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Recommendations and standards:

Deliverables in support of sustainable development and the circular economy as the outcomes of the sixty-ninth session of the Economic Commission for Europe

Enabling Sustainability and Circularity in the Garment and Footwear Sector: Policy Developments and Industry Perspectives on Traceability and Transparency

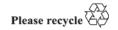
Submitted by the secretariat

Summary

This report summarizes the results of the desk and field research carried out in 2020 as background work to the drafting of Recommendation No. 46, with its implementation guidelines, and call to action¹, which constitute the key output of the United Nations Economic Commission for Europe (ECE) project "Enhancing traceability and transparency for more sustainable value chains in the garment and footwear sector". This project is being implemented with the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) in collaboration with the International Trade Centre (ITC) and with funding from the European Union. Starting from an in-depth analysis of the key challenges and opportunities of traceability and transparency in value chains, this report introduces a detailed mapping of relevant policies, regulations and global guidelines in priority sectors and presents the point of view of the experts involved in the project, reflecting the multistakeholder approach adopted by the initiative. The desk and field research underlines that in order to harness the benefits of traceability and transparency for all industry stakeholders, there is a need to develop a commonly defined standard and a global policy and regulatory framework. To conclude, key measures to open up opportunities for more sustainable and circular value chains in the garment and footwear sector have been identified and proposed.

Document ECE/TRADE/C/CEFACT/2022/10 is submitted to the twenty-eighth session by the secretariat for information.

¹ ECE Recommendation No. 46: Enhancing traceability and transparency of sustainable value chains in the garment and footwear sector (ECE/TRADE/463), 2022, available at https://unece.org/sites/default/files/2022-01/ECE-TRADE-463E.pdf.



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Part I

Introduction

1. Recommendation No. 46 starts from a central premise: traceability and transparency are enablers that can guarantee sustainability and circularity claims.

ECE Recommendation No. 46

"Improving traceability and transparency has become a priority for the garment and footwear industry. Consumers, governments and civil society are demanding responsible business conduct and are calling upon the industry to identify and address actual and potential negative impacts in the areas of human rights, the environment, and human health. By creating enhanced visibility in value chains, companies are better equipped to manage such impacts and address financial, operational and reputational risks. Also, traceability in value chains allow companies to respond more effectively to unforeseen disruptions, conform with applicable laws and regulations, ensure product quality and safety, combat counterfeits, and protect cultural and industrial heritage.

On the other hand, greater transparency empowers consumers to make better-informed consumption choices, as they have more reliable information about the sustainability and circularity claims of products and processes. As a result, traceability and transparency have great potential to build trust among all industry actors." ... "Effectively addressing risks to responsible business conduct depends on all the links in the value chain and requires the active and effective engagement of both upstream and downstream actors. The latter, who make the final decisions about which materials are used and which products are placed on the market, also are expected – and at times, legally required – to identify and mitigate risks that might result in harm to humans or the environment throughout their entire value chain."

- 2. This report presents the main results of the desk and field research carried out to produce Recommendation No. 46 with its implementation guidelines and call to action, which constitutes the main output of the ECE-UN/CEFACT project "Enhancing traceability and transparency for more sustainable value chains in the garment and footwear sector".
- 3. Chapter I shows the key benefits and challenges highlighted during the desk and field research, presents the traceability and transparency regulatory frameworks in the garment and footwear industry and in other industries, and finally details how governments and enterprises could support traceability and transparency.
- 4. Chapter II focuses on reporting and environmental and human rights due diligence, giving an overview of national, international and European principles, policies, legislation and guidelines, and underlines key areas for attention to be considered while setting minimum requirements.
- 5. Chapter III defines the role of sustainability claims, describes legislative and non-legislative measures that empower consumers and enterprises to adopt sustainable consumption and production, and identifies multi-stakeholder initiatives that share good practices and lessons learned.
- 6. Chapter IV analyses the opportunities and challenges of circular value chains, identifies tools to accelerate traceability and transparency to advance the circular economy in the garment and footwear sector, and highlights policies and legislative actions to close the loop.
- 7. Chapter V considers the allocation of costs and responsibilities for traceability and transparency systems and presents the main findings of the desk and field research on the identification of relevant incentives.
- 8. Chapter VI explores different instruments to support small and medium-sized enterprises (SMEs) in the implementation of traceability and transparency systems and capacity building, considering gender issues as well as the inclusion of informal actors and other vulnerable groups.

- 9. Throughout the report there is continuous reference to tailored support to be given to SMEs and other vulnerable groups.
- 10. The geographical scope of the desk research conducted is based on national, European and international documents. However not all national and global policies, regulations, guidelines and initiatives are examined in depth in the main text of this report. A complete description of the documents analysed in the desk research can be found in a separate 2021 ECE report² dedicated to the mapping of policies, regulations and guidelines for traceability and transparency. The 2021 mapping report is continuously updated with new laws and regulations.
- 11. Finally, this desk report includes the policy recommendation for a set of measures to unlock opportunities for traceable and transparent value chains in the garment and footwear sector.
- 12. The annexes provide further details: Annex I presents a detailed glossary with the terminology used in the text; Annex II introduces a methodological note drawing upon the desk and field research carried out; Annex III provides the list of experts interviewed during the field research and Annex IV shows the detailed interview guidelines for garment and footwear industry experts and other industry experts; Annex V provides an overview of the various business models in circular garment and footwear value chains; Annex VI lists the technologies to implement traceability and transparency systems presented in the Recommendation No. 46; Annex VII identifies the main data description and methodology harmonization efforts mapped during the field research; Annex 8 underlines the main call to action initiatives mapped during the field research.
- 13. In the following text, reference is made to traceability and transparency as defined in ECE Recommendation No. 46:

Traceability is understood as "the ability to trace the history, application or location of an object" in a supply chain³. In this context, it is defined as the ability to identify and trace the history, distribution, location and use of products, parts and materials, to ensure the reliability of sustainability claims in the areas of human rights, labour (including health and safety), the environment and anti-corruption⁴; and "the process by which enterprises track materials and products and the conditions in which they were produced through the supply chain"⁵.

Transparency relates directly to relevant information being made available to all elements of the value chain in a harmonized way, which allows for common understanding, accessibility, clarity and comparison.⁶

² ECE report "Enhancing Sustainability and Circularity of Value Chains in the Garment and Footwear Sector: Policy Developments on Traceability and Transparency. A mapping of policies, regulations and guidelines" (ECE/TRADE/C/CEFACT/2021/INF.3). Available at https://unece.org/sites/default/files/2021-04/ECE_TRADE_C_CEFACT_2021_INF3-MappingRegPolicies.pdf.

³ ISO 9001:2015

⁴ United Nations Global Compact Office, *A Guide to Traceability: A Practical Approach to Advance Sustainability in Global Supply Chains* (New York, 2014).

⁵ Organisation for Economic Co-operation and Development (OECD), *Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector* (Paris, 2018).

⁶ European Commission, A Background Analysis on Transparency and Traceability in the Garment Value Chain (2017).

Part II

I. Exploring traceability and transparency: reshaping the policy and regulatory framework

A. Challenges and benefits of traceability and transparency

- 14. Traceability and transparency have been identified as an agenda priority in garment and footwear value chains⁷ to increase consumer trust, better manage resources and relations with business partners, combat counterfeiting and handle reputational risks "...while supporting more responsible consumption and production patterns, circularity and inclusive progress, in line with sustainable development goals (SDGs) 12 and 8, of the United Nations 2030 Agenda for Sustainable Development".
- 15. The desk research highlights that improvements must be made to enhance transparency of products through full traceability systems to justify the reliability of claims⁹, in particular sustainability claims¹⁰, and to map production processes in order to identify, mitigate and prevent social, environmental and economic risks in garment and footwear value chains.
- 16. The sharing of data and the disclosure of relevant information about products, processes and organizations along the value chain to all relevant stakeholders is a prerequisite to advance sustainability and circularity in the sector. In fact, increased traceability and transparency throughout value chains is a way to achieve a higher level of protection for human and social rights, health and the environment.
- 17. The review and analysis of legislation and policies in other industries demonstrates that the garment and footwear industry lacks key criteria for traceability and transparency for sustainable production, including the transparent collection of data and tools for consumer information, value chain due diligence, access to justice and remedies for workers and citizens, gender equality and vulnerable groups. It lacks tailored support for SMEs, financial and non-financial incentives, allocation of costs and responsibilities, monitoring and enforcement, and identification of comprehensive indicators which would, among other things, help to assess the effectiveness of traceability and transparency systems. ¹¹
- 18. In today's regulatory and policy frameworks at the regional, national, European and international levels there is also a lack of reference to information technology tools in facilitating the exchange of information. Digitalization can, in fact, be an enabler of traceability and transparency for sustainability and circularity, helping to build a sustainable market based on responsibility, transparency, information sharing and a more effective use of resources. ¹² This is also confirmed by European policy documents. ¹³

⁷ See ECE, "Policy Paper. Accelerating action for a sustainable and circular garment and footwear industry: which role for transparency and traceability of value chains?" (ECE/TRADE/449), 2020; McKinsey & BoF, State of Fashion 2019 report (as well as the 2020 report); Global Fashion Agenda, Boston Consulting Group and Sustainable Apparel Coalition, "Pulse of the Fashion Industry, 2019 Update"; Rinaldi F.R. and S. Testa. The Responsible Fashion Company (Green Leaf Publishing and Routledge, 2014); and Rinaldi F.R., Fashion Industry 2030: Reshaping the Future Through Sustainability and Responsible Innovation (Bocconi University Press and EGEA S.p.A, 2019).

⁸ ECE, Policy Paper (\ECE/TRADE/449), 2020.

⁹ According to ECE Recommendation No. 46: "A claim is a high-level statement about a characteristic of a product, or about a process or an organization associated with that product (traceable asset)."

¹⁰ This report considers the following definition of sustainability claim: "claim that covers one or multiple sustainability dimensions (economic, environmental, social)". Definition taken from the United Nations Environment Programme (UNEP) *Guidelines for Providing Product Sustainability Information*, 2017.

¹¹ European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

¹² European Parliament resolution of 25 November 2020 towards a more sustainable single market for business and consumers (2020/2021(INI)).

¹³ Examples include the EU Circular Economy Action Plan, 2020; European Digital Strategy, 2020; and the European Data Strategy, 2020.

- 19. Previous research¹⁴ identifies some key benefits and challenges in relation to traceability and transparency. The main benefits are represented by more accurate information to consumers; reputational risk management; more efficient value chain and resource management; and enhanced communication with business partners. The main challenges include the fragmentation and complexity of the business network, data privacy and data security, costs associated with the necessary resources and technologies, and technological barriers. All of these were confirmed during the extensive desk and field research carried out in 2020 as background methodology for ECE Recommendation No. 46.
- 20. Below are the main highlights of the interviews with 35 experts representing key industry stakeholders, who shared their insights. ¹⁵ According to the experts, the main benefits of a traceability and transparency system are as follows:
 - Brands and retailers: The key value for brands and retailers is improved brand
 reputation, better risk management (e.g. lowering environmental and social risks),
 improved scalability of solutions and increased interoperability through standards that
 enable trading partners to easily identify, capture and share value chain data. Other
 benefits include value chain efficiency and costs savings resulting from simplified and
 automated business processes such as order to cash, inventory management, order
 fulfilment and returns management;
 - Governments: The most important value for governments is to have standardized criteria to measure impact, achieve regulatory compliance, and to create legal certainty that could also make it easier to set equal criteria to apply financial incentives:
 - Supplier, trade unions and NGOs: The main value for suppliers, trade unions and non-governmental organizations (NGOs) is to advance due diligence, which leads to the ability to better implement remedy mechanisms for workers¹⁶; and
 - Consumers: The most relevant value for consumers is related to quality assurance, consumer products' safety due to the availability of more robust, accurate and complete product data used in business-to-business (B2B) and business-to-consumer (B2C) processes and systems, and the ability to make better-informed and more responsible choices.
- 21. Even if traceability and transparency bring clear benefits, their implementation in the garment and footwear industry is still not satisfactory. The journey towards more transparent and traceable garment and footwear value chains is full of complexities that need to be addressed, as confirmed by all the experts interviewed¹⁷ during the field research.
- 22. As is consistent with previous ECE research¹⁸, according to the experts, the most relevant challenges are as follows:
 - The high cost associated with the necessary resources and technologies required for traceability systems, including both human and financial resources;
 - The fragmentation and complexity of the business network, including the lack of harmonization, the lack of common data infrastructure and common taxonomy, the lack of visibility of suppliers beyond tiers one and two in the value chain, the presence

¹⁴ ECE, Policy Paper (ECE/TRADE/449), 2020.

¹⁵ See Annex 2 for the detailed methodology.

¹⁶ Expert comments on the subject include the following: "Traceability and transparency can solve problems such as rights violations at the mill level or factory level: local actors are not able to come to a resolution and they need a form of escalation. Public disclosure enables a quick discussion and speeds the resolution"; "Through traceability and transparency workers could access more easily to remedy and may have a stronger position for collective bargaining".

¹⁷ The following are some relevant expert quotes that illustrate this complexity: "We need to have systems that are very flexible and that can scale up with the needs of large and complicated businesses and industries". "Traceability systems should be simple and suitable to collect data: these data have to be verifiable and managed

with confidentiality, from sharing of know-how and protecting the role of tanneries and commercial roles". "Some actors in the supply chain are not prepared to share data: see wild indigenous populations (e.g. sourcing of exotic skins), or families which farm small animals such as goats and sheep".

¹⁸ECE Policy Paper (ECE/TRADE/449).

- of various sourcing methods with vertical and non-vertical value chains, and the mixing of fibres throughout the value chains;
- The technological barriers, including the viability, scalability, and access to technologies; the limited number of technologies that can cover the entire value chain from upstream to downstream activities; and the lack of traceability infrastructure, especially for developing countries and countries with transitioning economies; and
- The data privacy and data-security concerns related to corporate culture such as the perceived fear of sharing business-related, confidential information and commercially-sensitive data; and the risk of scrutiny and criticism for the actors (both brands and suppliers) along the value chain who are taking steps towards traceability and transparency by disclosing information.
- 23. Some experts also mentioned the impact of regulatory factors: the lack of regulatory frameworks and standards for traceability and transparency; the lack of mandatory public disclosure, due diligence and transparency of customs data; and the lack of control on potential fraudulent behaviour in some certification systems.
- 24. All these challenges result in a lack of trust in the industry. According to the interviewees, the impact of a higher investment in traceability and transparency is to build trust between consumers and other relevant stakeholders.
- 25. How is it possible to enhance the level of trust among value chain actors in order to allow information sharing and build stronger relationships and partnerships?
- 26. During the interviews, the experts highlighted seven core elements (Table 1) that are necessary to increase the level of trust among value chain actors. These will be further explained in the remaining chapters of the report, and will include relevant expert quotes to support the main findings of the desk research.

Table 1: Core elements highlighted by the experts to enhance the level of trust among value chain actors

Core elements to enhance the level of trust among value chain actors	Relevant expert suggestions
Due diligence	"Robust due diligence system", "reporting and grievance mechanisms"
Public disclosure	"Open communication systems", "long-lasting relationships and strengthened partnerships along the value chain with suppliers", "open dialogue", "regular meet-ups", "involvement and exposure"
One common traceability standard	"Ability to trace back to the brands and to be able to catch issues in the supply chains to implement remedies", "global open standards"
A system of financial and non-financial incentives	"Having a benefit/revenue sharing scheme among all actors and penalization system (e.g. fines and penalties for contractual obligations breaches)"
Supporting role of advanced technologies	"Relevance of technology-based trust", "open source decentralized data system", "trustful data-sharing platform"
Clear rules for collaboration among stakeholders 19	"Code of ethics for fair relationships with clear definition of the role of each stakeholder and the

¹⁹ The experts also highlighted the need for an impartial body to manage the data at the upstream level.

Core elements to enhance the level of trust among value chain actors

Relevant expert suggestions

resources and tools available for each stakeholder", "longer term contracts", "joint resolution strategies", "an interoperable framework that facilitates information exchange", "an implementation that is efficient in terms of costs and organization", "empowering suppliers and producers in the upstream part of the value chain to participate in traceability and transparency systems", "traceability should not become a cost or burden for companies along the supply chain, especially for SMEs, nor it should become a barrier to trade".

B. Policy and regulatory frameworks in the garment and footwear sector and in other industries

- 27. The desk research reviewed existing mandatory traceability frameworks at the national, European and international levels and the different labelling requirements across jurisdictions that allow consumers to access complete and reliable information about product, process, organization and sustainability performance in order to protect their health and wellbeing.
- 28. The analysis focused on countries that have specific traceability regulations in place, not only for garment and footwear products, but also for different types of commodities such as food and agricultural products.
- 29. The desk research shows that there is a lack of specific requirements concerning products, processes and organizations' traceability in garment and footwear value chains, and this regulatory scenario represents a huge challenge for enterprises operating in the sector. On the other hand, there are several traceability systems established by policymakers in the food sector.
- 30. In particular, at national level, many developed countries outside Europe such as, among others, the United States, Australia, Canada, Brazil, New Zealand, Japan and China have introduced binding requirements for traceability in the food sector. At the European level, member States of the European Union (EU) as well as pan-European countries such as Sweden, Norway and Switzerland have provided traceability systems for specific food and agricultural products.
- 31. The desk research highlights that the EU has set comprehensive and strict mandatory legislation for the traceability of all food products; this applies not only to domestic, but also to imported products. The EU legislation covers not just food safety, but also animal health and welfare, plant health, and extends to food hygiene. All actors in the food value chain, including producers and exporters in developing countries, are required to ensure that only safe food products enter the EU market and that the labelling and advertising of food products is not misleading for consumers. It must be noted that the European legislation refers to traceability only in the food value chain: traceability under this legislation means the ability to track any food, feed, food-producing animal or substance to be used for consumption through all stages of production, processing and distribution. ²⁰

²⁰ Some relevant EU food sector laws are briefly described below:

The EU regulation 178/2002 laid down the general principles and requirements of food law, establishing the European Food Safety Authority and procedures regarding food safety that all the member States need to follow. The regulation requires food business operators to (1) be able to identify from whom and to whom a product has been supplied; and (2) have systems and procedures in place that allow for this information to be made available to the competent authorities upon request. The EU also established a mandatory beef labelling regulation (1760/2000).

- 32. In the garment and footwear sector a regulatory framework on traceability and transparency is necessary. In fact, at the national and European levels the only mandatory information for garment and footwear products covers fibre name and composition with washing instructions (EU Textiles Regulation, 2011; US Fur Products Labeling Act, 2010; US Care Labeling of Textile Wearing Apparel and Certain Piece Goods, 2000; EU Directive 94/11/EC on footwear labelling, 1994).
- 33. Traceability and disclosure of information relevant to the garment and footwear sector are included in EU legislation on chemicals, and in particular by REACH (EU Regulation 1907/2006) which sets out the general regulatory framework on chemicals with the aim of ensuring that chemicals contained in all products are safe for both people and the environment. The REACH regulation applies to all chemicals, including the chemicals used in garment and footwear production. Manufacturers, importers and all downstream users are responsible for identifying, assessing and managing the risks posed by chemicals and for providing appropriate safety information to their users.
- 34. Many European and non-European countries and the EU increasingly recognize the importance of tracing and tracking garment and footwear products throughout the value chain to increase transparency and to generate new opportunities to develop a reliable garment and footwear industry in which social and environmental standards are respected.²¹ In particular, in 2017, the European Parliament (EP) adopted a resolution on the EU flagship initiative in the garment sector²² which requires the European Commission to develop measures to strengthen value chain traceability and transparency.
- 35. The desk research shows that in order to develop traceability and transparency systems for the garment and footwear sector, digital solutions should also be considered. In fact, several documents analysed, particularly at European level, emphasize the key role of digitalization to track the journey of products and processes and to make the resulting data securely accessible. Advanced technologies and digital solutions (e.g. blockchain, internet of things, artificial intelligence) can facilitate traceability systems in the exchange of data between stakeholders and help information travel with products and materials throughout garment and footwear value chains. They can also play a key role in achieving greater transparency for consumers since these solutions can be used to inform, and consequently empower them, to make more conscious choices.
- 36. In conclusion, the analysis of the current policy and regulatory landscape reveals the absence of traceability and transparency policy and regulatory frameworks in the garment and footwear sector and the need to establish harmonized and common traceability

Under this compulsory system, operators and organizations marketing beef should indicate on the label information about the beef and the point of slaughter of the animal or animals from which that beef was derived in order to give maximum transparency in the marketing of beef. Beef labels must include precise information about where the animal was born and reared, as well as the place of fattening, slaughtering, and butchering. EU Regulation 1337/2013 sets out rules on the indication of country of origin or place of provenance on the label of fresh, chilled and frozen meat of swine, sheep, goats and poultry. EU legislation also has specific requirements on seafood traceability. In particular, Council Regulation 1224/2009 includes a traceability system complementing the provisions contained in the EU Regulation 178/2002 and protects the interests of consumers by providing information concerning fisheries and aquaculture products. The regulation requires that all lots of such products must conform to labelling requirements with identification numbers, including the name and address of the suppliers.

The main labelling laws in the EU follow Directive 2000/13/EC for the labelling and advertising of foods, EC No. 1760/2000 for beef products, and EC 104/2000 for fish products.

Other European countries, that are not EU members, such as Sweden, Norway and Switzerland, set mandatory traceability requirements and tracing and tracking systems of food products.

Outside Europe many countries have also developed traceability regulations: China has in place different food safety regulations to address its national traceability requirements; Australia has its National Livestock Identification System that has mandatory requirements for the tagging and identification of cattle, sheep, and goats; Brazil has implemented a mandatory traceability and identification system for the identification and control of both domestic and imported cattle through the Brazilian System of Identification and Certification of Origin for Bovine and Buffalo. The United States the Food Safety Modernization Act (2011) includes a specific section (SEC. 204) dedicated to enhancing tracking and tracing of food and recordkeeping.

There are also many countries outside Europe that have consumer protection laws in place, establishing mandatory labelling requirements.

²¹ For example, see the European Commission staff working document "Sustainable garment value chains through EU development action", 2017.

²² European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

requirements to avoid misleading practices, to strengthen interoperability, and improve transparency for garment and footwear products globally.

C. How governments and enterprises can provide support

- 37. The regulatory objectives of a traceability and transparency action should be to set clear policies, legislation and guidelines, linked to the sustainable development goals of the United Nations 2030 Agenda.
- 38. Consistent with the results of the desk research, the experts agreed that traceability is "key for providing consumers with transparent information on the origin of goods and services and giving them tools to a verify product's authenticity and [providing them with] countermeasures against counterfeits". 23 They agreed that traceability and transparency systems should be endorsed by governments since the cost of being non-transparent is borne by society. Most of the interviewees underscored the role of governments in several activities, specifically the following: producing traceability and transparency policy actions through legislation, guidelines and trade tools guaranteeing all stakeholders access to the data and making it easy and cost-effective to access for SMEs and other potentially disadvantaged groups; providing a framework for harmonization and adoption of standards; requiring and encouraging product labelling and claims; helping to define key performance indicators for traceability and transparency; designing clear, standardized methodologies to identify and measure sustainability challenges across value chains; setting the framework to create the right (positive and negative) incentives for traceability and transparency along value chains; supporting the creation of a common taxonomy; mandating a certain level of public disclosure; supporting research and innovation; providing platforms for stakeholder engagement and promoting pilots to foster capacity building.
- 39. Some experts believe that governments should also give support to stakeholders to make it easy to comply with the requirements of a new traceability and transparency system: "governments may [not have the] capacity to frame and enforce traceability and transparency systems in countries and areas where they matter the most. The risk is also that they set out a comprehensive policy framework for traceability and transparency that is unachievable by the actors involved". For this reason, providing policies and regulations for traceability and transparency "must be based on a dialogue with the countries where products originate and where manufacturing takes place, building the enforcement capacities to comply with environmental and social standards".
- 40. Some experts highlighted that governments should establish a general "regulatory level playing field" by "requiring basic information to be shared", to set the conditions for traceability and transparency "without potentially creating the wrong type of prescription".²⁴
- 41. The field research also underlined that reaching significant results will be impossible without a higher level of harmonization among countries. The international cooperation of governments is considered crucial: given national regulations are not sufficient, regulations at the European or even international level with a global approach are considered necessary.
- 42. In order to have a level regulatory playing field, the experts suggest intergovernmental action and policy dialogue involving major garment-producing countries such as Bangladesh, Cambodia, and Myanmar, since manufacturing countries could have different starting points and different paces. It is important to allow flexibility in the implementation of traceability and transparency systems, especially in developing countries and transitioning economies. According to the experts, governments should set regulatory expectations for a minimum level of public disclosure and make practical tools available to increase data reliability.²⁵
- 43. It is also relevant to highlight some concerns emphasized by industry players during the interviews, such as the following: "Sustainability information should be used for

²³ Quotation is from expert interviews.

²⁴ The precise question asked to the experts was "Which should be the regulatory objectives of such government action? Please comment on having a regulatory level playing field".

²⁵ Expert response: "[Make] it compulsory; the more data you have, the more you can use the data generated by others to validate and normalize your own data".

sustainability goals and not for other business purposes", so we need an "...industry code of conduct to make sure that the information is not being used inappropriately" and "guarantees on confidentiality of the commercial data".

- 44. Most of the experts agree that governments should create a level regulatory playing field²⁶ and promote a plurality of technological solutions and products to enforce the implementation of traceability and transparency systems and to increase interoperability between the different systems in place. Some experts also pointed out the advantages of open data systems²⁷.
- 45. The priority of any traceability and transparency framework should be sharing value²⁸ between all stakeholders: this is why smallholder farmers, raw materials suppliers and manufacturers in the upstream part of the value chain must be empowered to participate in traceability and transparency systems. One of the main challenges for governments is represented by the adjustment of the systems to SMEs and most disadvantaged stakeholders, including the raw materials suppliers and producers in the upstream part of the value chain since access to technology may be difficult and enterprises may have weaker management tools to develop traceability and transparency systems.
- 46. The experts highlighted the "need of sharing the concrete benefits of traceability and transparency upstream" and indicated possible solutions to address the main challenges; for instance, enterprises could give visibility to raw materials suppliers and manufacturers; mechanisms could be created that include financial incentives for participation; long-lasting partnerships and collaboration could be strengthened, resilience and long-term planning could be built, especially with the upstream segment of the value chain sourcing fibers and raw materials (e.g. in the agriculture industry). Another key aspect to consider in the implementation of traceability and transparency systems is flexibility, particularly in relation to the technologies to be adopted and data confidentiality to be assured.
- 47. The field research indicated, public listings with transparency, traceability, risk ratings (eventually tied to financial incentives) and benchmarking indexes could be useful tools to empower upstream actors.
- 48. Experts believe that in order to share the benefits of traceability and transparency at the upstream level, it is important to have a multi-stakeholder approach, in cooperation with NGOs and intergovernmental organizations (IGOs), to support enterprises in training, knowledge sharing and capacity building activities for disadvantaged players, educating about the advantages of data sharing and the link between their business and their sustainability impact. This will ultimately lead to the availability of information about market trends, including due diligence legislation, which upstream players do not always have first-hand access to.

²⁶ Expert responses: "A level playing field is a sound and efficient playing field. It ensures companies are not disadvantaged for being sustainable, or allowed to go for the lowest standards to remain overall competitive"; "The regulatory objectives of such government action should be to ensure fair trade, provide trust to consumers and society in general and to support more the creation of shared value, not just profits"; "The regulatory objectives of such government action should be an integrated and holistic approach among social and environmental sustainability"; "Removing barriers to transparency on the one hand, and enabling workable solutions, particularly by facilitating collaboration and consultation with stakeholders".

²⁷ Open data systems are based on both a technical and a legal framework (for more information, see https://odsas.org/):

a) Legal framework (you must be allowed to get the data legally, to build on it and to share it): "Legal openness" is usually provided by applying an appropriate (open) license which allows for free access to and reuse of the data, or by placing data into the public domain.

b) Technical framework (there should be no technical barriers to using that data): Providing data as printouts on paper or as tables in PDF documents, makes the information extremely difficult to work with. An example of "technical openness" would be requiring that data is machine readable and available in bulk.

Three important principles of open data are what makes it so powerful (see https://blog.okfn.org/2013/10/03/defining-open-data/):

Availability and access (people can get the data)

[•] Reuse and redistribution (people can reuse and share the data)

Universal participation (anyone can use the data)

²⁸ For more information on this concept, see Porter, M. E. and M. R. Kramer, "Creating Shared Value", *Harvard Business Review*, January-February 2011.

II. Setting reporting and due diligence requirements

A. Overview of national, international and European principles, policy, legislation and guidelines on reporting requirements and due diligence

- 49. Traceability is an enabler to carry out due diligence, share data on business conduct among all relevant stakeholders and achieve transparency about social, environmental and economic performance in garment and footwear value chains.
- 50. Today, transparency represents a critical challenge for enterprises that want to develop due diligence through their value chains, considering that (as mentioned in Table 1) visibility and control over an enterprise's value chain in this sector is particularly difficult to accomplish. The complexity of these value chains is characterized by "stages of the production process [being] spread across diverse countries, short lead times and short-term buyer-supplier relationships"²⁹. This has led to unfair purchasing practices and human rights violations for workers. This was dramatically proven by incidents such as the fires in the KiK factory in Pakistan and the Tazreen Fashions garment factory in Bangladesh in 2012, and the Rana Plaza collapse in 2013, which demonstrated the lack of social responsibility. Traceability systems help enterprises exercise control over their suppliers' environmental performance and, in turn, their own.
- 51. Identifying risks in a value chain can allow enterprises to manage them more effectively and to efficiently mitigate and prevent risks with the help of suppliers or other relevant stakeholders. With due diligence, actions can be traced and linked to products or processing stages, improving transparency. Ultimately, higher visibility, transparency and accountability, ensured by traceability systems put in place by industry players, support the sustainability claims made by value chain actors.
- 52. The desk research highlights the role of traceability systems to empower human rights and environmental due diligence to obtain transparency in garment and footwear value chains. On the one hand, it allows consumers, workers, NGOs, and civil society to know which steps an enterprise is taking to tackle human rights and environmental violations; on the other hand, it enables enterprises to better control and understand their value chains. Putting in place traceability and transparency systems to ensure due diligence can demonstrate that environmental, social, and economic impacts are addressed properly by all actors in the garment and footwear sector.³⁰
- 53. The following table contains an overview of the existing state-of-the-art frameworks covering human rights and environmental due diligence, which enables a comparison of the different measures developed on reporting and due diligence. It focuses on the following:
 - International principles and guidelines that address human rights and environmental due diligence in enterprises' operations and value chains; and
 - The legislation in the EU, as well as in some non-EU jurisdictions that require mandatory transparency or mandatory due diligence for enterprises.
- 54. There are international instruments that underline the state duty to protect human rights, the corporate responsibility to respect human rights, and the shared obligation to provide remedy where harm was not avoided. These instruments recognize due diligence as the tool with which enterprises should fulfil their responsibility to respect human rights and the environment. These are non-binding soft-law instruments with the goal of persuading governments to translate international norms on human rights and environmental protection into domestic laws (see Table 2).

²⁹ OECD, "OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector", 2018

³⁰ Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector, 2018.

Table 2: Main international principles and guidelines addressing human rights and environmental due diligence

International instruments	Year of adoption	Description
OECD Due Diligence Guidance for Responsible Business Conduct	2018	This document contains recommendations for enterprises on how to develop due diligence in order to prevent, avoid and address adverse impacts through the enterprise's own activities or those to which it could be directly linked through its operations, products or services provided through business relationships.
		The following due diligence process stages are outlined:
		Embed responsible business conduct in policies and risk management systems
		Identify and assess actual and potential adverse impacts in operations, value chains and business relationships
		 Cease, prevent or mitigate adverse impacts the enterprise may cause or contribute to
		4) Track implementation and results
		5) Communicate how the impacts were addressed
		6) Enable remediation where appropriate
OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector	2018	This document endorses all the essential elements of due diligence produced by the OECD Guidelines for Multinational Enterprises and considers the specific risks of the garment and footwear industry, in particular child labour; discrimination; forced labour; working conditions; occupational health and safety; the right to establish or join a trade union, representative worker organization and the right to collective bargaining; unfair wages; use of hazardous materials; and others.
OECD Guidelines for Multinational Enterprises (OECD Guidelines)	2011	The OECD Guidelines represent a corporate responsibility risk- oriented instrument adopted by governments that addresses enterprises operating in or from adhering countries. The document provides enterprises with guidelines to develop due diligence policies and processes. It covers numerous areas of risk for responsible business conduct and all significant aspects of corporate behaviours such as the labour rights, environmental protection, information disclosure, bribery and corruption, consumer interests, science and technology, competition and taxation.
United Nations Guiding Principles on Business and Human Rights (UNGPs)	2011	The UNGPs declare that companies should have in place "a human rights due diligence process to identify, prevent, mitigate and account for how a company addresses their impacts on human rights".
ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy	1977	The ILO Tripartite Declaration, based on international labour conventions and the ILO Declaration on Fundamental Principles and Rights at Work, encourages enterprises to contribute to economic and social progress and to the realization of decent work for all. Following the OECD Guidelines, enterprises (including multinational) should carry out due diligence to identify, prevent, mitigate and account for how they address their actual and potential adverse impacts related to internationally recognized human rights.
ILO Protocol to the Forced Labour Convention	1930	The ILO Protocol to the Forced Labour Convention calls on Member States to take measures to support "due diligence by both

International instruments	Year of adoption	Description
		the public and private sectors to prevent and respond to risks of forced or compulsory labour", to cooperate with each other, and to set common, minimum and consistent requirements for enterprises across jurisdictions.

- 55. The guidelines and declarations presented in the table above introduce a robust framework for countries adopting legislation that requires enterprises to ensure that their value chains are free from human rights and environmental violations.
- 56. Across the world, countries have translated international norms into domestic laws. The purpose of these laws is to encourage enterprises to take responsibility in respect of human rights and the environment throughout their international operations and value chains, regardless of where the enterprise is located or domiciled. These laws differ in their legislative approach: reporting or due diligence.
- 57. Based on the desk research conducted on national, international, and European legal frameworks it is possible to divide the legislation into two broad categories:
 - Mandatory transparency: This is legislation that requires enterprises to disclose information about the human rights and/or environmental impacts or risks occurring in their operations and value chains, as well as on specific actions taken to address these risks (see Table 3); and
 - Mandatory due diligence: This is legislation that mandates an entire due diligence process, in particular risk identification, the obligation to take action, and the obligation to report on measures taken and their outcomes (see Table 4).

Table 3: **Mandatory transparency**

		•	Environmental and/or	
Law	Year	Enterprise scope	human rights issues covered	Requirements
Canadian Modern Slavery Act	2020	Entities that a) are listed on a Canadian stock exchange; and b) have a place of business or do business in Canada, produce or sell goods in Canada or import goods to Canada or control an entity that does any of the foregoing; and	Forced labour, modern slavery, child labour	Enterprises are required to provide an annual report on the steps taken during that year to reduce and prevent the risk that forced labour or child labour is used at any stage of the production of goods.
		and satisfy two of the following criteria in one of the last two years: (i) have more than \$20 million Canadian dollars (CAD) in assets, (ii) generate more than CAD \$40 million in revenue, (iii) employ at least 250 people; and		
		c) are prescribed by regulations		
EU Regulation on sustainability related disclosures in the financial services sector	2019	Manufacturers of financial products and financial advisers to end investors		Investors and asset managers are required to disclose how sustainability risks are integrated into investment decisions or insurance advice; the potential impacts of sustainable risks on the returns of financial products; and information on how the financial products consider principal adverse impacts on sustainability factors.
Australian Modern Slavery Act	2018	Australian entities (including corporate Commonwealth entities and Commonwealth companies) with annual revenue of \$100 million or more, foreign entities operating in Australia with annual revenue of \$100 million or more, and the Australian Government. Entities with lower annual revenue may voluntarily provide statements.	Forced labour and modern slavery	Enterprises are required to provide a statement that includes information on the entity's structure, operations and value chains; potential modern slavery risks in those operations and value chains; actions the entity has taken to assess and address the risks identified; and how the entity

Law	Year	Enterprise scope	Environmental and/or human rights issues covered	Requirements
				assesses the effectiveness of those actions.
UK Modern Slavery Act	2015	Any commercial organization with an annual turnover of or more than £36 million, that supplies goods and services and which carries out all or part of their business in the UK	Forced labour and modern slavery	Enterprises are required to produce a 'slavery and human trafficking statement' for each financial year identifying what enterprises are doing to 'ensure that slavery and human trafficking is not taking place in any of its supply chains, and in any part of its own business'.
EU Directive 2014/95/EU on non- financial reporting	2014	Public interest entities with more than 500 employees	Human rights and the environment	Enterprises are required to provide a description of the policies applied related to the administrative, management and supervisory bodies, the objectives of the diversity policy, how it has been implemented, and the results in the reporting period. The disclosure obligation covers information related to the company's own operations and to its value chains and business relationships.
California Transparency in Supply Chains Act	2010	Manufacturers and retailers with an annual global revenue of more than US\$100 million that 'do business' in California	Forced labour and modern slavery	Enterprises are required to disclose to 'what extent, if any,' they verify their product value chains; audit their suppliers; demand certifications from direct suppliers; maintain internal accountability; and train employees and management.

Table 4: **Mandatory due diligence**

Law	Year	Enterprise scope	Environmental and/or human rights issues covered	Requirements
Canadian Modern Slavery Act	2020	Entities that a) are listed on a Canadian stock exchange; and	Forced labour, modern slavery, child labour	Enterprises are required to provide an annual report on the steps taken during that year to reduce and prevent the risk that forced labour or child labour is
		b) have a place of business or do business in Canada, produce or sell goods in Canada or import goods to Canada or control an entity that does any of the foregoing; and		used at any stage of the production of goods.
		and satisfy two of the following criteria in one of the last two years: (i) have more than \$20 million Canadian dollars (CAD) in assets, (ii) generate more than CAD \$40 million in revenue, (iii) employ at least 250 people; and		
		c) are prescribed by regulations		
Dutch Child Labour Due Diligence Law	2019	Enterprises registered in the Netherlands as well as companies that sell to a Dutch consumer	Child labour	Enterprises are required to exercise due diligence to identify whether there is a "reasonable suspicion" that goods or services to be supplied have been created using child labour; to develop and execute a plan of action, in line with the UNGP and OECD Guidelines standards, in case of such reasonable suspicion; and to submit a disclosure statement, to be made publicly available.
EU Conflict Minerals Regulation	2017	Importers into the EU minerals or metals containing or consisting of tin, tantalum, tungsten or gold (estimated to ensure sustainable sourcing for at least 95% of all such imports)	Conflict minerals related	Enterprises are required to put in place due diligence procedures in accordance with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High- Risk Areas.
French Duty of Vigilance Law	2017	France's largest companies – those registered in France with either	Human rights and the environment	Enterprises are required to develop and implement a 'plan de vigilance' to identify and mitigate violations of human

Law	Year	Enterprise scope	Environmental and/or human rights issues covered	Requirements
		(a) more than 5,000 employees working for the company and its direct or indirect French registered subsidiaries, or (b) more than 10,000 employees working for the company and in its direct or indirect subsidiaries globally		rights, severe bodily or environmental damage, or health risks in their operations, value chains and business relationships.
United States Trade Facilitation and Enforcement Act	2016	All importers to the U.S.	Forced labour, modern slavery and child labour	Enterprises are required to conduct value chain due diligence to prove that their products were not mined, produced or manufactured with forced labour.
EU Timber Regulation	2010	Enterprises or persons placing timber or timber products on the EU market	Timber related	Enterprises are required to develop a due diligence system containing the following elements: measures and procedures providing access to information concerning the operator's supply of timber or timber products placed on the market, such as country of harvest, species, quantity, supplier details and information on compliance with national legislation; risk assessment procedures enabling the operator to analyse and evaluate the risk of illegally harvested timber or timber products derived from such timber being placed on the market; risk mitigation procedures.

- 58. There are also different legislative proposals on human rights and environmental due diligence at the country level.³¹
- 59. At the European level, many documents require enhancing the implementation of due diligence legislation in order to achieve a level global playing field.³²

³¹ Germany: In December 2019, the Ministers for Labour and Development committed to the development of a supply chain due diligence law. The draft law requires enterprises to conduct human rights and environmental due diligence and provide sanctions for non-compliance with the law (fines of up to five million Euros, imprisonment and exclusion from public procurement procedures in Germany.

Norway: In 2019, Norway published a draft law on transparency and supply chain due diligence.

Denmark: In January 2019 three political parties, in consultation with one hundred civil society organizations, the trade union confederation, the Danish Consumer Council and some enterprises, developed a motion requesting the Parliament to make a legislative proposal on mandatory due diligence and corporate liability.

Austria: In July 2018 a draft for a Social Responsibility Law was introduced.

32 The Council of EU on different occasions called for legislation to address due diligence and access to remedy (EU Conclusions on Global Value Chains, 2016 and EU Conclusions on Business and Human Rights, 2016). The European Parliament developed several resolutions in the same vein, such as the resolution on coordinated EU action to combat the COVID-19 pandemic and its consequences, 2020; the resolution on child labour in mines in Madagascar, 2020; and the European Parliament resolution of 12 September 2017 on the impact of international trade and the EU's trade policies on global value chains (2016/2301(INI)), 2017. The European Parliament also

- 60. Regarding the garment sector, the European Parliament asked the European Commission for a human rights and environmental duty of care that goes beyond voluntary initiatives and establishes mandatory due diligence for value chains.³³
- 61. In February 2020 the European Commission published a study on due diligence requirements through the supply chains³⁴, as part of the Action Plan on Financing Sustainable Growth. The study explored different scenarios of due diligence implementation for adverse human rights and environmental impacts in the enterprises' own operations and throughout their supply chains:
 - No policy change (baseline scenario);
 - New voluntary guidelines/guidance;
 - · New regulation requiring due diligence reporting; and
 - New regulation requiring mandatory due diligence as a legal duty of care.
- 62. Following this study, in April 2020, the EU Commissioner for Justice, Didier Reynders announced that the EU would develop an EU-wide legislation on mandatory human rights and environmental due diligence by 2022.

B. Disclosure: from reporting requirements to human rights and environmental due diligence

- 63. The desk research on international guidelines and European and national legislation shows that at the national, international and European and levels, there is a growing legislative interest in using due diligence to obtain radical transparency in value chains.
- 64. The desk research also underlines the need for a common approach in due diligence. In fact, an uncoordinated approach could lead to legal uncertainty due to inconsistent requirements for enterprises across jurisdictions and could impede access to remedy for victims of corporate human rights and environmental violations. Only harmonized policies at the European and international levels can create a level playing field for enterprises operating in different countries, as is the case in the garment and footwear sector.³⁵
- 65. The need of a common approach on due diligence for traceability and transparency in garment and footwear value chains was also indicated by the experts during the field research. Most of the experts emphasized the need to align with the United Nations Guiding Principles, the United Nations Sustainable Development Goals, the OECD Guidelines, the most relevant standards, and emphasized the importance of making the reporting more efficient; some experts also pointed out that technologies such as blockchain, open standardized central repositories and others, could make data collection more efficient, thus reducing the reporting burden 37.
- 66. The desk research corroborated what some experts expressed during the field research: Enterprises should be encouraged by policymakers to undertake dynamic, ongoing, and responsive human rights and environmental due diligence in accordance with the OECD Due Diligence Guidance for Responsible Supply Chains in the Garment & Footwear Sector and the OECD Due Diligence Guidance for Responsible Business Conduct. Enterprises

produced many reports that ask for binding and enforceable rules on due diligence, in particular the report on sustainable finance, 2018; the report on indigenous peoples, 2018; the report on global value chains, 2017; the report on the EU flagship initiative for the garment sector, 2017; and the report on corporate liability for serious human rights abuses in third countries, 2016.

³³ European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

³⁴ European Commission, Study on due diligence requirements through the supply chain, 2020.

³⁵ "European Strategy for Sustainable Textile, Garments, Leather and Footwear", Fair and Sustainable Textile European Civil Society Strategy, 2020. Available at https://circulareconomy.europa.eu/platform/sites/default/files/civil_society_european_strategy_for_sustainable_textiles.pdf. (Accessed 15 March 2022.)

³⁶ The exact question asked to the experts was the following: "What kind of reporting requirements do you believe should be included in a government policy framework on collaboration?"

³⁷ "The automation of procedures like those for *certification of origin* and *preferential origin certification* are concrete opportunities to save money and speed up bureaucracy for exported goods".

should also be encouraged to refer to the United Nations Sustainable Development Goals, the United Nations Guiding Principles and the ILO International Labour Protocol. This would create a level playing field between enterprises that are already acting responsibly and enterprises that still need to change their policies and practices. The objective of due diligence is to raise awareness about human rights and environmental issues and to boost the ability of enterprises' to increase traceability and transparency in their operations and value chains.

- 67. A comparison of the various international soft law instruments, binding European and national legislation and policy documents, conducted as part of the desk research, demonstrated the need to consider the following key areas while developing minimum reporting and due diligence requirements to improve transparency of garment and footwear value chains:
 - 1) The types of issues covered by the due diligence and the set of reporting criteria should be considered.
 - 2) The types of enterprises that have to comply with due diligence requirements should be considered, including the company's size and revenue threshold. Due diligence requirements could be specific and accurately defined but at the same time reasonable for enterprises and with a tailored approach for SMEs. Less onerous requirements should be demanded of SMEs to make it possible for them to carry out appropriate due diligence, and they should also be provided specific guidance and support.
 - 3) The specific value chain stage at which the due diligence requirements are needed should be considered. Clarity is essential for enterprises and all other stakeholders involved. Access to comprehensive information and data sharing is particularly necessary at the raw material production stage since this stage presents a great deal of social and environmental challenges, as confirmed by some interviewees (see Table 1 and Part II, Chapter I, section C).
 - 4) The identification of what must be included in the due diligence statement taking into account the due diligence stage process identified by the OECD Due Diligence Guidance for Responsible Supply Chains in the Garment & Footwear Sector and the OECD Due Diligence Guidance for Responsible Business Conduct.
 - 5) The periodic public disclosure of the due diligence statement (e.g. on an annual basis) should be considered, as this would help to highlight progress and challenges, considering that due diligence is a continuous process.³⁸
 - 6) Systemic issues in value chains and trading practices should be considered, given how enterprise purchasing practices may prevent a supplier's capacity to carry out due diligence; this was also confirmed by some of the interviewees (see Table 1 and Part II, Chapter I, section C).
 - 7) The establishment of a public registry of enterprises which need to comply with due diligence requirements would allow stakeholders to know which enterprises are liable; the existence of such a list would enhance transparency into these companies' operations, thereby improving compliance, as suggested by some interviewees (see Table 1 and Part II, Chapter I, section C).
 - 8) Management training, capacity-building and awareness-raising activities about social and environmental issues should be undertaken for the benefit of enterprise employees.
 - 9) The opportunity to apply due diligence requirements to the enterprise, subsidiaries, subcontractors and suppliers, as well as the liability of senior management and the board should be considered.
 - 10) The adoption of monitoring and grievance mechanisms using a gradual approach to foster a high level of reporting should be considered.

³⁸ The annual public disclosure of due diligence statements is suggested in the OECD Guidance for Responsible Supply Chains in the Garment & Footwear Sector.

- 11) The right of consumers to pursue civil claims and the right of individuals, trade unions and NGOs to file complaints in case of enterprise non-compliance should be considered.
- 12) The consultation and participation of trade unions, worker representatives, civil society organizations, employees and workers should be considered, with special consideration paid to the interests of small actors such as farmers and producers, women and vulnerable groups, and to the design and implementation of the due diligence process, in order to ensure effective and shared measures; this was confirmed by some interviewees (see Table 1 and Part II, Chapter I, section C).
- 13) Sector-specific, clear and comprehensive guidance, based on consultation with relevant stakeholders, should be created to supplement and clarify due diligence requirements in order to help enterprises, and especially SMEs, comply with established requirements.
- 14) Actors in developing countries and economies in transition, who may lack the capacity to participate in data collection and comply with reporting requirements, should be supported.
- 15) Cooperation and coordination between and among government representatives should be considered, given the global and cross-cutting dimensions of human rights and environmental issues in different sectors.
- 16) The extension of due diligence requirements to the public sector should be considered. Public procurement could be a powerful tool in encouraging transparent business conduct.

III. Enabling traceability and transparency for sustainability

A. Role of sustainability claims

- 68. The desk research underlines the role of traceability in supporting sustainability. Traceability is a key instrument in promoting the three dimensions of sustainability: environmental, social and economic.³⁹ Traceability systems are needed across sustainable value chains to generate information flow and to share data among the different actors, thereby creating transparency.⁴⁰
- 69. Traceability systems can be a game changer in ensuring social transparency because, once the information is traced and made available, it is possible for enterprises to identify the social risks in their value chains and address them. Traceability systems can also be an effective enabler of environmental transparency since they allow information from the raw materials and manufacturing phase, consumption phase, and post-consumption phase to travel along the value chain and enable a deeper understanding of the product's life cycle impact. Traceability systems can also contribute to economic sustainability since enterprises are able to have more visibility, knowledge and control of their value chains.
- 70. Traceability systems can also be a competitive tool for enterprises since they enable them to build trust with value chain partners while communicating information regarding products, processes and organizations. Furthermore, they allow consumers to make sustainable and informed decisions. This is aligned with SDG 12, target 12.8 which recognizes the right of people everywhere to "have the relevant information and awareness for sustainable development and lifestyles in harmony with nature". However, sustainability cannot be achieved without the support of relevant data to verify the claims made by enterprises. This explains why traceability is strictly intertwined with sustainability.

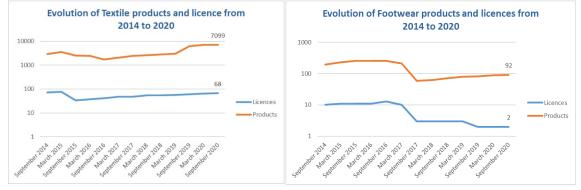
³⁹ Kumar, V., T.K. Agrawal and L. Wang, "Contribution of traceability towards attaining sustainability in the textile sector", *Textiles and Clothing Sustainability*, 2017.

⁴⁰ Agrawal, T. K., Koehl, L., & Campagne, C. (2016). "Cryptographic tracking tags for traceability in textiles and clothing supply chain". In X. Zeng, J. Lu, E. E. Kerre, L. Martinez & L. Koehl (Eds.), *Uncertainty Modelling in Knowledge Engineering and Decision Making: Proceedings of the 12th International FLINS Conference* (pp. 800–805). Singapore: World Scientific, 2016.

According to the *State of Sustainability Initiatives Review 2014*, traceability systems constitute the link between sustainability initiatives and claims because they "help ensure the integrity of claims…by providing accountability between standard-compliant products produced and sold". ⁴¹ Traceability is needed to make accountable claims since it is the foundation for the three pillars of sustainability (environmental, social and economic).

- 71. The desk research investigated policy and regulatory frameworks, particularly within the EU, on information given to consumers, with a particular focus on sustainability-related information.
- 72. Regarding consumer information, the EU Consumer Rights Directive (2011/83/EU) requires that consumers receive "material information" (so called "pre-contractual information") about a product before the purchase, and the EU Unfair Commercial Practices Directive (2005/29/EC) prohibits misleading omissions of any such information.
- 73. The EU Textiles Regulation (1007/2011), as mentioned above, is the only legislation that includes mandatory information on labelling of textile products in the garment and footwear sector, although it covers only fibre names and composition to be included with washing instructions.
- 74. Among the voluntary labelling instruments, at the European level, the EU Ecolabel Regulation (66/2010) can be applied to textile products that meet high environmental standards throughout their life cycle—from raw material extraction, to production, distribution and disposal.
- 75. Figure 1, below, shows the number of EU Ecolabel textile and footwear products and licences as of September 2020.

Figure 1: European Union Ecolabel textile and footwear products and licences (https://ec.europa.eu/environment/ecolabel/facts-and-figures.html)



- 76. In addition, there are a considerable number of different private environmental labels on the environmental performance of products and enterprises: it has been estimated that there are more than 200 environmental labels active in the EU, and more than 450 environmental labels active worldwide; there are also more than 80 widely used reporting initiatives and methods for carbon emissions only⁴². This creates confusion among consumers and relevant stakeholders who cannot properly understand the level of reliability and the sustainability issues covered by the claims made by enterprises. As a result, there is a lack of trust among the actors.
- 77. The lack of coordination, credibility and comparability between sustainability claims is a crucial issue in advancing sustainable consumption and production patterns.

⁴¹ International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED) and others, *The State of Sustainability Initiatives Review 2014: Standards and the Green Economy*, 2014.

⁴² https://ec.europa.eu/environment/eussd/smgp/initiative on green claims.htm

- 78. In the garment and footwear industry there are an extensive variety of claims in the form of text, names, trademarks, pictures and figurative or other signs that convey explicitly or implicitly product characteristics or functions in the labelling and advertising.
- 79. The main objective of a claim is to enable consumers to make informed purchasing decisions and to choose products that better meet their needs and expectations. To that end, it is essential to ensure that information about the product characteristics and qualities conveyed to consumers through such claims is clear, useful and reliable.
- 80. The desk research related to sustainability claims revealed the need to improve transparency for consumers, through easy and more comprehensive access to information beyond the claims, which can be enabled through the development of scalable and interoperable traceability systems.
- 81. The analysis highlighted that there are no minimum harmonized criteria at the national, international or European levels to validate sustainability claims related to garment and footwear products. A common, holistic approach is needed to guarantee a high level of protection for consumers from misleading sustainability claims, to end the diffusion of inconsistent methods and initiatives, and to build trust among relevant stakeholders. The reliability and credibility of sustainability claims is essential for the path to sustainability for both consumers and enterprises.
- 82. According to the EU Circular Economy Action Plan, the European Commission will consider setting minimum requirements for sustainability labels and for information tools in the revision of EU consumer law, thus helping consumers to strengthen their role in achieving a more sustainable economy. ⁴³ In order to tackle misleading environmental claims ⁴⁴ and to address greenwashing practices ⁴⁵ the European Green Deal indicates that "companies making green claims should substantiate these against a standard methodology to assess their impact on the environment ⁴⁶". In this regard "the European Commission will also propose that companies substantiate their environmental claims using product and organization environmental footprint methods". ⁴⁷ These documents demonstrate the commitment by the European Union to make green claims more trustworthy and transparent.
- 83. Key to achieving a strong traceability and transparency framework on sustainability claims will be the development of clear guidelines for the garment and footwear sector,

⁴³ European Commission, "A new Circular Economy Action Plan For a cleaner and more competitive Europe" (COM/2020/98 final), 2020.

⁴⁴ There is no consensus on a single definition of environmental or green claims. For the European Guidance for the implementation/application of Directive 2005/29/EC on unfair commercial practices environmental claims "refer to the practice of suggesting or otherwise creating the impression (in the context of a commercial communication, marketing or advertising) that a product or a service, is environmentally friendly (e.g. it has a positive impact on the environment) or is less damaging to the environment than competing goods or services. This may be due to, for example, its composition, the way it has been manufactured or produced, the way it can be disposed of and the reduction in energy or pollution which can be expected from its use. When such claims are not true or cannot be verified this practice can be described as greenwashing".

The OECD defines environmental labelling as "voluntary granting of labels by a private or public body in order to inform consumers and thereby promote consumer products which are determined to be environmentally more friendly than other functionally and competitively similar products" (OECD, *Environmental Labelling in OECD Countries*, 1991), while the GATT Secretariat refer to "systems for the usually voluntary granting of labels by a private or public body in order to inform consumers" (GATT Packaging and Labelling Requirements, TRE/W/3, 29 September 1992). In 1993, the GATT secretariat revised its definition and differentiated between 'environmental labelling' and eco-labelling' by using the former to cover all labels while the latter only covered labels which used life cycle analysis (GATT Packaging and Labelling Requirements, TRE/W/12, 14 June 1993).

Another definition is the one provided by the United Nations Conference on Trade and Development (UNCTAD); here environmental claims are described as "use of labels in order to inform consumers that a labelled product is environmentally more friendly relative to other products in the same category" (Ecolabeling and International Trade, UNCTAD Discussion Paper, No 70, UNCTAD, Geneva, October 1993).

⁴⁵ "Greenwashing" is derived from the term "whitewashing". It is an attempt to mislead consumers and to market products as more environmentally friendly than they actually are. This can be an exaggeration or misrepresentation of improved environmental performance, a claim that cannot be verified, or a claim that is irrelevant or simply false. Even though the word "green" relates to environmental claims, the expression is sometimes also used in the context of social and ethical product information. "Greenwashing" has the potential to demotivate consumers to purchase and use more sustainable products and to penalize providers of information who adhere to appropriate guidance (UNEP *Guidelines for Providing Product Sustainability Information*, 2017).

⁴⁶ The need "to tackle misleading environmental claims and to address 'greenwashing practices' through effective methodologies, including on how to substantiate such claims" is also stated by the European Parliament resolution of 25 November 2020 towards a more sustainable single market for business and consumers (2020/2021(INI)). ⁴⁷ COM/2020/98 final.

tailored to the specific needs and characteristics of the sector. The importance of producing guidelines on sustainability claims was confirmed by the European Parliament in its resolution "towards a more sustainable single market for business and consumers" (2020/2021(INI)) which calls on the European Commission to produce clear guidelines and standards for green claims and commitments, to update the implementation guidelines of the EU Unfair Commercial Practices Directive with regard to environmental claims, and to provide guidance on market surveillance activities.

84. Another key element illuminated by the study on the legislation and policies is the provision of better monitoring and enforcement through proactive measures to tackle misleading claims. This was confirmed by the European Parliament, which suggested the establishment of a public European register listing authorized and banned environmental claims and the conditions and steps needed to assert a claim.⁴⁸

B. Empowering consumers and enterprises towards sustainable consumption and production

- 85. The development of legislative instruments to implement traceability and transparency systems that provide transparent, accountable and accurate information will lead consumers to more informed choices while encouraging companies to adopt sustainable production. In fact, sustainable consumption goes hand in hand with sustainable production, as highlighted by the European Parliament in its resolution towards a more sustainable single market for business and consumers.
- 86. Consumers are recognized as key players who need to be empowered with consumer rights and access to harmonized and reliable information so that they are able to play their role in enhancing sustainable consumption.⁴⁹
- 87. The desk research indicates that there is a strong need to provide consumers with clear, trustworthy, easy to understand and verifiable information about sustainability in the garment and footwear sector⁵⁰ that shows the origin of products, the extent to which workers' rights and the environment have been respected, and relevant information regarding all actors along the value chain should be made available.⁵¹
- 88. In 2017, the European Parliament adopted a resolution on the impact of international trade and the EU's trade policies on global value chains⁵² that also addresses the global garment and footwear industry. In this resolution the European Commission is asked to introduce the following:
 - A transparent and functioning mandatory EU social and environmental traceability labelling system along the entire value chain, in compliance with the World Trade Organization Technical Barriers to Trade Agreement, while, in parallel, promoting similar action at international the level; and
 - A legal framework for labelling rules regarding the origin of products entering the EU market or rules that ensure effective traceability.
- 89. More awareness raising among consumers regarding the production of garment and footwear products is needed. To this end, European policy documents stress the importance of establishing EU-wide labelling standards, applicable to both multinational companies and

⁴⁸ European Parliament resolution of 25 November 2020 towards a more sustainable single market for business and consumers (2020/2021(INI)).

consumers (2020/2021(INI)).

49 "European consumers are at the core of a global change. Their actions can make a significant difference. Consumers need to be empowered to make sustainable choices and to be reassured that their rights will be protected in all circumstances." Source: Didier Reynders, the EU's justice commissioner.

[&]quot;We want to empower consumers to play their role in the green and digital transitions. At the same time we must ensure that our rules to protect consumer rights remain up to speed with today's digital reality – especially through vigorous enforcement and increased responsibility of online platforms". Source: Vice-President for Values and Transparency, Věra Jourová.

⁵⁰ See EP resolution 2020/2021(INI), among others.

⁵¹ European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

⁵² European Parliament resolution of 12 September 2017 on the impact of international trade and the EU's trade policies on global value chains (2016/2301(INI)).

SMEs, to indicate their compliance with fair working conditions and to support consumers in their purchasing decisions with better information.

- 90. The European Union is promoting a number of policies that can shift consumer demand towards sustainable, informed choices for the environment, people and communities. With the EU Circular Economy Action Plan, the European Commission has committed to undertake a legislative initiative to empower consumers to take part in the green transition.
- 91. In November 2020, the European Commission launched a New Consumer Agenda to respond to the needs arising from the COVID-19 crisis that defines the following priorities and key action points to be considered, together with Member States at both European and national levels, in the following years: the green transition, the digital transformation, the effective enforcement of consumer rights, the protection for vulnerable groups, and international cooperation. The New Consumer Agenda stresses the urgency of providing better information on sustainability to consumers through the introduction or revision of EU legislation.
- 92. The result of the desk research indicates that a strong traceability and transparency framework tackling misleading claims could strengthen consumer protection, especially for certain categories of consumers considered as vulnerable, and encourages sustainable production and consumption.⁵³

C. Identification of multi-stakeholder initiatives to share good practices and lessons learned

- 93. The analysis of the regulatory and policy frameworks conducted under the desk research points out that coordination, information sharing, and the exchange of best practices can help private and public value chain initiatives to be more efficient and to achieve positive results for sustainable development.⁵⁴
- 94. During the expert interviews, many existing multi-stakeholder initiatives and transparency tools to share good practices and lessons learned were highlighted.⁵⁵
- 95. According to the interviewees, these initiatives to support traceability and transparency systems have the following goals:
 - Public visibility (e.g. creating a non-financial incentive for raw material suppliers, manufacturers, brands and retailers);
 - Education and training of industry actors, both at the B2B and B2C level; and
 - Learning effects (e.g. improving efficiency by learning from the experiences of other industries, and/or from the same industry).
- 96. Table 5 lists and describes the transparency tools, mentioned by the experts, that are used to share good practices and lessons learned. The table also indicates the main objectives of each tool and relevant items identified during the content analysis.

⁵³ European Parliament resolution of 25 November 2020 towards a more sustainable single market for business and consumers (2020/2021(INI)).

⁵⁴ European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

^{(2016/2140(}INI)).

55 The following are some best-practice examples of multi-stakeholder platforms mentioned by the experts: the Open Apparel Registry https://openapparel.org; the ACT (Action Collaboration Transformation) agreement, https://openapparel.org; the ACT (Action Collaboration Transformation) agreement, https://actonlivingwages.com, the Bangladesh Accord https://actonlivingwages.com, https://slconvergence.org.

Other multi-stakeholder efforts with the goal of harmonizing terminology or methodology for traceability and transparency in the garment and footwear sector can be found in Annex 7.

Table 5: Transparency tools highlighted by the experts to share good practices and lessons learned

Transparency tools to share good practices and lessons learned	Main objectives	Relevant items	
Physical/Blended tools			
Meetings, conferences, industry forums	public visibilityeducation and trainingeconomies of learning	 focus on the community approach having global meetings in addition to conferences and forums that focus on specific geographical areas using a blended approach (e.g. adding the digital to the physical) 	
Pilot projects	• learning effects	 assessing practical results (impact-driven measurement) 	
Online tools			
Knowledge management platform containing the following:	public visibilityeducation and training	assessing practical results (impact-driven measurement)	
reports, short videos and clips, podcasts, position papers, white papers, training webinars, articles on B2B magazines, P2P learning, newsletters	economies of learning	 easily readable and accessible results disseminating short summaries on the social media 	
Open database / documentation hub	public visibilityeconomies of learning	• using open data to learn from each other ⁵⁶	
Guidelines ⁵⁷	education and trainingeconomies of learning	 assessing practical results (impact-driven measurement) 	
Case studies	public visibilityeducation and trainingeconomies of learning	 assessing practical results (impact-driven measurement) defining clear criteria for entering best practices as well as for identifying greenwashing cases 	

97. According to the experts, governments should support multi-stakeholder initiatives that seek to achieve industry-wide change and create shared value for all industry actors. Inclusiveness should be the main principle to be adopted in the implementation, including SMEs, microenterprises, vulnerable groups in developing and transition countries, smallholders and farmers, and other groups affected by unfair practices including women, young workers, home-based invisible workers, and migrant workers.

⁵⁶ A good example is Joinup (https://joinup.ec.europa.eu), a collaborative platform created by the European Commission and funded by the European Union via the "interoperability solutions for public administrations, businesses and citizens (ISA²) programme". It offers several services that aim to help e-government professionals share their experience with each other. It also hopes to support them to find, choose, reuse, develop and implement interoperability solutions.

⁵⁷ A good example is eBiz (https://ebiz-tcf.eu): "eBIZ is an initiative started with the eBIZ-TCF project, in January 2008 by the European Commission to boost e-business processes in the Textile & Clothing and Footwear (TCF) Industries (phase I). After the eBIZ-TCF project, the CEN Workshop eBIZ, was launched in 2012 as standardisation initiative to consolidate, update and promote the use of eBIZ and its Reference Architecture (phase II). In 2016 a new project, eBIZ 4.0, is launched to foster its adoption among European industries and software developers and to exploit synergies with the RFID technology (phase III). Beyond the projects, the eBIZ initiative is leaded by EURATEX with the support of an advisory board to foster its adoption and maintain and improve its contents".

98. Multi-stakeholder initiatives to advance traceability and transparency and sustainable value chains could lead to anti-competitive practices⁵⁸ that are forbidden by competition rules. Consequently, these initiatives should always consider competition rules in order to avoid unfair competition. It must be noted that, at the European level, the European Commission has committed to developing guidance to clarify how sustainability should be considered when assessing multi-stakeholder initiatives under EU competition rules.

IV. Fostering traceability and transparency for circularity

A. Opportunities, challenges and tools to close the loop

- 99. The desk and field research shows that traceability and transparency along the value chain are key enablers of circularity⁵⁹, and that they need to be implemented and fostered to create a more resilient garment and footwear industry.
- 100. Garment and footwear value chains have been recognized by strategic policies and documents, particularly at the European level, as key value chains to move towards a circular economy.⁶⁰
- 101. Nowadays, the circular economy is seen as a key instrument in transitioning towards an economic growth and development model that goes hand in hand with social justice, job protection, and reduction of environmental impacts through the efficient use of natural resources and sustainable production and consumption patterns. This will play a fundamental role in achieving a more resilient economy, particularly considering that the COVID-19 pandemic exposed the vulnerability of global value chains.
- 102. As emphasized by Ellen MacArthur Foundation (Ellen MacArthur Foundation, 2020), the garment and footwear sector has been among those sectors most significantly affected by the pandemic, and there is a strong need to address systemic global risks and to develop a regulatory framework that can enable the transition from a linear to a circular economy model.
- 103. Such a transition faces potential opportunities but also challenges. The following are the main resilience opportunities generated for companies transitioning from linear to circular models:
 - The opportunity to mitigate and reduce pressures on the environment;
 - The improvement of the supply of raw materials in order to mitigate risks such as price volatility, availability, import dependency and supply disruptions such as the ones caused by COVID-19;
 - The growth in enterprise competitiveness due to resource efficiency and cost savings;
 - The increase in innovation through circular product ecodesign and business models (see next few paragraphs on circular business models);
 - The positive impact on employment;

⁵⁸ According to the OECD, anticompetitive practices "refer to a wide range of business practices in which a firm or group of firms may engage in order to restrict inter-firm competition to maintain or increase their relative market position and profits without necessarily providing goods and services at a lower cost or of higher quality" (from the *Glossary of Industrial Organisation Economics and Competition Law*, compiled by R. S. Khemani and D. M. Shapiro, commissioned by the Directorate for Financial, Fiscal and Enterprise Affairs, OECD, 1993.)

In Europe, the Treaty on the Functioning of the European Union (TFEU) prohibits agreements between companies that prevent, restrict or distort competition and prohibits abuse of dominant market positions.

⁵⁹ An economic system can be defined as "circular" when products and services are traded in a closed loop, creating a virtuous circle capable of prospering and regenerating. The Ellen MacArthur Foundation provides one of the most credited definitions of circular economy: "Looking beyond the current take-make-waste extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources and designing waste out of the system. [...] The circular model builds economic, natural, and social capital".

⁶⁰ EU Circular Economy Action Plan (COM/2020/98 final).

- The compliance with upcoming regulations since governments are increasingly taking action to protect scarce resources via additional costs and/or taxation; and
- The ability to answer consumer demand regarding the environmental impact of products since awareness about waste and resource scarcity is rising.⁶¹
- 104. The analysis of policies and legislation at the national, international and European levels also highlights the following critical challenges to be considered:
 - The lack of key economic enablers to encourage enterprises to develop and implement circular business models to drive the transition;
 - The significant cost to deploy new business models and invest in waste management and digital innovation, in particular for SMEs;
 - The lack of technical skills in enterprises, especially for SMEs, to redesign materials and products from a circular perspective;
 - The limited awareness of consumers regarding their fundamental role in shifting the
 business models of industries from linear to circular through their buying power and
 responsible behaviours when using, recycling and disposing of the products;
 - The lack of effective stakeholder involvement, such as national/regional/local governments, local businesses, enterprises and industries, NGOs, consumers and citizens, universities and research centres, considering their different roles;
 - The lack of environmental legislation to support and foster the transition; and
 - The limited policy coherence and strategy at different levels in many areas where trade
 policies, in particular, would have to be taken into account to achieve the transition to
 a circular economy.
- 105. In order to harness the benefits and to address the challenges entailed by circularity, a multi-stakeholder approach is needed, as highlighted in both the desk and field research.
- 106. When asked about the tools to accelerate traceability and transparency for circularity in the garment and footwear sector, the experts mentioned the following (see Table 6): regulations on traceability and transparency and the adoption of international standards for data collection and exchange; the setting of financial and non-financial incentives; industry commitments and collaborative initiatives to achieve industry-wide change; product passports and advanced technologies, including blockchain systems and DNA markers; public communication and information campaigns; extended producer responsibility 62 schemes; action plans with quantitative targets for traceability and transparency; and consumer education.
- 107. The tools should be implemented by three categories of relevant actors:
 - 1) Policymakers are expected to enact regulations for traceability and transparency and adopt international standards for data collection and exchange; create financial and non-financial incentives, including sustainable procurement and fast customs clearance; create extended producer responsibility schemes; put on public communication and information campaigns; and engage in consumers education.
 - 2) Companies and industry associations are expected to act on industry commitments and collaborative initiatives; invest in product passports⁶³ and other advanced technologies (including blockchain systems and DNA markers); create action plans with targets for traceability and transparency; and engage in consumer education.

 ⁶¹ Adapted from the Euromonitor International publication "The Global Circular Economy: The Impact of Reduce,
 Re-use, Recycle on Consumer Markets", December 2016.
 62 Extended producer responsibility (EPR) is a policy approach under which producers are given a significant

Extended producer responsibility (EPR) is a policy approach under which producers are given a significant responsibility—financial and/or physical—for the treatment or disposal of post-consumer products (see https://www.oecd.org/env/tools-evaluation/extendedproducerresponsibility.htm).

⁶³ The European Commission defines product passport as a set of information about the components and materials that a product contains and how they can be disassembled and recycled at the end of the product's useful life (https://ec.europa.eu/environment/ecoap/about-eco-innovation/policies-matters/eu/20130708_european-resource-efficiency-platform-pushes-for-product-passports_en)

3) Civil society organizations (CSOs) are expected to engage in public communication and information campaigns; collaborative initiatives to achieve industry-wide change; and consumer education.

Table 6: Most relevant tools highlighted by the experts to enhance traceability and transparency towards a circular economy in the garment and footwear sector

	o enhance traceability and transparency towards a circular economy in ment and footwear sector	Relevant actors
1)	Regulation for traceability and transparency	Policymakers
2)	Incentives	Policymakers
3)	Industry commitments and collaborative initiatives	Companies and industry associations, civil society organizations
4)	Product passports and other advanced technologies	Companies and industry associations
5)	Public communication and information campaigns	Policymakers, civil society organizations
6)	Extended producer responsibility schemes	Policymakers
7)	Action plans	Companies and industry associations
8)	Consumer education	Policymakers; companies and industry associations; civil society organizations

B. Policy and regulatory frameworks to achieve the circular economy model

- 108. The desk research emphasizes that the path towards a circular economy needs traceability and transparency systems. Traceability is crucial not only in the manufacturing phase but also in the post-sale and post-use phases where it can provide relevant information to evaluate and reduce the impact of products, thereby advancing transparency and environmental sustainability.
- 109. The analysis of the policy and regulatory frameworks reveals that legislative and non-legislative measures related to traceability and transparency have been adopted, especially at the European level, in the context of the transition to a circular economy.
- 110. The new EU Circular Economy Action Plan⁶⁴ is part of the Circular Economy Package that represents a key pillar of the European Green Deal. The European Commission's actions to foster a circular economy aim to close the loop while contributing to the achievement of the United Nations SDGs, and in particular Goal 12 on sustainable consumption and production.
- 111. Textiles are identified in the EU Circular Economy Action Plan as key value chains where "urgent, comprehensive and coordinated actions" are needed in order to solve critical sustainability challenges, considering that they represent "the fourth highest pressure category for the use of primary raw materials and water, and the fifth for GHG emissions".

⁶⁴ The Circular Economy Action Plan (COM/2020/98 final), introduced on 11 March 202, includes a set of actions indicating measures that cover the entire product life cycle from production and consumption to waste management and the market for secondary raw materials. This includes legislative and non-legislative instruments aimed at the following:

⁻ Making sustainable products the norm in the EU

⁻ Empowering consumers and public buyers

Focusing on the sectors that use the most resources and where the potential for circularity is high, such as
electronics and ICT; batteries and vehicles; packaging; plastics; textiles; construction and buildings; food;
water and nutrients

Ensuing less waste

⁻ Making circularity work for people, regions and cities

⁻ Leading global efforts on the circular economy

The European Commission is committed to developing a comprehensive EU strategy for textiles, in consultation with all relevant stakeholders, with the objective of fostering industrial competitiveness and innovation in the sector and contribute to the sustainability and circularity of products placed on the EU market. In order to achieve these objectives, a set of measures will be put in place including measures related to traceability and transparency, such as tackling the presence of hazardous chemicals and empowering consumers and public buyers by disclosing trustworthy and relevant information about products at the point of sale.

- 112. The desk research shows that some European legislation already requires mandatory disclosure of specific environmental information from manufacturers who want to sell their products and services on the EU market.
- 113. The Ecodesign Directive (EU Directive 2009/125) and the Energy Labelling Regulation (EU Regulation 2017/1369) set out a framework for energy-related products and regulate energy efficiency. These European instruments have been recognized by the European Commission Ecodesign Working Plan 2016-2019⁶⁵ as the most effective policy instruments to promote energy efficiency.
- 114. In particular, the Ecodesign Directive establishes minimum mandatory requirements for energy-related products and, starting from 2019, product-specific regulations included requirements with the goal of extending the lifespan of products, while the Energy Labelling Regulation lays down mandatory labelling requirements with respect to environmental characteristics for energy-related products, ranging on a comparative scale from A (most efficient) to G (least efficient) in order to enhance sustainable consumption and production.
- 115. Currently in the garment and footwear sector, there is no legislation at the European level that requires enterprises to disclose information related to the environmental footprint, durability and reparability of products.
- 116. However, the EU Circular Economy Action Plan states that ecodesign criteria should be developed for products other than energy-related products. The purpose would be to tackle the environmental footprint of product design during their lifetime, giving priority to products which are critical to achieving circularity in value chains, such as textiles. The extension of these criteria to textile products was already suggested in 2018 by EU Parliament Resolution 2017/2087(INI) on the implementation of the Ecodesign Directive (2009/125/EC), and more recently in 2019 by the EU Council in its 2019 Council conclusions document "More circularity Transition to a sustainable society" (12791/19). In the case of textiles, these criteria will include sustainability requirements in terms of durability, reparability, recyclability and reusability, as well as traceability and restrictions on the use of hazardous chemicals, and they will be based on the lessons learned from the Ecodesign Directive. Moreover, the EU Circular Economy Action Plan indicates that the European Commission will consider incorporating sustainability and circularity aspects in the EU Textiles Regulation based on insights from the Energy Labelling Regulation and its database. 66
- 117. European Institutions also encourage voluntary environmental labelling. Recently, the European Parliament stressed the need to develop and harmonize voluntary labelling schemes and involve all relevant stakeholders in the process. The labelling criteria should be based on research, transparent standards and impact assessments to demonstrate their relevance and effectiveness in reducing negative environmental impacts. The European Parliament also highlighted the importance of including information on durability and reparability in the form of an environmental performance index. The index should consider multiple criteria throughout the life cycle of the products based on product category. These measures are intended to inform consumers at the time of purchase.⁶⁷
- 118. One of the fundamental elements in the transition towards a circular economy is to provide more traceability and transparency in the areas of chemicals and waste in order to enhance sustainable practices in garment and footwear value chains.

^{65 (}COM(2015) 341 final).

⁶⁶ EU Circular Economy Action Plan (COM/2020/98 final).

⁶⁷ European Parliament Resolution (2020/2021(INI)) of 25 November 2020 towards a more sustainable single market for business and consumers.

- 119. There is a need to implement traceability systems in which suppliers and other relevant stakeholders in the production process along the value chain provide data on the chemical substances used in their products and components. This will help enterprises ensure their articles comply with legislation and enable them to substantiate their sustainability claims beyond regulatory requirements, thereby providing transparency for consumers.
- 120. The desk research highlights that addressing chemicals in garment and footwear value chains represents a priority of the European Commission's New Consumer Agenda.
- 121. The Council of the European Union in its 2019 Council conclusions document entitled "More circularity Transition to a sustainable society" (12791/19) requested an action plan to close the gaps in the current European legal framework in order to prevent the presence of chemicals in products, especially for products that consumers come into close and frequent contact with, such as textiles.
- 122. The European Commission in its EU Circular Economy Action Plan committed to the establishment, in consultation and coordination with the industry players, of harmonized systems to track and manage information on substances of very high concern and other relevant substances present along value chains, and to the identification of those substances in waste.
- 123. The availability and reliability of chemical hazard and safety information is crucial for companies, as they need to protect their workers by providing them with the correct safety instructions, training and protective equipment and by implementing a good system of surveillance. Protection must be provided for workers who need to be aware of the safety and risks associated the chemicals they manage during the production processes, and also for consumers, vulnerable groups and citizens who are widely exposed to chemicals in their products.⁶⁸
- 124. In October 2020, the European Commission adopted a comprehensive Chemical Strategy for Sustainability that includes traceability and transparency measures to respond to the challenges that chemicals pose. In fact, a sustainable chemicals policy requires the tracing of hazardous chemicals in products, their substitution by safer and sustainable alternatives, and the disclosure of relevant non-confidential information on hazardous chemicals in the products to consumers and waste managers as stated by the European Parliament in its resolution of 10 July 2020 on the Chemicals Strategy for Sustainability.⁶⁹
- 125. Another critical challenge for the garment and footwear sector in the transition to a circular economy is waste prevention and waste management throughout a product's life cycle and the reduction of waste that ends up in incinerators or landfills. Proper management of waste, and particularly hazardous waste, is a key global concern, and data in this area is missing.
- 126. Traceability systems could allow enterprises to have information and share data related to the production of waste among all actors of the value chain and to take measures to address risks to human health and the environment. Therefore, it is necessary to set up robust traceability mechanisms and strengthen record keeping through the establishment of electronic registries for waste, and especially for hazardous waste, in order to help companies to improve the monitoring of their waste flows (EU Directive on Waste, as amended by EU Directive 851/2018). 70
- 127. At the European level, selected Member States are starting to develop legislation on waste and the circular economy that include traceability and transparency provisions to advance sustainable consumption and production.

⁶⁸ European Parliament resolution of 10 July 2020 on the Chemicals Strategy for Sustainability (2020/2531(RSP))

⁷⁰ The European Union has a comprehensive regulatory framework on waste, in particular provided by three directives: the EU Directive on Waste (Directive 2008/98/EC), the EU Landfill Directive (Directive 1999/31/EC), and the Packaging and Packaging Waste Directive (Directive 2005/20/EC) which were all amended in 2018 (by EU Directives 850/2018; 851/2018; 852/2018).

- 128. Two examples are the French⁷¹ and Italian⁷² Anti Waste Laws, both adopted in 2020 as the result of a broad consultation with stakeholders including enterprises, NGOs and local authorities. The legislative measures on traceability and transparency provided by those laws aim at changing enterprises' production methods and consumer behaviours, preserving natural resources and biodiversity, reducing waste, and encouraging the repair and reuse of products.
- 129. The desk research found that several policy documents, particularly at European level⁷³, have demonstrated that digitalization could represent a powerful tool to advance traceability and transparency for circularity. Technologies such as online platforms, smart devices, artificial intelligence (AI), the internet of things (IoT) and blockchain technology could be adopted to support a transition to a circular economy.
- 130. As proposed in 2013 by the European Resource Efficiency Platform and in the EU Circular Economy Action Plan in 2020, product passports, tagging and watermarks, could be powerful instruments for sharing information. They could provide information about the components and materials used in products, including substances of concern, and they could specify how the product can be safely disassembled and recycled at the end of its life. The development of a digital product passport in close cooperation with industry and stakeholders, has also been requested by the European Parliament in its resolution "towards a more sustainable single market for business and consumers"⁷⁴. Digitalization could also play a key role in addressing waste issues in this sector.
- 131. To conclude, the findings of the desk and field research show that the circular transition requires a coherent traceability and transparency framework, in consultation with all relevant stakeholders, considering the different roles and responsibilities of each actor in the sector.

V. Allocating costs and unlocking key opportunities for improvement

A. Distribution of responsibilities and allocation of costs

- 132. The desk research underlines that responsibilities should be shared among all actors in the entire value chain, including subcontractors in the formal and informal economy ⁷⁵ and suggests putting effort to this effect. ⁷⁶
- 133. When asked about how to distribute the responsibilities regarding traceability and transparency's objectives, the majority of the experts expressed that "every actor in the supply chain should be held accountable for the lack of traceability and transparency".
- 134. Some experts pointed out that brands and retailers bear a greater responsibility, being the most powerful and having more influence and resources to manage risks. Other experts stressed the critical role of governments in enforcing regulatory systems (e.g. norms and a

⁷¹ French law No. 105 of 10 February 2020 on the fight against waste and the circular economy.

⁷² Italian anti-waste decree, (legislative decree n. 116), 3 September 2020.

 ⁷³ For example, the European digital strategy: European Commission, "Shaping Europe's digital future" (COM(2020) 67 final), 2020; and the EU Circular Economy Action Plan (COM/2020/98 final).
 ⁷⁴ 2020/2021(INI).

⁷⁵ There is no universal definition of an informal economy. According to the *ILC 2002 Resolution and conclusions* on decent work and the informal economy International Labour Conference, 90th session (ILC90-PR25-292-En.Doc) "informal economy" refers "to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements." This description was endorsed by the 2015 ILO Recommendation No. 204 concerning the transition from the informal to the formal economy, which specified that the term does not cover illicit activities, and that the expression "economic units" in the definition refers to units that (a) employ hired labour; (b) individuals working on their own account, and (c) cooperatives and social and solidarity economy units. Recommendation No. 204 constitutes a historic landmark for the world of work as it is the first international standard focusing exclusively on the informal economy in its entirety. The ILO also indicates that "work in the informal economy is often characterized by small or undefined workplaces, unsafe and unhealthy working conditions, low levels of skills and productivity, low or irregular incomes, long working hours and lack of access to information, markets, finance, training and technology" (ILO website).

⁷⁶ See European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

clear taxonomy) to create a level playing field at the supranational (e.g. EU) and international (IGO/intergovernmental-organizations and IO/international organizations) levels. They stressed that governments need to align efforts and schemes around a regulation for traceability and transparency, especially in the producing countries. It was underlined that governments could also "enable accountability and create remedy mechanisms through mediation actors, such as the national contact points (NCPs) for the OECD Guidelines for Multinational Enterprises".

- 135. Interestingly, some experts emphasized the supporting role of advanced technologies, such as blockchain, to ensure shared accountability by all actors along the value chain.
- 136. Table 7 below summarizes the three main points of view of the experts on this topic.

Table 7:

Experts' points of view on accountability regarding the lack of traceability and transparency

Points of view of the experts on accountability	Relevant items
Shared accountability	 Every actor in the value chain should be held accountable for the lack of traceability and transparency It is important to develop relationships beyond the transactional aspect to build trust Blockchain technology can be useful to ensure shared accountability
Brands and retailers must be held accountable	 Brands and retailers bear a greater responsibility, being the most powerful with more influence and resources to manage the risks
The role of government for legislation and enforcement	 Governments should enforce regulatory systems to create a level playing field Supranational level and international level (IGOs/IOs) should align efforts and schemes around a regulation for traceability and transparency Legislation should enable accountability and put in place remedy mechanisms/mediation actors (e.g. OECD NCPs)

- 137. The costs of traceability and transparency systems are another key challenge to address.
- 138. The costs to be absorbed would include the development of traceability, disclosure and monitoring systems. While the "short term costs for setting up are substantial", the "running costs are more marginal" ⁷⁷.
- 139. Most of the experts agree that, not only the responsibilities but also the costs for traceability and transparency systems should be distributed along the value chain, depending on the business model. Remarks include the following: "The costs could be shared in consortiums and with government support"; "Brands and private entities should bear the cost for implementing traceability and transparency to reflect the profit margin and/or the price/volume proportionally"; "Suppliers and consumers are asked to bear some costs too". It is not just a matter of costs for transparency since "the costs for non-transparency are high". "Business opportunity and efficiency gains can be obtained" due to traceability and transparency systems.

⁷⁷ Expert comments.

B. Identification of relevant incentives

- 140. The desk research stresses the need to provide incentives to enterprises, and especially to SMEs while developing a traceability and transparency framework.
- 141. The analysis of the legislation, regulations and policies highlights that, among the different incentives that can be provided by policymakers, public procurement⁷⁸ policies can support SMEs and local microenterprises and contribute to fairer and more sustainable garment and footwear value chains.
- 142. The European Parliament recognizes public procurement as a useful tool for the promotion of a responsible garment and footwear industry and it asks European institutions to ensure that all their public procurements enhance fair and sustainable garment and footwear value chains. It calls on the European Commission to create guidance for local authorities on social criteria to purchase textiles, to provide assistance to developing countries and transitioning economies, and to introduce a plan that incentivizes the public procurement of garment and footwear products from sustainable sources by 2030.⁷⁹
- 143. According to the OECD national accounts statistics ⁸⁰, the total volume of public procurement falling under the OECD range is approximately 12 per cent of the gross domestic product of OECD member countries and 29 per cent of general government expenditure. These numbers reveal that public procurement plays a central role in the economic activity of governments and they can leverage this fact to significantly orient their production and consumption towards more responsible behaviours and stimulate the demand for sustainable products and services.
- 144. The systematic inclusion of social and environmental criteria in public tenders fosters green public procurement (GPP)⁸¹. Even if GPP is a voluntary instrument, it could represent a game changer in moving toward a circular economy and, at same time, have a strong effect on worker rights and working conditions along global value chains.⁸²
- 145. Some legislation already expressly includes green criteria in public purchasing policies. Specifically, EU Directives 2004/18/EC and 2004/17/EC establish that environmental issues can be considered at each stage of the procurement process. Other similar legislation has also been adopted by the United States, Canada, South Africa, Asia and Australia. At the European level, it should be noted that the European Commission committed to proposing minimum mandatory GPP criteria and targets in sectoral legislation. 83
- 146. Green procurement preferences could be adopted by policymakers as mandatory environmental requirements; due diligence requirements could also be prerequisite to meeting the sustainability criteria for public procurement.
- 147. The desk research highlights that the development of GPP policies should focus on two main instruments:
 - 1) Guidelines and other useful documentation tools for GPP
 - 2) Training materials
- 148. Implementing GPP would involve providing information including detailed operational guidelines on applying social and environmental criteria, defining environmentally and/or socially preferable products, and raising awareness among

⁷⁸ The OECD defines public procurement as "the purchase by governments and state-owned enterprises of goods, services and works. The public procurement process is the sequence of activities starting with the assessment of needs through awards to contract management and final payment."

⁷⁹ European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI)).

⁸⁰ See https://www.oecd.org/sdd/na/.

⁸¹ Green public procurement has been defined by the European Commission as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured" European Commission, Communication (COM (2008) 400) "Public procurement for a better environment", 2008.

⁸² European Parliament resolution of 27 April 2017 on the EU flagship initiative on the garment sector (2016/2140(INI))

⁸³ EU Circular Economy Action Plan (COM/2020/98 final).

purchasers. In addition, the adoption of digital tools could also play a key role in supporting GPP towards the sustainable development agenda, and in particular SDG 12.7 (promote public procurement practices that are sustainable in accordance with national policies and priorities). Additionally, in order to encourage and monitor the participation of SMEs in GPP it will be essential to create an affordable information and communication technology (ICT) infrastructure.

- 149. The desk research indicates that setting minimum requirements for extended producer responsibility (EPR) schemes for the garment and footwear sector could be another powerful incentive for enterprises operating in the sector. In the EU Circular Economy Action Plan the European Commission has committed to implementing requirements for EPR schemes, providing incentives and encouraging the sharing of information and good practices⁸⁴. Setting a fee structure that includes discounts for declaring and certifying the lifespan of products could encourage enterprises to move toward more sustainable production. Effective EPR schemes have already been introduced by some European countries, such as France and Italy (French and Italian Anti Waste Laws, 2020).
- 150. The desk research also shows that preferential tariffs for fair and sustainable garment and footwear products could constitute a relevant incentive for enterprises and could facilitate market access. The European Parliament asked the Commission to introduce preferential tariffs for garments whose sustainable production had been demonstrably proven. 85 Policymakers could:
 - offer a lower tariff rate on products sustainably certified in comparison with other products and/or;
 - allow goods to enjoy preferential access on the EU market, conditional upon meeting sustainability requirements.
- 151. When asked about appropriate incentives for different stakeholders, most of the experts confirmed the relevance of financial incentives, especially ones supporting technological innovation, infrastructural investments, pilot projects, direct incentives for interoperable solutions and digitalization, green public procurement, and paying a premium to traceable raw material suppliers.
- 152. Among other incentives, experts also mentioned public visibility (positive and negative), both B2B and B2C; technical support, including training and education; faster customs clearance; and technology transfer.
- 153. Developing and nurturing open-source technologies and user-friendly interface designs to facilitate data entry in the value chain are "preconditions" for the implementation of incentives. Incentives also need to be adapted to the different types of enterprises, especially in support of SMEs, small farmers and producers, and other vulnerable groups such as women, young workers, home-based and migrant workers.
- 154. Experts believe that the incentives should be provided as both short-term and long-term measures. While financial incentives are purposeful in the short term, non-financial incentives are more relevant in the long term, especially workforce training⁸⁶, digital support and IT infrastructure. Also, according to the field research, certain types of incentives to develop and implement traceability and transparency systems may be more useful compared to others, considering the specific needs of the stakeholders:
 - For raw material suppliers and manufacturers, financial incentives such as subsidies, fiscal incentives, loan guarantees, together with clear traceability and transparency criteria to get governmental support through development cooperation⁸⁷ could be particularly effective. Targeted grants and subsidies may

⁸⁴ Ibid.

⁸⁵ Ibid.

^{86 &}quot;Intense workforce training may be required for all actors along the supply chain. This would provide solid knowhow on the topic to the [actors who have] already started investing in traceability and transparency and would help the others to kickstart the change".

⁸⁷ "I give you the loan, but you have to be prepared to do the traceability of your supply chain and be transparent about your activities"; "There is a need for rules [that ensure we don't] give public support to companies who put children into slavery".

- help, especially for smaller suppliers and manufacturers. Education about sustainability and data confidentiality rules is also needed⁸⁸.
- 2) For brands and retailers, financial incentives such as tax credits, VAT incentives, easier access to public procurement, and non-financial incentives such as public visibility would repay efforts to achieve more traceable and transparent value chains and enhancing sustainability and circularity.
- 3) For workers and trade unions, a higher visibility brought by a higher traceability and transparency would already represent an important incentive ⁸⁹.
- 4) For consumers, public awareness and education is needed in the form of mandatory labelling of products. This is increasingly required by regulatory frameworks, and could represent both an incentive and a regulatory constraint.
- 155. Table 8 lists of incentives for traceability, transparency, sustainability and circularity mentioned by the experts with relevant quotes.

Table 8:

Points of view of the experts regarding financial and non-financial incentives

Type and list of incentives for traceability, transparency, sustainability and circularity	Main rationale	Relevant quotes
 Government financial incentives: Subsidies Fiscal incentives (including direct capital grants, rebates, tax credits, VAT incentives, etc. 90) Loan guarantees 	Size and maturity of the company could be considered: • Larger companies may prefer fiscal incentives giving priority to VAT incentives and tax credits	"Some incentives could be connected to the budget: the more transparent [you are] with your CO2 emissions performance, the more you would be incentivized". "Farmers in particular are being marginalized".
	• SMEs may prefer direct capital grants, ongoing capital grants; tax rebates; incentives for harmonized traceability reporting systems	"These incentives should guarantee benefits for the consumers, avoiding the price increase of sustainable products".
 Government non-financial incentives: Public visibility Green Public Procurement Training and education Technology transfer Faster customs clearance Easier reporting / fewer audits 	 Public visibility (positive and negative) is considered the most effective option. Training and education is needed for all stakeholders: raw material suppliers and manufacturers (mainly technical support and methodological guidance); -brands and retailers (mainly technical support and methodological guidance); -consumers (education for increasing the awareness). All companies may be highly supported by green public 	"Through public visibility a company can have exposure in a platform where it is possible to check the reputation based on decentralized identities". "An additional way could be to put pressure on the suppliers that do not expose themselves". "Providing support, even technical support and methodological guidance, is crucial". "Recognition of independent science-based welfare certification schemes (linked to the developing

^{88 &}quot;Many still need to be educated on what sustainability is".

(https://www.marketscreener.com/news/United-Nations-Global-Compact-First-SDG-linked-bond-in-the-European-market-raises-2-5-billion-euro--29370038/). For possible solutions for the near future, see the following: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6555545/;

https://www.confectionerynews.com/Article/2019/07/15/The-Right-Price-Could-premiums-paid-by-the-government-eradicate-child-labor-in-Ghana-s-cocoa-industry.

⁸⁹ "Transparency should begin first with the workers, sharing with them information about chemicals stored in factories, wages, the risks of accidents etc...".

⁹⁰ Examples include incentives for the allocation of capital or differentiated taxes for companies demonstrating commitment to environmental stewardship and meeting credible labour and social standards. Another option is green bonds linked to the SDGs, social bonds already existing in the financial market

Type and list of incentives for traceability, transparency, sustainability and circularity	Main rationale	Relevant quotes
	procurement and through preferential financing loans and grants on the basis of traceability and transparency criteria.	traceability solution) that are in place on farms is important".

Box 1:

Examples of existing initiatives for public visibility mentioned during the field research

The Transparency Pledge

https://www.hrw.org/sites/default/files/supporting_resources/transparency_pledge_1_pager.pdf

This is an example of a civil society coalition for Tier 1⁹¹ disclosure.

The Open Apparel Registry

https://info.openapparel.org

This is an open source map and database of global apparel facilities encompassing their affiliations and unique OAR IDs assigned to each facility.

Bangladesh Accord

https://bangladeshaccord.org/factories

This provides a list of factories, access to inspection data, remediation data, follow up and complaints in Bangladesh⁹².

Sources: field research and websites

156. When considering how to adapt the incentives to the needs of small actors, the experts indicated that SMEs and microenterprises could be more in need of specific financial and non-financial incentives such as the following:

- a. Financial incentives:
 - Grants and subsidies for businesses investing in the deployment and implementation of traceability systems
 - Funds for start-ups willing to launch collaborative projects and open platforms supporting traceability and transparency
 - Incentives for pilot projects on traceability
 - Dedicated research funds for R&D
 - Economic support for collaborative projects involving interoperable solutions that are SME friendly
- b. Non-financial incentives:
 - Feasibility studies for SMEs and start-ups regarding the introduction of traceability and transparency systems in their value chains

⁹¹ First-tier/ Tier One/ manufacturing suppliers are those which have a direct relationship with buyer e.g. production units, Cut Make Trim (CMT) facilities, garment sewing, garment finishing, full package production and packaging and storage (www.fashionrevolution.org).

⁹² Born out of the Rana Plaza Collapse in 2013 A five-year legally binding agreement between brands and trade unions to ensure a safe working environment in the Bangladeshi RMG industry with a multi-stakeholder governance.

- Infrastructure investment, fast-tracked processes, easier reporting, fewer audits for easier market access; technical support and methodological guidance, specialized managerial and workforce training
- Promotion of an organizational and cultural change about digitalization and company networking
- 157. The results of the desk and field research reveal that incentives could represent a key instrument to encourage enterprises to implement traceability and transparency systems and they need to be developed and implemented by policymakers in consultation with all relevant value chains stakeholders.

VI. Tailoring support for SMEs and other vulnerable groups

A. Definition of appropriate measures for SMEs and capacity building considerations

- 158. SMEs and other vulnerable groups need some adaptations of the incentives and of the overall framework of traceability and transparency. Their specific needs should be considered, and to this end, relevant representatives and experts should participate in the consultation phases of the development of traceability and transparency systems.
- 159. The desk research shows that legislation and policies at the national, European and international levels recognize the importance of SMEs in innovating and improving wealth and employment in the garment and footwear sector. However, there is not yet enough support in place (financial and non-financial measures, information and training, research and development programs) to allow them to better access markets and implement traceability and transparency systems. There is a need to tailor legislative and non-legislative instruments to the size of the enterprise to advance such systems and ensure a level playing field in the market.
- 160. The experts interviewed believe that the tools to be used and the guidelines to be implemented can be adapted through special training and action plans: "Awareness campaigns and training programs are necessary to explain, particularly to SMEs, why traceability is a competitive [necessity] and [how] it can provide organizations with marketing benefits" ⁹³.
- 161. The interviewees emphasized that "data capturing should be made as friendly as possible", especially for SMEs⁹⁴. The final objective should be to have a fully integrated, transparent system which provides visibility on all the relevant aspects; it should be designed so that developing countries and smaller stakeholders can easily provide the needed data, if necessary, supported by enterprises and industry associations.
- 162. Governments could also build specific incentives, given that the cost of accessing traceability technologies could be prohibitive for them. Providing very simple technologies is also a great support; the solutions always need to be as accessible, easy, and cost efficient as possible for the SMEs to be part of the solution.
- 163. Stakeholder engagement, advocacy on topics related to minimum wage and social protection programs⁹⁵ are needed, together with multisectoral initiatives to support companies. These should involve the trade unions, NGOs and civil society organization who, "being on the ground, are in a position that allows [for] easier data gathering". This means "they can implement actions with the final goal of bringing value to local communities, benefiting the working conditions, labour and social standards in producing and exporting countries".

⁹³ Expert comment

⁹⁴ Sourcemap is an interesting practice for data capturing (see https://www.sourcemap.com/apparel).

⁹⁵ An example is the previously-mentioned Bangladesh "Accord" program (https://bangladeshaccord.org/).

164. Adaptations are needed for capacity development in terms of "size, economic and human capacity-related concerns". Open source technologies and cloud computing could make the deployment easier for scaling up.96

Integration of gender considerations, inclusion of informal actors and other vulnerable groups

- 165. More than half of the global labour force and more than 90 percent of micro and small enterprises (MSEs) worldwide⁹⁷ are part of the informal economy.
- 166. According to a 2018 ILO report⁹⁸, two billion workers representing 61.2 per cent of the world's employed population — are in informal employment. They are not protected under the current policy and regulatory frameworks in place at the national and international levels and are characterized by a high degree of vulnerability.
- Undeclared informal work is a challenge, particularly in the garment and footwear sector where production is fragmented across different countries. In fact, undeclared informal work rarely complies with labour standards and leads to decent work deficits and lack of transparency. 99 Implementing traceability and transparency systems could play a central role in decreasing informality while ensuring protection for vulnerable groups, thereby contributing to a more sustainable economy.
- 168. In order to adjust the traceability and transparency systems to the needs of informal actors and other vulnerable groups of stakeholders, it is important to involve them from the early stages through to the testing phase pilot projects, and to include them in determining the appropriate criteria to measure the pilot results. "An inclusive approach is needed to create shared value". Collecting data related to gender and demographic numbers on vulnerable groups such as migrant workers is important for the development of traceability and transparency systems. Social considerations like child labour or slavery are also critical elements, as underlined by the field research. 100
- The experts also confirmed the importance of including informal actors and other vulnerable groups, in accordance with OECD findings. For a comprehensive due diligence process, the traceability system needs to include all parties that contribute to the journey of a product. "The challenge then lies within the so-called 'first mile problem' of supply chains, i.e. the road from the farmers (first mile) to the customers (last mile). Several issues can arise in the first mile problem. Indeed, often times, the first producers are low-income smallholders who operate without a working contract and are practically anonymous to players further down in the chain. In addition to informal actors, other vulnerable groups may lack access to participation in the [traceability system] as well, e.g. individuals in rural areas without technical infrastructure, and homeworkers who are denied access to telecommunications services (smart phones) etc. This is the stage where a high risk of human rights violations and corrupted practices arises. A [traceability system] that aims to facilitate the due diligence process would need to find a way to incorporate these actors, e.g. by using mobile infrastructure capabilities that tend to be better developed than traditional infrastructure in developing countries."101
- 170. The 2030 Agenda has gender equality as one of its main ambitions, with a dedicated goal (SDG 5) and numerous SDG-related targets. Hence, measuring progress on SDGs for women and girls is key to enable traceability and transparency.

[%] See for example Docker (https://docker.com) and open source systems for automating deployment, scaling, and management of containerized applications such as Kubernetes (https://kubernetes.io).

Source: www.ilo.org.

⁹⁸ ILO, Women and men in the informal economy: A statistical picture, 2018.

⁹⁹ European Commission staff working document "Sustainable garment value chains through EU development action", 2017.

¹⁰⁰ Other relevant quotes from the interviews include the following: "Cultural differences are important to be involved [and] women are too often overlooked. They need to be more empowered in order not to be put in jeopardy"; "Not just product certifications but also human rights are important".

101 OECD, "Is there a role for blockchain in responsible supply chains?", 2019

- 171. According to the ILO, women account for the majority of the labour workforce in the garment and footwear value chain. However, many garment and footwear producing countries perform poorly on gender equality and women's economic empowerment. ¹⁰²
- 172. Risks of harm often differ for men and women; "for example, women are more likely to be paid lower wages than men; women are more often linked to precarious, informal or irregular employment; and low-income women workers are particularly vulnerable to harassment in the workplace". The position of women should therefore be systematically considered at all stages in traceability and transparency systems to achieve due diligence. ¹⁰³
- 173. In accordance with the OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector (2018) and the OECD Due Diligence Guidance for Responsible Business Conduct¹⁰⁴, the experts encourage enterprises to do the following:
 - Consider whether a program or policy could have unintended negative consequences for women
 - 2) Collect and assess sex-disaggregated data and [determine] whether enterprise activities impact men and women differently
 - 3) Support the equal and meaningful participation women in consultations and negotiations, and in the design of monitoring and evaluation measures
 - 4) Develop, design and evaluate gender-sensitive and gender-responsive policies and plans to mitigate and address real and potential adverse impacts
 - 5) Identify overlapping/accumulated vulnerabilities
 - Assess whether women benefit equitably in compensation payments or other forms of restitution
 - Consult women outside the presence of men and facilitate separate spaces for women to express opinions and provide input on business decisions
 - 8) Assess whether grievance mechanisms are equally accessible to all affected parties
 - 9) Ensure that the individual serving as the access point for a grievance mechanism is approachable regardless of the complainant's gender, religion, etc. Special attention should be paid to women from vulnerable groups
 - 10) Adjust, as appropriate, the actions to identify, prevent, mitigate and address negative impacts to ensure these are appropriate
 - 11) Develop gender-sensitive warning systems
 - 12) Identify gender-specific trends and patterns in actual or potential adverse impacts that have been overlooked in the due diligence processes
- 174. Gender equality represents an international priority. The EU policy documents analysed during the desk research show the commitment of the EU to making gender equality and women's empowerment a central focus of its legislation (among others, European Parliament on the EU flagship initiative on the garment sector, 2017).
- 175. All experts commenting on gender considerations confirmed that it is necessary "to build traceability and transparency for gender equality to take place". There is a need for no-discrimination policies "...in order to be as gender inclusive as possible, by assessing that there are no gender pay gaps in the bonus system or in the corporate structure". Some experts underlined that traceability is also needed because, in certain contexts, "what is on paper does not reflect the reality, so even though the women may be highly involved in the farm, they

¹⁰² AETS APAVE, Study on responsible management of the supply chain in the garment sector-2015, European Union funded study, December 2016.

¹⁰³ OECD, OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector, 2017.

 $^{^{104}\} OECD, OECD\ Due\ Diligence\ Guidance\ for\ Responsible\ Business\ Conduct,\ 2018.$

¹⁰⁵ The following list is a compilation of expert responses/quotations, slightly edited to conform to the grammar, tense and structure of the list.

are not recorded as actual farmers or workers since the farm is recorded as belonging to the husband and she is helping the family". 106

- 176. The desk research highlights that the policymakers can have an important role in strengthening women's rights through the development of policies and measures tailored to their needs.
- 177. The European Parliament in its 2015 resolution on the implementation of the Joint Staff Working Document on Gender Equality and Women's Empowerment 107 underlines the need to empower rural women by improving their access to land, water, education and training, markets and financial services and the need for women's inclusion and representation in economic fields that are important for sustainable development. The European Parliament also asked the European Commission to develop policies and legislation to support local SMEs, especially female entrepreneurs, via micro loans to enable them to gain from private sector led growth.
- 178. Gender issues in the garment and footwear sector also include the "glass ceiling" for woman's career dynamics¹⁰⁸, which represents "the unseen, yet unbreakable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements"¹⁰⁹.
- 179. The desk research emphasizes the commitment, especially at the EU level, to ensure gender equality and women's empowerment. The European Parliament in its "Towards a more sustainable single market for business and consumers" reiterated its commitment and stated "the need to promote women's access to leadership positions by supporting the training of female workers regarding their rights, labour legislation, safety and health issues, as well as the training and awareness of male managers regarding gender equality and discrimination". The importance of promoting gender equality and women's empowerment was also confirmed by the field research where the experts underlined the need to "integrate females into leadership positions" and to give women entrepreneurs "support and access to finance."
- 180. The result of the desk and field research underlines that participation of informal workers and vulnerable groups in the garment and footwear sector is crucial for sustainable development and economic growth; consequently, it has to be considered by policymakers while implementing traceability and transparency systems.

¹⁰⁶ A "good practice" for requesting factory level transparency is the included in Transparency Pledge. See https://transparencypledge.org/good-practices.

A good example of a collaborative initiative that strives to empower low-income women working in global supply chains is BSR's HERprojectTM. "Bringing together global brands, their suppliers, and local NGOs, HERprojectTM drives impact for women and business via workplace-based interventions on health, financial inclusion, and gender equality. Since its inception in 2007, HERprojectTM has worked in more than 850 workplaces across 14 countries and has increased the well-being, confidence, and economic potential of more than 1,000,000 women and 450,000 men". See https://herproject.org/.

¹⁰⁷ European Parliament resolution of 31 May 2018 on the implementation of the Joint Staff Working Document (SWD(2015)0182) – Gender Equality and Women's Empowerment: Transforming the Lives of Girls and Women through EU External Relations 2016-2020 (2017/2012(INI))

¹⁰⁸ Campopiano, G., A. De Massis, F.R. Rinaldi, S. Sciascia, "Women's involvement in family firms: Progress and challenges for future research", Journal of Family Business Strategy, 8(4) 200-212, 2017.

Federal Glass Ceiling Commission. A Solid Investment. Making Full Use of the Nation's Human Capital.
 Washington, D.C. - U.S. Department of Labor, 1995
 2020/2021(INI).

Part III. Conclusions and policy recommendation

- 181. The desk and field research demonstrate that in order to obtain all the benefits of traceability and transparency, there is a need to develop a commonly defined standard and a global regulatory framework in consultation with all stakeholders involved in the garment and footwear value chains.
- 182. Supporting policymakers, industry players, consumers and all other relevant stakeholders' horizontal and vertical collaborative efforts has been the starting point of The Sustainability Pledge¹¹¹. The role of intergovernmental bodies is crucial to support policy dialogue, coherence and engagement.
- 183. In order to ensure that the people and the planet are more consistently protected, and to support enterprises in implementing traceability and transparency systems, policymakers should properly define a coherent approach across jurisdictions, while considering the needs for the green and digital transition to a circular economy and the specific characteristics of the garment and footwear sector.
- 184. As highlighted in the policies, regulations and guidelines analysed during the desk research, and confirmed in the field research, mandatory, harmonized and user-friendly traceability and transparency systems in the garment and footwear sector need to be established by policymakers through a multi-stakeholder approach. The information should be made publicly accessible to consumers and citizens, industry players, authorities and all actors involved in the sector, considering that traceability and transparency is an ambitious and urgent goal that can be achieved only through the collaborative and effective effort of the different players.
- 185. A new paradigm is necessary to enhance traceability and transparency along garment and footwear value chains.
- 186. What follows is from the text ECE Recommendation No. 46:

"The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) of the United Nations Economic Commission for Europe (ECE), at its twenty seventh session, agreed to recommend that governments act in the following action areas:

1. Policy actions, norms and standards

- (a) Establish harmonized policies and regulations that support the implementation of traceability and transparency, in order to achieve higher environmental and social standards, economic viability and circularity in garment and footwear value chains by
 - (i) Encouraging responsible business conduct, which addresses actual and potential adverse impacts resulting from companies' decisions;
 - (ii) Ensuring the reliability of non-financial reporting and sustainability claims about materials, products, processes and facilities;
 - (iii) Contributing to international policy coherence, thereby addressing the challenges, for both producers and consumers that are created by a proliferation of similar, but different, policies and regulations, while also establishing a more level playing field for companies operating in this industry.
- (b) Define minimum levels of traceability across garment and footwear value chains (from raw materials sourcing to consumption and post-consumption activities) and the minimum data that need to be collected in order to show due diligence and transparency in support of claims regarding the origin, composition and other characteristics, including sustainability performance of products, processes and facilities.
- (c) Encourage companies' efforts to embrace higher transparency in value chain operations, for example by disclosing the names and addresses of suppliers' factories and

¹¹¹ Find out more at http://www.thesustainabilitypledge.org.

sharing relevant information on their sustainability performance with stakeholders who are impacted, or potentially impacted, by enterprise decisions. This should be done in a timely, culturally sensitive, open and accessible manner, in line with international data protection norms and standards.

(d) Reduce the implementation burden on business and support SMEs by promoting the use of international standards, such as the UN/CEFACT standards for traceability and transparency of sustainable value chains in the garment and footwear sector or the equivalent, and by encouraging the use of existing data. For example, requiring the use of these standards for any mandatory reporting requirements linked to traceability results such as showing that materials were legally sourced or no forced labour was used.

2. Incentives

- (e) Provide economic and fiscal incentives (positive and negative) for establishing and implementing value chain traceability and transparency systems, especially in support of SMEs, small farmers and producers, and other vulnerable groups such as women, young workers, home-based workers and migrant workers.
- (f) Provide non-financial incentives, including measures to facilitate access to markets, fast-track processes, public procurement criteria that are green and socially responsible, specialized managerial and workforce training, public visibility, peer-learning and non-financial reporting requirements.

3. Research and development

- (g) Support research and development, and identify and scale-up innovative solutions for:
 - (i) Advancing the sustainability and circularity of production and consumption processes;
 - (ii) Tracing and verifying products' authenticity and provenance;
 - (iii) Increasing the lifespan of products;
 - (iv) Creating more sustainable materials; and
 - (v) Recycling, reusing and redesigning garments and footwear.

4. Awareness and education

- (h) Provide education in order to:
 - (i) Allow consumers to make informed choices;
 - (ii) Create an awareness of the shared responsibility of all stakeholders, including both business and consumers, to take an active role in preserving our planet; and
 - (iii) Increase the demand for materials, products and processes that are more responsible and sustainable.

5. Multi-stakeholder collaborative initiatives

- (i) Stimulate and support multi-stakeholder, collaborative initiatives that seek to achieve industry-wide change and create shared value for all industry actors. These should be inclusive, benefitting especially SMEs and vulnerable groups in developing and transition countries while, at the same time, addressing garment and footwear value chains' sustainability risks and impacts. Such initiatives could include:
 - (i) A global, open-source knowledge platform to make guidance available and ensure that industry actors receive appropriate training and information;
 - (ii) Multi-stakeholder policy dialogues for the sharing of good practices and lessons learned at the international, regional and national levels;
 - (iii) Pilot projects to experiment with innovative approaches and advanced technologies in traceability, including blockchain technology, artificial intelligence

(AI), the internet of things (IoT), and biotechnology markers to ensure an effective connection between digital and physical assets.

When deciding upon specific public policy actions to be taken, multi-stakeholder consultations are recommended in order to strike a balance between the different interests at stake, and to identify targeted implementation in support for vulnerable groups. Special attention needs to be given to SMEs, smallholders and farmers, and other groups affected by unfair practices in this sector, including (as appropriate) women, young workers, home-based and migrant workers.

In order to monitor and keep track of the implementation of this policy recommendation, governments are requested to report on commitments to the recommended measures starting in 2022, and thereafter every two years. Such pledges are to be expressed in accordance with the Call to Action (ECE/TRADE/C/CEFACT/2020/6/Rev.1), [annexed to Recommendation No. 46], which is open to all industry stakeholders and actors embracing transformational change for a responsible and sustainable garment and footwear industry of the future."

List of acronyms

B2B	business to business	
B2C	business to consumer	
BCG	Boston Consulting Group	
CSO	civil society organization	
CFC	collaborative fashion consumption	
EC	European Commission	
ECE	United Nations Economic Commission for Europe	
EP	European Parliament	
EPR	extended producer responsibility	
GFA	Global Fashion Agenda	
GPP	green public procurement	
ICT	information and communication technology	
IGO	intergovernmental organization	
ILO	International Labour Organization	
NCP	national contact point	
MSE	micro and small enterprise	
NGO	non-governmental organization	
OECD	Organisation for Economic Cooperation and Development	
P2P	peer to peer	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals regulation	
SAC	Sustainable Apparel Coalition	
SDG	sustainable development goal	
SME	small and medium-sized enterprise	
UNEP	United Nations Environment Programme	
UNGPs	United Nations Guiding Principles on Business and Human	
UNGIS	Rights	
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic	
	Business	
WWF	World Wide Fund For Nature (formerly the World Wildlife	
	Fund)	

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Council Conclusion on Green Claims Initiative, 2019

Council Conclusions on the EU and Responsible Global Value Chains, 2016

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Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste, 2018

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Bangladesh Accord

https://bangladeshaccord.org/

Ellen MacArthur Foundation

 ${\it https://www.ellenmacarthurfoundation.org}$

SDA Bocconi School of Management, Monitor for Circular Fashion

www.sdabocconi.it/circularfashion

Annex I:

Glossary

Sustainability¹¹² In the context of garment and footwear value chains, means that all activities, throughout a product's life cycle, take into account their environmental, health, human rights and socioeconomic impacts, and their continuous improvement.

Due diligence is understood as "the process through which enterprises can identify, prevent, mitigate and account for how they address their actual and potential adverse impacts" as an integral part of business decision-making and risk management systems.

Circularity of a production process refers to the ability of such a process to retain the value of products, materials and resources in the economy for as long as possible and to minimize, to the greatest extent possible, the generation of waste along all the steps of the value chain. ¹¹⁴

An economic system can be defined as "circular" when products and services are traded in a closed loop, creating a virtuous circle capable of prospering and regenerating. The Ellen MacArthur Foundation provides one of the most credited definitions of circular economy: "Looking beyond the current take-make-waste extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources and designing waste out of the system. [...] The circular model builds economic, natural, and social capital". ¹¹⁵

Sustainability refers to the ability of an activity to support "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, *Our Common Future: Report of the World Commission on Environment and Development* (the "Brundtland Report"), A/42/427, 1987. This implies that the activity also takes into account the needs of "people, planet, prosperity, peace and partnership", as outlined in the United Nations Sustainable Development Goals (*Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, 2015).
 OECD, OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector

¹¹³ OECD, OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector (2018). Available at: http://dx.doi.org/10.1787/9789264290587-en.

¹¹¹⁴ European Commission, European Circular Economy Package of the European Commission, Communication 'Closing the loop – An EU action plan for the Circular Economy', COM(2015) 614 final, 2015.

¹¹⁵ See https://ellenmacarthurfoundation.org/media-centre/overview.

Annex II:

Methodological note

A. Desk research

- 1. The desk research was carried out in 2020 analysing more than 100 national, regional and international policies, regulations and guidelines. The result is a mapping document that gives an overview of the existing policies, regulations and guidelines relevant to the development of ECE Recommendation No. 46.
- 2. The full mapping identifies and clusters the issues that demand legislative actions for traceability and transparency in garment and footwear value chains.
- 3. The policies, regulations and guidelines have been collected on a global scale and several industries have been considered in the analysis: Cross-industry, garment and footwear, agri-food, fishery, minerals, cosmetics and timber.
- 4. The mapping is structured in tables that have different sections:
 - Title of the document
 - Description of the document
 - Provisions and contents relating to traceability and transparency
 - Source information (where to find the complete document)
 - Notes including relevant information such as the type of document, when it was
 enacted and when it came into effect along with enforcement and sanctions.
- 5. The main text of this report introduces the essential and most updated information related to traceability and transparency policies, regulations and guidelines in the garment and footwear industry.

B. Field research

- 6. From February until May 2020, thirty-five in-depth oral interviews were carried out with multiple stakeholders, including the "Wider Business Ecosystem", "Extended Enterprise" and "Core Business Function" 117, in order to collect their point of view on several key issues that have been reflected in ECE Recommendation No. 46 and its guidelines.
- 7. The interviewees received the detailed interview questions in advance and were informed that the scope of the UNECE project "Enhancing traceability and transparency for more sustainable value chains in the garment and footwear sector" related to the whole value chain from raw material inputs all the way to the finished product, including the lateral and ancillary part of the value chain such as components, transport, shipping and customs. They were also informed about the final purpose of Recommendation No. 46 on traceability and transparency in the Garment and Footwear Sector: "traceability and transparency are key for advancing due diligence and sustainability because they enable firms to make risk-informed decisions, operating according to a set of internationally agreed practices, they strengthen sustainable consumption and production patterns (SDG 12) in the industry and enable firms to enhance both social and environmental sustainability and to move toward a more circular approach in the sector".
- 8. Two versions of the interview questions have been used in order to interview "garment and footwear experts" and "other industry experts". The total of 27 questions have been

¹¹⁶ ECE report Enhancing Sustainability and Circularity of Value Chains in the Garment and Footwear Sector: Policy Developments on Traceability and Transparency. A mapping of policies, regulations and guidelines (ECE/TRADE/C/CEFACT/2021/INF.3), 2021.

¹¹⁷ Further details can be found in the ecosystem mapping available in the UNECE Sustainability Pledge website: https://www.thesustainabilitypledge.org/toolbox.html

organized in 4 sections: "vision, regulatory objectives, needs and expectations", "accountability, distribution of costs and role of technology", "standardization or reporting methods and role of certification", "identification of best practices, lessons learned and final suggestions".

- 9. After collecting the answers, the interviews were turned into transcripts, then the transcripts were approved by the interviewees via mail.
- 10. Once approved, the interviews were processed through a content analysis. The main results of the analysis are described in this report.

Annex III:

List of interviewees

Table 9 presents the list of all the interviewees involved in the field research.

Table 9:

List of interviewees participating to the field research

First and last name	Roles (May 2020)
Antoine Heuty	Founder & CEO Ulula
Nina Shariati	Sustainability strategist
Fabian Vogelsteller	Founder and Chief Architect at LUKSO
Ben Vanpeperstraete	Garment sector advisor at Freedom Fund
Miriam Geelhoed	Consultant at Modint
Cesare Saccani	ICMQ Certification India – MD and Indo-Italian Chamber of Commerce President
Jan Merckx	Independent Expert with experiences in traceability systems
Paul Roeland	Transparency Coordinator at Clean Clothes Campaign
Jason Kibbey	CEO Higg Co
Thomas Mason	Program Officer at Organic Cotton Accelerator (OCA)
Paul Stockall	Director of standard and sustainability,
	International Fur Federation IFF
Piero de Sabbata	ENEA Researcher and Euratex expert
Ilishio Lovejoy & Sarah Ditty	Project Manager Policy and Research at Fashion Revolution; Global Policy Director at Fashion Revolution
Roberto Mollica	CEO Europroject Consulting and advisory services
Franzisca Markschlaeger	Policy Advisor GIZ
Natalie Grillon & Katie Shaw	Leadership Team, Open Apparel Registry
Dorothy Lovell	Policy Analyst Textile and Garment, OECD Centre for Responsible Business Conduct, Directorate for Financial and Enterprise Affairs
Philipp Meister	Senior Director Sustainability Adidas
Rudrajeet Pal	Associate Professor Swedish School of Textiles, University of Borås
Hakan Karaosman	Researcher at Politecnico di Milano School of Management
Nathan Williams	CEO Minespider
Sabrina Frontini &	Quality Certification Institute for the Leather Sector; UNIC Italian Tunneries Association
Maurizia Contu	Tunneries Association
Leonardo Bonanni	Founder & CEO Sourcemap
Timothy Marsh & Lena Coulibaly	Senior Director, Product Traceability, Provenance & Sustainability; Director Industry Engagement, Apparel & General Merchandise, GS1 Global

First and last name	Roles (May 2020)
Maylis Souque	Secrétaire générale du PCN français de l'OCDE - Chargée de mission RSE, Direction générale du Trésor
Merel Krebbers	Material integrity and traceability specialist for H&M Group
Thuy Nguyen	Deputy Director of Industrial Development Center Vietnam Industry
Cyril Liance	Belgium NCP Service public fédéral Économie
Evonne Tan	Data Management & China Strategy Director, Textile Exchange
Christian Smith	Fair Wear Foundation
Isabella Tonelli	CSR coordinator- Italy, Vivienne Westwood Srl
Yvonne Chileshe	ACP Secretariat, Expert on commodities and value chains development
Christina Hajagos-Clausen	Director, Textile and Garment Industry IndustriALL
Mari-Lou Dupont	Senior Manager, Decent Work and Social Sustainability UN Global Compact
Benjamin Fuchs	Chief Executive Officer, Alba-Gruppe

Interviewer (name):

Annex IV:

Interview guidelines

Guidelines for interviewing garment and footwear experts

Interviewee (name, title, organization):	
Date:	
Time:	
Location:	
Methodology (face to face/Skype/WebEx/email):	
Interviewee's main area(s) of competence in traceability and transparency:	
Specific industry considered:	
> garment	
> footwear	
Specific phase/s of the value chain considered:	
> raw materials supply	
> raw materials processing	
> logistics	
> manufacturing	
> trading, marketing, and distribution	
> consumer use and disposal	
> other (please specify)	
Questions	Answers
Vision, regulatory objectives, needs and expectations	

1. What is your vision of how traceability and transparency systems should be supported by governments in order to achieve higher environmental and social sustainability?

- 2. Which should be the regulatory objectives of such government action? Please comment on having a regulatory level playing field.
- 3. What is the value of a traceability and transparency system to the value chain stakeholders you work with? Which are their main needs and expectations?
- 4. What are the key challenges in implementing a traceability and transparency system? What are the shortcomings that hamper the effectiveness of existing traceability and transparency systems?
- 5. Which incentives should be put in place for different stakeholders (raw material suppliers/manufacturers/brand/retailers/consumers) in order to implement a traceability system? Please consider both government financial incentives such as subsidies, capital grant and other forms of financial

support, fiscal incentives (including cash grants, rebates and tax credits, VAT incentives, etc.), loan guarantee, and government nonfinancial incentives such as specialized managerial and workforce training, infrastructure investment, fast-tracked processes, public visibility, etc.

- 6. Which incentives should be put in place for different stakeholders (raw material suppliers/manufacturers/brand/retailers/consumers) in order to implement a transparency system? Please consider both government financial incentives and government nonfinancial incentives. Please provide some examples.
- 7. How could raw materials suppliers/producers in the upstream part of the value chain be empowered to participate in traceability and transparency systems?

Accountability, distribution of costs and role of technology

- 8. Who should be held accountable when there is a lack of traceability and transparency?
- 9. Who should absorb the costs/how should costs be distributed along the value chain for traceability and transparency?
- 10. How do we enhance the level of trust among supply chain actors so that they are prepared to share information and build relationships?
- 11. What do you believe should be included in the rules for collaboration between stakeholders?
- 12. How can technological innovation help facilitate engagement and participation?

Standardization of reporting methods and role of certification

- 13. Do you have any suggestions for what should be included in standardized reporting methods and how to streamline communication channels?
- 14. Do you know of any already existing efforts in your industry to harmonize terminology and/or data descriptions?
- 15. What kind of reporting requirements do you believe should be included in a government policy framework on collaboration?
- 16. Please share any existing guidelines or examples you may have for the establishment of a repository of commitments (i.e. a call for action to be set up for the standard's implementation) and/or for reporting mechanisms to monitor progress?
- 17. What role should certification play in traceability and transparency?
- 18. Does certification need to be a requirement?
- 19. Could you describe the most relevant criteria for selecting certification and audit schemes/processes?

Identification of best practices, lessons learned and final suggestions

- 20. What, in your view, would be the best way to share good practices and lessons learned between relevant stakeholders?
- 21. Please share your views on the following aspects of a traceability and transparency system:
 - Integration of developing countries and small stakeholders

•	Adaptation to include gender considerations
•	Adaptations needed in order to take into account capacity development (size and economic and human capacity-related concerns) considerations.
Wh	at can the garment and footwear industry learn from other industries

- 22. (such as agri-food, mining and timber) in terms of traceability and transparency? Could you provide a specific example?
- 23. Could you mention any traceability and transparency regulations from other industries (such as agri-food, mining and timber) that has been particularly effective?
- 24. Do you have in mind some examples of firms that are working on traceability and transparency extremely well?
- 25. Are there specific information sources you would like to suggest as inputs to the design of a traceability and transparency system?
- 26. Are there other traceability and transparency experts you would suggest that we interview for our project?
- 27. Among the following, which do you believe are the 3 most relevant tools 1. for enhan garment and footwear sector? (Please list them in order of importance)

ncing traceability and transparency towards a circular economy in the	
and footwear sector? (Please list them in order of importance)	

- 2. 1. Product passports
- 2. Consumer education (e.g. in schools/universities)
- 3. Public communication and information campaigns 3. 4. Industry commitments
- 5. Targets for traceability and transparency
- 6. Incentives (investments in infrastructure, VAT incentives, subsidies,
- 7. Green public procurement
- 8. Extended producer responsibility (EPR) policies
- 9. Having a regulation for mandatory traceability and transparency
- 10. Other (please specify)

Guidelines for interviewing experts from other industries		
Interviewer (name):		
Interviewee (name, title, organization):		
Date:		
Time:		
Location:		
Methodology (face to face/Skype/WebEx/email):		

Interviewee's main area(s) of competence in traceability and transparency:

Specific industry considered (please specify):

Specific phase/s of the value chain considered:

- > raw materials supply
- > raw materials processing
- > logistics
- > manufacturing
- > trading, marketing, and distribution
- > consumer use and disposal
- > other (please specify)

Ouestions Answers

Vision, regulatory objectives, needs and expectations

- 1. What is your vision of how traceability and transparency systems should be supported by governments in order to achieve a higher environmental and social sustainability?
- 2. Which should be the regulatory objectives of such government action? Please comment on having a level regulatory playing field.
- 3. What is the value of a traceability and transparency system to the value chain stakeholders you work with? Which are their main needs and expectations?
- 4. What are the key challenges to implement a traceability and transparency system? What are the shortcomings that hamper the effectiveness of existing traceability and transparency systems?
- 5. Which incentives should be put in place for different stakeholders (raw material suppliers/manufacturers/brand/retailers/consumers) in order to implement a traceability system? Please consider both government financial incentives such as subsidies, capital grant and other forms of financial support, fiscal incentives (including cash grants, rebates and tax credits, VAT incentives, etc.), loan guarantee, and government nonfinancial incentives such as specialized managerial and workforce training, infrastructure investment, fast-tracked processes, public visibility, etc.
- 6. Which incentives should be put in place for different stakeholders (raw material suppliers/manufacturers/brand/retailers/consumers) in order to implement a transparency system? Please consider both government financial incentives and government nonfinancial incentives. Please provide some examples.
- 7. How could raw materials suppliers/producers in the upstream part of the value chain be empowered to participate in traceability and transparency systems?

Accountability, distribution of costs and role of technology

- 8. Who should be held accountable when there is a lack of traceability and transparency?
- 9. Who should absorb the costs/how should costs be distributed along the value chain for traceability and transparency?

- 10. How do we enhance the level of trust among supply chain actors so that they are prepared to share information and build relationships?
- 11. What do you believe should be included in the rules for collaboration between stakeholders?
- 12. How can technological innovation help facilitate engagement and participation?

Standardization of reporting methods and role of certification

- 13. Do you have any suggestions for what should be included in standardized reporting methods and how to streamline communication channels?
- 14. Do you know of any already existing efforts in your industry to harmonize terminology and/or data descriptions?
- 15. What kind of reporting requirements do you believe should be included in a government policy framework on collaboration?
- 16. Please share any existing guidelines or examples you may have for the establishment of a repository of commitments (i.e. a call for action to be set up for the standard's implementation) and/or for reporting mechanisms to monitor progress.
- 17. What role should certification play in traceability and transparency?
- 18. Does certification need to be a requirement?
- 19. Could you describe the most relevant criteria for selecting certification and audit schemes/processes?

Identification of best practices, lessons learned and final suggestions

- 20. What, in your view, would be the best way to share good practices and lessons learned between relevant stakeholders?
- 21. Please share your views on the following aspects of a traceability and transparency system:
 - Integration of developing countries and small stakeholders
 - Adaptation to include gender considerations
 - Adaptations needed in order to take into account capacity development (size and economic and human capacity-related concerns) considerations.
- 22. What can the garment and footwear industry learn from other industries (such as agri-food, mining and timber) in terms of traceability and transparency? Could you provide a specific example?
- 23. Could you mention any traceability and transparency regulation from other industries (such as agri-food, mining and timber) that has been particularly effective?
- 24. Do you have in mind some examples of firms that are working on traceability and transparency extremely well in your industry of focus?
- 25. Are there specific information sources you would like to suggest as inputs to the design of a traceability and transparency system?
- 26. Are there other traceability and transparency experts you would suggest that we interview for our project?

27. Among the following, which do you believe are the 3 most relevant tools for enhancing traceability and transparency towards a circular economy in the garment and footwear sector? (Please list them in order of importance)	
1. Product passports	2.
2. Consumer education (e.g. in schools/universities)	
3. Public communication and information campaigns	3.
4. Industry commitments	
5. Targets for traceability and transparency	
6. Incentives (investments in infrastructure, VAT incentives, subsidies, etc.)	
7. Green public procurement	
8. Extended producer responsibility (EPR) policies	
9. Having a regulation for mandatory traceability and transparency	
10. Other (please specify)	

Annex V:

Circular business models in garment and footwear value chains

- 1. Our industrial economy is based on a linear model of resource consumption: companies collect and extract raw materials in order to manufacture and sell products that the consumers will dispose of once they are no longer able to satisfy their needs. This model leads to extensive quantities of waste, vast damage to ecosystems and higher exposure to risks for companies¹¹⁸. All these negative effects are emphasized by global population growth. A circular approach is the answer to preserving natural capital and ensuring sustainable development.
- 2. In recent years, brands and retail companies in the fashion industry have started to rethink their businesses and redesign their strategies, procedures and supply chains. In doing so, they have shaped their business models following those that characterize the circular economy, and in accordance with three principles: eliminate waste and pollution, circulate products and materials, regenerate nature¹¹⁹.
- 3. Circularity also builds upon three types of value retention loops: 120
 - 1) "User-to-user" value retention processes, where a product or component remains close to its user and function. They translate into three distinct circular processes: refuse (to buy or use less); reduce (consumers rethink how they can best meet their needs and live their aspirations with minimal impact on the planet and the people around them); reuse and resale (reusing a textile product that is not waste).
 - 2) "User-to-business" value retention processes, where a product or a component is upgraded, and producers are involved again through *repairing*. In the textile value chain, producers, in collaboration with consumers, have an opportunity to extend the lifespan of their textile products.
 - 3) **"Business-to-business" value retention processes**, where a product or component loses its original function. Producers, in cooperation with other value chain stakeholders (designers, producers, retailers, waste handlers, recyclers, raw material producers, etc.) need to work together to ensure discarded textile goods and components are not lost to disposal processes but are instead used as materials in other product systems. This translates into the following two circular processes: *Repurpose* (by reusing discarded goods or components adapted for another function, where the material gets a distinct new life cycle); *Recycle* (which refers to operations that prevent waste disposal and allow material to re-enter the economic cycle.
- 4. Among the options for circularity are a few other business models, including collaborative fashion consumption (CFC). A formal definition of CFC has been provided by Iran and Schrader¹²¹, who assert that "CFC embraces fashion consumption in which consumers, instead of buying new fashion products, have access to already existing garments, either through alternative opportunities to acquire individual ownership (e.g. swapping or second hand) or through usage options for fashion products owned by others (e.g. renting or leasing)".

¹¹⁸ Rinaldi F.R., Fashion Industry 2030: Reshaping the Future Through Sustainability and Responsible Innovation (Bocconi University Press and EGEA S.p.A, 2019).

¹¹⁹ Ellen MacArthur Foundation, https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview.

¹²⁰ United Nations Environment Programme, Sustainability and Circularity in the Textile Value Chain. Global Stocktaking, 2020.

¹²¹ Iran S. and Schrader, Ulf, "Collaborative fashion consumption and its environmental effects", *Journal of Fashion Marketing and Management: An International Journal*, 11 August 2017.

- 5. According to Accenture and Fashion for Good¹²² in CFC there are three main business models that retailers and e-tailers can implement:
 - - Rental: a one-off rental of a garment for a short time period
 - - Subscription rental: a fee paid for access to a range of garments
 - - Recommerce: the recovery and resale of a garment by the original retailer
- 6. A complete overview of circular fashion business models—including "sustainable inputs", "life extension", "end of life", "sharing" and "product as a service"— can also be found in the SDA Bocconi School of Management *Monitor for Circular Fashion Report* 2021. 123

¹²² Accenture Strategy and Fashion for Good, *The Future of Circular Fashion: Assessing the viability of circular business models*, 2019

¹²³ Available at www.sdabocconi.it/circularfashion

Annex VI:

List of technologies to implement traceability and transparency

- 1. The experts confirmed that technological innovation can help facilitate engagement and participation, connect different stakeholders more easily, grant higher efficiency, make it easier to capture and verify data, speed up the customs declaration process, help in collecting information about working conditions, and build trust between stakeholders.
- 2. They underlined that these advantages can be reached if two main requirements are respected: (1) lean processes that are not time consuming are created, and (2) technology should be carefully selected to avoid getting locked into one type.
- 3. Table 10 presents the advanced technologies that can support traceability and transparency and the main advantages, as they appear in ECE Recommendation No. 46.

Table 10: Advanced technologies that can support traceability and transparency and the main advantages

advantages		
Advanced technologies	Supporting role in traceability and transparency.	
Artificial intelligence (AI) and machine learning systems	Can use the data from traceability systems for risk analysis, for optimizing value chains and operating processes and for tracking textile waste	
Blockchain technology	Provides enhanced data reconciliation and tracing; trustworthy, real-time data updating; access to the same information by multiple stakeholders (thus providing the same "truth" for everyone); and improved confidence in the trustworthiness of data	
Internet cloud services	Allow multiple parties to share common software services and to access and update the same data sources	
Distributed databases and data pipelines	Allow access to data stored in multiple locations using tools like those for accessing a single source of data; thus avoiding some of the problems of central database administration while offering an experience that is similar to the user	
Internet of things (IoT)	Increase automation in data collection. In addition, as low-energy and sensor technologies for IoT devices advance, they also allow for the automated collection of new data (such as the temperature inside of containers and other logistics units or the use of water/chemicals by manufacturing machinery).	
Advanced product labelling: - Quick response (QR) codes - Physical tracer technologies - Radio frequency IDs (RFID) - Near-field communications (NFC) labels	Allow for the "attaching" of additional data to traceable assets and the automated collection of higher-quality track-and-trace information. These labelling technologies, which include both digital and physical markers, when used together with other technologies such as blockchain and AI, can also provide the following: - Greater accuracy in physical raw material tracing through multiple product transformations (e.g. from raw cotton to fabric)	

- Higher speed and automation
- Lower costs in tracking data that are attached to products

Annex VII:

Harmonization efforts for traceability and transparency in the garment and footwear sector

- 1. Experts were asked about pre-existing multi-stakeholder efforts at harmonization of communication standards in the industry. The answers identified 20 initiatives, including harmonization initiatives for "data description" (if a precise data description is available) and harmonization initiatives for "methodology" (if no precise data description is available).
- 2. Thirteen harmonization initiatives of "data description" have been mapped including standards, libraries, assessment tools, tools, pilot protocols. Seven harmonization initiatives for "methodology" have been mapped.
- 3. They are organized in alphabetical order in Table 11. Codes of conduct were not included because they are not a multi-stakeholder effort.

Table 11: Harmonization efforts for traceability and transparency in the garment and footwear sector

Harmonization Initiative	Launched by	Туре	Kind of organization	Launch Year
CircularID TM	EON	Data description	Private	2019
circularity.ID® Open Data Standard	circular.fashion	Data description	Intergovernmental	2019
Cotton 2040	Forum for the Future	Methodology	Association	2020
Delta Framework project	Delta Framework	Methodology	Association	2019
eBIZ 4.0	European Commission and EURATEX	Data description	Intergovernmental	2008
Fashion Transparency Index	Fashion Revolution	Methodology	Association	2017
GS1 standards	GS1	Data description	Association	1973
Higg index	Sustainable Apparel Coalition (SAC)	Data description	Association	2019
Initiative for Compliance and Sustainability (ICS)	FCD, Fédération Française du Commerce et de la Distribution	Methodology	Association	1998
ISO standards	ISO (International Organization for Standardization)	Data description	NGO	1951 (first standard)
Open Apparel Registry (OAR)	Laudes Foundation (formerly C&A Foundation)	Data description	Private	2018
Preferred Fiber & Materials Benchmark	Textile Exchange	Methodology	Association	2015

Harmonization Initiative	Launched by	Туре	Kind of organization	Launch Year
Product Environmental Footprint (PEF)	European Commission's Joint Research Centre (JRC)	Data description	Intergovernmental	2012
Social and Labor Convergence Program (SLCP)	ITC (International Trade Centre)	Data description	Intergovernmental	2019
Sustainability Map	ITC (International Trade Centre)	Methodology	Intergovernmental	2018
Textile Exchange Standards	Textile Exchange	Data description	NGO	2002
Transparency Pledge	A global coalition of nine labour and human rights organizations	Data description	Association	2016
UN Core Component Library (CCL)	United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT)	Data description	Intergovernmental	2006
Wikirate	Non-profit organization	Methodology	Association	2013
ZDHC Roadmap to Zero	Zero Discharge of Hazardous Chemicals (ZDHC)	Data description	Association	2011

Annex VIII:

Call to action initiatives for traceability and transparency in the garment and footwear sector

- 1. The Recommendation No. 46 Call to Action invites all actors in the garment and footwear industry to take action for traceability and transparency, with the goal of accelerating the sustainability and circularity of value chains, by establishing a mechanism for supporting the implementation of the measures proposed in the recommendation.
- 2. During the field research many calls to action have been mentioned by the experts and monitored by the core team. Table 12 shows the eight main call-to-action initiatives that are particularly relevant for their support of traceability and transparency in the garment and footwear sector.
- 3. They can be classified as follows:
 - Private initiative;
 - Public initiative (e.g. Blockchain for Made in Italy Traceability, COVID-19: Action in the Global Garment Industry);
 - Public-private initiative (e.g. the Fashion Pact);
 - Civil society collaboration initiative (e.g. the EC "shadow strategy" ¹²⁴, Transparency Pledge); and
 - Foundation/association initiative (e.g. Fashion Transparency Index by Fashion Revolution; Make Fashion Circular by Ellen MacArthur Foundation; the global coalition Open Letter¹²⁵).

Table 12: List and description of selected call-to-action initiatives

Call to action	Launched by	Year launched	Country/ countries	Туре	Mission
Blockchain for Made in Italy Traceability	Italian Ministry of Economic Development	2019	Italy	Public initiative (with the support of IBM)	Improving transparency through technology in distributed registers when offering Italian products to consumers
COVID-19: Action in the Global Garment Industry	International Labour Organization (ILO)	2020	Global	Public initiative	Protecting workers and employers in countries with the weakest health and social protection systems, and those whose work demands special measures to ensure their safety and health
Fashion Transparency Index	Fashion Revolution	2017	Global	Foundations & associations initiative	To incentivize and push major brands to be more transparent, and encourage them to disclose more information about their policies, practices and supply chain
Fashion Pact	Global coalition of companies in	2019	Global	Public-private initiative	Stopping global warming, restoring biodiversity and protecting the oceans. Specific for Transparency &

 ¹²⁴ European Strategy for Sustainable Textile, Garments, Leather and Footwear: This is a non-official (or "shadow") proposal for an ambitious and integrated EU strategy in support of fair and sustainable textile, garments, leather and footwear (TGLF) value chains.
 125 The Open Letter is a call on behalf of a coalition of leading actors in the fashion, apparel and textile sector and

¹²⁵ The Open Letter is a call on behalf of a coalition of leading actors in the fashion, apparel and textile sector and NGOs that work for a more sustainable fashion industry, to ensure sustainability remains central in the face of our collective recovery from COVID-19.

			Country/		
Call to action	Launched by	Year launched	countries	Туре	Mission
	the fashion and textile industry				Accountability: building the systems for certification, verification and traceability of materials and impacts through supply chains
Make Fashion Circular	Ellen MacArthur Foundation	2017	Europe (mainly)	Foundations & associations initiative	Accelerating the transition to a circular economy
Shadow strategy	Fair Trade Advocacy Office (FTAO)	2020	Europe	Civil society collaboration initiative	Contributing to the upcoming "comprehensive EU Strategy for Textiles", expected in 2021, by providing recommendations on what such a strategy should encompass in order to maintain a high level of ambition. It includes forward-looking proposals on due diligence, product policy framework, waste, unfair trading practices, international trade, support to producing countries, alternative business models and a multi-stakeholder platform.
Transparency Pledge	A global coalition of nine labour and human rights organizations, including IndustriALL	2016	Global	Civil society collaboration initiative	Helping the garment industry reach a common minimum standard for supply chain disclosures by getting companies to publish standardized, meaningful information on all factories in the manufacturing phase of their supply chains
WWF Open Letter Global coalition calls for sustainability to be central to post-COVID recovery in fashion, apparel and textile sector	World Wide Fund For Nature (WWF)	2020	Global	Foundations & associations initiative	Supporting and encouraging governments to deploy green economic recovery plans; maintaining and strengthening corporate sustainability commitments; recognizing the importance of WASH and pledge action; recognizing the importance of nature, particularly freshwater ecosystems, in maintaining human wellbeing; increasing brand-led sustainability efforts and ensure a role for circularity; enhancing and strengthening supplier relationships; and enhancing traceability and transparency

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