Towards a Sustainable and Circular Textile Value Chain:

TOOLBOX FOR POLICYMAKERS FROM HIGH TEXTILE CONSUMPTION COUNTRIES

The **purpose** of this toolbox is to provide **policymakers from high textile consumption countries** with examples of policy* approaches that may support the transition **towards a sustainable and circular textile value chain**. A **high textile consumption country** refers to a country where there is significant demand for textile products. Significant demand can be quantified by, for example, the per capita consumption of new garments each year. In this regard, while some do not yet have adequate access to textiles,[01] others are consuming more than 50 garments per person per year.[02] This contrasts with the recommendation of five new garments per year per capita to live within the climate planetary boundary.[03] Factors contributing to high textile consumption include population size, economic prosperity, fashion trends, growth prospects, and lifestyle preferences.

High textile consumption countries typically import large volumes of textile products, have a large retail sector, and export used textiles. They are also often home to the headquarters of major textile brands and retailers, whose decisions about product design and business models impact production and consumption practices globally. Given the environmental and social implications associated with the overconsumption of textiles, strengthening the policy landscape of these countries is vital to reduce the inflow of new products, decrease unnecessary demand, and develop appropriate disposal methods for textile waste where all other more favourable options (reuse, recycling, etc.) have been exhausted. Due to the global nature of the value chains in which brands operate, it is also important to consider the potential impacts of new policies on other regions and countries.

This document was written following a literature review process and is not exhaustive.** This is a living document that will be updated regularly, incorporating input from consultations and any new policies that are proposed or adopted. To address the environmental and social issues associated with high textile consumption, this toolbox outlines four phases to accelerate the transition towards a sustainable and circular textile value chain.

This toolbox adopts the same definition of '**textiles**' as the United Nations Environment Programme (UNEP)'s Sustainability and Circularity in the Textile Value Chain - A Global Roadmap (2023): "all products that contain knit or woven textile components, primarily composed of apparel and footwear, but also including home textiles, technical, medical and automotive textiles, etc." The policy examples included in the toolbox may use different definitions.

** For the purposes of this toolbox, '**policies**' encompass a broad range of tools, referred to as policy instruments, that governments and public institutions may adopt to influence the behaviour of individuals, organizations, and stakeholders towards sustainability and circularity in the textile value chain. These instruments may adopt various forms, including regulatory measures, economic incentives, information-based instruments, among others. Such measures include primary and secondary legislation, as well as non-legally binding instruments (e.g. research grants, etc).*

*** The authors did not undertake consultations or obtain expert peer-review. The methodology for developing this toolbox included a global scan of existing, emerging, and historic policies which are relevant to the transition toward a sustainable and circular textile value chain. This scan resulted in the development of a database of over 200 relevant policies across the globe. Policy examples from countries in this toolbox may not reflect latest developments; readers are encouraged to check for any recent updates.*

PHASE 1

ASSESSING THE CURRENT POLICY LANDSCAPE

A **comprehensive assessment** of the country's policy landscape as it relates to textiles and the impact of textiles in the country can assist countries in selecting policy instruments. An **inclusive consultation process** is vital, including with policymakers across all relevant ministries, industry players (e.g. raw material producers, manufacturers, brands, and retailers), civil society organisations, financial institutions, and consumers, to foster interministerial cooperation, synergies among policies and broader acceptability. The assessment should also be informed by existing data or resources at the sub-national, national, regional and/or international levels (see complementary resources on p 17 of the toolbox). Recognizing the importance and role of the informal sector is also critical.

The **purpose** of the assessment is to, inter alia, (1) build an initial baseline to understand the amount, location and value of current textile production, consumption and disposal levels and drivers; (2) map existing policies and voluntary initiatives related to textiles (at all levels), institutional responsibilities, and actors involved in the value chain; (3) assess the economic, social, and environmental impact of the textile sector across the value chain, including beyond national borders; (4) identify hotspots, policy gaps, challenges, and opportunities for reform; (5) identify key enablers, such as technology, institutional and technical capacity, and investment, to support the implementation of the 'R' strategies of reuse, repair, remanufacturing, recycling, and recovery; and (6) identify key stakeholders engaged along the value chain, such as fashion schools, academia, think tanks, and research centres to assess the role of youth, innovators, and thought-leaders in the country.

PHASE 2

ENVISIONING THE PATH TOWARDS SUSTAINABLE AND CIRCULAR TEXTILES

Developing a vision for sustainable, circular textiles can serve as a **strategic guide or blueprint** for a country, ensuring coherence and alignment with overarching goals, such as climate, pollution and biodiversity commitments. This vision might take the form of a standalone textiles strategy or be part of a country's broader industry or circular economy strategy.

Developing a vision is helpful to identify the strategic priorities of the country to address national 'hotspots' or the most pressing environmental and socio-economic issues, set measurable targets, align resources, identify key stakeholders, and establish clear responsibilities and timelines. It is also a key opportunity to identify the policy instruments required to enhance the existing policy framework, foster synergies, and avoid overlaps between policies to create a coordinated policy response throughout the value chain and avoid siloed interventions.

Examples of strategies include the European Union (EU)'s Strategy for Sustainable and Circular Textiles (2022), Chile's Strategy for Circular Textiles by 2040 (2025) or the Netherlands' Policy Programme for Circular Textile 2025-2030. For more examples visit UNEP's dedicated knowledge hub for the Global Textile Policy Dialogues.

PHASE 3

INTRODUCING POLICY INTERVENTIONS

A list of **policy examples** that may support the transition of **high textile consumption countries** towards a sustainable and circular textile value chain are included in the following pages. These examples were chosen because of their geographic spread, relevance to textiles, and/or their innovative approach to textiles regulation. The instruments below are organised according to the type of regulation (direct, economic, information-based, voluntary, behavioural),[04] although many are cross-cutting. A combination of policy instruments can support a profound, sustainable transformation.[05]

It is also important to adopt a **value chain perspective** when designing a coherent policy response. The following examples focus on the specific leverage points that a high textile consumption country may have to influence change along the entire textile value chain.

REGULATORY INSTRUMENTS (DIRECT REGULATION)

Regulatory instruments can mandate or prohibit specific practices or define a level of environmental performance to be achieved. They are usually combined with a monitoring mechanism and sanctions for noncompliance.[06]

INSTRUMENT

BANS AND RESTRICTIONS TARGETING HAZARDOUS CHEMICALS

These measures ban, phase out, and/or restrict the use, manufacture, distribution, selling, and importation of harmful chemicals used in textile products or during textile fibre production. While the products are not typically manufactured in high consumption countries, they are imported, and chemical compliance can be a condition for import and thus trigger production and product design decisions.

These measures aim to protect public health and the environment by **reducing or eliminating the exposure to harmful chemicals** and promote the use of safer alternatives where available. Such measures should be developed and implemented in line with the latest scientific findings and take into account international regulations, standards and commitments where applicable (e.g. the Stockholm Convention on Persistent Organic Pollutants (2001), the Global Framework on Chemicals (2023)), enabling clean input for eventual recirculation/recycling.

Examples include bans on the use of certain azo dyes (commonly used to impart vibrant colours to textiles), phthalates (used to enhance the flexibility and durability of textile materials), and perfluoroalkyl and polyfluoroalkyl substances (PFAS) (often used as water and stain resistance in textile applications).

EXAMPLES

The EU's Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (in force since 2007) aims to protect human health and the environment from chemical risks by, inter alia, requiring the registration of the use of chemicals, assessing the safety of chemicals, and phasing out or restricting substances of very high concern. REACH extends to the use of chemical substances in textile products sold within the EU. In November 2020, additional restrictions targeting textiles were implemented through the inclusion of Entry 72 in Annex XVII by Regulation 2018/1513.[07] This update limits the use of 33 substances known or suspected to be carcinogenic, mutagenic, or toxic for reproduction (CMR) which are used in textile production. According to Entry 72, textiles that come into contact with human skin must not contain these restricted substances in concentrations exceeding the regulated limits. REACH is implemented in the EU, though it has global impact as product importers must comply with the regulation in order to sell in the EU market.[08]

Regarding the use of PFAS in textiles, the EU is considering a proposal put forward in 2023 by Denmark, Germany, the Netherlands, Norway and Sweden on a 'universal PFAS restriction'.[09] While under consideration, steps are already being taken by some EU countries. In February 2025, France's National Assembly passed a new bill (Proposition de loi visant à protéger la population des risques liés aux substances per- et polyfluoroalkylées) banning the manufacture, import and sale of clothing textiles containing PFAS, except for protective clothing for security and civil protection professionals. Similarly, Denmark has also indicated its intention to ban PFAS on clothing and shoes, which is expected to apply from July 2026.[10]

Additionally, several states in the United States of America (USA) have also introduced or are planning to introduce bans and/or restrictions on the use of PFAS in textile products. Examples include California's Product Safety: Textile Articles PFAS Act - AB 1817 (2022); and the New York Act to Prohibit the Use of PFAS in Apparel and Outdoor Apparel for Severe Wet Conditions - Senate Bill S1322 (2023).

PRACTICAL GUIDANCE & TOOLS FOR ACTION

For guidance on chemicals management, explore the work done by the Strategic Approach to International Chemicals Management (SAICM) (e.g. Policy Brief – A Review of PFAS as a Chemical Class in the Textile Sector (2021); and Engaging the textiles industry as a key sector in SAICM: a review of PFAS as a chemical class in the textile sector (2021)) and stay informed with the progress made under the Global Framework on Chemicals. Also see the Inter-Organization Programme for the Sound Management of Chemicals (IOMC)'s platform for news, events, resources and tools for chemicals management.

INSTRUMENT

BANS ON THE DESTRUCTION OF UNSOLD AND RETURNED ITEMS

These measures prohibit companies from **discarding or destroying unsold or returned items** through methods such as landfilling or incineration. Such measures encourage companies to rethink stock management and (over)production. Brands and retailers have been found to destroy stock as a way of managing reputation and maintaining control of product distribution. Bans on the destruction of unsold and returned items force brands and retailers to use alternate pathways for reuse and responsible donation. In this regard, requirements for monitoring and reporting on total production volumes are essential to understand the quantity and value of unsold stock.[11]

In addition, the practice of discounting to move unsold stock should also be discouraged. Instead, the UNEP's and UN Climate Change's Sustainable Fashion Communication Playbook (2023) recommends brands to "[c]onsider loyalty programmes focused on repair for example rather than discounts for repeat purchases" (p 49).

EXAMPLES

France's Anti-Waste and Circular Economy Law, "Loi Relative à la Lutte Contre le Gaspillage et à l'Économie Circulaire" (2020), aims to eliminate waste, encourage circular practices, and provide support to the solidarity economy.* While the law is not textiles-specific, many of its rulings impact the textile value chain, including the ban on the destruction of unsold goods. This ruling encourages textile businesses to implement better stock management and forecasting, minimise order quantities, and support initiatives or partnerships for reuse, donation, or recycling.

** **'Solidarity economy'** refers to "enterprises organized in the form of cooperatives, mutual societies, associations, or foundations, whose internal functioning and activities are based on the principles of solidarity and social utility".[12] In the textiles sector, the solidarity economy has historically taken on the responsibility for used clothing collection, sorting, reusing and reprocessing and these stakeholders remain central to the transition toward a sustainable and circular textiles value chain.*

This approach has been supported by the EU, with policymakers agreeing to introduce a ban on the destruction of textiles and footwear.[13] The ban on the destruction of unsold textiles was a key action proposed in the EU Strategy for Sustainable and Circular Textiles (2022). In July 2024, the EU Ecodesign for Sustainable Products Regulation (ESPR) entered into force, which aims, among other matters, to stop the destruction of unsold and returned textiles. This will also require companies to disclose annual information regarding the number and weight of products that are discarded and the reasons for doing so.[14] An overview of the ESPR is included in the example below on 'product design and technical requirements'.

INSTRUMENT

BANS AND RESTRICTIONS ON ADVERTISING

These bans and restrictions include policy measures to **restrict messages of overconsumption** and associated advertising and promotion (e.g. from brands, retailers, the media, and influencers) which encourage unnecessary consumption and/or unsustainable behaviours. These measures may help ensure that public spaces remain free from unsustainable commercial practices and instead attempt to focus on messaging which enhances citizens' awareness and affinity for circular practices. In the textiles industry, this has implications for supporting the uptake of circular practices both for businesses and for households.

These regulations are distinct from those aimed at greenwashing, environmental claims, and other forms of sustainability communication as the bans on advertising place stricter perspectives on the commercialisation of public spaces and for instance discourage certain aspects of fashion advertising such as the drive for constant newness and the rapid turnover of styles, or marketing strategies which might, for example, encourage impulse purchases or overconsumption.

EXAMPLES

France's "Proposition de loi n°258, adoptée par l'Assemblée nationale visant à réduire l'impact environnemental de l'industrie textile" includes a proposed ban on advertising clothing products with very rapid renewal rates (adopted in 2024 by the National Assembly, pending endorsement of the Senate). This proposed law aims to reduce the speed and quantity at which fashion products are brought to the market. The law would implement a ban on advertising clothing made with very rapid renewal rates to discourage marketing practices that promote such products. Often, companies release a new clothing collection before the previous one is even launched, creating a continuous cycle that encourages unnecessary purchases and contributes to fashion waste. The advertising ban would extend to include household linens and shoes as well.

INSTRUMENT

PRODUCT DESIGN AND TECHNICAL REQUIREMENTS

These laws require producers to meet certain **criteria regarding the design or technical specifications** of products. These regulations have direct and indirect impact in the textile value chain and can stimulate circular business models. Product design and technical requirements which directly address textile products include those developed for flammability and safety, as well as those which specify minimum standards for circular production practices.

Design and technical requirements might also impact textile-related processes, including laundering and use, such as requirements for new washing machines to be equipped with built in or in the line microfibre filtration systems, with the goal to capture microfibres before they enter wastewater systems. However, the final disposal of retained microfibres in microfibre filtration systems is a crucial concern as rinsing filters with water or disposing of them through general waste can still end up in the environment. According to scientific research, the final disposal of these filters is a matter that still needs to be addressed, underlining the need for regulation in this area to be supported with recommendations for the safe disposal of filters.[15]

EXAMPLES

The EU's Ecodesign for Sustainable Products Regulation (ESPR) (2024) is central to the European Commission's strategy for fostering environmentally sustainable and circular products. The ESPR replaces the EU Ecodesign Directive 2009/125/EC and establishes a framework to set eco-design requirements for specific product groups, significantly enhancing their circularity, energy performance, and other environmental sustainability aspects. This new framework enables the establishment of a broad range of ecodesign requirements, including product durability, reusability, upgradability, and reparability; the presence of substances that hinder circularity; energy and resource efficiency; recycled content; remanufacturing and recycling; and carbon and environmental footprints.

In addition, the ESPR contains other new measures, including the Digital Product Passport (a digital identity card for products, components and materials), and a ban on the destruction of unsold textiles and footwear, and it enables mandatory green public procurement criteria to be set for EU authorities. For textiles in the EU, this law will require global businesses to alter the design and production of clothing for the EU market. Requirements for textiles and clothing products will be established through a specific law known as the Delegated Act, on which work is already underway.[16]

California's proposed Microfiber Filtration Act, AB1628 (bill introduced in 2023) would have required all new washing machines for sale on or after 1 January 2029 in California for residential or state use to contain a microfibre filtration system, with a mesh size of no greater than 100 micrometres, and bear a label with a specified consumer notice. The bill also provided civil penalties in cases of non-compliance. The bill was vetoed in October 2023 by the Governor of California due to potential increased costs for consumers pending further research being completed, encouraging the consideration of other alternatives in the interim to incentivise the use of filters or other technologies to remove microfibres.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

UNEP's Eco-Innovation Manual (2020) outlines a methodology for the implementation of eco-innovation* within small and medium sized companies (SMEs) to inform, guide and support manufacturing companies to improve their sustainability performance. The Manual's Textiles Supplement (2021) provides textile sector-specific information in eco-innovation, including case studies, using the core principles and methodology outlined in the Manual. Although the primary target audience is service providers (i.e. organizations that provide professional consulting services), other stakeholders interested in eco-innovation will also find the Manual and its Supplement valuable.

In addition, UNEP's Eco-Innovation platform includes a repository of good practices for eco-innovation, including case studies from Viet Nam, Malaysia, Peru, among others. Through eco-innovation's focus on supporting particularly SMEs in developing countries in implementing sustainable and circular business models and sharing learnings from this work, the platform also provides valuable insights for policymakers and other stakeholders when devising policy approaches to transition to a sustainable and circular textile value chain.

***'Eco-innovation'** *is defined as "the development and application of a business model, shaped by a new business strategy that incorporates sustainability throughout all business operations based on life cycle thinking and in cooperation with partners across the value chain. It entails a coordinated set of modifications or novel solutions to products (goods/services), processes, market approach and organizational structure which leads to a company's enhanced performance and competitiveness".*[17]

The Technical Manual on How to conduct a PEF study (2023), produced under the framework of the UNEP led InTex Project, is designed to help technical experts to conduct product environmental footprint (PEF) studies for apparel and footwear products, clarifying the steps to follow, the technical modelling rules, as well as helping experts draft the final PEF report. The Manual must be read in conjunction with the PEF and PEFCR method.* The Annex is a pre-filled template to simplify the development of a PEF report for apparel and footwear products.

For a quick overview of the PEF method, please refer to the PEF 101 factsheet. Environmental footprint methods can also help policymakers assess and design policies by better understanding the hotspots.[18]

** The **PEF method** is "a life cycle-based method, with detailed rules on how to calculate the environmental contribution of products to a fixed set of 16 environmental impacts (such as contribution to global warming, water scarcity and land use). The method gives precise guidance to model, collect data, and analyse the results for all the flows in and out to the environment, during a product's entire life cycle".*

***PEFCR** refers to the fact that "[f]or certain product categories (such as for apparel and footwear), the PEF method is complemented by PEF Category Rules (PEFCRs). These provide additional guidance on specific aspects and parameters that are most relevant, to calculate the PEF, for a specific product category. Having a PEFCR contributes to increased consistency of the results and it reduces the cost of conducting a PEF study".*[19]

INSTRUMENT

SUSTAINABLE PUBLIC PROCUREMENT (SPP) POLICY

Public procurement (which represents on average 13% to 20% of GDP)[20] and governments (as the largest consumers in a given economy) can play a critical role in creating demand for sustainable and circular textiles.[21] The types of textile products that governments may commonly procure include uniforms (e.g. protective clothing and defence), medical textiles (e.g. personal protective equipment and scrubs), and household textiles and furnishings.

By establishing clear mandates and guidance, public procurement policies can support the **integration of environmental and social criteria into purchasing decisions**, driving demand for responsibly produced and circular textiles.[22] This includes setting minimum requirements for durability, material quality, ethical production, and environmental performance, such as recyclability or recycled content, preferred fibres, and assurance of the absence of modern slavery. Procurement policies that go beyond cost efficiency to reflect a balance of environmental, social, and economic value can also drive innovation, including through circular business models such as repair, reuse, and rental, thereby extending product life and reducing resource use across the textile lifecycle.

EXAMPLES

The Dutch Circular Procurement Platform, "Versnellingsnetwerk Circular Inkopen" showcases Dutch best practices in circular procurement. The platform is designed for global stakeholders and provides a comprehensive step-by-step guide, role-specific advice, and product-specific insights, highlighting the importance of supplier involvement. The platform was created through collaboration among multiple stakeholders and supported by the Ministry of Infrastructure and Water Management. The knowledge platform has specific examples from textiles, including a case study in circular work clothing. In 2005, PIANOo, the Dutch Public Procurement Expertise Centre was established to improve efficiency in procurement across all Dutch government departments. Since 2017, PIANOo is part of the Netherlands Enterprise Agency, which is part of the Ministry of Economic Affairs and Climate Policy. SPP, and specifically circular procurement, is part of PIANOo's work. Initiatives such as the Dutch Circular Procurement Platform are part of a wider push by the Dutch Government to achieve a fully circular economy by 2050.

Australia's Environmentally Sustainable Procurement Policy (2024)[23] requires 'high value' procurements in specific categories to address environmental impacts. This includes reporting and contract management obligations. The Policy acknowledges that 'value' is determined by economic as well as social and environmental considerations. The Australian Public Service are encouraged to use the Sustainable Procurement Guide to help embed environmentally sustainable procurement practices. Textiles are specifically mentioned in the Policy and is listed as a 'high opportunity category' in the Guide, with government officials encouraged to consider uniforms made "from certified sustainable sources, from non-mixed fibres, to make reprocessing and recycling easier and take-back systems and remanufacture pathways available at end of useful life."

PRACTICAL GUIDANCE & TOOLS FOR ACTION

The Second Edition of UNEP's Sustainable Public Procurement Implementation Guidelines (2021) is designed to support policymakers, experts and consultants on designing SPP policies and implementing them. Specifically, the Guidelines provide a methodology and roadmap for designing and implementing SPP policies and action plans, with the aim to provide a common vision, language and framework for SPP. The Guidelines include best practices and case studies.

ECONOMIC INSTRUMENTS

Economic instruments are most commonly used to adjust market prices so that environmental and social costs are internalised in the prices of goods and services. Examples include eco-taxes, emission charges, and extended producer responsibility schemes.[24]

INSTRUMENT

INCENTIVES FOR CIRCULAR PRACTICES AND DISINCENTIVES FOR UNSUSTAINABLE PRACTICES

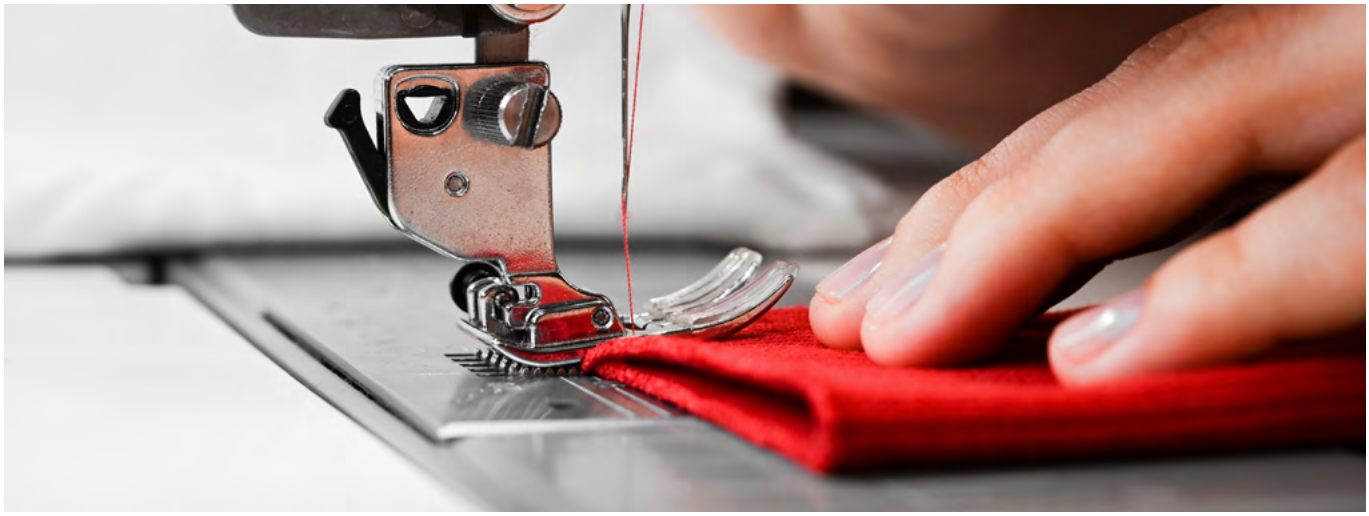
Economic incentives can be used to **discourage linear practices and promote circular business models and services**, such as repair, rental, upcycling, and recycling. Government subsidies and tax policies, including fiscal and trade policy measures (e.g. removing tariffs), can be leveraged to create powerful economic incentives for the uptake of circular economy solutions. Similarly, by imposing financial charges (e.g. levies or taxes) on practices that involve environmentally harmful activities, governments can create a financial disincentive for such practices and make circular practices more economically attractive.

EXAMPLES

France's Clothing Repair Bonus (2023) is a scheme to reduce waste by incentivising the mending of clothes and shoes. Under the scheme, individuals benefit from discounts between €6 and €25 for repairs done at participating workshops or cobblers. All clothing and footwear are eligible, except for underwear and lingerie, leather clothing and real fur clothing. The repair bonus is funded by a €154 million government allocation over a five-year period (2023-2028),[25] that comes from eco-contributions paid by brands under France's Anti-Waste and Circular Economy Act and EPR fees.[26]

France's "Proposition de loi n°258, adoptée par l'Assemblée nationale visant à réduire l'impact environnemental de l'industrie textile" (adopted in 2024 by the National Assembly, pending endorsement of the Senate) includes a surcharge on clothing products with very rapid renewal rates. This proposed law aims to reduce the speed and quantity at which fashion products are brought to the market. If adopted, it would link a surcharge to the environmental footprint of garments over certain production volumes and turnover speeds, starting at €5 an item and increasing to €10 by 2030, not exceeding 50 per cent of an item's price tag. The proceeds from the charge would be used to subsidise sustainable clothing producers, allowing them to compete while providing high-quality, durable products.[27]

For more insights on how economic instruments, such as environmental taxes, value-added taxes, and subsidies, may promote a circular economy for textiles, see the IVL Swedish Environmental Research Institute's case study of the Nordic region (2023). The study was commissioned by the Nordic Working Group on Environment and Economics (one of the working groups of the Nordic Council of Ministers – the official body for intergovernmental cooperation in the Nordic Region).



INSTRUMENT

EXTENDED PRODUCER RESPONSIBILITY (EPR) SCHEMES

EPR schemes, which can be mandatory or voluntary, are a market-based instrument that has been used widely to promote life cycle environmental improvements of value chains, such as electronics, plastic packaging, and vehicles. It extends the responsibilities of the manufacturer of a product to various parts of the product's life cycle, especially focusing on the take-back, recovery, and final disposal of the product.

The current separate collection rates for textiles are low (on average 14%, where reporting is available), with more than 80% of the reusable clothing collected being exported to other countries.[28] However, as outlined below, **EPR schemes for textiles are emerging**. In the context of textiles and EPR, it is important to consider the diversity in the different types and uses of textiles and its corresponding diverse textiles markets. EPR textile schemes are currently limited to national boundaries (or state limits in the case of federal countries). However, work to maximise alignment of EPR schemes[29] and discussions around the concept of 'ultimate producer responsibility' and 'producer ownership' are emerging.*

** Today the responsibility of producers stop at the point of export, which limits the capacity of EPR systems to manage discarded textiles in those countries where they finally end up.[30] The concept of 'Ultimate Producer Responsibility' (UPR) suggests that producers should be responsible for the waste beyond national boundaries, whereby producers also finance waste management in final destination countries. UPR for textiles has not been implemented in practice, but it is being referenced as an idea for textiles by some non-profit organisations.[31]*

Similarly, the concept of 'producer ownership', as tabled by Systemiq and UCL under Project LAUNCH, refers to schemes that go beyond EPR by providing "incentives and regulations so that producers are or act like owners of their products during and after the use of the product by the customer".[32]

EXAMPLES

EPR schemes for textiles are emerging in several countries. As examples, as of September 2024, California (USA), France, Hungary, Latvia, and the Netherlands have adopted mandatory EPR textile schemes, Australia and Colombia are piloting a voluntary scheme, and other jurisdictions, such as Canada, Chile, the EU, Ghana, India, Indonesia,[33] Kenya, and New York have either already signalled their intent to implement, or are currently debating the implementation of, an EPR scheme for textiles.[34]

France's mandatory EPR scheme for textiles has been in place since 2007. The French Code de l'Environnement Article L541-10-3 introduced EPR measures for the textile industry, including clothing and footwear, to limit its environmental impact, with current plans to expand the system beyond collection and sorting operations to incentivise circular business models, with a focus on repair and recycling.[35] The law charges a mandatory levy for textile products placed on the French market and includes eco-modulation criteria, which adjust fees or charges based on the environmental performance of products or producers. It is restricted to products sold within French national borders, but the scheme provides funding for authorised sorting operators based outside France (within the EU).[36] The French Producer Responsibility Organisation (PRO), Refashion, which operates the EPR, estimates the share of collected garments used for recycling grew from 14% to 23% between 2009-2019.[37]

Chile implemented its EPR law in 2016 (Law 20.920/2016) and currently targets 6 product categories, with plans on track to extend the scope to textiles.[38] The extended scope will require producers to internalise the costs and negative externalities associated with the end-of-life management of textile products.

Within EPR schemes, **eco-modulation** can incentivise eco-design by lowering the tariffs paid for products that are more environmentally responsible. Eco-modulation works by setting minimum standards for certain criteria and awarding a 'bonus' or levy adjustment on that product. Businesses are financially rewarded to meet these criteria and must provide supporting evidence for review to substantiate claims. For textiles, this can mean standards for recyclability content or product lifetime durability or for obtaining certain environmental certifications. So far, the modulated incentives within EPR regulation have been utilised as a tool to reward products with minimised environmental impacts, though additional modulations to address overproduction, such as an increased levy contribution for quantities over designated amounts, or modulations which enforce minimum social standards, could be explored too.

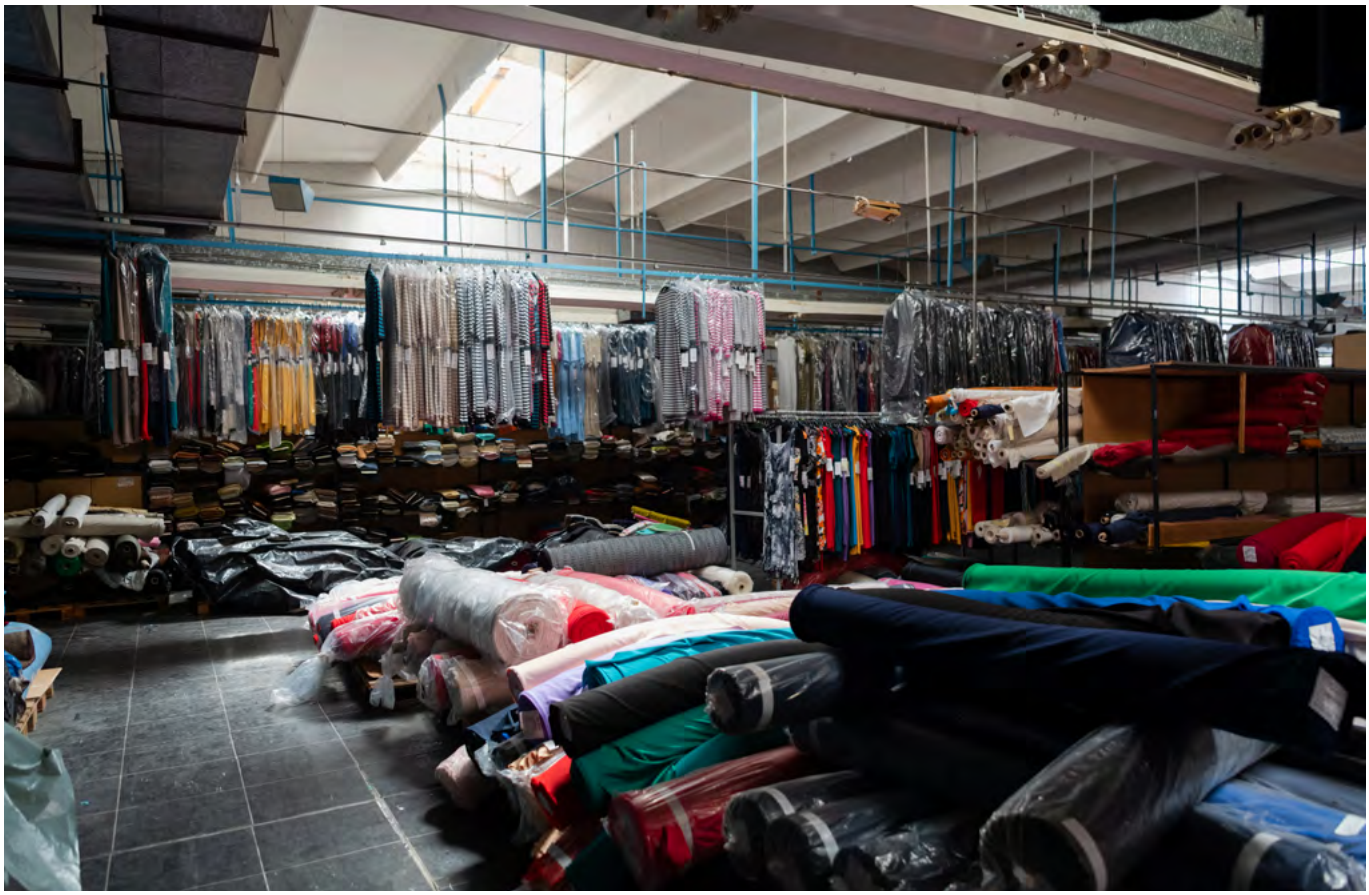
EXAMPLE

France's eco-modulation criteria, within its EPR regulation, awards products whose environmental impacts have been minimised. Under the French EPR scheme, smaller companies with a turnover of less than €750,000 or which place 5,000 items or less on the market annually pay a flat rate per year. Contributions from larger companies are calculated on a rate per item basis, depending on the size of the product.[39] This price is modulated on the basis of durability, environmental certifications, and the incorporation of raw recycled materials. As of 1 January 2025, a new eco-modulation has been introduced as a penalty regarding the recyclability of products (see Refashion's 2025 eco-modulations).

PRACTICAL GUIDANCE & TOOLS FOR ACTION

For guidance and insights on EPR for textiles, see the Organisation for Economic Cooperation and Development (OECD)'s Environment Working Papers on EPR in the garments sector (2024) and New Aspects of EPR: Extending producer responsibility to additional product groups and challenges throughout the product lifecycle (2023), Ellen MacArthur Foundation's overview and report on EPR for textiles (2024), WRAP's Textiles EPR status report (2024) and the Global Fashion Agenda's Mapping of Global EPR for Textiles (2025).

For more general guidance on EPR schemes see UNEP's Topic Sheet on EPR (2023), as well as the resources provided by the Global Action Partnership for EPR (e.g. OECD Policy Brief on EPR (2024)).



INFORMATION-BASED INSTRUMENTS

Information-based instruments are intended to provide information on the environmental and social impacts of products and business operations to both producers and consumers. Examples include ecolabels, certification schemes, corporate sustainability reporting and awareness campaigns.[40]

INSTRUMENT

ECOLABELS, CERTIFICATION SCHEMES AND STANDARDS

Voluntary sustainability standards (VSS) can be used as a governance tool encouraging companies to adopt sustainable consumption and production practices.[41] VSS are increasingly being adopted by companies as the core of their sustainability approaches.[42] The United Nations Forum on Sustainability Standards defines VSS as voluntary "standards specifying requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others".[43] VSS, in particular eco-labels and certification schemes, are tools that businesses can use to communicate the sustainability attributes of their products to consumers.

Ecolabels and certification schemes aim to provide clear, verified, and reliable information about the environmental and social impacts of items and business operations, and/or about the presence of harmful substances. These instruments aim to encourage behavioural change and help consumers make informed choices. Labels, which can be mandatory or voluntary, can cover a range of criteria, including the environmental qualities of a product, such as 'organic', and labour practices, such as 'fair trade'. Labels can be used to either reward and certify products, or to caution or warn against them (see examples below).

A range of different VSS, eco-labels, and certification schemes exist. Recognising these schemes within national legislation as schemes which provide guidance on the processes and requirements of textile circularity could help highlight their role in the transition towards a sustainable, circular textile value chain. Additionally, incentives for compliance with these schemes may also encourage broader adoption. In other sectors, this is commonly done by using VSS in the framework of Sustainable Public Procurement.

EXAMPLES

Germany's Green Button is a government-run certification label for sustainable textiles, first introduced in 2019. In August 2022, the Government introduced its second iteration, Green Button 2.0. To receive the label, companies must adhere to human rights and environmental due diligence obligations across the supply chain. The government sets the criteria, and compliance is monitored by independent auditors. The label can be used within and outside Germany. As of February 2025, over 65 companies use the Green Button label.[44]

From 1 January 2025, Colorado (USA) has outlawed the sale and distribution of outdoor apparel for severe wet conditions products that contains intentionally added PFAS chemicals unless the product is accompanied by "a legible and easily discernible disclosure that includes the phrase 'Made with PFAS chemicals' " (Senate Bill 24-081 Concerning Measures to Increase Protections from PFAS (adopted in 2024)). This type of label, which may be seen as a 'warning label', acts as a caution or warning to consumers. The disclosure requirement is in place until 1 January 2028, after which the sale and distribution of such products containing intentionally added PFAS will be prohibited.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

For guidance on consumer information and ecolabelling please visit One Planet Network's Hub. The Hub includes background on ecolabeling, trainings, materials, guidelines and handbooks relevant for ecolabels, including a series of good practices. The trainings include the Gen Ecolabelling Training Programme, covering 9 modules developed by UNEP and the Global Ecolabelling Network (GEN), to help stakeholders, including policymakers, to build knowledge on ecolabeling and their impact on the environment.

INSTRUMENT

DUE DILIGENCE AND DISCLOSURE REGULATIONS

Due diligence and disclosure requirements (which can be mandatory or voluntary) aim to promote **transparency and accountability** in various areas, including business practices, environmental protection, human rights, and financial reporting. These regulations typically require organisations to conduct thorough assessments (due diligence) of their operations and value chains to identify and mitigate risks, such as environmental damage, human rights abuses, contemporary forms of slavery, forced labour, and/or financial misconduct. Often these regulations require information to be publicly disclosed.

These legal frameworks aim to increase transparency, hold businesses accountable, and protect the rights of vulnerable individuals who may be exploited in supply chains. Although existing due diligence and disclosure requirements are not generally textiles-specific, textiles are often identified as a high-risk industry for human rights and environmental degradation. Due diligence and disclosure legislation is of relevance to high consumption countries as typically these countries are headquarters for large companies whose supply chains extend to vulnerable regions.

EXAMPLES

In recent years, the EU has introduced several pieces of legislation impacting the textile sector, including due diligence and disclosure requirements. These include the EU Corporate Sustainability Due Diligence Directive (adopted in 2024) and the EU Corporate Sustainability Reporting Directive (adopted in 2022). These requirements aim to ensure that companies identify and address the adverse human rights and environmental impacts of their actions. In February 2025, the European Commission released a package of proposals to reduce and simplify these due diligence and reporting requirements, as part of the so-called Omnibus package.

California's Transparency in Supply Chains Act (2010) requires certain retail sellers and manufacturers with worldwide annual gross receipts exceeding $100 million and doing business in California to disclose their efforts to eradicate modern slavery and human trafficking from their direct supply chains. Companies subject to the Act must disclose their actions to verify and audit their supply chains, certify that their products comply with anti-slavery and anti-trafficking laws, provide training to employees and management, and maintain internal accountability standards for ensuring compliance with the Act. Although the Act is not textiles-specific, its requirements have significant implications for the textile sector, including its focus on public disclosure requirements which threaten brand reputation and its acknowledgement that complex global value chains involve multiple tiers of suppliers.

Similarly, Australia's Modern Slavery Act (2018), which came into force on 1 January 2019, requires large companies and other entities in Australia to report on how they are preventing and addressing modern slavery risks in their operations and supply chains.

Regarding environmental due diligence, in February 2025, a new bill was introduced in California (USA) specifically addressed to the textile sector. The Fashion Environmental Accountability Act of 2025 proposes to require "fashion sellers with annual revenues over $100 million to conduct comprehensive environmental due diligence throughout their supply chains".[45] The bill also mandates fashion sellers to establish reduction targets for greenhouse gas emissions and progressively map and disclose their suppliers across Tiers 1-4 of the supply chain by 2032.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

The OECD has developed guidance to help enterprises along the garment and footwear supply chain to implement the due diligence recommendations of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct. The OECD Due Diligence Guidance for Responsible Chains in the Garment and Footwear Sector (2018) provides comprehensive guidance to support a common understanding of due diligence in the sector, underscoring that due diligence should be '"ongoing, proactive and reactive and applied with flexibility and should not lead to a 'tick the box' approach".[46]

INSTRUMENT

CONSUMER LAWS ADDRESSING GREENWASHING CLAIMS

These laws seek to address **false claims and misleading communication campaigns** concerning, for instance, materials, circularity, climate impact, or modern slavery. Greenwashing laws work by developing standard definitions of what constitutes a misleading sustainability frame, including for key terms in the textiles value chain such as 'sustainable', 'eco-friendly', or 'green'. Businesses are then required to provide evidence to substantiate their claims. The 'regulators' are policymakers, civil society organisations and citizens, who are encouraged to scrutinise environmental claims made by businesses and are provided with legal standing through legislation.

Regulation addressing greenwashing supports a just transition towards a more sustainable and circular textile value chain by ensuring market integrity and fair competition. Brands making legitimate circular efforts are not unfairly overshadowed by competitors making false or exaggerated claims. Consumers are empowered to make informed choices, which can drive markets towards offering more sustainable and circular alternatives.

Legislation needs to be adaptable to evolving industry practices, ensuring that it remains relevant and effective in addressing new challenges associated with communicating sustainability. Although greenwashing is not exclusive to the textile sector, the culture surrounding the consumption of textiles is prone to exaggerated claims and the size and diversity of the value chain includes complex and varying definitions of 'green' and 'sustainability' attributes.

EXAMPLES

France's Article L. 121-1 of the Consumer Code relates to unfair commercial practices, including those related to environmental impact (Article L121-2). A breach of this provision may entail a fine of €300,000 (subject to potential increases depending on the benefit derived from the offence) and up to 2 years of imprisonment.[47] Additionally, France's Anti-Waste and Circular Economy Law (2020) prohibited the use of the terms 'biodegradable' and 'environmentally friendly' on new products and packaging for consumers (Article R 541-223), and France's Climate and Resilience Law (2021) introduced strict regulations requiring specific evidence to be accompanied by claims on a product's carbon neutrality (Article L 229-68 of French Environment Code). These laws apply to a range of items, including textiles.

A proposal for the EU Green Claims Directive was put forward by the European Commission in March 2023. The directive would require companies to substantiate claims made about product environmental footprints by using standard methods for quantifying them. The proposal follows the European Commission's finding in 2020 that "53% of examined environmental claims in the EU were vague, misleading or unfounded, and 40% were unsubstantiated".[48]

PRACTICAL GUIDANCE & TOOLS FOR ACTION

Under the frame of the One Planet Network, UNEP and its partners have published guidance and tools to engage and assist consumers in sustainable consumption and address greenwashing. These resources include the Guidelines for Providing Product Sustainability Information (2017). The Guidelines aim to provide global guidance to value chain and public sector professionals on making effective environmental, social and economic claims. The Guidelines are applicable to all regions and to companies of all sizes, and have also been used as a tool to analyse the provision of product sustainability information from textile and fashion brands (HEJSupport, Sustainable Fashion? How companies provide sustainability information to consumers (2020)).

Based on the Guidelines, UNEP also developed a fun, interactive Green Marketing Challenge to help stakeholders better identify product claims that empower sustainable consumption and avoids greenwashing. Additionally, the report on Regulatory Frameworks to Combat Greenwashing (2023) aims to support governments in adopting or improving regulatory frameworks to contribute to the fight against greenwashing.

The UNEP and UN Climate Change Sustainable Fashion Communication Playbook (2023) is designed for communicators (Marketing/PR/Communications managers of brands, but also influencers, journalists, etc.) to redirect communication on fashion towards sustainable and circular solutions, including countering greenwashing and shifting the narrative around overconsumption and what is valued.

INSTRUMENT

AWARENESS CAMPAIGNS

In a regulatory context, an awareness campaign is a strategic effort by governments to **inform, educate, and raise awareness** among the public, businesses and other stakeholders about specific regulations or issues. Awareness campaigns in a regulatory context may include information about new or existing regulations to inform stakeholders about their rights and responsibilities or promote best practice to encourage citizen behaviour change.

Textiles-specific examples include the promotion and education around the use-phase. For example, to raise awareness of the need to keep clothing in use for as long as possible, to repair garments and to reduce consumption. Awareness campaigns can be directly linked to regulations by informing consumers about textile regulations that impact how they use or dispose of textile products. For example, the introduction of microfibre filtration regulation can be accompanied by information campaigns on how to dispose of the microfibre filter responsibly.

EXAMPLES

The United Kingdom's Love Your Clothes Campaign (2014) was originally funded by the UK Government's Department for Environment, Food & Rural Affairs (Defra), and administered by the local non-governmental organisation, WRAP. The citizen-facing campaign aimed to change the way UK consumers bought, used, and disposed of their clothing. It engaged hundreds of "supercrafters" nationwide and encouraged circular practices such as repair, upcycling, clothes swapping, and buying second-hand. The Sustainable Clothing Action Plan, of which Love Your Clothes was a part, between 2012 and 2019 resulted in a 21.6% reduction in carbon, 18.2% reduction in water usage, and met 60% of its waste target.[49]

In Sweden, the Swedish Environmental Protection Agency (Naturvårdsverket), the Swedish Consumer Agency and the Swedish Chemicals Agency worked together to deliver a 3-year (2018-2021) government assignment to inform consumers about more sustainable consumption of textiles.[50] As part of the assignment, the agencies developed the campaign Textilsmart to raise awareness on sustainable and unsustainable consumption by sharing a range of knowledge products, including films, information materials and illustrations, to inspire consumers to adopt more conscious consumption habits.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

The #Anatomy of Action Campaign aims to engage the public, organisations and global influencers to encourage sustainable lifestyle changes. Key actions include #BeyondBuying, #FashionSlowDown, and #DitchDisposables – encouraging individuals to consider what they need to buy, to buy products that will last longer, buy fewer and better clothes, and refuse everyday products that cannot be reused. Anatomy of Action was born out of a partnership project between UNEP and the UnSchool of Disruptive Design, to identify and disseminate the most positively impactful actions we can take to contribute to the global movement around sustainable lifestyles to help achieve the Sustainable Development Goals.

VOLUNTARY INSTRUMENTS

Voluntary instruments are flexible and cost-effective initiatives from a policymaking perspective as they give producers the choice to decide how best to achieve goals with little or no 'policing' by the state.[51]

INSTRUMENT

KNOWLEDGE PLATFORMS

Knowledge platforms aim to strengthen and share the knowledge and skills required to support the transition to a sustainable and circular textiles value chain. These platforms can provide both public and private-sector stakeholders with **access to information** on the best available knowledge, techniques, and technologies which enable circularity, as well as accredited circular product suppliers for procurement. Knowledge platforms in the textile value chain are often led by multi-stakeholder initiatives which bring together industry, government, and not-for-profits.

EXAMPLE

Sweden's National Platform for Sustainable Fashion and Textiles (Textile & Fashion 2030) is funded by the Swedish Government and hosted by the University of Borås and Smart Textiles. The platform, in partnership with key stakeholders from business, academia, research institutions, and public entities, fosters collaboration in education, research, and innovation aimed at advancing environmentally sustainable development. Key priorities include creating new business models, eliminating harmful substances from production processes, enhancing energy efficiency in the industry, and primarily promoting the shift toward a circular economy. This approach seeks to create an efficient, closed-loop system for materials use, rather than relying on traditional linear processes, with the goal of establishing a circular framework for the textile and fashion sectors.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

The Green Growth Knowledge Partnership (GGKP), established in 2012, is a global network of policy, business and finance professionals and organizations which offers policymakers guidance, good practices, tools and data to support the transition to a green economy. In particular, its Green Policy Platform offers the largest collection of knowledge products for a policy driven transition to a nature-positive, pollution-free and climate-friendly economy, including global reports, case studies and guidance notes. These products include textile specific knowledge products.

INSTRUMENT

TRAINING AND CAPACITY BUILDING

Training and capacity building on sustainability and circularity is vital to **fill skills and knowledge gaps** among stakeholders throughout the textile value chain. For high consumption countries, this might include training and capacity building focused on circular product design and circular business models. Training and capacity building in the textile value chain is often led by multi-stakeholder initiatives which industry, government, and not-for-profits are engaged in together. Multi-stakeholder initiatives are often the most comprehensive approach, as they combine the industry-specific expertise of businesses and non-government organisations, with the authority and credibility of policymakers.

EXAMPLE

The Belgian-based international network for social enterprises, RREUSE, comprises members of reuse organisations from over 31 countries and focuses on policies to support the environmental and social good of the reuse sector, including textiles for reuse. RREUSE projects are frequently in partnership with government agencies or funded by government grants. Project examples include youth training courses for creative waste recycling, pilots across regions to promote reuse, and training courses for digital upskilling for organisations in the reuse sector.

PRACTICAL GUIDANCE & TOOLS FOR ACTION

UNEP has developed a training package/toolkit for universities on UNEP's and UN Climate Change's Sustainable Fashion Communication Playbook (2023). The toolkit includes a pre-recorded guest lecture, PowerPoint presentations on the Playbook and a series of seminar activities, as well as the Playbook resources themselves and a reading list.[52]

INSTRUMENT

VOLUNTARY AGREEMENTS

Voluntary agreements aim to stipulate a **non-mandatory commitment** between stakeholders to achieve certain environmental, social, or economic objectives. While there may be incentives for participation, there are no penalties for non-compliance. These agreements are often the result of comprehensive stakeholder consultation, negotiation and collaboration and thus might be more flexible in their implementation. Voluntary agreements in the textile value chain are often conducted under the governance of the private sector, though policymakers and government play an important role in accrediting or authorising their work.

EXAMPLES

WRAP UK's Textile 2030 initiative has grown out of UK government support and is a voluntary agreement, involving major UK-based clothing retailers and others across the textile value chain, towards targets around reducing waste, water and carbon emissions, and helping consumers make sustainable lifestyle changes.

The Australian Government funded the design of a National Clothing Product Stewardship Scheme, known as Seamless, to establish EPR first at a voluntary scale in the nation. It commenced operations in 2024. The government-funded design phases allowed the scheme to be co-designed with industry and involved comprehensive stakeholder consultation. This period gave the scheme the credibility, resources, and opportunity to design a voluntary agreement that specifically addressed the industry context and needs.[53]

BEHAVIOURAL INSTRUMENTS

Behavioural instruments provide a non-regulatory way to influence human behaviour towards more sustainable choices. [54]

INSTRUMENT

SUPPORT FOR INNOVATION AND RESEARCH

Government **funding for textile research and innovation** aims to support the development of new materials, processes, and technologies that reduce the environmental impact of the textile value chain. For high consumption countries, this might include a focus on reducing overconsumption and its impacts, researching what drives consumer behaviour and how to incentivize a shift towards circular business models, building the capacity for circular technologies, including fibre-to-fibre recycling, and collaborating with research institutions who are experts in the field within and beyond the country.

EXAMPLE

The South African Council for Scientific and Industrial Research (CSIR)'s initiative titled Science, Technology and Innovation for a Circular Economy (STI4CE) aims to create a sustainable, resource-efficient, and economically resilient future for South Africa by leveraging science, technology, and innovation to drive the transition to a circular economy. Currently, funding is aimed for public research organisations that can help drive and coordinate circular economy for three priority sectors: mining, manufacturing, and agriculture.[55] Calls for expressions of interest to host the South African Circular Economy Manufacturing Initiative (SACMI) closed in October 2024. The priority areas that will drive the activities of SACMI include the optimisation of resource use along value chains, circular product design, advanced manufacturing, and remanufacturing.

INSTRUMENT

TEXTILES EDUCATION

Textiles education, specifically focusing on clothing care and repair skills, can be integrated within school curricula as a strategic measure to advance towards a sustainable and circular textiles value chain. Early education in these skills cultivates an improved culture around the use and ownership of textiles. Initiatives to improve awareness, ability and confidence on clothing care include education on how to interpret a garment care label and completing basic repair skills, such as replacing a button.

Industry skills and training need to be circular-economy ready by cultivating skills in redesign, repair and remanufacturing of clothing alongside traditional garment design and manufacturing. Sustainability is integral to contemporary fashion education in colleges and universities globally and has been a mainstream subject taught for the past decade or more.[56]

EXAMPLES

My Clothes, My World (MCMW) is Canada's Fashion Takes Action (FTA)'s school program (geared towards grade 4-12 students), offering workshops, lessons plans and resources focused on the global fashion industry's environmental, economic and social impacts. Its aim is to instil an understanding of sustainability amongst students.

The Fashion SEEDS project is an EU funded collaborative network of fashion universities that aims "to develop a holistic framework to integrate sustainability into higher education fashion design".

PHASE 4

MONITORING POLICY EFFECTIVENESS

The **ongoing monitoring of policies** is critical to ensure regulatory measures are adjusted as needed. For textiles, sustainable and circular policies may be considered an emerging space, therefore specific approaches to monitor and measure these policies are still nascent.

LIST OF OTHER COMPLEMENTARY UNEP RESOURCES

- UNEP's Stocktaking Report – this 2020 report provides an analysis of the environmental and socio-economic hotspots along the entire value chain, thus identifying which stages in the value chain are dominant in different impacts, and maps out initiatives working to address those.
- UNEP's Roadmap Report – this 2023 report builds on the analysis of the Stocktaking Report by providing a Roadmap for all stakeholders to address these environmental and socio-economic hotspots through a sustainable and circular textile sector. It has stakeholder-specific annexes that outline the key priorities and actions for each stakeholder (brands and retailers, financial institutions, raw material producers and manufacturers, policymakers, innovators and recyclers, NGOs and communicators).
- For more information about UNEP's work on textiles please visit UNEP Textile Initiative. As part of this Initiative, UNEP also contributes to building a globally coordinated policy response through the Global Textile Policy Dialogues.
- For more information about UNEP's work on circularity please visit UNEP Circularity Platform.

SHARE YOUR FEEDBACK

We welcome any feedback you may have on the policies and content presented, as well as any other examples that could be valuable for other countries!

Please reach out to us at:
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Endnotes

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