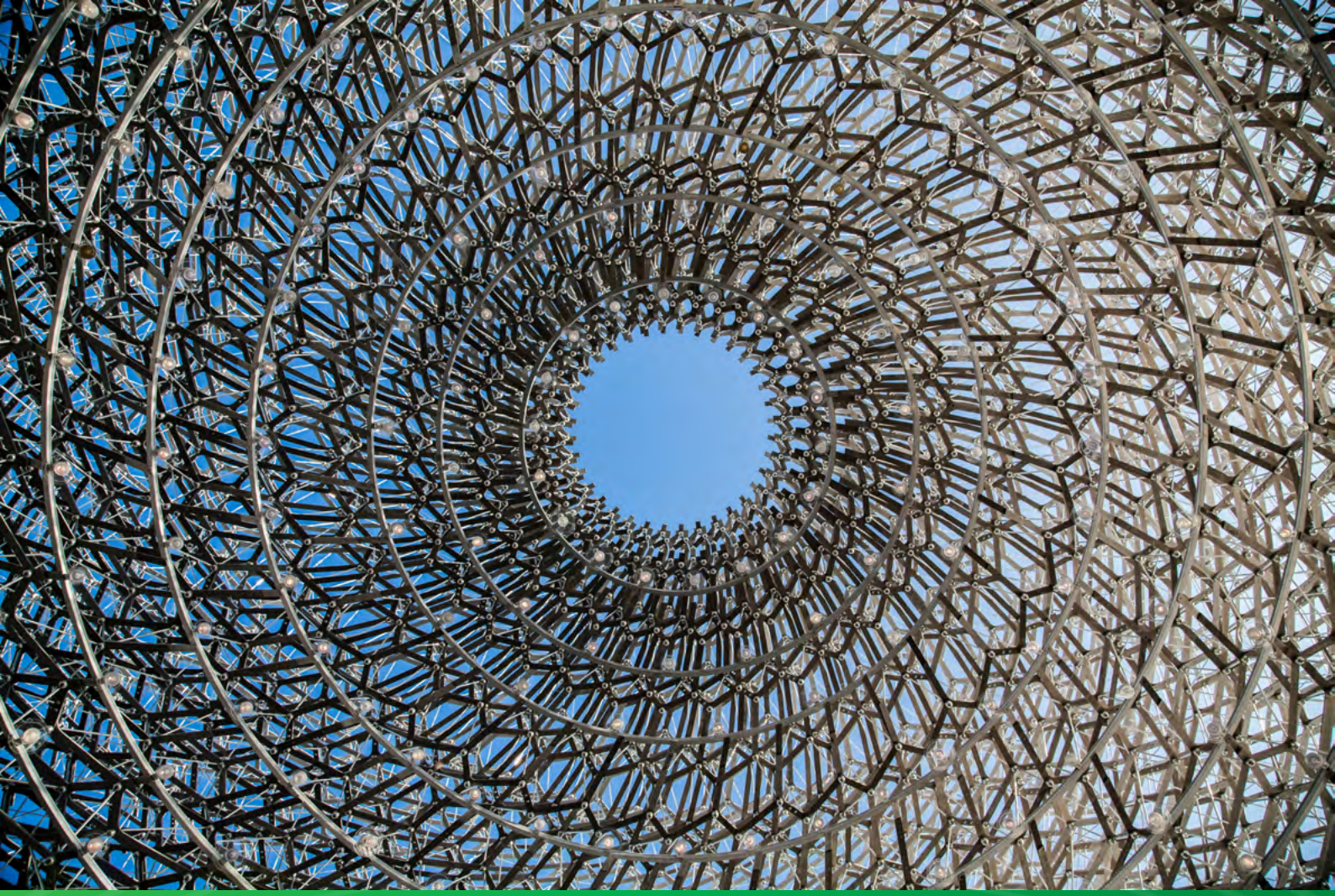

Policy Instruments on Product Lifetime Extension (PLE)

Relevant policies that countries have in place, or aspire to, for addressing product lifetime extension

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About the One Planet Network Consumer Information Programme

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Ministry of Environment and Forestry Republic of Indonesia

CONSUMERS INTERNATIONAL

This document is an output of the Consumer Information Programme of the 10 Year Framework of Programmes on Sustainable Consumption and Production (known as the One Planet network). The Programme is a global platform supporting the provision of quality information on goods and services, to engage and assist consumers in sustainable consumption. It implements and supports projects, undertakes research, shares good practice and policies, and provides collaboration opportunities. The Programme is led by the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU), Germany; the Ministry of Environment and Forestry of Indonesia, and Consumers International; and brings together a network of public, private and third sector actors.

More information, and ways to participate, can be found at http://www.oneplanetnetwork.org/ consumer-information-scp/ or contact ciscp@un.org.

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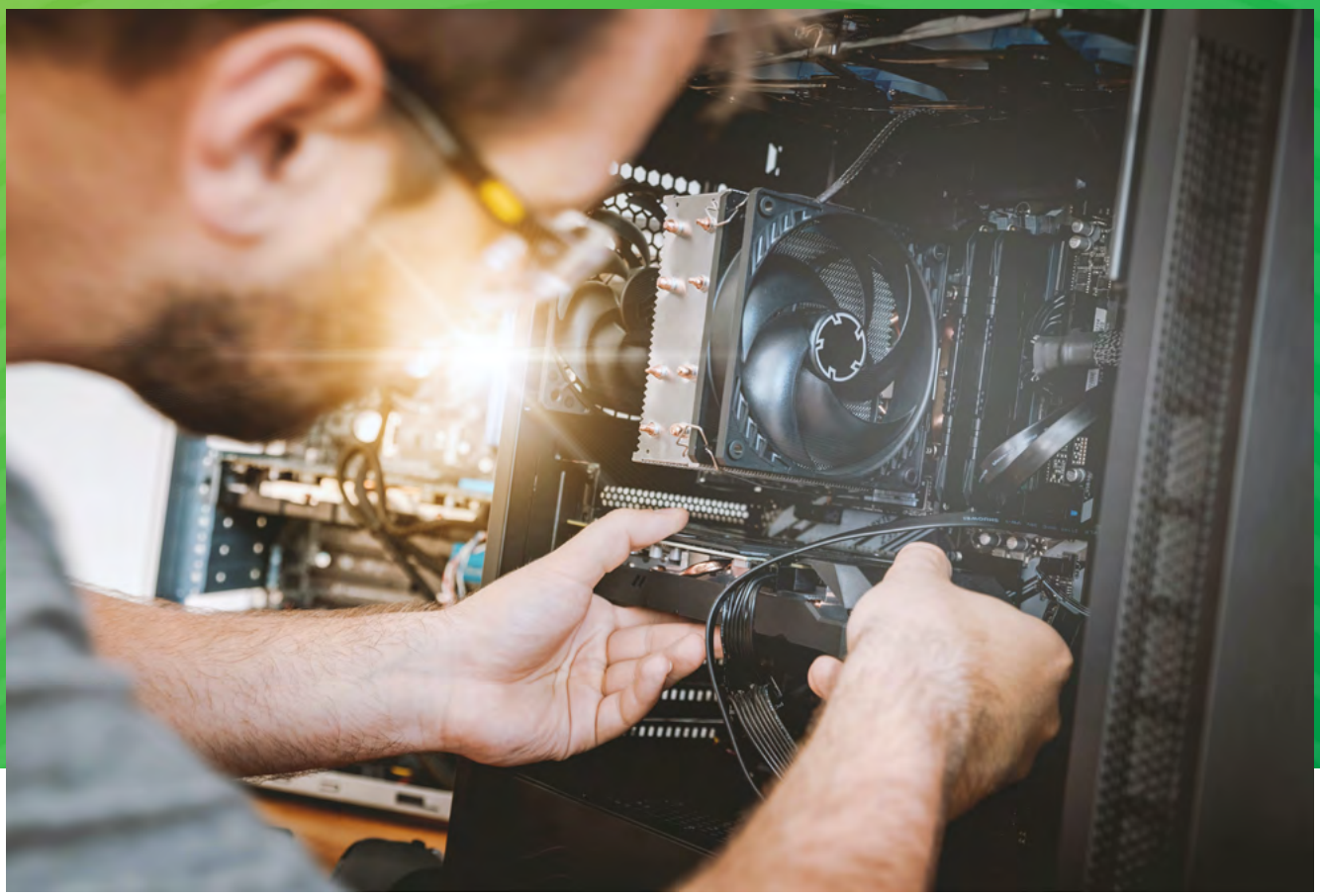
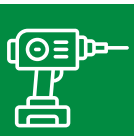


1. Background, aims and scope

Product lifetime extension (PLE) is the postponement or reversal of the obsolescence of a product through deliberate intervention. This can be done by designing more durable products so that consumers can use them for a longer time, by extending their use through maintenance and upgrades, and by recovering broken products through repair.

REFURBISHMENT

It aims to restore performance and/or functionality, but it does not generally require comprehensive disassembly, nor does it return a product to as new or better condition and performance.



REMANUFACTURING

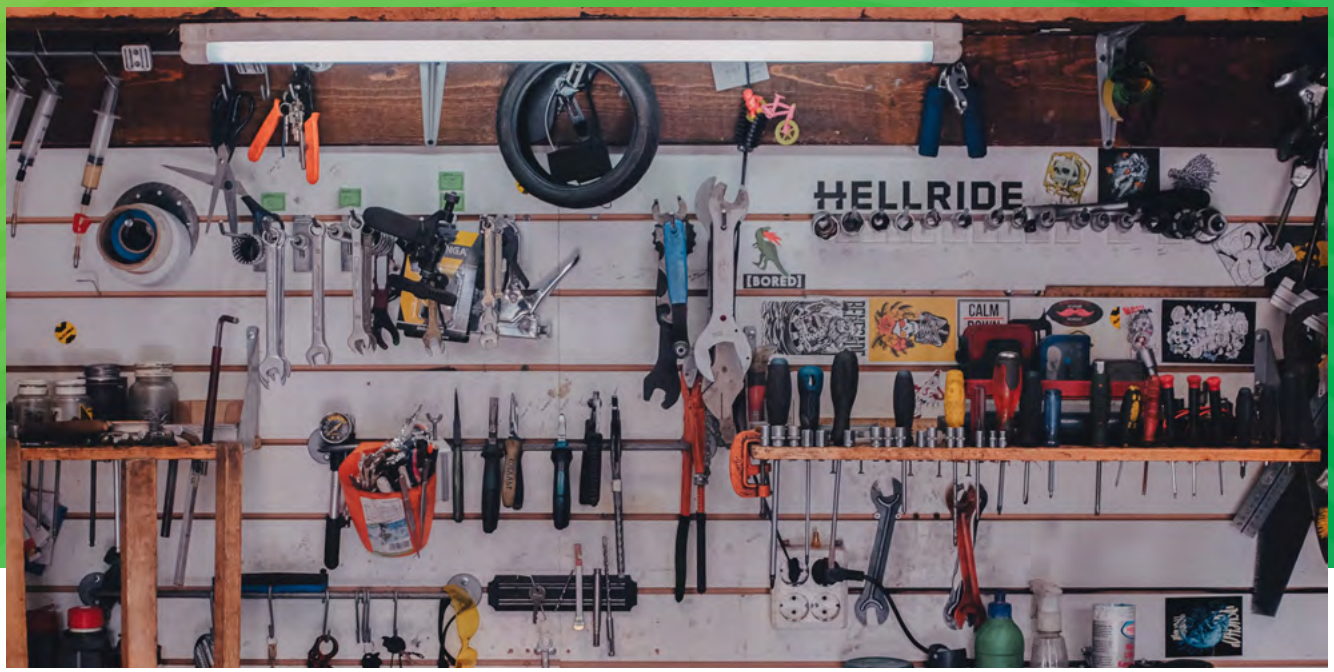
It is a standardized industrial process by which used products are returned to as-new, or better, condition and performance. The process yields fully warranted products.

REPAIR

This means to restore functionality to a single product that is damaged, broken or not functioning correctly. It is not conducted at an industrial scale and may be carried out in-situ on a single non-functioning product.

UPCYCLING

This means the process of converting old or discarded materials into something useful, giving an item a better purpose and improving its quality from one cycle of use to the next one.



It is important to notice that there are no internationally agreed legal definitions for these terms.The definitions adopted here have been derived and combined from several sources, including UNEP's Circularity Platform.

In addition to creating burden to consumers, short product life worsens environmental issues since massive production generates large quantities of waste, which are most of times simply dumped (Rivera & Lallmahomed, 2016). Short product life also contributes to the increase of greenhouse gas emissions, concentrated in the production phase for some products such as electronic devices, and poses a huge pressure on scarce natural resources, with high extraction pollution impacts. Policies and regulations have a key role to play in addressing PLE by stimulating the transition of businesses and consumers towards a circular economy, where the value embedded in products is maintained for as long as possible.

This project led by UNEP in collaboration with Akatu Institute is developed under the umbrella of the Product Lifetime Extension Working Group of the One Planet Consumer Information Programme (CI-SCP). Activities under the project aim at providing a mapping of product lifetime extension policy instruments around the world. While it aims at providing an overview of diverse policies and regulatory approaches for product lifetime extension across the globe, it does not aim to be a complete and exhaustive mapping of all policies that have been discussed or implemented on the topic around the world. Still, the current review may provide a useful illustration of the main instruments and initiatives through which some countries have promoted the topic of product lifetime extension.

This mapping focuses exclusively on policies and regulatory measures that aim to extend product lifetimes by designing more durable products, by extending their desirability or their use through maintenance, upgrades and repurpose, and by recovering broken products through repair, refurbishment or remanufacturing. At present this mapping does not include policies that focus on extended or shared responsibility by producers during the life cycle of products because such policies do not always have an explicit component of product lifetime extension (although often may encompass the development/design phase during which PLE aspects may be addressed).

The compilation of this overview is based on publicly available documents and reports identified through online research. Wherever possible, regulatory texts were used as primary sources, but secondary sources, such as news articles and policy reports were also considered. The research was conducted mainly in English, French, Spanish and Portuguese. Documents only available in other languages were processed with the aid of machine-based translation tools where possible. Although extensive efforts were undertaken to find relevant policies, which included inputs from members of the Product Lifetime Extension Working Group of the CI-SCP, it is possible that relevant policies may not have been captured in the analysis. It is also possible that listed documents may have been withdrawn and are no longer valid. Further inputs from the international community are welcomed to complement the research.

2. Overall findings

Sustainable consumption and production (SCP) is increasingly a priority for policy-making. It is a cross-cutting theme of the Agenda 2030 and the Sustainable Development Goals, directly addressed by Goal 12 – Ensure sustainable consumption and productions patterns. The world's transition towards more SCP practices depends to a high degree on the role of governments to reform policies that encourage unsustainable consumption and wasteful use of resources, enhancing the uptake of more sustainable, durable products and contributing to reduce pollution and the pressure on natural resources.

Over the last two decades, countries have become increasingly engaged in promoting policies that encourage greater resource efficiency, which include measures that tackle either material or energy efficiency or both. Although the focus of regulatory action in most countries has been related to the improvement of energy efficiency, there has also been an improvement in the way they address material efficiency over time. It is clear from this current overview that the focus of the policies has largely been on downstream measures, such as landfill management, energy recovery and increasing material recycling. The review has shown that more policy attention is needed for the design and use phases of products to reduce the amount of waste produced in the first place.

The current overview shows that extending the useful life of a product can be promoted by a variety of policy measures. It is clear from the mapping that product repairability is by far the most common policy instrument being used and/or discussed by countries on the topic, whereas minimum durability criteria are the least used. This might be because durability criteria can be challenging to implement due to complex test procedures, and market surveillance authorities are generally not in the position to perform or organize such tests. Also, it was generally found that policymakers tend to prefer "soft" approaches ensuring that consumers can make informed choices than "hard" approaches that block the sale of products that some consumers may want. Policies that require manufacturers to provide transparent information to consumers (e.g. regarding product repair options) and to strengthen consumer protection against greenwashing have been more usually applied. It should be pointed out that most policies identified in the research address electronic products and white goods, whereas policies related to other product categories such as textiles are still largely missing.

It is noteworthy that an important untapped leverage point for governments is the notion of psychological or cultural obsolescence, as none of the policy options addresses it. This is specifically relevant for sectors where the massive drivers for products being replaced so rapidly is based on fashion and marketing principles (e.g. textiles). For instance, between 2000 and 2015 the number of times a garment is worn has decreased by 36% worldwide while global production has doubled (Ellen MacArthur Foundation, 2017). At the same time, it has also been shown that extending clothes life by just 9 months would reduce by around 20-30% the carbon, water and waste footprint of the fashion industry, and cut resource costs by 5 billion pounds (WRAP, 2017).

It is important to notice that a one-size-fits-all horizontal approach to product lifetime is unlikely to be appropriate, as different policy measures are suitable to different products and contexts at different times. For instance, in most developed countries, where labour usually costs more than resources and therefore it is often economically inefficient to repair a product instead of buying a new one, it should be important for governments to subsidize professional repair services. Recognition of the potential of the informal sector through access to investment capital and training is essential to make product lifetime strategies more efficient, safe and environmentally sound. In lower income economies, where product

lifetime extension practices tend to occur more spontaneously due to existence of informal repair and second-hand markets, coherent institutional arrangements and improvement of waste treatment infrastructure remain important challenges. Finally, public education on how and where to dispose products is often required in both developing and developed countries contexts.

This means that different policies should co-exist and be combined and that a hybrid policy toolbox might be more effective. For instance, if it has been identified that the main cause for shorter product lives is the lack of transparency (i.e. asymmetrical information between industry and consumers), then one can assume that if consumers had better information, they can make better buying and use decisions. In such cases, regulations against planned obsolescence and consumer education and information policies can be most effective. If the lack of incentives for companies to develop durable, reusable and repairable products is the major cause of shorter product lives, then it should be useful to select policy measures that enable and empower manufacturers to extend the lifetime of products. In such cases, removal of legal barriers for refurbishment and remanufacturing tends to be an effective policy measure. It is important to emphasize however that as it is not possible to find one single reason for short product lives, a strong policy mix is therefore necessary.

3. Overview of regulatory and policy approaches

A variety of different policy measures has been applied to enhance the useful life of a product worldwide. This variety is mainly due to the fact that policy measures are generally designed to tackle different roots of the problem. Overall, these policies fall into two broader categories:

UPSTREAM POLICIES: promote and/or stimulate strategies during the design phase of a product (also known as 'nature' strategies), e.g. policies that address needs for minimum products lifetimes and the promotion of modularity to facilitate ease of replacements by the user.

DOWNSTREAM POLICIES: promote and/or stimulate strategies during maintenance and prolonged use with a consumer or other stakeholder actors (also known as 'nurture' strategies), e.g. policies to inform customers about the expected lifetime of a product in order to facilitate informed choice and use.

The most common policy measures found in the research are regulation against planned obsolescence, minimum durability criteria, extended product warranty, product repairability and consumers education, consumer rights, consumer protection and information policies. It is important to note that this is not a definitive list, but a summary of regulatory approaches that have been identified through the applied research methodology.

3.1 PLANNED OBSOLESCENCE

Obsolescence is the natural or artificial ageing of products. For the purpose of this mapping, only artificial ageing of products was considered, i.e. planned obsolescence. Planned obsolescence is considered here as a deliberate action by manufacturers and designers to shorten a product's lifetime in order to increase its replacement rate, at the expense of consumers. Planned obsolescence may increase consumer's dissatisfaction with poor quality and short-lived products, impact their financial resources, and harm the environment by increasing the waste of natural resources, as well as greenhouse gas emissions and pollution (Maggiolino, 2019). It is important however to highlight that there are in reality many reasons for replacing products, whether material, functional, economic or psychological, and that even technical defects in products can have a variety of causes other than intentional introduction of weak points (German Environment Agency, 2019). Planned obsolescence is often divided into four main groups: technological or functional obsolescence, psychological obsolescence, systemic obsolescence, and economic obsolescence. Technological or functional obsolescence happens when a product becomes out of date because consumers are more interested in products with improved performance as a result of improved technology. The second type is psychological obsolescence. It consists of designing products to trigger the desire to buy more, or to buy the newest version of a product and it is based on fashion and marketing principles. The French association Halte à l'Obsolescence Programmée (HOP) often refers to it as "cultural" or "aesthetic" obsolescence. Advertising is one major factor that drives this type of obsolescence.

The third is the systemic obsolescence, which consists of altering the system in which the product is used to make it more difficult to use, or by cancelling maintenance services for the product. This type of obsolescence is often associated with devices that are purposely designed with one or more conditions such that the product will stop working after a predetermined number of cycles. This also includes software obsolescence, which has been an increasing issue frequent software updates tend to make software heavier with the result that some devices stop working. Software obsolescence also includes limitation of the period of technical support or some incompatibility of devices with new software. Finally, economic obsolescence is the loss of the useful properties of a product because the costs of the resource inputs required to maintain or repair the product are excessive or the difference to the cost of a new product is unfavourable (German Environment Agency, 2019). Reasons may be the short product development cycles, rapidly falling prices, repair-unfriendly design, high repair costs, or the lack of spare parts, special tools, and repair services.

France has led the way on legislating against planned obsolescence, setting penalties and punishment for the practice. It is important to understand however that while some countries have substantial constitutional objections against criminal sanctioning of planned obsolescence as a criminal offense, others may already have existing laws that prohibit planned obsolescence in some other ways. For instance, German criminal law already offers the possibility of sanctioning the deliberate shortening of product lifetimes.

Argentina

.....PL 5390/2018 - Pending

The bill addresses obsolescence and the manufacturer's role in this process.

Brazil

.....PL 3903/2015

The bill complements the Consumer Protection Code (art. 18-25), and it provides guidance applicable for the benefit of consumers in case of obsolescence before the end of its useful life of electronic products or appliances.

.....PL 2833/2019 - Pending

The bill aims to amend the Consumer Protection Code, to define as an abusive practice the artificially shrinkage of products /components life cycle, as known as planned obsolescence, in order to turn them into obsolete products before the estimated useful life.

.....PL 3019/2019 - Pending

The bill amends the Consumer Protection Code to classify as an abusive practice to program the decrease of durability of products displayed on the market, or the life span of its members, with the objective of making them obsolete before the stipulated useful lifespan.

Denmark

.....B106 - 2014-15 - Proposal for parliament

The proposal aims at providing consumer information on longevity and planned obsolescence for electrical and electronic products.

European Union

.....The Circular Economy Action Plan

The second edition of the Circular Economy Action Plan was released in March 2020.The Plan announces that the "Commission will also consider further strengthening consumer protection against green washing and premature obsolescence, setting minimum requirements for sustainability labels/logos and for information tools."

.....Premature Obsolescence
Multi-stakeholder Product Testing Programme

The European Commission is working on developing a testing programme against planned obsolescence. The programme aims to support the assessment of the longevity of consumers products when they are made available on the market. The testing programme will cover smartphones, televisions, washing machines and vacuum cleaners.

France

.....Loi no 2015-992 du 17 août 2015 / Code de la Consommation

The law was adopted in August 2015. France is the only nation known to have introduced penalties and punishment for planned obsolescence. The practice is punishable by two years' imprisonment and a fine of 300.000 euros or a maximum of 5% of the sales revenue. The law reads "planned obsolescence means the techniques by which a manufacturer aims to deliberately reduce the life of a product.

Italy

.....Codice del consume

The Codice del Consume contains articles regarding the Liability for damage caused by defective products (Art. 128-135). New proposal on programmed obsolescence is currently pending.

Ecuador

.....Reglamento General al Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación (Law Nº 1435 of June 7yh, 2017)

Articles 63 to 66 of this law are centred on planned obsolescence, establishing provisions for governments to avoid such practices from manufacturers.

Mexico

.....LXIV/2PPO-56/99640 - Pending

The bill amends various provisions of the Federal Law on Consumer Protection, regarding the prohibition of the sale of products with programmed obsolescence.

3.2 MINIMUM DURABILITY CRITERIA

Durability is generally understood as the ability of products to perform their function at the anticipated performance level over a given period (e.g. number of cycles, uses, hours in use, etc.), under the expected conditions of use and under foreseeable actions. Policies are able to stimulate durability in several ways. Policy and specific measures can facilitate durability in a direct manner, for instance by setting clear mandatory requirements on product lifetime (Maitre-Ekern and Dalhammar, 2016).

Brazil

.....PL 7875/2017 – Pending

The bill provides for the National Policy for Conservation of Natural Resources and foresees that every product sold in Brazil must have a "Durability Seal" to be disclosed in a clearly visible and highlighted and easy to read, informing the product's expected durability under normal conditions of use.

European Union

.....The European Ecodesign Directive

The Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 established an overarching framework for the setting of ecodesign requirements for energy-related products. Since then, a number of product-specific regulations were adopted in different years. For instance, the minimum durability criteria for vacuum cleaners. For instance, the minimum durability criteria varies for vacuum cleaners, domestic light products, computers and computer servers, servers and data storage products.

France

.....Repairability scoring system - Introduced in the law to enter into force in 2024

The anti-waste and circular economy law (2020) introduced this index, which will replace or enhance the repairability scoring system, and will consider repairability but also durability and robustness of products (art. L.541-9-2 du code de l'environnement).

Japan

.....Consumer Product Safety Act (Act No. 31 of June 6, 1973)

The article 32 of this Act requires that the manufacturer determine (a) the standard period of use during which no safety trouble should arise if used under standard conditions; and (b) the period of time for inspection that is necessary to prevent the occurrence of injury due to Age-Related Deterioration as the design standard use period expires.

3.3 PRODUCT REPAIRABILITY

Reparability is defined by the ability of a product to be repaired during its life cycle, and it can also offer new economic opportunities for services providers. It is not uncommon, however, that products are not designed for easy dismantling of their components. Also, the capacity to repair products can be restricted by the use of digital locks or copyrighted software, incompatible screws, impossibility to separate materials and components, or absence of repair manuals.

When independent repair professionals and consumers themselves are unable to repair items, products may not last as long as this would be possible. It is common that consumers need to access approved repairers, sometimes at greater expense, distance and delay, especially if they do not want to invalidate the warranty. This might be an inconvenience for many, arguably hitting poorer and geographically isolated consumers harder. In order to overcome these barriers, regulations on product repairability generally requires manufacturers to design longer-lasting products or make spare parts readily available for consumers or independent repairers.

Argentina

.....Ley 24240/1993 (Consumer Protection Code, art. 12) Approved

The law requires that manufacturers, importers and sellers of durable consumer goods must ensure adequate technical service and the supply of parts and spare parts.

Brazil

.....PL 3002/2011 – Pending

The bill adds an article to the Consumer Protection Code, forcing automotive vehicle sellers to keep in their stocks the parts needed to repair the vehicles sold by them.

.....Lei 8078/1990
(Consumer Protection Code, art. 21) Approved

The law requires that repair services' providers must employ suitable and new original replacement components, or which maintain the manufacturer's technical specifications, unless the consumer authorizes otherwise.

.....Lei 8078/1990
(Consumer Protection Code, art. 32) Approved

The law requires that manufacturers and importers must ensure the supply of components and spare parts until the manufacture or import of the product stops.

.....Lei 12.977/2014 – Approved

The law regulates the activity of dismantling land motor vehicles, so their parts can be used for replacement.

.....PL 2002/2020 – Pending

The bill amends the Consumer Protection Code regarding warranty for products acquired overseas. The PL foresees that in the case of products purchased overseas, the manufacturer headquartered in Brazil or its representative will be held liable for answer for quality defects.

.....PL 2010/2011 – Pending

The bill amends the Consumer Protection Code to mandate the provision of effective means to make the warranty repair of products viable.

.....Lei 8078/1990
(Consumer Protection Code, art. 70) Approved

The law states that the use of second hand replacement parts to fix products without consumer authorization is classified as a crime against consumer relations, for which the sentence is three months to one year of imprisonment and a fine.

Belgium

.....VAT reductions on repair services

Social enterprises active in the area of reuse and preparing for reuse have a reduced VAT rate of 6% under certain conditions, because they combine their reuse, and preparing for reuse activities with training, rehabilitation and integration of disadvantaged groups. This is a reduced VAT rate relating to the sales of goods and services provided by such social enterprises.

Canada

.....Bill 72 - Introduced in 2019, but not approved

The Bill 72 was introduced to require electronic manufacturers to provide consumers and third-party repair shops the necessary resources to repair electronic products that function at least in part because of electronics in or attached to them.

Chile

.....Ley 19496/2004
(Consumer Protection Code, art. 40) Approved

The law obliges the service provider to use in such repair components or spare parts suitable for the property in question, whether new or refurbished.

Costa Rica

.....Ley de Promoción de la Competencia y Defensa Efectiva del Consumidor
(Law Nº 7472 of December 20th, 1994)

The article 34 of this law obliges the merchant to inform consumers if products contain any parts that were previously used in other items (if there is no information on the matter, product can be considered new) and inform when there are no technical repair services or spare parts for a specific product in the country.

Colombia

.....Ley 1480/2011
(Consumer Protection Code) Approved

The law establishes the obligation to have the available spare parts, supplies and skilled labour, even after the warranty expires.

European Union

.....The European Ecodesign Directive

The Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 established an overarching framework for the setting of ecodesign requirements for energy-related products. In October 2019, the European Commission announced new ecodesign measures that aimed at facilitating products repair by ensuring the availability of spare parts, in particular that spare parts are available over a long period of time after purchase (e.g. 7 years minimum for refrigerating appliances, 10 years minimum for household washing-machines and household washer-dryers; and 10 years minimum for household dishwashers). It was also announced that as of 2021, in order to enhance the repair market, manufacturers have to ensure the availability of repair and professional maintenance information for professional repairers for up to 10 years.

.....The Circular Economy Action Plan - Circular Electronics Initiative

The Circular Economy Action Plan was released in 2020 and contains various measures to accelerate the transition to a more resource-efficient and circular economy in the EU. These measures include new EU-wide ecodesign criteria and information requirements to ensure that consumers can repair products more easily in future. This will affect IT and electrical equipment such as smartphones, tablets and household appliances. A related initiative to reform the existing Batteries Directive so to make the batteries of devices removable and replaceable was presented in December 2020.

.....The European Sale of Consumer Goods and Associated Guarantees Directive (Directive 1999/ 44/EC)

The European Sale of Consumer Goods was released in 1999. A new sale of goods directive (Directive 2019/771) will apply from 2022.The European Sale of Consumer Goods and Associated Guarantees Directive (Directive 1999/44/EC) contains general rules on certain requirements concerning sales contracts concluded between sellers and consumers. Amongst other aspects, this Directive announced that consumers are entitled to repair or replacement of goods which are not fit for purpose or do not match the description given by the seller. However, this is only available within a two-year guarantee period (the warranty period remains the same in the new Directive 2019/771). It is important to mention that EU member states have the possibility to formulate more ambitious requirements than the EU minimum standards and some countries have done that (e.g. Portugal). Also, the aspect of the reversal of burden of proof is also addressed, in which any lack of

conformity which becomes apparent within one year of the time when the products were delivered should be presumed to have existed at the time when the products were delivered, unless proved otherwise.

France

.....Décret n2016-703 du 30 mai 2016 relatif à l'utilisation de pièces de rechange automobiles issues de l'Économie circulaire - In force

The decree requires car repair services to also propose spare parts from the circular economy.

.....Anti-waste and Circular Economy Law (Law 2020 - 105) (AGEC)

The law was adopted in 2020 but some dispositions enter into force in 2021 or 2022.

- obligation to make spare parts available for a minimum of 5 years after purchase for small electronics (products to be defined) (art. L.111-4 du code de la consommation)
- obligation to inform consumers in stores whether spare parts are available or not, and for how long (article L.111-4 du code de la consommation)
- spare parts must be delivered within 15 working days as opposed to 60 working days before
- if a part is unavailable, the 3D printing plans must be made available (subject to the respect for intellectual property rights)
- encouragement for using second-hand parts in electronic and medical repair (art. L.224-109 et L.224-110 du code de la consommation)
- it is now forbidden to put a product on the market that would be intentionally unrepairable (art. L. 441-3 du code de la consommation)
- repair funds are set up (within EPR schemes) that aim to support and develop the repair sector and aim to make repair cheaper at state-certified professionals (art L.541-10-4 du code de l'environnement).
- extension of the minimum legal guarantee of 6 months if a product is repaired during the minimum legal guarantee of 2 years (article 22, implementation due in 2022)
- from January 2021, anyone producing or selling electronics in France will be required to inform vendors and consumers of a new "reparability index". The obligation starts with 6 product categories of consumer electronics: front-loading washing machines, smartphones, laptops, TV monitors, and electric lawn mowers. It will progressively be extended to more consumer electronic product categories. It is expected that this index will give products a score out of 10 to inform consumers how easy to repair the product is. Decreet and articles have been published the 31st December of 2020. Calculation of the index is based on 5 criteria, with a specific matrix for each 5 types of products concerned.

.....Decree 2014-1482

The decree was released in 2014 and it is related to information and supply obligations concerning spare parts essential for the use of goods obliges manufacturers and retailers to inform consumers on spare part availability

.....French Circular Economy Law
French Circular Economy Roadmap (FREC)

The Roadmap released in 2018 proposes measures to foster the development of digital platforms mapping repair and reuse services and to mobilize organizations to make information on these services available tothe public.

Germany

.....Waste Prevention Programme of Germany

The Programme was published in January 2020 and includes information on repair as an important strategy for waste prevention. It also includes measures on how to use products for longer, enable sustainable consumer choices, design better products, and use market incentives to do so.

.....National programme
on Sustainable Consumption

The Programme was published in January 2019 and includes support for the development of repair services for used IT devices, for example through activities as part of the implementation of the federal waste prevention program with the participation of the federal states and also within the scope of the Blue Angel ecolabel. The programme also states that aspects such as service life of products and ease of repair should be made clearer and more accessible for consumers.

.....Digital Policy Agenda

The Digital Policy Agenda was released in 2019 and foresees the development of a digital product passport, and calls for the lifetime extension strategies for smartphones and other electronics (including easier disassembly as well as spare part and software update provision).

Panama

.....Ley de Protección al Consumidor y Defensa de la Competencia (Law Nº 47 of October 31st, 2007)

The law establishes that the manufacturer is responsible for providing information about the existence of spare parts and repair services in the country, as well as providing the repair service for the consumer in case of product defect or any other reason that prevents the use of the product by the consumer within the warranty period.

Spain

.....Ley 7/1996

The law approved in 1996 states that spare parts should be available for 5 years after the placing on the market of the last product and that spare parts price lists should be available for the consumers. Labour costs and visit costs should not be higher than the average costs estimated for the sector.

United States

.....Right to repair legislation - Active in 17 states

Right to Repair legislation already active in 17 states in 2020[1]: Massachusetts (House and Senate), Minnesota, Vermont (which added a companion bill in the House), New York (House and Senate), Washington (which held a hearing on the Senate side), Georgia, and Hawaii (which added a companion bill on the House side). New Hampshire and California bills were carried over, but are no longer active. New bills have been filed in a few additional states: Oklahoma, Alabama, Maine (which has already held a hearing and two work sessions), Missouri, Colorado, Maryland (House and Senate), Idaho and New Jersey.

.....The Massachusetts "Right to Repair" Initiative

A bill passed in Massachusetts in 2012 requires car manufacturers to provide documents to allow anyone to repair their vehicles. The US automotive industry was the first to attract legislation requiring automotive Original Equipment Manufacturers (OEMs) to open up maintenance and repairs to independent workshops, without the vehicles warranty being voided.

.....Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies

In this rule that was approved in 2018, consumers are allowed to legally hack software in their devices as needed for repair and maintenance.

Ireland, Luxembourg, Malta, Netherlands, Poland, Slovenia, Finland

.....VAT reductions on minor repair services

Products include bicycles, shoes and leather goods, and repair services include mending and alteration[2].

South Africa

.....South African Consumer Protection Act (Act No. 68 of 2008)

The article 57 of this Act requires that a service provider must warrant every new or reconditioned part installed during any repair or maintenance work, and the labour required to install it, for a period of three months after the date of installation or such longer period as the supplier may specify in writing.

Sweden

.....Tax breaks on repairs

Approved in 2016, Sweden implemented a reduced VAT rate for repair services to clothes, bicycles, fridges and washing machines and encouraged consumers to repair their household appliances by allowing them to deduct 50% of the labour cost off their taxes.

Venezuela

.....Ley 37930/2004 (Consumer Protection Code, art. 21)Approved

The law obliges the producer to guarantee the existence of spare parts during the commercialization of products and period after the commercialization of it.

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[1] More information available online at: malegislature.gov/Bills/191/H218 | malegislature.gov/Bills/191/S107 | www.revisor.mn.gov/bills/bill.php?b=House&f=H-F1138&ssn=0&y=2019 | legislature.vermont.gov/bill/status/2018/S.180 | assembly.state.ny.us/leg/?default_fld=&bn=A06589&term=2019&Summary=Y&Actions=Y&Text=Y&-Committee%26nbspVotes=Y&Floor%26nbspVotes=Y | app.leg.wa.gov/billsummary?BillNumber=1342&Year=2019&Initiative=false | www.legis.ga.gov/Legislation/en-US/display/20192020/HB/286 | www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=2496&year=2020

[2] More information available online at: www.rreuse.org/wp-content/uploads/RREUSE-position-on-VAT-2017-Final-website_1.pdf

3.4 EXTENDED PRODUCT WARRANTY

A legal guarantee is a legal contract which requires the traders to either rectify or compensate for all failures occurring within the warranty period. A commercial warranty is a voluntary form of guarantee that a manufacturer gives regarding the condition of its product. By being offered an extended product warranty, consumers will not have to pay for repairs for a specified period after the manufacturer's or traders' guarantee or warranty has expired.

Brazil

.....PL 2285/2011 – Pending

The bill obliges manufacturers and shopkeepers to hire an insurance company to support the extended coverage.

Costa Rica

.....Ley de Promoción de la Competencia y Defensa Efectiva del Consumidor (Law Nº 7472 of December 20th, 1994)

The article 43 of this law establishes that any good that is sold or service that is provided must be implicitly guaranteed in terms of compliance with the quality standards and technical requirements. For durable goods, in addition to the implicit quality guarantee, the guarantee must indicate the scope, duration, conditions, natural or legal persons who extend them and are responsible for them and the procedures to make them effective.

European Union

.....The Consumer Sales and Guarantee Directive (DIRECTIVE 1999/44/EC) and Directive (EU) 2019/771Released in 1999 and revised in 2019

It provides for a minimum period of six months during which the burden of proof is reversed in favour of the consumer. Some countries went beyond the required and extended it. Poland has extended it and implemented a 1-year period and France and Portugal have implemented a 2-year period[3]. In the case of second-hand goods, the seller and the consumer can agree to contractual terms or agreements with a shorter liability or limitation period than those referred to new goods, provided that such shorter periods shall not be less than one year.

Finland

.....Guarantees and returns

In Finland, the length of the warranty of products is decided based on the predicted lifespan of the product rather than a singular specified number of years.

France

.....Law 2014-344 on consumer rights (Loi Hamon)

Approved in 2014, the law extends the presumption of anticipation for the lack of conformity from 6 months to 2 years. This means that the burden of the proof is borne by the manufacturer for the full 2 years of the guarantee, instead of only 6 months as it was before.

India

.....The Consumer Protection Act (Act No. 35 of August 9th, 2019)

This Act establishes that a product service provider shall be liable in a product liability action, if the service did not conform to express warranty or the terms and conditions of the contract.

Panama

.....Ley de Protección al Consumidor y Defensa de la Competencia (Law Nº 47 of October 31st, 2007)

The article 56 of this law obliges the manufacturer to provide a reasonable warranty period for an efficient function of the product and all suppliers/providers from the supply chain must comply with this period.

South Africa

.....South African Consumer Protection Act (Act No. 68 of 2008)

The article 52 of this Act gives the right to consumers, within six months after the delivery of any goods, to return them to the supplier, without penalty and at the supplier's risk and expense, if the goods fail to satisfy the requirements and standards and the supplier must, at the direction of the consumer, either (a) repair or replace the failed, unsafe or defective goods; or (b) refund to the consumer the price paid by the consumer, for the goods.

[3] More information available online at: www.ecc.fi/globalassets/ecc/ajankohtaista/julkaisut/garanties_final-optimized.pdf

3.5 CONSUMER EDUCATION, CONSUMER RIGHTS, CONSUMER PROTECTION AND INFORMATION POLICIES

These policy measures and regulations aim to give consumers access to reliable and clear information that allows and encourage them to keep products for longer.

Consumer involvement is essential to address product lifetime extension as it is the consumer who can either provide careful maintenance or decide to replace a product for certain reasons. Replacement motives can be very diverse and seem to vary by type of product and consumer. That is the reason why knowledge about the drivers of replacement is so important for developing effective design strategies to avoid early replacement. Thus, policies must support consumers and assure their independence and autonomy, which means consumers can decide when to replace products and that it is not planned obsolescence, lack of repair services or spare parts that impose such decisions on consumers.

Argentina

.....PL 2210/2016 – Pending

The bill obliges the manufacturer, seller or importer, in the process of sale of electronic goods or goods of high economic value, to inform the useful time of the good, mediating its normal, responsible and adequate use.

Brazil

.....PL 6042/2019 – Pending

The bill obliges the supplier to inform the estimated useful life of electronic products and appliances. In case of obsolescence before the estimated useful life, the consumer can require the product replacement.

.....Sectoral Agreement for the implementation of the reverse logistics system for electronic products for domestic use and its components – Approved

The agreement obliges the value chain of electronic products to implement a communication and environmental education plan on the reverse logistics of electronic products and environmental aspects of the product life cycle. Manufacturers, importers, distributors and retailers of consumer electronics, in compliance with the National Solid Waste Policy, must implement the Sectoral Agreement signed in October 2019, which includes the elaboration of a non-formal environmental education and communication plan with the objective of publicizing the implementation of the Reverse Logistics System, as well as qualifying opinion leaders, leaders of entities, associations and municipal managers to support the implementation of the System.

China

.....Law of the People's Republic of China on the Protection of the Rights and Interests of Consumers

The articles 7 and 8 of this law state that in the purchase or use of a commodity or receipt of a service, a consumer shall have the right to the safety of property guaranteed and also have the right to require relevant information (for example, place of origin, producer, usage, functions, specifications, certificate of inspection and others).

Costa Rica

.....Ley de Promoción de la Competencia y Defensa Efectiva del Consumidor (Law Nº 7472 of December 20th, 1994)

The article 34 of this law obliges the merchants to inform the consumer about the nature, composition, content, weight, where applicable, the characteristics of the goods and services, the cash price on the packaging, the container, the container or the label of the product and the gondola or the shelf of the commercial establishment, as well as any other determining data. In addition, the product label must indicate which is the certifying body.The article 39 of this same law establishes that when defective, used or rebuilt/repaired products are sold, before the purchase, the merchant must indicate to the consumer, precisely and clearly, such conditions and be recorded in the invoices or vouchers. The merchant must warn of the previous points if he advertises the sale of these products using any means. If there is no warning on the matter, these goods are considered new and in perfect condition.

European Union

..... The Circular Economy Action Plan

The Plan released in March 2020 announces an intention to revise consumer law to ensure consumers receive trustworthy and relevant information on products at the point of sale, including on lifespan and reparability. More specifically, the Plan announces that additional information will need to be provided to consumers about product lifetimes and that companies will be legally required to substantiate any environmental claims.The Empowering Consumers initiative, which is planned for 2021, aim to to (1) empower consumers to make better informed choices as regards the environmental aspects of products (including by providing point of sale information on lifespan of products, as well as availability of repair services, spare parts and repair manuals); (2) counter greenwashing and (3) prevent planned obsolescence and other similar practices.

France

..... Article 16 law against waste and for the circular economy (AGEC)

The article requires a mandatory repairability logo on electric and electronic consumer products. The repairability index is enforced from the 1st January of 2021, and will be replaced/enhanced by a durability index in 2024.

.....Article 19 law against waste and for the circular economy (AGEC) - Implementing measure pending

It requires sellers to provide information to consumers about the availability of spare parts and its duration (aims to reinforce the previous 2014 measure that contained a loophole whereby sellers and manufacturers who did not provide spare parts escaped the measure).

.....Articles 27 and 13 law against waste and for the circular economy (AGEC) - Implementing measures pending

The Law imposes an obligation on manufacturers to inform consumers of how long updates to the software provided at the time of purchase will remain compatible with normal use of the device (these provisions will be enforceable after enactment of specific decrees, yet to be published). From January 2022, additional requirements will come into force to require businesses to inform consumers of the environmental and waste-generating characteristics of products (e.g. durability).

.....Décret 2014-1482 - In force

The decree adopted in 2014 requires sellers and manufacturers to provide information to consumers about the duration of the avaliability of spare parts.

India

.....The Consumer Protection Act (Act No. 35 of August 9th, 2019)

The articles 84 and 85 of this Act claims that a product manufacturer shall be liable in a product liability action, if the product contains a manufacturing defect, is defective in design, does not conform to the express warranty, fails to contain adequate instructions of correct usage to prevent any harm or any warning regarding improper or incorrect usage or if there is a deviation from manufacturing specifications

Japan

.....Act on Promotion of Consumer Education (Act No. 61 of December 12, 2012)

The article 3 of this Act requires the implementation of Consumer Education in order to have consumers fully acquire knowledge of consumer affairs and to foster consumers' practical ability to combine what they have learned with appropriate consumption behaviour.

Mexico

..... 151/ DOF 26-12-2019 – Approved

The law requires imported products must express their place of origin, places they can be repaired, instructions of use as well as the corresponding guarantees.

Panama

.....Ley de Protección al Consumidor y Defensa de la Competencia (Law Nº 47 of October 31st, 2007)

The article 34 of this law establishes that the State is responsible for formulating consumer education, orientation and information programs, with the purpose of training them so that they can discern and make informed decisions about the consumption of goods and services, with knowledge of their duties and rights.The article 35 of this same law claims that the consumer has the right to receive from the suppliers all the information on the characteristics of the product or service offered, in a clear and truthful way, to be able to make a decision when purchasing the product or service, as well as to make the proper use or consumption of it, in accordance with national laws.

South Africa

.....South African Consumer Protection Act (Act No. 68 of 2008)

The article 20 of this Act implies that consumers may return goods to the supplier, and receive a full refund of any consideration paid for those goods, if the supplier has delivered goods that the consumer did not have an opportunity to examine before delivery, and the consumer has rejected delivery of those goods due to lack of type and quality reasonably contemplated in the agreement; and lack of reasonably conform to the material specifications of the special order.

Viet Nam

.....Law 59/2010/QH12 on consumer rights – Approved

The law stipulates liability of the trading entities on the warranty and maintenance of goods, components and accessories. The law obliges the manufacturers and sellers to (1) apply labels on their products in accordance with the national regulations (including energy saving label, toxic label, etc,) (2) provide point of sale information on lifespan of products, as well as availability of repair services, spare parts, guarantee procedures and repair manuals, (3) provide consumers with the receipt of the warranty, clearly stating the duration of the warranty, and (4) provide consumer with similar goods, components or accessories for temporary use or provide other forms of settlement accepted by consumers during implementation of the warranty.

Thailand

.....Consumer Protection Act B.E. 2522 (April 30th, 1979)

According to section 4 of this Act the consumer has the right to receive correct and sufficient information and description as to the quality of goods or services; the right to expect safety in the use of goods or services; and the right to have the injury considered and compensated in accordance with the laws on such matters or with the provision of this Act.Defect Liability Act ("Draft Act") – PendingThe Act states that the buyer has the following rights when the seller is liable for the defect of the product: demand the seller to repair the product, to replace the product, demand a discount of the product price or cancel the contract.

3.6 OTHERS

Brazil

.....Portaria SECEX 23/2011 – Approved

It establishes authorization conditions for imports of second hand machinery, equipment, appliances, instruments, tools, and containers for use as a cargo unit, provided that they are not produced in the country, or cannot be replaced by others that are manufactured in the national territory, capable of meeting the purposes for which the material to be imported is intended.

Viet Nam

..... Decree No. 116/2017/ND-CP on requirements for manufacturing, assembly and import of motor vehicles and trade in motor vehicle warranty and maintenance services - Approved

The regulation stipulates responsibilities for motor vehicle warranty and maintenance, including:

- Motor vehicle manufacturers, assemblers and importers shall provide motor vehicle warranty in accordance with regulations of law on protection of consumers' benefits.
- Motor vehicle manufacturers, assemblers and importers shall publish information about warranty periods, contents and requirements; warranty cycles and tasks; addresses of eligible warranty/maintenance centers mentioned herein and other necessary information serving the warranty or maintenance.

4. Conclusions

A transition to a more circular economy and to sustainable consumption and production practices is urgent to reduce the rate in which natural resources are being consumed. Considering that short use and fast replacement of products have dictated consumption patterns in many regions around the world, product lifetime extension makes a compelling case as it reduces resource use and waste, while preserving the economic value embedded in products (UNEP, 2017).

Without considerable changes in how products are designed, produced, and discarded there can be little progress towards sustainable consumption. In order to encourage sustainable choices in consumption and production, while ultimately fostering circular economy, actions need to be taken to enhance the availability of more sustainable options and inhibit the production and sale of products with high negative impacts on the society, the environment and local economies. Governments have a key role to play since it is challenging for individual consumers to make such structural changes happen. Regulatory and policy approaches that shift market practices in the SCP direction not only enable motivated consumers to behave more sustainably but also direct less aware consumers to more sustainable options by default (UNEP, 2015).

Given this, governments should consider regulating around the use of resources and associated pollution. The existence of policies that address product lifetime extension is particularly relevant when considering the need for a solid background that guarantees the involvement of all actors along the value chains in promoting such practices. This current document presented examples of policies and regulatory measures that different countries have in place, or aspire to, for addressing product lifetime extension. The objective was to illustrate that the extension of the useful life of a product can be promoted by not only one, but a variety of strategies.

The nature of the regulatory and policy landscape relevant for the postponement or reversal of the obsolescence of a product is highly specific on national contexts. Due to this complexity and the time constraints under the project, the scope of the review only covered a few countries. Even though not all countries were covered in this overview, the research made it clear that the engagement in creating and promoting policies that encourage greater resource efficiency has been increasing over the last two decades, as well as waste management policies. Yet, more policy attention still needs to be directed to the design and use phases of products, particularly to certain product categories such as textiles, as it was observed that the significant majority of policies covered in this report target electronic products and white goods. More attention should also be placed to measures that could address psychological obsolescence, which occurs when fully functioning products are replaced because they are no longer fashionable or desirable by consumers.

Finally, it is important to emphasize that a one-size-fits-all horizontal policy approach to product lifetime is unlikely to be appropriate, as different policy measures are suitable to different product categories at different times.

THE ROLE OF CONSUMER INFORMATION

Consumer information tools, such as labels and product declarations, have the potential to provide credible information on the ‘world behind’ the products, including pertinent guidance that could help consumers to make more sustainable consumption choices. Consumer information can be seen not only as a tool to communicate environmental credentials to consumers but also to track and control performance through value chains, with the aim to enhance circularity and ultimately extend the lifetime of products. In fact, both consumers and producers require clear and reliable information if they are to make efficient decisions that make products last longer. At the production side, consumer information tools can promote good quality products with requirements on durability, upgradability, reparability, warranties, and availability of replacement parts as requirements. The use of consumer information tools

can also guide consumers towards products that have a better environmental performance, including at the use and disposal phases. Consumer information tools can also inform and help educate consumers to correctly use and dispose of products, therefore contributing to material flow returning to the economy.

The section entitled “Consumer education, consumer rights, consumer protection and information policies” highlights policies that directly address consumer information in aspects such as the origin of the product, manufacturing and expiration dates, and availability of repair services. Governments can also support consumer choice of products through information-based mechanisms, for instance by monitoring and regulating misleading environmental product claims, which is usually performed by consumer protection departments. Policies around the world often focus on enabling consumers to understand their rights regarding the purchase of products and their durability, procedures in case of defect, and product repairability options. It is important to recognize however that these policies alone are not enough to reach consumers widely. Voluntary instruments and efficient communication tools are still needed to strengthen consumers awareness on how they can engage in product lifetime extension strategies. Such tools are generally based on the rationale that if consumers have better information, they are able to make better buying decisions.

Consumers play an important role in extending the useful life of products by deciding what to consume and how they will use the products they buy. In order to encourage PLE in practice, consumers can take various actions, which include prioritizing products from companies that address key issues of the value chain, such as adequate raw material extraction, fair and safe labour conditions, and satisfactory end-of-life management. NGOs and consumers organisations can provide further support by monitoring law implementation, raising awareness, informing advocacy, educating consumers and sharing relevant knowledge through communication campaigns.

Extending the lifetime of products has many potential positive impacts on consumers. Benefits can be an increase in consumer satisfaction, as products could be used for a longer time. This benefit applies particularly to products which consumers rely upon for their function and which tend to be kept in use until they break, also known as workhorse products (e.g. irons, vacuum cleaners, household machines, refrigerators, etc.). Also, the security to be covered by a supplier warranty in case of need of repair and refurbishment, and the opportunity to acquire ‘one-of-a-kind’ items (by purchasing unique items) in case of upcycling, can be seen as other benefits.

However, for these benefits to be realised in practice, one of the main current challenges from the perspective of consumers is the fact that some products made under the circularity approach may still cost more than those with built-in obsolescence, even though consumers might expect monetary savings along products’ lifetime. It is therefore crucial to change the general perception in relation to the value of a product with an extended lifetime, which is an important point of education. From the perspective of businesses, a common challenge is the fact that when going from fast obsolescence to an extended lifetime model, the profitability of the company may also depend on a necessary change of the business model. In this sense, policies that aim at more sustainable production and consumption, as well as providing better and more holistic product information, are crucial to guide both consumers and producers in the direction of the circular economy across the world.which is an important point of education. From the perspective of businesses, a common challenge is the fact that when going from fast obsolescence to an extended lifetime model, the profitability of the company may also depend on a necessary change of the business model. In this sense, policies that aim at more sustainable producing and consuming, as well as better information, are crucial to guide both consumers and producers in the direction of the circular economy across the world.

GET INVOLVED

The Consumer Information Programme acts as a global platform supporting the provision of quality information on goods and services, to engage and assist consumers in sustainable consumption. Organizations interested to learn more about the projects on product lifetime extension, to share ideas and join the network are invited to contact ciscp@un.org.

For more information:
www.oneplanetnetwork.org/consumer-information-scp

5. References

Regulatory texts were used as primary sources, but secondary sources, such as news articles and policy reports were also considered for this compilation. Hyperlinks are included throughout the document. Although extensive efforts were undertaken to find relevant policies, which included inputs from members of the Product Lifetime Extension Working Group of the CI-SCP, it is possible that relevant policies may not have been captured in the analysis. Academic references included:

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