

A Practical Guide to Building De-risked, Compliant, and Future-Ready Supply Chains



PLAYBOOK OVERVIEW

OBJECTIVE

This Playbook responds to the increasing data burden on supply chain stakeholders to gather and share information related to facilities, processes, materials and more, on behalf of apparel and footwear brands.

Today, the typical approach to data requests and collection is not streamlined, standardised or scalable, and puts extreme pressure on suppliers. This Playbook sets out a starting point for streamlined, collaborative and strategic data collection that is feasible and scalable, beginning from the assertion that it is better to gather fewer necessary and meaningful data points accurately and efficiently, than to gather as much data as possible without a clear compliance or impact-mitigation rationale.

Therefore, this Playbook aims to reduce the data collection burden and set a basis for efficient and effective data collection that enables risk management, impact mitigation and increased supply chain resilience for both brands and suppliers.

Ultimately, the desired outcome is to support and accelerate the sustainable transformation and regulatory compliance of fashion and textile supply chains.

The Playbook scope spans the policy landscape, relevant laws, regulations and directives, and expert insights from brands, suppliers, industry organisations and subject matter experts.

THE APPROACH

The Playbook comprises three key segments:

1. The TrusTrace Compliance Canvas[™]

The Canvas is a 'minimum data package' of what is 'Required' and 'Suggested' to comply with industry-relevant laws, regulations and directives. The data points are grouped by category and their usual source and/or location in the supply chain.

The TrusTrace Compliance Canvas[™] was originally created in 2021 by Pauline God and Lisa Lerouge. Since then, it has evolved organically through years of legal research and practical implementation, driven by close collaboration between Product Managers from TrusTrace's Platform Capabilities and Solution teams, customers, industry stakeholders, and regulatory experts.

2. Brand and Supplier Insights

Interviews with brands, suppliers and industry organisations to identify strategies, challenges and opportunities related to data collection and management. This section also evaluates how suitable the current data methods are for addressing compliance requirements and environmental targets, such as those set under the Science Based Targets Initiative.

3. The Executive Briefing: Compliance and Risk

Macro-insights from policy-, trade-, traceability- and risk experts on shifts and trends that reveal global headwinds, including the rise in strategic climate litigation cases (seeking broad societal and legal reform) which included a textile and fashion sector company for the first time in 2021.

The Playbook aligns with TrusTrace's vision of a future where all value chains are traceable, circular and fair.

WHO IS THIS PLAYBOOK FOR?

This Playbook is intended to inform the following stakeholder groups:

- **Brands and suppliers:** with a framework for more effective data collaboration and more informed, useful data requests, traceability-, sustainability-, compliance-, legal- and sourcing teams.
- Industry organisations: helping align efforts and drive harmonization across the sector.
- Educational institutions: to support curriculum development and research focused on supply chain transformation and policy readiness.
- Supply chain technologies and innovators: as input to solutions that enable scalable, meaningful data exchange.
- **Governments and regulators:** offering practical insights into the data realities on the ground to inform policy design, implementation, and evaluation.

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SPECIAL THANKS TO

- Lisa Lerouge, for invaluable contributions to The TrusTrace Compliance Canvas[™] and methodology for dynamic risk modelling.

- Linnéa Teljas Puranen and Napsugár Takács for great cover and graphic design.

ABOUT TRUSTRACE

Founded in 2016, TrusTrace is a global leader in supply chain traceability and compliance, enabling many of the world's most ambitious brands and suppliers to standardize how material and supply chain data is captured, digitized, and shared. Its Al-powered data hub supports primary data collection and enrichment to manage supply chain risk, compliance and impact. Headquartered in Stockholm, the company also has offices in India, France, and the U.S.

Also in the TrusTrace Playbook Series

- The Traceability Playbook
- <u>The Traceability Roadmap</u>
- <u>Unlocking DPP</u>

DISCLAIMER

This Playbook is intended to serve as a directional resource based on the TrusTrace Compliance Canvas[™]. It is provided for informational purposes only and does not constitute legal advice.

While the content reflects a minimum set of efforts to support compliance initiatives, it does not guarantee full regulatory compliance. Organizations remain solely responsible for interpreting and applying applicable laws and regulations to their specific circumstances.

This guide is not a substitute for consultation with legal counsel, compliance professionals, public affairs teams, or purpose-built regulatory software solutions. Rather, it is a collaborative suggestion of where to start, designed to support strategic alignment, foster informed discussions, and provide guidance on building a compliance roadmap.

Use of this guide is at your own discretion and risk. TrusTrace and its contributors disclaim any liability for actions taken or not taken based on the contents of this publication.



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INTRODUCTION

REGULATORY HAZE

It's easy to find reasons to despair at the complexity and changeability of imminent regulations. How should brands and suppliers prepare to comply while policy makers continue to debate terms and delay final decisions?

For all the ongoing discussion, there are enough regulations in place, including Forced Labour prevention, supply chain due diligence, Ecodesign for Sustainable Products Regulation (ESPR) and the European Deforestation Regulation (EUDR), to set a framework for data collection today.

DATA NORMS

Overwhelmingly, data collection today is an exercise in compliance, reliant mostly on documentation and answers to questions – not 'hard numbers'.

Data collection is done in myriad ways, from emails and excel spreadsheets, to automated digital systems connected via APIs¹.To ensure supply chains are future-ready, and to streamline data collection and reporting, brands are starting to implement and scale platformbased digital traceability.

If a hierarchy were to be assigned to how brands approach data collection when using a traceability platform, it might look something like this:

- Supply Chain Mapping. Brands' direct suppliers are recorded in a 'digital map' (usually these are Tier 1² suppliers, who tend to have direct business relationships with the suppliers in Tiers 2 and 3); then information is gathered on all suppliers and facilities in the brand's network.
- 2. Basic Due Diligence. The digital map is used to identify and request documentation uploads from Tier 1 suppliers on behalf of the entire supply chain (materials certificates, transaction documents, audit reports back to Tier 4).
- 3. Dynamic Data Collection. Beyond the map and broader documentation of the supply chain network, brands can obtain information on specific products by asking Tier 1 and Tier 2 suppliers to provide additional documents and data, related to specific purchase orders.

For suppliers, such an approach requires training and 'onboarding' to the digital platform. However, the platforms are configured to meet each brand's differing requirements and internal processes, so the requests suppliers receive vary from brand to brand, and between different platforms, causing increased workload and confusion. Underlying this is a lack of standardisation–something that brands and suppliers want, since they say it is the root cause of splintered data demands. With many of the regulations open to interpretation, suppliers have felt ill-equipped to question why so many data points are needed, and how the data satisfies those regulations.

Brands juggle the minimum essential compliance demands of Forced Labour and Corporate Due Diligence reporting whilst realising that when the next wave of product-specific regulation comes (including Digital Product Passports (DPP) and European Extended Producer Responsibility (EPR)) they will need granular data beyond certificates and questionnaires, such as 'hard numbers' to calculate environmental footprints.

Data for product-specific impact calculations are way beyond the current scope and capability of data collection strategies, which tend to focus on supply chain mapping and country of origin of materials and products.

Without a clear summary of the data points demanded by current and imminent regulations, a thoughtful and streamlined approach that minimises the burden for suppliers is impossible, let alone a strategic one that enables brands and manufacturers to optimise production and make better business decisions.

BIG PICTURE PRESSURES

Over the horizon, as policies fortify and ecological degradation advances globally, the risks are existential for us all. Corporate law demands that chief executives and their c-suite colleagues act in the best financial interests of their shareholders, upholding the profitability of their companies. Today, climate risk is a material financial risk. Unprecedented cases of climate litigation are being brought against companies, and in some cases executives and the legal teams who have helped them secure the supply of raw materials from agriculture connected directly to deforestation. A link has been established between climate litigation cases and decreased firm stock prices. The stakes may be higher than they immediately seem.

DATA NEEDS

With the industry's data norms falling short and risks rising, what strategies and solutions can close the gap?

Impact Data vs Compliance Data

As sustainability becomes increasingly regulated, the type of data companies must collect is changing. Traditionally, impact data has been used to measure and improve a company's environmental and social performance. This includes environmental or social metrics like those collected for internal targets, voluntary disclosures, or sustainability storytelling. But as regulations increase in number and stringency, compliance data must be more detailed, auditable and prove conformity with legal requirements. Such data includes supplier identity, country of origin, transaction certificates, shipment documentation, and third-party audit results.

What's the Data Difference?

Impact data is broadly-defined, selfreported and focused on performance improvement. Compliance data is narrower, more specific, and often requires traceable documentation or third-party validation. While impact data helps brands communicate sustainability, compliance data protects them from legal, financial, and reputational risks.

Why do Brands Need Both?

Impact data can help improve supply chain performance, build brand trust, and meet climate or Environmental and Social Governance (ESG) goals.

Compliance data ensures access to regulated markets and fulfills legal duties under due diligence laws.

DATA AMBITIONS

Collecting both types of data contributes to a more resilient and responsible supply chain, helps mitigate environmental risks (including greenhouse gas (GHG) emissions and resource scarcity), social risks (like forced labour), and reputational risks linked to greenwashing or noncompliance.

The key to successfully juggling these different data demands is aligning the impact ambitions of a given business with compliance readiness: data should be meaningful and verifiable. The TrusTrace Compliance Canvas[™] indicates *compliance data* requirements not *impact data requirements* since those are subjective, highly variable and company-specific.

THE TRUSTRACE COMPLIANCE CANVAS™

SCOPE AND METHOD

The TrusTrace Compliance Canvas[™] is a structured map that houses all the data points needed to comply with 8 key groups of regulations, comprising 16 laws:

REGULATORY GROUP	DUE DILIGENCE	ESG REPORTING	PACKAGING	CLAIMS & FOOTPRINT	CHEMICALS & PRODUCT SAFETY	FORCED LABOR	DEFORESTATION	DPP
REGULATIONS COVERED	CSDDD Corporate Sustainability Due Diligence Directive LkSG German Supply Chain Act	CSRD Corportate Sustainability Reporting Directive	PPWR Packaging And Packaging Waste Regulation WFD Waste Framework Directive	GCD Green Claims Directive ECGT Empowering Consumers for the Green Transition	CPSIA Consumer Product Safety Information Act GPSR General Product Safety Regulation	UFLPA Uyghur Forced Labor Prevention Act EU FL BAN EU Ban On Products Made with Forced Labor	EUDR EU Regulation For Deforestation Free Supply Chains LACEY ACT UK FOREST ACT	DPP (ESPR) Digital Product Passports (Ecodesign For Sustainable Products Regulation) AGEC

The Canvas was compiled by analysing each regulation to determine the necessary data points (spanning whole documents, to manual and automated alphanumeric entries).

All the data points were listed and repetition across the regulations was identified and consolidated into single (streamlined) Data Points. These points were then bundled and layered according to 'commonality', to create a logical and practical map for streamlining data requests and managing data responsibilities across different business functions or roles.

ARCHITECTURE AND TAXONOMY

To construct a usable tool, The TrusTrace Compliance Canvas[™] is built in four layers, each 'signposting' the user with increasing specificity toward the necessary data point and, enabling organised and logical collection.

The Canvas's data layers act as a funnel, guiding you to the eventual individual data point and its usual form and location. The data layers are, in order of specificity:

3 CATEGORIES > 7 ENTITIES > 26 SOURCES > 171 POINTS

DATA CATEGORY	DATA ENTITY	DATA SOURCE	NUMBER OF DATA POINTS
PROCUREMENT	SHIPMENT	Product Unit SKU Identity Lot Bill of Lading Packing List Transaction Certificate Shipment data Certificate of Origin	3 4 8 5 6 7 9
	ORDER	Invoice PO Line Item Purchase Order	5 6 10
		Material Identity	4
	MATERIAI	Material Provenance	3
		Material Specifications	7
DDODUOT		Material Certifications & Documents	1
DATA		Item Testing	5
	ITEM	Item Certificate	10
		Item Provenance	1
		Product Certifications & Documents	1
	PRODUCT	Product Specification	10
		Product Identity	5
		Facility Certificate (Scope Certificate)	6
		Facility Audit	9
	FACILITY	Facility Assessment	25
DATA		Facility Supply Chain Map	1
		Facility Identity	10
	SUPPLIER	Code of Conduct	3
		Supplier Identity	7

DATA CATEGORIES

In layer 1, the data is segmented into three Categories:

- 1. Procurement Data: the most prominent category, encompassing both transactional records (like purchase orders and invoices) and commercial trade documents (such as bill of landing).
- Product Data: covers materials or goods-specific information, including technical specifications and certifications.
- 3. Supplier Data: focuses on verifying and assessing supply chain actors, with separate emphasis on supplier-level and facility-level documents, such as audits and registration data.

DATA ENTITIES

In layer 2, the three Categories are segmented into seven Entities. For example, the Supplier Category contains two entities: Supplier and Facility.

Data Sources

In layer 3, Entities are divided according to Source. For example, 'Material' contains four sources: Material Identity, Material Provenance, Material Specifications and Material Certifications & Documentations. Each of these sources contains the Data Points.

Data Points

In layer 4, the specific data point is listed, alongside the 'Data Document/ Location' to assist in locating and collecting it.

Canvas Deep Dive

Within the Supplier Category, the Facility Entity contains five Data Sources (all document based): Facility Certificate, Facility Audit, Facility Assessment, Facility Supply Chain Map and Facility Identity.

The five Data Sources contain a total of 50 Data Points to meet the requirements of all 16 regulations where Supplier Facility data are concerned.

Importantly, alongside each Data Point is the object(s) or location(s) it can usually be obtained from; these are mostly documents such as SLCP³ Facility Assessments or CDP⁴ supply chain questionnaires, or reports from platforms such as Higg FEM or TrusTrace.

³ Social & Labor Convergence Program

⁴ The Carbon Disclosure Project

CANVAS DEEP DIVE: 'FACILITY' EXAMPLE

DATA CATEGORY	DATA ENTITY	DATA SOURCE	DATA POINT	DATA DOCUMENTATION / LOCATION	
		Facility Certificate (Scope Certificate)	Certificate ID Facility ID Issue Date Expiry Date Certification Body Certification Scheme	Example documents: GOTS, OEKO-TEX, Textile Exchange Certificates, FSC, SA8000.	
		Facility Audit	Audit Report ID Facility ID Standard Auditor Audit Date Expiry Date Audit Result Comments	Example documents: SMETA, BSCI, WRAP, SLCP — Verified Assessment, ISO Certification Audits, SA8000, brand-led audits.	
	FACILITY	Facility Assessment	Questionnaire ID Facility ID Answer Date Reporting Year Water Risk Indicator Total Water Consumption Total Water Consumption Total Water Recycled Unit Measurement Name Total Radioactive Waste Total Radioactive Waste Total Radioactive Waste Total Non-Recycled Waste Unit Measurement Name Scope 1 Emissions Scope 2 Emissions Location Scope 3 Emissions Declaration of Compliance Signature Signature Date Energy Consumption Energy Mix Heat Mix	Example Sources of Data: Higg FEM reports, CDP supply chain questionnaires, corporate sustainability reports, supplier ESG self- assessment forms, ZDHC environmental and wastewater reports, ISO 14001/50001 audit reports, SLCP facility assessment. These data points can also come from internal audits, second-party assessments, or manual data collection processes.	
		Facility Supply Chain Map	Supply Chain Map of Facility and Entities	This data often comes from supply chain mapping exercises and can be sourced through manual input, traceability platform reports, supplier declarations, brand onboarding processes, or third-party mapping services used to document facility locations and their upstream optices	
		Facility Identity	Facility ID Facility Name Supplier ID Facility Country Facility State Facility City Facility Cordinates Geocoordinates Polygon Facility Contact Facility Value Process	 Documents that hold this kind of data typically include Scope Certificates or Audit Reports, but also more administrative records such as Business License, Facility Registration Certificates, Certificate of Origin, and similar. Example of third-party certifications and reports include SMETA, SLCP, Higg FEM/FSLM, CDP, and Textile Exchange Certifications. 	
	SUPPLIER	Code of Conduct Supplier Identity			

DOCUMENTATION MATRIX FOR A SAMPLE OF HIGH PRIORITY REGULATIONS

DATA CATEGORY	DATA ENTITY	DATA SOURCE	PACKAGING	CHEMICALS	FORCED LABOR	DEFORESTATION
Procurement Data	Shipment	Product Unit SKU			R	R
Procurement Data	Shipment	Lot	R			
Procurement Data	Shipment	Bill of Lading			R	R
Procurement Data	Shipment	Packing List			R	S
Procurement Data	Shipment	Transaction Certificate			S	S
Procurement Data	Shipment	Shipment Data			R	R
Procurement Data	Shipment	Certificate of Origin			R	R
Procurement Data	Order	Invoice			R	
Procurement Data	Order	PO Line Item				S
Procurement Data	Order	Purchase Order			R	R
Product Data	Material	Material Identity	R	R	R	R
Product Data	Material	Material Provenance	R	S	R	R
Product Data	Material	Material Specifications	R	R	R	R
Product Data	Material	Material Certifications & Documentation	S	R	S	S
Product Data	ltem	Item Testing	R	R	S	
Product Data	ltem	Item Certificate	R	R	S	S
Product Data	ltem	Item Provenance	S	R	S	S
Product Data	Product	Product Certifications & Documentation	R		S	S
Product Data	Product	Product Specifications	R	S	R	R
Product Data	Product	Product Identify	R	S	R	R
Supplier Data	Facility	Facility Certificate (Scope Certificate)	R		S	S
Supplier Data	Facility	Facility Audit	R	S	S	S
Supplier Data	Facility	Facility Assessment	R	S	S	R
Supplier Data	Facility	Facility Supply Chain Map	S		R	R
Supplier Data	Facility	Facility Identity	S	S	R	R
Supplier Data	Supplier	Code of Conduct	S		R	R
Supplier Data	Supplier	Supplier Identity	R	S	R	R

It is critical to note that not all groups of regulations require data from all three Data Categories. For Example, Chemical Regulations typically only required data for the material of the product entering the market, where Testing Reports of that specific item stands out as the critical documentation. Procurement data is not required, and Supplier Data only can act as supporting datapoints for compliance. The Documentation Matrix above shows the Data Entities and Data Sources that a sample of high priority regulations need. Forced Labor and Deforestation regulations, on the other hand, require Data from all three categories, and from almost all Data Entities and Sources within them. The Digital Product Passport

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(DPP) is expected to require the fullest breadth of Data Sources – not surprising since its requirements are at the unique item (individual product) level and govern market entry.

Within the groups of regulations, the requirements of individual laws differ. For instance, some due diligence regulations may require only a few of the Data Points from a Source, while the more comprehensive ones, like the Corporate Sustainability Due Diligence Directive (CSDDD), could demand broader and deeper datasets, including risk indicators and corrective action plans. The minimum data requirement in each case usually depends on the scope of the regulation, or the business goal of the company collecting it.

Finally, due to the varying regulatory scopes, implementation phases, and incomplete data specifications, including for Digital Product Passports, the Data Points have been assigned a hierarchy (Required, Suggested or Expected) to assist with prioritization.

Data Hierarchy

In the context of regulatory preparedness and traceability, the individual Data Points are classified according to relevance and urgency across the sixteen named regulations.

These classifications are denoted as:

R = Required, S = Supporting, and **E** = Expected.

R = **Required:** These data points are explicitly referenced in current regulations or widely accepted compliance frameworks (e.g., EUDR, UFLPA, or PPWR). They form the minimum dataset necessary to meet today's legal obligations.

S = **Supporting:** These are non-mandatory but strategically valuable data points that enhance traceability, help demonstrate due diligence, or offer deeper insights. They often complement required data and support auditability, transparency, or risk mitigation.

E = **Expected:** These refer to data points that are likely to become essential in the near future, once pending regulatory texts (like delegated acts for DPPs, technical specifications, or final guidance) are adopted. Preparing for these proactively helps future-proof data systems.

Use of the term "Required" (not "Mandatory") is deliberate, because most data requirements arise from multiple overlapping laws, each with their own level of interpretation, scope, and flexibility. "Required" recognises that regulatory compliance is tiered, and organizations may choose to meet only the baseline, or go beyond it to align with internal ESG goals, investor expectations, or market demands. This flexible interpretation allows businesses to build data strategies that are both compliant and adaptable, accommodating different ambition levels, industries, and jurisdictional nuances.

Regulatory Scope

Corporations are in scope for all 16 listed laws. Today, small and medium enterprises (SMEs) are in scope for at least seven: CPSIA⁵, ECGT⁶, EU FL BAN⁷, GCD⁸, GPSR⁹, PPWR¹⁰ and UFLPA¹¹. Some regulations, like the EUDR, apply to SMEs but with a short delay (for example, 6 months); and although DPP applies equally to all companies, it includes tailored guidance for SMEs.



Only CSRD¹² and CSDDD¹³ primarily target large enterprises with phased implementation, but indirect 'knock-on' effects on SMEs are expected due to their interconnected global supply chains.

Under the evolving Omnibus Directive, the final scope and timelines remain

unconfirmed, and may also influence the future alignment and application of related national laws such as LkSG¹⁴. Irrespective of this, CSRD and CSDDD are still expected to affect only large enterprises.

- ⁵ Consumer Product Safety Improvement Act (CPSIA)
- ⁶ Directive on Empowering Consumers for the Green Transition
- 7 European Union Forced Labour Ban
- ⁸ Green Claims Directive
- ⁹ General Product Safety Regulation
- ¹⁰ Packaging and Packaging Waste Directive
- ¹¹ Uyghur Forced Labor Prevention Act
- ¹² Corporate Sustainability Reporting Directive
- ¹³ Corporate Sustainability Due Diligence Reporting Directive
- ¹⁴ German Supply Chain Due Diligence Act

THE TRUSTRACE COMPLIANCE CANVAS™

LEGEND

	REQUIRED	SUPPORTING
SHIPMENT		
ORDER		
MATERIAL		
ITEM		
PRODUCT		
FACILITY		
SUPPLIER		

	\uparrow							
PROCUREMENT						Product Unit SKU Identity	Product Unit SKU Identity	Product Unit SKU Identity
DATA						Lot	Lot	Lot
						Bill of Lading	Bill of Lading	Bill of Lading
						Packing List	Packing List	Packing List
						Transaction Certificate	Transaction Certificate	Transaction Certificate
				Shipment data		Shipment data	Shipment data	Shipment data
						Certificate of Origin	Certificate of Origin	Certificate of Origin
						Invoice		Invoice
							PO Line Item	PO Line Item
		Purchase Order				Purchase Order	Purchase Order	Purchase Order
PRODUCT DATA			Material Identity	Material Identity	Material Identity	Material Identity	Material Identity	Material Identity
			Material Provenance	Material Provenance	Material Provenance	Material Provenance	Material Provenance	Material Provenance
			Material Specifications	Material Specifications	Material Specifications	Material Specifications	Material Specifications	Material Specifications
		Material Certifications & Documents	Material Certifications & Documents	Material Certifications & Documents	Material Certifications & Documents	Material Certifications & Documents	Material Certifications & Documents	Material Certifications & Documents
			Item Testing	Item Testing	Item Testing	Item Testing		Item Testing
			Item Certificate	Item Certificate	Item Certificate	Item Certificate	Item Certificate	Item Certificate
			Item Provenance		Item Provenance	Item Provenance	Item Provenance	Item Provenance
		Product Certifications & Documents	Product Certifications & Documents	Product Certifications & Documents		Product Certifications & Documents	Product Certifications & Documents	Product Certifications & Documents
	Product Specification	Product Specification	Product Specification	Product Specification	Product Specification	Product Specification	Product Specification	Product Specification
			Product Identify	Product Identity	Product Identity	Product Identity	Product Identity	Product Identity
SUPPLIER DATA	Facility Certificate	Facility Certificate	Facility Certificate			Facility Certificate	Facility Certificate	Facility Certificate (Scope Certificate)
	Facility Audit	Facility Audit	Facility Audit	Facility Audit	Facility Audit	Facility Audit	Facility Audit	Facility Audit
	Facility Assessment	Facility Assessment	Facility Assessment	Facility Assessment	Facility Assessment	Facility Assessment	Facility Assessment	Facility Assessment
	Pacinty Suppry Chain Map	Pacinty suppry chain map	Pacinty Supply Chain Map			Facility Supply Chain Map	Facility suppry Chain Map	Pacing Supply Chain Map
	Code of Conduct	Code of Conduct				Code of Conduct	Facinity Identity	
	Compliant Identifier	Sumalias Identity	Code of Conduct 7	Concert Conduct V	Sumilia Unita	Sumiliar Identity	Constinue of Constant	
	Supplier Identity	Supplier identity	Supplier Identity	Supplier identity	Suppler Identity	Supplier Identity	Supplier identity	Suppler Identity
REGULATORY GROUP	DUE DILIGENCE	ESG REPORTING	PACKAGING	FOOTPRINT	PRODUCT SAFETY	FORCED LABOR	DEFORESTATION	DPP
	CSDDD Corporate Sustainability Due	CSRD Corportate Sustainability Benerting Directive	PPWR Packaging And Packaging Waste	GCD Green Claims Directive	CPSIA Consumer Product Safety Information Act	UFLPA Uyghur forced labor prevention act	EUDR Eu Regulation For Deforestation Free	DPP (ESPR) Digital Product Passport (Ecodesign For
REGULATIONS COVERED	LkSG German Supply	Reporting Directive	WFD Waste Framework	ECGT Empowering Consumers for the	GPSR General Product Safety Regulation	EU FL BAN EU Ban On Products Made with	LACEY ACT	Regulation)
	Chain Act		Directive	Green Transition		Forced Labor	UK FOREST ACT	
REGULATORY SCOPE	COMPANY LEVE	L	PRODUCT LEVE	L		ITEM / SHIPMEN	T LEVEL	
ENFORCEMENT	NOW*	NOW	2026/2027	2026/2027	NOW	NOW	NOW	2029
COMPANY SCOPE	Enterprise**	Enterprise**	ALL	ALL	ALL	ALL	ALL	ALL
	*Due to the OMNIBUS th the future scope and time	ere are uncertainty about line of these regulations.						
	**SMBs can be indirectly pressure. Scope to be up	affected via downstream dated due to OMNIBUS.						

The TrusTrace Compliance Canvas[™] is a modular tool containing four layers of navigation pointing to all the Data Points needed to comply with the listed regulations.

In the snapshot above, the first two layers of The Canvas are shown:

- 1. The overall Data Categories (Supplier, Product, Procurement)
- 2. The Data Entities within each Category, for each group of regulations.

Due to the granularity and depth of the full Compliance Canvas[™], it is provided as a standalone resource to ensure usability. In the full canvas, users can click through to Layer 3: Data Sources, which in turn links to Layer 4: Specific Data Points required under each regulation. Each regulatory group also includes details of applicable company types and enforcement timelines.

Click here to download the full Canvas.

After a journey through the industry's Regulatory Haze and Data Norms, to the new and next critical Data Needs (condensed into a Compliance Canvas), where are brand and supplier stakeholders positioned today? And where are they on their data collection and compliance journey?

The foundations of data collection for compliance are clear (mapping supply chains, collecting basic due diligence data, dynamic data collection through purchase order tracking); but what about impact data? How do brands and suppliers address and prioritise this 'data divide'? The TrusTrace Compliance Canvas[™] structures and pointpoints the data to comply with regulations, right down to individual data points and sources; but how does this compare to the processes brands and suppliers follow today? What are the challenges and opportunities? Where is the data burden heaviest, and where does the data fall short?

CURRENT DATA STRATEGIES AND CHALLENGES

BRANDS

In this section, spokespeople from adidas, Primark and HUGO BOSS share their approach to data collection for compliance and impact calculations, and how they intend to expand this remit for strategic sourcing and investment decision-making.

A certainty in the near term is that the volume and types of data required to comply with global regulations will continue to increase, but how are brands managing this?

ADIDAS

Founded 1949. Headquarters: Germany Using TrusTrace since 2021 Adidas is a publicly traded athletic apparel and footwear company with around 62,000 employees worldwide and global sales of around €23,683 billion in 2024.



Sigrid Buehrle SVP of Sustainability and ESG at Adidas

"My North Star is to get supply chain-related data to the same robustness as financial data."

From Transparent to Traceable Supply Chains

In 2022, adidas expanded and enhanced their existing approach to digitally tracing material flows and material certifications with one key aim: to overcome data gaps for proving the origin of materials.

The company's first goal was to establish further verification steps to ensure the accuracy of recycled material certificates, starting with recycled polyester. This was done by linking brand purchase orders to production steps, certificates, supplier declarations and quality reports, so that adidas could prove the use of recycled content.

According to Sigrid Buehrle, Senior Vice President, Sustainability & ESG, adidas first started with transparency with direct suppliers (to map their supply chain) and then moved into traceability:

"We built the tool with TrusTrace initially to ensure that we have the certificates for [our recycled polyester] products to support our recycled polyester ambition. Now we are expanding our approach to cotton, other recycled [materials], certified down, certified wool, and organic hemp."

Beyond Mapping to Real-time Tracing

Where mapping and traceability can enable due diligence and compliance via documentation (such as the country of origin of a material), the gathering and handling of environmental impact data – including energy, water, chemicals and waste – is more complex.

"Today's landscape is fragmented, so we have TrusTrace as a partner for traceability and certificates. Whereas, to capture metrics such as energy, chemicals and waste there are separate software tools"

"There might be a future opportunity to align and consolidate this fragmentation to reach broader industry solutions, in order to reduce the reporting burden for the suppliers."

From Compliance to Impact Calculations

A key challenge for brands and suppliers is determining the energy use and therefore emissions attributable to each product – especially as they are made in factories that are simultaneously manufacturing goods for multiple brands. Such attribution is needed for calculating Scope 3 emissions and to enable emissions reduction planning. "We do depend on suppliers' data, and ideally there will be continuous solutions to make it easier for them. For example, adidas collects energy data on a monthly basis and this information is audited. These data are critical to calculate our Scope 3 emissions and to plan reduction measures.".

The Next Frontier: Combined Data From traceability to transformation, the next big leap is clear:

"Traceability is where we are today. The next priority is to establish an ecosystem of data providers who collect, manage and safeguard information in a standardised way with interoperability as a key feature."

The ultimate aim is to shift from reactive compliance to proactive evaluation and planning:

"Ideally, in the future, we should be able to work with the non-financial data as we do with the financial data. This would be my North Star – that's where we need to get to, with an effective data landscape and a standardised approach to data collection and evaluation" Clearly, supply chain tracing, data collection and data management meet two overarching needs: mandatory compliance (with ESG reporting to comply with regulations, and to laws); and risk mitigation (environmental impact reduction to achieve publicly declared targets and uphold brand reputation).

These two framings help to explain what supply chain data needs to do in both 'non-negotiable' terms (compliance), and ambitions (improved business practices, better served customers and a competitive edge at a time of economic, environmental and social upheaval).

While each brand that qualifies as a corporation may be subject to the same mandatory legal and regulatory

requirements, their differing product types, markets and business models influence their priorities and requirements for supply chain tracing and data collection.

Herein lies a fundamental challenge suppliers face since each brand requests different data in different forms and frequencies to achieve their own goals, and without standardisation and an interoperable solution – as called for by Buehrle – that's set to continue.

While tracing recycled polyester (the brand's most used fibre) for sports apparel is key for adidas, Primark's majority fibre is cotton. While the brands may face the same regulatory demands, their sustainability strategy and goals differ, resulting in different data strategies.

PRIMARK

Founded 1969 (under the Penneys brand). Headquarters: Ireland Using TrusTrace since 2022 A wholly-owned subsidiary of publicly traded company Associated British Foods (ABF), Primark is a retail company selling clothing, accessories and footwear with around 70,000 employees and global sales of about £9.5 billion (€11.2 billion) in 2024.



Cari Atkinson Head of Product Traceability & Assurance at Primark



Roseann Hickey Director of Sustainability, Quality and Compliance at Primark

"Purchase Order tracing shows us the facilities being utilised in the supply chain and who has the potential to have the biggest impacts."

Primark's traceability and data strategy is based on the company's need to comply with regulations on the one hand, and achieve environmental and social targets on the other. While their legal and compliance teams play a central role in interpreting regulations, the representatives explain that implementing them requires close collaboration across the business including sourcing and production teams, who manage supply chain mapping, data collection and ongoing progress tracking.

Since 2022, the expanding regulatory data needs and Primark's transparency efforts have led to a new approach to supply chain data collection and supplier management. An onboarding process has been underway to train all of Primark's new and existing suppliers as to the brand's exact data requirements, why the data is needed and what it will be used for. This process has thrown up unforeseen challenges and opportunities, but is essential, as explained by Cari Atkinson, who leads product traceability:

"In the past Excel spreadsheets served a purpose, but they were not scalable or efficient for suppliers across multiple regions—and suppliers in multiple countries were being asked for the data twice."

Primark plans to onboard their full clothing and textile supplier base to the TrusTrace platform by the end of 2025. Atkinson explains the dual ambitions for mapping and onboarding the supply chain:

"Our Primark Cares commitments are public and span across the business; we knew traceability would be an enabler to help us achieve those. Then, with regulations and legislation we are subject to all, including UFLPA, the German Supply Chain Act, ESPR and DPP, in 16 to 17 markets."

The approach has been to gather the required data via Tier 1:

"We've been getting Tier 2 and 3 information from [our] Tier 1 suppliers, who run as a business extension of Primark sourcing..."

"Outside of our nominated supply chains we would gather that information directly ourselves". Although it is clear that the regulations and legislation will demand greater supply chain data transparency and accessibility, it's not clear exactly what data will be needed when, and in what form:

"The challenge is understanding the legislation and regulations – it can be quite unclear what's required and how to interpret them. Take EUDR–it was supposed to go live but was postponed and clarifications and requirements are still coming out... We've tried to start in advance of that, though."

The lack of clarity is leading to a more complicated data burden as brands try to get started despite gaps in the requirements:

"For DPPs we know textile and furniture will be in scope... but the specific legislative details are still being finalised. In the meantime brands are trying to 'solve for' the same problems, but in different ways."

Investing in Traceability

Atkinson explains the expansion of skills the new data demands require:

"For Primark, extra resources are required for enhanced traceability and compliance— this couldn't be absorbed into the business as it stood. We have a dedicated traceability team that went from 1 to 13 people in 3 years." Primark has a 13 member core traceability team with colleagues on the ground in China, India and Bangladesh, training and working with the suppliers on a daily basis to enable them to gather data and work on data quality.

Operationalizing systematic data collection

The increasing data burden on suppliers is the reason this Playbook is being written, and Primark admits this poses difficulties. There have been supplier challenges, according to Atkinson, and introducing the new traceability and data collecting systems takes time:

"We do supplier training on the ground where onboarded suppliers speak in panel discussions to share how they've managed the data burdens and the pitfalls..."

"We try to spread out what we ask for [in data terms]. We have taken a phased approach to suppliers onboarding and prioritised cotton, then expanded to numerous other fibres..."

Despite the additional work and process change, Roseann Hickey, Director of Sustainability, Quality and Compliance, says there are extended benefits:

"Suppliers are benefitting from systemizing their [own] supply chain and avoiding Excel; they [now] have visibility of [utilization of] their suppliers and can evaluate that."

Beyond Compliance - Strategic Opportunities

Building on their mapping of Tier 1 suppliers and their supply chains, the company has begun linking purchase orders (POs) to the mapped suppliers, and examining what is being produced where, in real time. Atkinson explains:

"We have 60 suppliers connected to purchase order tracing and the plan is to transition all suppliers to live tracing so that as soon as the purchase order is confirmed...they can give us the view of material and production flow."

Hickey explains how linking purchase orders to suppliers and therefore the material flows in the supply chain is providing additional insights:

"Purchase Order tracing shows us the facilities being utilised in the supply chain and who has the potential to have the biggest impacts."

As this expands, Hickey explains the impact on suppliers:

"Having the POs linked to the supply chain map is going to be a game changer – it won't only help with visibility but it will help suppliers to challenge the number of suppliers they're working with upstream and optimise." Supply Chain Visibility beyond Tier 1 is managed via Tier 1 suppliers:

"Since Tier 1 places orders with Tier 2 they have the most leverage up the supply chain. That's why it works best this way– that's where the commercial relationship is."

Regarding how the data might shape Primark's sourcing decisions, Hickey adds:

"There are lots of strategic conversations happening but we are still gathering information."

What are the opportunities beyond live production information?

"It helps us to see how traceability ties into lots of other parts of the business, including the carbon team, sourcing team, quality and compliance, product sustainability and materials changes."

"With Primark's 2030 targets, as well as regulations including DPPs, we are working closely together across teams, so having the supply chain in a live system is the foundation of everything we are trying to do."

Like many growing companies, Primark faces the challenge of reducing impacts while continuing to expand. Therefore, identifying the brands' emissions 'hotspots' (which are invariably in Scope 3–supply chain facilities) is crucial. Hickey: "Scope 3 carbon is the biggest impact, and having the visibility of where the biggest volume of production is will be invaluable."

Fortified Business

Regarding strategy and deployment, Hickey says the tracing and data approach is driven from the executive level.

"When we launched this we had a huge amount of support from the Chief Product officer and we got the buy-in and investment in Cari and her team of thirteen. That's what drives this."

"Because we had everybody [in Primark] invested, our suppliers invested [in it] themselves. We've been working with many of our suppliers for over 20 years– our tier 1 suppliers are like an extension of the business."

How is Primark Using the Data?

Hickey highlights a couple of data examples related to supply chain optimization and enhanced compliance. For live purchase order tracing:

"Having visibility of what's made where and in what volume helps us manage production allocation more effectively..."

"It means our sourcing team can work in closer partnership with Tier 1 suppliers, for example, by identifying when not all mapped suppliers are being fully utilized." From a wider business point of view:

"There will be multiple use cases, for example CSRD, the DMA (Digital Markets Act) requirement; and a lot of the legislation requires the ability to demonstrate how you are doing due diligence–not to just say we have done it."

While there is still uncertainty around final data requirements across all regulations, Primark says it is investing in systems that meet current needs and are flexible enough to adapt. Traceability and data collection efforts are a significant drain on business resources, so their ambition is to use the data for supply chain optimisation, better allocation of production and identification of risks – making the data work for the business, beyond mere compliance. In closing, Cari Atkinson and Roseann Hickey explained that in the absence of a standardised approach to data requirements and collection methods across the industry, they interact with the likes of Textile Exchange and other NGOs, who partner with other brands (many of whom share Primark's suppliers) to ensure they are in line with the market and the industry, rather than attempting to set up their own standalone systems or approaches. In this data and traceability effort, Hickey concludes:

"We want to be part of the industry."

Primark is not alone in its calls for unity and harmonisation, as is revealed in the following brand and supplier interviews; nor is Primark the sole brand aiming to extract more value and insight from compliance data to make better business decisions.

HUGO BOSS

HUGO BOSS AG. Founded 1924. Headquarters: Germany Using TrusTrace since 2024 HUGO BOSS is a publicly traded premium fashion company selling clothing, accessories, footwear, and leather goods with around 19,000 employees and global sales of about €4.3 billion in 2024.



Ann-Kristin Erdmann-Burt Head of Sustainable Supply Chain Management at HUGO BOSS

"Data gathering is beneficial for influencing our sourcing decisions and of course moving us closer towards full traceability."

Organizational Setup

As with all brands interviewed, transparency and compliance were key drivers for increased data efforts at HUGO BOSS:

"The approach and methodology of tracking from the purchase order (...) is the safest way of verifying Chain of Custody, and the most feasible."

The setup of a new traceability and sustainable relations team began with an organizational evaluation:

"We had a dedicated project team with internal and external experts assessing the organizational setup that makes the most sense, so it was independently planned according to the resources, the requirements as well as questions like how do we get the best data, and how do we achieve the best results." Since January 2024, HUGO BOSS has dedicated significant resources to further expanding its traceability efforts:

"In peak times over 50 people worked on the project across various teams: from the product divisions, which fall under business operations, to compliance, corporate sustainability, legal, and strategy."

Supplier Onboarding and Engagement

Following the initial project phase, HUGO BOSS implemented a highly integrated organizational setup for traceability:

"Our traceability team at HUGO BOSS is structured in duos which work closely with the suppliers and the product divisions." "Each duo consists of a sustainable supplier relations manager and a sustainable supplier insights specialist who steer the onboarding and communication process, ensuring data quality and consistency. We took that organizational approach based on our requirements, and to get the best data with a focus on driving data quality."

The Traceability and Sustainable Supplier Relations team at HUGO BOSS is involved in supplier onboarding from the outset:

"We have integrated supplier onboarding into the traceability team."

"It comes back to combining the business perspective with our impact on ensuring sustainable supply chain operations."

How does HUGO BOSS work with suppliers from the outset?

"We have the sustainable supplier relations managers to explain why the data is needed, and to reassure suppliers it will not be used for purposes other than the traceability effort."

It's worth noting that the TrusTrace platform is configured according to each brands' subjective needs and priorities, meaning that a supplier may be uploading different data to the platform for each brand. A lack of industry-wide standardization of what's required (from a social auditing perspective, for example) means this is likely to continue.

Reducing the burden

HUGO BOSS says the major barrier to streamlining data and compliance is a lack of industry standards and advocates for a pragmatic and unified approach:

"Brands and the industry have a responsibility to make the data collection easy for suppliers. We believe the industry has a responsibility to partner with the supply chain even more in this regard."

In terms of making the data work for the benefit of the wider business, this is in progress:

"We are working to connect all the ESG dots so the data can be a benefit for our overall risk assessment and mitigation."

TrusTrace has recently introduced a risk evaluation layer on the platform:

"We think the risk layer is very interesting, with CSDDD it will help to work in a more impact- oriented way."

The brand's strategy reflects a resourceintensive approach to supply chain transparency, with dedicated teams, structured processes, and supplier engagement embedded from the start.

As HUGO BOSS explores how to apply ESG data to more granular risk analysis, their broader goal is clear: to make traceability a strategic asset. While challenges around standardization and data burden persist, HUGO BOSS is building a foundation where traceability data can inform smarter sourcing, strengthen supplier relationships, and support long-term sustainability goals.

BRAND SUMMARY

HIGHLIGHTS

The brands' data processes and challenges reflect the changed and expanded regulations introduced in the past 5 years.

adidas's initial motivation was tracing and additional verification of recycled polyester, in line with their sustainability targets. Early-adopters, they began well ahead of the curve at a time when only 3 of today's 16 regulations were in place:

- Up to 2020, there were only 3 regulations (US Lacey Act, US CPSIA / FFA, US UFLPA);
- By the end of 2021, 4 additional regulations were introduced, including CSRD and LkSG;

Primark adopted traceability at scale in 2022 to comply with regulations and achieve environmental and social targets. By then, 7 regulations were in place:

- In 2022, AGEC, the Green Claims Directive, ESPR and CSDDD were added;
- 2023 saw a further 5 new regulations, including EUDR and EU FLR.

HUGO BOSS adopted traceability at scale in 2024. In peak times over 50 people worked on the project across various teams: from the product divisions, which fall under business operations, to compliance, corporate sustainability, legal, and strategy.

CHALLENGES

The brands report several key challenges in tracing, data collection and addressing both ESG and environmental impacts:

- No industry standards or harmonization for data collection, resulting in brands devising their own individual data requirements for suppliers.
- The data burden is significant for their suppliers, and standardization (of systems and metrics) would help reduce the burden.
- Brands have different priorities according to their businesses some require data monthly, others annually, generating additional work for suppliers.
- There are inadequate digital systems for unifying governance and environmental impact data.
- Data collection is costly, and therefore the 'end goal' is to use it to improve business operations and address not only compliance risks, but environmental impacts, too.

The data standardization vacuum means that brands request different data from suppliers, even when seeking to achieve the same due diligence or purchase order tracing outcomes.

Companies are on a journey of roughly four steps: 1. transparency to map their supply chain; 2. gathering basic due diligence data using the map; 3. live purchase order tracking for dynamic production and risk management; 4. integrating resource use and impact data with the 'core' ESG data for compliance, to address not only compliance, but also impact assessment and impact reduction.
Brands' journeys become their suppliers' journeys, too, since the data they need resides within the supply chain. While brands are the 'responsible operators' in law, they do not own their means of production, nor the data they require from those facilities.

Brands request various data to meet compliance- and other business needs, but do suppliers have it? Where do they get it? What does it cost to collect and administer data, since it consumes human and technological resources?

What data demands are suppliers facing across the supply chain, and do they fully understand why they're collecting it, or who benefits from it? While supplier data is central to brand risk mitigation, what risks and burdens are suppliers themselves shouldering in return?

SUPPLIERS

In this section, suppliers Epic Group, Karacasu Tekstil, and Impetus Group share candid insights into their data collection processes, highlighting both the challenges they face and the opportunities they see. Drawing from their on-the-ground expertise, they offer practical recommendations for improving how data is gathered to address impact hotspots, uncover regulatory blind spots, and identify critical gaps in environmental footprint calculations. As the ones closest to production, suppliers bring essential perspectives on what data is truly meaningful, and what's realistically achievable.

EPIC GROUP

Founded 1983. Headquarters: Hong Kong Epic Group is a privately owned apparel manufacturing and design company with 30,000 employees and garment manufacturing facilities in Bangladesh, Ethiopia & Jordan. Its clients include Walmart, Uniqlo, Tesco and C&A.



Vidhura Ralapanawe Executive Vice President Sustainability & Innovation at Epic Group

"Some [brands] want daily, weekly, monthly or annual data [and the] intent is not the level of precision, [it's the volume]."

Epic Group operates globally with design, sourcing and manufacturing capabilities, and leading digital integration for end-to-end order management and SMART warehousing. The group specialises in cotton-rich garments, and has laundry facilities for cotton and denim.

Vidhura Ralapnawe, Executive Vice President, says brands' data needs from suppliers fall into two areas:

"Environmental (usually via Higg FEM¹⁵) and Social, which is a completely

fragmented space because there's no brand alignment."

"While environmental data is 'hard data', social is qualitative as well as quantitative, is not easily collected, and there are no standards."

Furthermore, the approaches to gathering and sharing data for both vary:

"[Higg] FEM supports almost all brands' [needs] for environmental data [and] is the main vehicle for data collection for meeting regulatory requirements right now, plus some additional sources..."

"For Social, every brand has different or preferred platforms – examples include Sedex, Wrap, SLCP (Better Works, or Higg FLM¹⁶ version) BCSI, and then there are customer specific versions."

The social requirements are met through audit-based questionnaires due to the requirement for 3rd party verification, whereas answering the Higg questions (of which there are 600) is done directly in the platform, where 50 of these questions are then verified 'in-platform' by a 3rd party.

Changing Data Demands

Despite the breadth of the Higg FEM questions, brands are seeking ever more data outside of these, citing regulatory requirements. A gap is widening between what the tool appears to be providing, and what brands say they need, despite expansion from 180, to 250 and now 600 questions with sub-questions, as explained by Ralapnawe.

"It's too big and too complicated. And sometimes the important questions are missed or not included..[since answering the 600 questions is not mandatory]"

"Epic fills in the 600 questions, but 80% of suppliers are not us [in terms of size and resources]."

As the data burden continues to increase, Ralapnawe believes that a guideline as to the minimum data package for complying with regulations would help brands to prioritize and focus on the data that is actually needed.

"This would be super important... partly because everybody interprets the regulations in separate ways... and people in factories haven't read the legislation so they shut up and get on with it..."

The Resource Burden

There are 3 team members per Epic Group factory dedicated to data and compliance and working across various teams.

"Energy and water data sits with the engineering teams, and material data with the production team."

Social data is managed by Human Resources and Compliance teams:

"HR teams manage and report salary, employment, work hours, age, overtime, social progression, training and development data..."

"The compliance team manages health and safety checks and balances, and audits alongside the HR team." "Even small factories would have a minimum of 3 people in sustainability teams working full time, plus other people working to support them."

Furthermore, there are extended teams in Bangladesh to manage the extra requirements for the International Accord (Accord and RSC) that are not present in other geographies.

Absent Standards, Increased Burden

For Epic Group, there has been an increase in data demand for climate impact assessment.

"Brands might request data for climate reporting to be provided outside of FEM and suppliers must do additional collection... using alternative standards due to the brands' need for 3rd party verification on the data."

Regarding data for greenhouse gas reporting, there are particular pitfalls including how companies choose to do greenhouse gas reporting:

"How one must account for Scope 1 and 2 is regulated, but Scope 3 is quite loose in its structure so everybody has created their own rules and methodology for Scope 3 reporting."

"Brands often don't use actual supply chain data, they use standard tools and global averages; however some brands use granular, factory level data." What's challenging is that it's not clear how the data will be used and the consequences for suppliers.

"Brands [often] use standard values, but the problem is that even fibre [data] is not standard (for example, cotton) and all brands are evaluating suppliers differently–some want daily, weekly, monthly or annual data [and the] intent is not the level of precision [it's the volume]."

Current regulations focus

So far, the focus areas for Epic Group's clients have been corporate reporting and forced labour regulations:

"Most of the work is around CSRD and CSDDD and UFLPA (for cotton)... nobody has operationalised the ESPR yet."

"With the [EU] omnibus, we know it's lowering the ambition so anyone prepared [for it] is covered..."

In addition, Epic Group does voluntary fibre testing:

"For UFLPA compliance we have extensive data audits and documentation processes and we do periodic isotope testing at our own cost. We randomly select a set of cotton samples and test them in addition to the paper [due diligence] mechanism, and we share these results with brands."

Next Regulation Priorities

Considering data unknowns and methodology gaps, calculating emissions for product-related regulations may be a challenge:

"I would be concerned about EPR and ESPR because of the emissions factors and different standards... What you need to report on in CSRD and CSDDD is clear and we know what forced labour is... those labour requirements, for example, are not going to change..."

"But the rules for things like emissions can upend a company's strategy. For example, one of the biggest fights is the synthetic versus natural fibre debate [and] if you compare cotton vs. polyester in different databases [how they compare] changes."

This problem may be addressed by the newly approved EU PEFCR for apparel and footwear impact calculation, despite drawing from some of the same databases the Executive Vice President refers to.

Although the data requirements and methods are still evolving, in addition to a minimum data package of required data, Ralapnawe believes suppliers would benefit from 'best judgement' guidance on 'unknowns': What's challenging is that it's not clear how the data will be used and the consequences for suppliers.

"Where there is space for interpretation, a recommended route... (either location, frequency, type of data) would be helpful."

IMPETUS GROUP

Founded 1973.

Headquarters: Portugal Impetus is a privately owned knitted textile and apparel manufacturing company with around 860 employees and manufacturing facilities in Portugal and Cape Verde. Impetus owns underwear, beachwear and nightwear brands (IMPETUS, IAM, Eden Park, ProtechDry) and manufactures for private label outdoor and fashion brands.



Tércio Pinto Head of Innovation at Impetus Group

"If I were a big brand I would focus [my impact efforts] on Tier 4 (fibres), textile finishing, and logistics [where] there is a blind spot for brands [because] the new [LCA] scope will be cradle-to-grave."

With integrated manufacturing from yarn to finished garment, Impetus Group spans Tier 1 and 2 of the supply chain, working with direct spinning partners in Tier 3. Tércio Pinto, Head of Innovation, explains how brands' requirements are shifting:

"Most brands started looking at the matter [of impact data] last year... the previous actions were focused on document flow, such as certifications and test results, not really data."

Now that brands are preparing for the next era of increased regulation, they are asking for data proactively:

"Each brand has a specific purpose [regarding data requests] – for example, some are focused more on water than energy mix – each has their own playbook which they will follow that will be better focused in some areas than others, until they really control their supply chains."

This is starting to materialize through additional upfront questions:

"Some brands have started to say they need to have specific data before they put in the purchase order, which could include ZDHC certifications, the energy mix, water use, and sometimes the LCA (lifecycle analysis); but for the moment I am not having a big demand for this."

"Most are still asking for answers to questions in Higg FLM and FEM, not actual data. There is still no one asking for dye house calculations or comparison of impact between different dyeing processes, for example." To Pinto's mind, answering questions and providing documents is more an exercise of supply chain organization and an essential first step for compliance; gathering meaningful data is another approach and most brands aren't there yet. Rather than reacting to brands' requests, he says Impetus started primary impact data collection because of their own brands and the mentality of the company founders.

Currently, the group provides data at the request of brands in multiple ways: directly into the wide range of industry documentation, traceability and impact assessment software platforms, as well as manually in Excel spreadsheets.

"Data collection and management is across the back office and commercial teams, and we have a certifications and data measurement person, and sometimes a production planning person is involved, too – the function is spread."

But since the factory processes are heavily digitalized, automated data capture reduces the manual work, and presents an opportunity via intermediary software to automate data transfer and uploads:

"We are investing in a solution to integrate it all and distribute the data to the platforms according to what's required by brands." In terms of managing the relationship with brands, this is also changing:

"Brands are getting more organized – the people asking for data are more knowledgeable, and when they ask us for something they communicate with one of only two people [within Impetus] and we say what we can and can't do..."

"There is a direct communication between them and a discussion to make sure the needs are clear, and they are speaking the same language."

Data Strategies and Blind Spots

With rapidly shifting regulations and a lack of clarity if and when they will become mandatory, Pinto suggests a targeted approach to data priorities:

"If I were a big brand I would focus on the Tier 4 (fibres), textile finishing, and logistics and transport..."

Logistics and transport? These ordinarily represent minority impact; but this is about to change – drastically:

Today the majority of LCAs are cradleto-gate, so there is a blind spot for brands in logistics impacts after that – the new scope will be cradle-to-grave."

Pinto refers to the recently approved EU Product Environmental Footprint (PEF) tool for calculating product lifecycle impacts from cradle to grave. The tool is expected to be named for complying with various regulations including CSRD, ESPR (and DPP), and Green Claims.

With the incorporation of logistics to and from the warehouse, retail outlets and online sales and returns, the influence of logistics on total product impacts will surge.

"If I were a brand I wouldn't worry about the data coming from a spinning mill for example, or the knitter or CMT (cut make trim) garment factory [by comparison]."

Data Hotspots

Through recent data collection efforts to conduct LCAs using standard ISO methodology and the new PEF tool for textiles and footwear, Impetus Group has observed key hotspots:

"The processes in the finishing mill influence the LCA impacts at least as much as the fibre does, and if it's a recycled fibre the difference [in favour of the fibre] is huge."

This means that low impact dyeing and finishing solutions will be a critical lever for lowering overall product impacts, and is driving investment choices:

"The major investments of major brands are related to water use and materials, which is a good thing, [not least because] the cost of water is increasing."

Regulatory Pressures

Although brands are not yet requesting data that compares different dyeing and finishing processes, Pinto thinks this will come:

"Based on the regulations and approval of the PEF, I think the data priorities will change, for example to comply with Green Claims..."

"The Green Claims directive made a lot of customers reduce claims they weren't sure of... nobody wants to claim anything they can't verify."

But despite this example, along with ESPR and corporate responsibility in the supply chain, there isn't clarity on what will be required:

"All the other [regulations and legislation] are still changing and the industry can't follow the same path because they don't know how, the investment that's needed, and they're worried it might all go away."

No company wants to invest in complying with a requirement that is not yet specified. But with what is clear so far, selected investments (helped by data analysis across the supply chain to determine the reduction in resource use and return on investment) are possible. Others are more about taking a position on what constitutes best practice and leadership.

Regulations and Investment

In view of Digital Product Passports and widened cradle-to-grave scope:

"We are going to make a huge investment in an automatic warehouse to permit us to distribute to customers to any part [of their business] directly, allowing them to reduce emissions in logistics."

They are also responding to the call for lot numbers on garments:

"We are keen on tracking a piece to the lot– brands are being advised to put the lot number on the piece, but you have to have full traceability (to the yarn and the lot of fibre that was produced), with the idea of connecting a [given] problem in a piece to a certain production within a supplier..."

How Are Brands Using Data?

Pinto is a supporter of brand data gathering for additional uses, regardless of whether the reasons are known:

"Brands don't really explain why they want the data, and it [isn't apparent to us] how they are using it, but I see why they are asking for it – I think they are collecting data to make [strategic] decisions."

Those decisions might include revising publicly stated targets or materials strategies, he thinks. Referring to impact assessment and reporting:

"SBTs¹⁷ are good baselines to start from and have a strategy – it's like doing ESG, it's important to have clear points of information, metrics and principles to follow because it helps us organise the work to be done."

But there are pitfalls:

"This work is going to create a demand for data... and the lack of harmonisation across countries – and I don't believe people will follow PEF in a strict way – means we need a taxonomy... beside just the [rule of] law"

From Impetus Group in Tiers 1 and 2, we venture further upstream to a yarn spinning facility in Tier 3, where the data burden is narrower, but no less challenging or resource intensive.

KARACASU TEKSTIL

Founded 1996. Headquarters: Turkey Karacasu Tekstil is a privately owned textile company with around 480 employees that produces yarns from natural and synthetic fibres for textile weaving and knitting, socks, denim, home textile and technical textile sectors. The company's clients include Nike and H&M.



Burak Orhan Arifioglu CEO at Karacasu Tekstil

"In the end, I believe it is a fundamental right for the customers to know what they are buying, but lack of standardisation is adding a huge burden."

Inside Tier 3 Data Collection

Based in Kahramanmaraş, Karacasu Tekstil is a leading innovator in spinning technology, producing some of the first core spun yarns in Turkey, then expanding to open-end yarn production. Despite value added yarn production, impressive sustainability credentials, and partnerships with market-leading fibre producers, business is challenging.

Tough market conditions have forced a reduction in their workforce from 550 to 480, and diverging and increasing compliance requirements are increasing the physical and financial burden.

"The data collection and reporting workload has increased significantly over the last 10 years. In a typical month we are spending around 150 hours on data collection and reporting..."

"Currently we have 3 people working on the paperwork and data tracing, and this excludes the amount of time spent by the people inside the factory."

While the volume of work is one challenge, the breadth of requirements is another:

"I believe it is beneficial for the industry to have traceability, but there is no standardization - every brand, entity or Tier 1 supplier is asking for something different."

"Another disadvantage of the lack of standardization is that [all of] these requirements are key for doing business now, but the cost is getting difficult to bear with." The majority of the data burden is gathering documentation and some is tracked daily (such as BCI and GOTS) while others require occasional data entry into traceability platforms. The wide variation in material certifications is a particular challenge:

"For Oekotex, BCI, GOTS, OCS, GRS, FSC, RWS, European Flax, GOTS IVN best, Regenagri and some others, there are additional and varying requirements related to CMIA [Cotton Made in Africa]..."

"The [certifications] all serve the same purpose, but have different methods and it is too much work. We pay roughly 48.000 USD [per year] for certifications and it does not look like they are going to end [anytime] soon."

Data collection and preparation is generally done in spreadsheets, then uploaded to the various platforms as required by clients, via portals. Arifioglu highlights one less requirement for his spinning mill, compared to the other suppliers interviewed who operate laundry and dyeing facilities:

"We have not [used] High FEM [yet as] it is mostly for dye houses, but we will in the future with our [dyeing] innovation."

Despite the burden, Arifioglu believes in transparency:

"In the end I believe it is a fundamental right for the customers to know what they are buying, but lack of standardization is adding a huge burden."

With much of the data reported to Tier 1 suppliers rather than directly to brands, understanding the reasons why data is requested often isn't possible:

"We believe they require it because they want to make sure we are really sourcing the materials from geographies that we say. I think one other aspect is they want customers to know what they are buying."

Where spinners do have direct interactions with brands is on audits, conducted via third parties:

"There is generally an inspector coming to our company at random intervals to make sure we are doing our practices in a rightful manner."

On data streamlining and sharing:

"I think there should be one standard for all [data requirements]. And then if this approach is really working on a mass scale in terms of customers having the opportunity to know what they are buying, then it is ok; but I don't see much education from the brands towards the customers."

While current data demands handed up to Tier 3 suppliers lean heavily on materials documentation and certificates (obtained from Tier 4), the recently approved EU Product Environmental Footprint methodology thrusts Tier 4 impacts into the spotlight. If today's ambition is certifications as a proxy for 'preferred' or 'low impact' fibres, tomorrow's is surely verified fibre impact data to calculate PEFCR scores that win in an increasingly competitive (and eco-incentivized) market. It's probable that any additional data burden would fall on Tier 3 suppliers – a concern given existing expanse and cost of certifications.

SUPPLIER SUMMARY

HIGHLIGHTS

Suppliers are clear: the growing data burden is not necessarily translating into better outcomes. As Vidhura Ralapanawe notes, the current approach to data is poorly suited for measuring and reducing environmental impacts, including Scope 3 emissions, and does little to address the existential risks suppliers face, such as those related to climate adaptation.

Most of the data collected today, often in the form of documentation, serves primarily to secure a license to operate for brands, yet even in that function, it frequently falls short. Burak Orhan Arifioğlu points to the high cost of certifications that don't guarantee compliance, evident in Ralapanawe's example of additional forensic cotton testing needed under UFLPA, despite having all required documentation.

Tércio Pinto emphasizes the need for high-quality data from the parts of the supply chain that matter most for impact: raw materials, dyeing, and finishing processes. These hotspots represent the bulk of the supply chain footprint, and data from these stages is essential for effective impact assessment.

HIGHLIGHTS - CONTINUED

However, new regulatory expansions are exposing blind spots. Under the broadened EU PEF rules, logistics-related emissions, including those from warehousing, transport between stores, and customer returns, are now included in cradle-to-grave footprinting. This creates a major accounting gap for brands that have not yet factored in emissions from product movement across channels.

If data is to drive real change, it must be both fit for purpose and strategically aligned, not just a bureaucratic burden. Suppliers are calling for a more meaningful and collaborative approach that prioritizes quality over quantity, and impact over optics, but this is not without challenges.

CHALLENGES

Fashion has a taxonomy-, harmonization-, and standardization problem that stands in the way of the 'real' data work that is required to measure and reduce supply chain impacts and mitigate critical environmental-, financial-, and human health risks. Until this is addressed, the data approach focuses on documentation to mitigate brands' legal- and reputational risks.

With individual suppliers sharing their processes, burdens and opportunities, what stance are multi-stakeholder organisations representing brands and suppliers taking? How are brands rallying to prepare for regulations, and is any ground being made on unification and standardization?

STAKEHOLDER ORGANIZATIONS

POLICY HUB

Founded 2019.

Headquarters: Brussels

Policy Hub aims to foster technical conversations on the transition to sustainability and textile circularity on behalf of a network of 700+ textile and footwear brands. It is co-founded by Cascale (formerly the Sustainable Apparel Coalition), the Federation of the European Sporting Goods Industry (FESI), Global Fashion Agenda (GFA), and Textile Exchange.



Marina Prados Espinola Co-Director at Policy Hub

"It's difficult to see the full picture on regulations and legislation and there is a need for mapping to combine the many pieces of the puzzle."

Marina Prados explains that Policy Hub's priorities, based on brands' needs, are to offer guidance on CSRD, CSDDD (and related due diligence regulations including EUDR and EU Forced Labour), and ESPR.

Omnibus Upshot

Although CSRD and CSDDD are both currently subject to change under the omnibus review (they may weaken or change), Prados says they are the foundation of more stringent regulations including EUDR, Forced Labour and ESPR, and cautions against complacency:

"EUDR and Forced Labour are under the sphere of influence of CSDDD. Irrespective of what happens for CSDDD regarding supply chain [data granularity], even if it only requires Tier 1 information, you will still need to prove that your product in the deeper tiers is not related to forced labour under the EU Forced Labour regulation, for example."

Similarly, ESPR is under the sphere of CSRD, with overlapping data requirements:

"ESPR is the major focus [for brands now] because it has market entry requirements—if you don't have [the data] you can't put the product on the market."

Although the ESPR requirements (and within it, DPP) won't be known until the delegated acts are finalised in 2027, overlap between them has been identified.

PRIORITY POLICIES AND DEADLINES FOR COMPLIANCE:



*ESPR contains delegated acts which will be finalised in 2027 and outline the digital product passport requirements; this will in turn influence European EPR and ecomodulation requirements. Blue text denotes product level requirement with all businesses in scope irrespective of size.

Although the ESPR requirements (and within it, DPP) won't be known until the delegated acts are finalised in 2027, overlap between them has been identified.

"For ESPR we don't know whether [it will be necessary to] include environmental impacts regarding, for example, a performance requirement threshold, or the amount of water used for production."

"[However], water consumption was also discussed for CSRD [and] no matter what happens for ESPR, the request for the metric is there for CSRD."

There may be a difference in how the water data would be reported, though:

"[In CSRD it is] in a report on double materiality, and the measures to reduce impact, whereas for ESPR it may be a threshold in order to be allowed to put the product on the market; or maybe whether [or not] you need to report the water usage to the consumer."

Corporations vs SMEs

Regarding the companies in scope this depends on the piece of regulation:

"CSRD and CSDDD target larger organisations [but] we have a potential domino effect here [on] SMEs in the supply chain of a big brand, since they are interconnected."

"For example, CSDDD obliges brands to trace and map actors in the supply chain and identify and mitigate adverse impacts [which might include engaging with a] smaller actor through audits and code of practice."

"A big brand may approach a smaller brand [linked to their suppliers] with questions related to their obligations to comply with CSDDD."

For SME suppliers:

"I imagine SME manufacturers might need to provide data on number of workers, hours they work, the rules and conditions they work under via a questionnaire for the corporate brand (not to be shared directly to the European Commission but held in case of an issue in the supply chain)."

Timelines for complying with the various regulations and the differing dates for corporations versus SMEs are highlighted in the infographic above. Prados highlights a couple of notable distinctions:

"For EUDR, it's corporations only now (by 2025), but SMEs from the end of 2026"

"EU Forced Labour is product level so everyone is in scope"

And for the 'top-of-mind' Ecodesign regulation:

"ESPR doesn't distinguish between corporations and SMEs [since] it's a product level regulation."

"Policy Hub wants to proceed based on consensus [and] we have all brands sizes and markets [in our network], so we are trying to put together an ambitious approach that's practically implementable for ESPR".

Don't Forget EPR

Since January 2025 there has been the obligation in Europe to separate collection of textile waste, and the Waste Directive was recently finalised.

"EPR should be [considered as] the centre of all the sustainability regulations, as it's needed to achieve circularity. At EU level, EPR specifics, including ecomodulation and fees, will come after the textile delegated acts are finalised in 2027."

"ESPR first, then ecomodulation [for EPR] next. At [Policy Hub] we are engaging [with the European Commission] on this topic, and waiting for the Commission to set the base for EPR schemes."

Subsequent to Prados closing comments the European Commission published the Single Market Strategy¹⁸ which aims to align internal market rules with the EU's green and digital transition. It's a move that could significantly affect brands, retailers, manufacturers, and SMEs across the value chain.

The strategy seeks to chart the path toward the Circular Economy Act (expected in Q4 2026) and suggests alignment between legislation including ESPR, DPP, Packaging and Packaging Waste Regulation (PPWR) and EPR schemes, and revision of the Textile Labelling Regulation.

Most notably, the Strategy calls for:

- 1. Harmonization of sustainability requirements across the legislation.
- 2. Traceability and digital data sharing, and real-time data exchange, with the DPP being the container for ALL product-related information and the central tool for compliance.
- 3. Reduced complexity and dedicated support for SMEs facing new regulatory burdens.
- 4. Enhanced sustainability enforcement.

As these regulatory changes unfold, Textile ETP represents the research and innovation interests of the textile value chain, developing strategic roadmaps and position papers to align with the green and digital transition plans in Europe. Is Europe ready for new textile regulations?

TEXTILE ETP

Founded 2004.

Headquarters: Brussels Through its broad membership base, the Textile ETP aims to represent the research and innovation interests of the entire manufacturing value chain from fibres to final textile-based products as well as directly allied industries. Since 2013, the Textile ETP has been established as an international non-profit association under Belgian law with its permanent premises based in Brussels.



Lutz Walter Secretary General, The European Network of Textile Research and Innovation Professionals

"You can't demonstrate compliance without data, but there is a lot of business that is done in that way today. If the management of data wasn't a big business function before now, it will become one."

As the secretary general of the European Network of Textile Research and Innovation Professionals, Lutz Walter is engaged with a stakeholder network focused on the technological aspects of the industry. The biggest challenge today is the basis from which the demand for data is coming:

"The general problem is the data quality in the industry is quite poor."

"Because there was no requirement to collect all sorts of data, if [suppliers] did collect it it was a competitive asset to know how a process works or how a product was made or designed, and the risk was that if you turned the data over to the customer, they could better understand your process and squeeze you on price, or take it to a competitor to replicate."

Reluctance to Share

Europe-based suppliers operate in relatively stringent jurisdictions, breeding further resistance to data collection and reporting. Walter explains that even for European suppliers, increased data sharing is often seen as an unnecessary extra layer of bureaucracy, as they are already treating their process water, professionally managing their waste, using approved chemicals and complying with the strict environmental and social legislation in place. "Their response is: 'Why do we need to come up with all sorts of data to show we are not doing these illegal or unsustainable things?', but the issue is, if you are part of a regulated industry, it's a non-negotiable"

"What I say to companies is: a product, a process or a manager/expert without the data to back up what it is, or what the person does or knows, can quickly turn from an asset to a liability [and] that was never the case before."

Is Europe Ready?

Are Europe-based companies better prepared to comply with increased regulation?

"A non-compliant product in the past was one with missing label information, for example, but now we are moving into [regulation that is] a lot more complex... that the industry and supply chain is not really ready for."

"The significant shift we see is that with the regulations now on the way, an industry very lightly regulated is becoming more strict, and [compliance] has gone from [a relative] non-issue to real issue."

Then, what is the readiness level, as gleaned from interacting with Textile ETP members across the value chain?

"[The usual approach of data] emailed in PDFs won't cut it and that's maybe the biggest challenge."

Data Costs

It's been hinted at in the number of people collecting, analyzing and managing it, but data costs! Walter views this as a decisive (and possible divisive) factor:

"As it becomes more crucial, data has a cost. You can't simply assume the supplier will provide the product and all the data that goes with it as a free extra service – there's a cost associated with generating and analyzing data."

"Any industry demanding data flow means there are software projects and the related costs and integration."

"Maybe once sensors and systems for capturing the data are installed and the processes are streamlined, the data management costs [will be] less significant, but this infrastructure requires an initial investment."

Primary Data

On the subject of data collection for impact assessment, including the recently approved EU PEF, Walter points out a tension between primary and secondary data sources: "The lack of primary data and the sheer variability of materials and processes [and] natural fibre production, for example, is challenging."

"Using averages in an industry that is so 'all over the place' can [give results that are] very far from the reality, and there are so many data gaps – we don't have really good and up-to-date data on polyester [impacts], for example. For recycled fibres it's a similar situation."

On one side we have to reduce the complexity [of impact assessments], but not to the point where they are meaningless, says Walter.

"Data and compliance with regulations [should] not just be there to provide certificates [and market access], they should incentivise lower impact [solutions]; but as long as I can hide behind averages rather than presenting my true primary data, where is my incentive to invest?"

Complex and Costly

Walter believes unwieldy supply chains are posing new risks:

"With this crazy globalization rush over the last 20-30 years, so many bad practices were enabled due to an out-of-sight, outof-mind mentality." "The complexity and length of the supply chains we built in this industry already have the downside of long lead times, which often costs brands and retailers much more in cost of inventory, dead stock or missed sales than they save by going to an even cheaper location."

"But if you add the risk of mismanaged and poorly compliant supply chains, and not working with more stable and trusted relationships instead, you are facing real compliance risks. Especially [for] publicly traded companies [which] don't want to take these risks."

Brand Barriers

"Brands understand so little about what really goes on in the manufacturing [sector], and what some of those processes actually mean in practice..."

"My hope is that some of the brands build more expertise in response to the regulations to integrate and interact more closely with a more limited group of suppliers...to better understand how to work with [them]."

Will regulations push more manufacturing to Europe?

"No large scale reshoring is expected – I believe in more optionality: producing products according to various requirements, how high the fashion or compliance risk is and then adapting the supplier location/type to those risks."

By extension, he points out advantages held by large integrated production groups, including those interviewed for this Playbook:

"They have more clout in regard to large brands, they are more integrated and can provide the data needed and move production. More consolidation in the supply chains expected, and compliance may be one of those drivers."

"If you can spread compliance costs over a bigger company base, it gives a cost advantage."

Consolidation and Integration?

Integration of manufacturing facilities may be on the horizon due to data risks:

"This is a big question mark for me in the future – will these data points be so business critical that we will see an integration of the supply chain?"

"If we had more integrated companies or at least more stable and trusting supply chain partnerships, data collection and management would be easier"

Walter questions the continued integration of thousands of suppliers and the data risks that will pose. Citing parallels in other industries he makes a case for consolidation:

"Regulated industries like medical devices and automotive require much more data to enter the supply chain. These requirements will bring about changes in the structure of the industry and it may come at the expense of smaller, less organized and less data driven suppliers, because they can't provide the data needed and therefore pose a risk."

Underpinning these insights was yet another call for standardization:

"We need data platforms and spaces where data can be exchanged based on commonly accepted standards. Now, five brands may ask you for the same data in five different forms." The multistakeholder insights from Europe-based policy and innovation leaders settle any illusion that Europe is 'regulation ready'. Walter alluded to regulators pushing too far, too fast – presumably in the rush to deploy the EU's Green Deal ambitions and remain on track to comply with European Climate Law, binding Europe to net zero emissions by 2050.

The law demands that all countries in the bloc cut domestic GHG emissions by at least 55% by 2030 and reach climate neutrality by 2050 – against 1990 baselines. But how? In a scenario mimicking that of this particular industry, the roadmap and milestones are not yet known.

Brands will continue to seek guidance from Policy Hub, Textile ETP, and others, as they prepare to comply with regulations and lobby for standardization and leniency. Prados explained there's no comfort to be found in watered-down omnibus outcomes, though, since slack in one regulation may be tempered by stringency in another. SMEs, in particular, face Policy and Innovation challenges as data demands ramp up:

- For brands implementing new regulations with relatively fewer resources and expertise.
- For brands and suppliers absorbing 'knock on' effects from corporations sharing their supply chains.
- For suppliers supply chain consolidation that favours manufacturing groups with higher integration (verticalization) and more mature and robust data processes.

Shifting from multistakeholder industry organizations to sector-agnostic litigation and risk experts, how do fashion brands and suppliers fare on the global risk stage? Sure, data efforts today mostly consider compliance as the 'end goal', but that same data is relevant for evaluating other risks, such as climate litigation. Stand by for a gear change, catapulting fashion's data and compliance conversations into wider society, where brands and retailers are facing significantly greater scrutiny, and lawsuits.

EXECUTIVE BRIEFING: THE DATA AND RISK OUTLOOK

COMPLIANCE AND LITIGATION

The data burden does not exist in a vacuum, or within fixed industry or global conditions.

Trade and tariff disruptions, retail stagnation, fluctuating energy costs, rising scrutiny of corporate frameworks and increased consumer eco-anxiety all influence business prioritises and resource allocation.

In preparing for such shocks, how might supply chain data mitigate risks beyond the immediate and obvious compliance ones?

Are there latent risks, lurking beyond the regulatory radar? Do brands have litigation and risk blindspots?

This section unites leading research on climate litigation cases and how they relate to stock prices (and fashion companies), the role of voluntary disclosures, and new demands for dynamic supply chain risk modelling. It also examines new tools for supply chain management that incorporate subjective risk profiling and primary supply chain data.

A new era of data digging, compounding risk and evolved climate litigation are dawning.

LONDON SCHOOL OF ECONOMICS

The Grantham Research Institute on Climate Change and the Environment was established by the London School of Economics and Political Science in 2008 to create a world-leading multidisciplinary centre for policy-relevant research and training on climate change and the environment.



Tiffanie Chan

Policy Analyst, The Grantham Research Institute on Climate Change and the Environment, LSE

*"Firms experience, on average, a 0.41% fall in stock returns following a climate-related filing or an unfavourable court decision*¹⁹."

Fashion in Focus

Each year since 2015, researchers from LSE's Grantham Institute have reported the Global trends in climate change litigation.

Tiffanie Chan, Policy Analyst and Lawyer, was involved in the research and compilation of the 2024 report:

NUMBER OF COMPANIES TARGETED IN STRATEGIC CLIMATE-ALIGNED CASES BY SECTOR, 2015–2023



- Utilities
- Travel, Personal, and Leisure
- Transport manufacturing
- Retail
- Property Services
- Mining and Extraction
- Media and Broadcasting
- Food and Tobacco Manufacturing
- Construction
- Business Services
- Agriculture, Horticulture and Forestry

Source: <u>2024 Global Trends in Climate Litigation report</u> Reprinted with permission.

The table above shows that for the first time, in 2021, a strategic corporate litigation case was brought against a textile and clothing company. In the two years following, three more strategic cases were brought.

"Fashion falls into the retail and textiles groups [and] it's not a small [number] of cases."

- Wood, Furniture and Paper Manufacturing
- $\boxtimes \,$ Transport, freight and storage
- Textiles and clothing manufacturing
- Public Administration, Education, Health Social Services
- Printing and Publishing
- Metals and Metal Products
- **Fossil fuel exploration, production, and transportation**
- Energy generation using fossil fuels
- Chemicals, Petroleum, Rubber and Plastic
- Banking, Insurance and Financial Services

Of the four cases, two were filed in the USA and one in the United Kingdom under a 'Climate washing' strategy. The fourth was filed in Italy under an 'Integrating climate considerations' strategy against an Italian company sourcing leather from cattle ranching firms that allegedly²⁰ contribute to deforestation and violate the human rights of indigenous populations. From 2015 to 2023, six strategic corporate cases have been filed against retailers in France, the United Kingdom, Switzerland, Germany, and two cases in the USA, including some 'brick and mortar' and online fashion retailers.

In all, strategic climate litigation is increasing. The significance of 'strategic' cases is that they actively seek to influence broader changes in society, rather than seeking an isolated outcome.

"For fashion companies, most litigation to date has been related to Green Claims...around the advertising of the product, rather than the underlying company."

But the scope and frequency of litigation is expanding:

"A lot of the trends we identify from climate litigation are applicable to fashion."

"Our high level finding [of cases] since 2015 is that it's not just 'carbon major' companies being sued – we have seen [the litigation] mature and evolve in the diversity of cases."

Categories of Climate Litigation Cases Chan shared some evolving examples that should ring alarm bells for fashion:

 Corporate frameworks - Where a challenge is made against the whole governance approach of an organisation. For example, where arguments of human rights are used to demand that highemitting carbon majors set clear targets for 2030 and 2050 to [explain how they will] decrease emissions. This could be applicable to fashion [brands that] don't have these plans in place.

- 2. Transition mismanagement Where NGOs might go after boards not upholding their duty of due diligence and reasonable care in managing [climate] transitions. On the surface it's about challenging what failing to have a plan would do to the financials of the business, with one example being against Shell directors in the UK.
- 3. Adaptation A category of cases brought against companies for failing to account for the physical risks of climate change, such as extreme weather or flooding leading to supply chain disruptions. For fashion brands with global sourcing networks, failure to assess and plan for these risks — particularly in vulnerable production regions — could be viewed as a lack of due diligence and expose them to legal or financial liability.
- 4. 'Polluter pays' and damages cases -Where a company's emissions are linked to localised impacts or deforestation (for example, exporting discarded clothing that is then burned); cases could be filed against companies or states to claim compensation for how those actors have contributed to local [environmental] damage.
- 5. Deforestation In particular, the case against JBS, a Brazilian meat producer, where apart from going for the company itself, there were warnings to the lawyers working with JBS as 'actors who facilitate the act of deforestation', since you could map the different actors involved (in JBS's acts).

6. Financing - There is a category [or cases] against banks and pension funds that are challenging the flow of money to high-emitters. The cases are alleging that their financing is what contributes to emissions, and that their due diligence should ensure that they are checking whether the companies they are funding have plans in place [to reduce emissions] - this [kind of case] could have implications for the cost of capital.

Evaluating Climate Risk

Chan says executives, investors and insurers are beginning to evaluate climate risks more deeply.

"One key change we are seeing is investor interest [in climate data]."

"[But] for climate litigation there isn't enough data on previous cases to understand how to evaluate the risk. [However], we see that insurers are currently doing their own private research around this."

Citing an historical parallel, Chan added:

"They had this problem around tobacco [and the likely litigation cases] so [we are watching to] see if climate follows a similar trajectory or tipping point [related to] the number of cases filed."

Adaptation

The recent Cornell ILR Global Labor Institute and Schroders publication Higher Ground? Report 2²¹ modelled the rise in temperatures and associated climate disasters in major manufacturing countries, including Bangladesh, Pakistan, Vietnam, Cambodia and China.

The modelling included 2030 apparel and footwear productivity headwinds in Vietnam (Ho Chi Minh) and Cambodia (Phnom Phen) for a sample brand. The modelled climate risk costs totalled 105 million Euros, representing 3% of brand regional COGS²².

Chan says it's conceivable that 'failure to adapt' cases could be brought against fashion brands. She shares an example of a recent case brought against a government:

"[There were] cases in Colombia, going after the lack of an adaptation plan in the country"

With over 140 countries pledged to halt deforestation by 2030 (but alarmingly off track to meet their commitment)²³, forest loss is exacerbating climate change, disrupting weather and water cycles, and endangering livelihoods. But it's not only governments being sued for failure to respond and adapt:

"For example, a Hawaii-based energy utilities company was recently sued on the basis that their operations worsened the wildfires there."

The world lost a record-shattering amount of forest in 2024, and fires were the biggest culprit (in place of agricultural deforestation) for the first time in at least the past two decades.

²² Cost of Goods Sold

²³ WRI https://gfr.wri.org/latest-analysis-deforestation-trends?

apcid=0066def0f24d464d184b6604&utm_campaign=wridigest&utm_medium=email&utm_source=wridigest-2025-05-21

²¹ https://www.ilr.cornell.edu/sites/default/files-d8/2023-09/Higher%20Ground%20Report%202%20FINAL.pdf

The *Higher Ground? Report 2* also notes that although references to sourcing, supply chains and sustainability in quarterly reports have surged in frequency since 2019, the perspective is skewed toward climate mitigation, not adaptation to reduce impacts on suppliers and workers.

Avoiding Litigation with Better Supplier Contracts

Chan recommends companies adopt better supplier contract, like those drafted by The Chancery Lane Project²⁴ which aims to 'reduce emissions using the power of legal documents and processes'. The Project's clients include the IKEA and Laudes Foundations.

"The Chancery Lane Project works with law firms to design guidance for how supplier contracts could be changed to improve terms, according to sector."

The Project's guidance includes how to prepare a climate transition plan and use contracts to implement it, along with mechanisms for disclosing annual progress.

In addition, they share detailed guidance on how to align Director's duties with climate targets, how to mitigate reputational and liability risks, especially greenwashing, and how to demonstrate climate leadership and commitment to reducing greenhouse gas emissions. Such plans and disclosures may seem bold, even risky, but clearer plans and public disclosures can help mitigate the risk of climate litigation.

Clearer Disclosures

"For the fashion industry, similar to banks, one of the trends we can see is transition mismanagement cases – having credible transition plans is a form of protection against [such] litigation."

"A [transition plan] document and the thinking that goes into it is a way of taking reasonable care."

But Chan says corporations report nervousness at disclosing such information voluntarily:

"Their counter argument is 'if we disclose, we are subject to criticism.' That [risk] is overstated in my view [since] you have a disclosure of your assumptions [in devising that plan]."

Rather than a concrete plan, it should contain thoughtful evaluation:

"Demonstrate and disclose data gaps and [related] risk factors, and the plan to address those over time...including the parts you're not sure about..[with] a clear explanation of what's missing and why – getting ahead [of any potential claims of inaction]."

C-Suite Training

"We see significant [C-suite] training on sustainability regulations and get a lot of requests to speak [to executives] about specific liability and litigation risks for companies. Board [members] are starting to wonder what [climate litigation] might mean for them."

While much of the commentary on new and changing regulations examines future data and compliance challenges, today's litigation risks are already outlined in the 10 strategic climate litigation cases filed against fashion companies and various retailers (not all fashion) since 2020.

Although 'climate-washing' is the main litigation strategy, two cases were filed under 'integrating climate considerations', expanding the basis to explicitly state the link between deforestation activity and the climate emergency, and citing multinational company pledges to reduce their deforestation impact. Reports by NGO Earthsight²⁵ were filed as the basis for allegations in one case; both cases involved the cattle industry in Brazil, and alleged deforestation and environmental and human rights harms. Therefore, these litigation cases mark a new era of 'fashion lawsuits' beyond greenwashing, instead claiming environmental and human rights harms related to materials sourcing.

DYNAMIC RISK MODELLING

TRUSTRACE

Founded 2016. Headquarters: Stockholm *TrusTrace is a global leader in supply chain traceability and compliance, enabling many of the world's most ambitious brands and suppliers to standardize how material and supply chain data is captured, digitized, and shared. Its AI-powered data hub supports primary data collection and enrichment to manage supply chain risk, compliance and impact. Headquartered in Stockholm, the company also has offices in India, France, and the U.S.*



Saravanan Parisutham Chief Operating Officer at TrusTrace

"Understanding the risk in supply chains has been an unmet need in the industry, especially where primary data is concerned, since most systems rely on secondary data."

Saravanan Parisutham explains the operational aims and limitations of supply chain risk management – where the weak spots are due to new regulatory demands – and why TrusTrace created a 'risk layer' atop supply chain mapping and materialsand purchase order tracing.

Risk Management Approach

"Fundamentally, supply chain risk management aims to ensure the right product reaches the right customer in the right quality at the right time, while protecting the procuring company's reputation." Building on this, Parisutham highlights six critical areas where disruptions can compromise a company's ability to deliver on that promise; jeopardizing timelines, quality, and ultimately, brand reputation:

- Material Disruptions Shortages or limited availability of key raw materials can halt production entirely or force the use of alternative inputs that may compromise quality or compliance.
- Labor Disruptions Labour issues such as strikes or disputes over collective bargaining agreements can disrupt manufacturing schedules, delay shipments, and damage supplier relationships.

- Facility Risks Critical infrastructure located in high-risk zones (e.g., dye houses in droughtprone areas or data centers in earthquake zones) can be rendered inoperable, interrupting production or data flow.
- Shipping Route Disruptions Geopolitical instability, trade wars, or events like port closures and road blockages can delay or completely stop goods in transit, preventing timely delivery to market.
- Customs & Trade Compliance Inability to prove that products originate from a preferred country (to access trade benefits) or that they are not from a restricted one can result in higher tariffs, delays at borders, or blocked market entry.
- Listing with Business Customers

 Missing or incomplete product data (e.g., sustainability claims substantiation, pricing, or article specifications) can slow down or prevent product listings with retailers and marketplaces, delaying sales.

While different teams within a company may own specific areas of risks, such as those related to materials, social compliance, or legal reporting, these functions all contribute to a broader, integrated risk management strategy. As Parisutham explains:

"Although a target to move from, say, 10% to 20% recycled materials by a certain time is given to a materials team, it is eventually part of the larger risk management strategy."

The same applies to social responsibility. Even if operationalized by a dedicated compliance function, it serves the larger goal of business continuity:

"Ensuring social compliance might be the job of a social audit person, but again, their directive is to ensure their factories are always running."

Failure to manage these risks effectively can have serious consequences:

"If these risks are not managed, the company loses access to the market and risks lawsuits and penalties."

Ultimately, regulatory enforcement tends to be driven by external gatekeepers:

"Most of the regulations are controlled through market watchdogs or border control mechanisms. Either you restrict market access for the product, or you impose penalties."

Flaws in Risk Management

There are two key limitations of how supply chain risk in modelled today, says Parisutham:

- 1. Visibility beyond your direct contacts (opacity beyond direct suppliers).
- Collecting data and validating data (obtaining the right data and ensuring quality and accuracy).

The recent rise in regulations has exposed the extent of this risk gap.:

"Increased regulation means there is a need for more data across supply chains, including for EUDR (environmental risk), UFLPA (social risk) and also for existing regulations like CPSIA (quality, safety)"

While some regulations have been around for over 20 years, they have evolved:

"Regulatory requirements to collect a lot of data are not new. But whereas they were previously focused on quality and safety, the 'New Age' regulations are focused on environmental and social conditions. That's the evolution"

The evolution is testing new data requirements against current capabilities:

"What is very critical and challenging for businesses is that the data required,

and the frequency, is very different."

"For example, EUDR asks for the plot analysis for every single shipment, or you cannot bring the product to market – this is an active compliance approach, like for the CPSC²⁶".

"In contrast, the UFLPA demands extensive documentation and has significant compliance requirements, but the likelihood of being asked to submit that data is relatively low."

Ultimately, there's one major challenge, according to Parisutham:

"The biggest gap currently lies in having high quality data across the supply chain to be able to comply with any of these regulations, and to even understand whether you're compliant or not."

How should brands manage the most risky of risks?

The New TrusTrace Risk Layer

"Understanding the risk in supply chains has been an unmet need in the industry, especially where primary data is concerned, since most systems rely on secondary data."

"Traceability platform users are keen to understand the risk exposure from their supply chain, and more importantly, they seek granular data." Previously, methods for flagging risk relied on single, often unreliable, factors:

"For instance, a supplier can't [accurately] be tagged as either risky or good from an environmental or social perspective, just because they are from a certain region."

"We have seen in multiple cases that suppliers across the street from each other could be vastly different, because they choose to implement certain plans or strategies that are key to their ESG credentials."

What are Brands Saying?

"We have spoken to 10-12 brands so far and everybody says that the technology is very important for them to understand the exposure they have in their supply chain across different fronts, but every brand has different internal guidelines for calibrating risk."

"For the UFLPA, there is a general data set from the CBP²⁷, but one brand has their own data sets to capture the risk in their own particular form."

"Brands are very interested in saying: I have certain philosophies and methodologies and I want to be able to adapt to that and measure the risk in my supply chain accordingly." The TrusTrace risk layer combines geographic factors with additional (defining) factors:

"We enable brands to start with a broadbased region level risk analysis, but quickly adjust that based on the granular data we collect: either public data about suppliers (certifications, 3rd party audits), or specific data we collect by visiting suppliers (2nd party audits)."

Current risk solutions are AI-based or public databases (like OECD²⁸), which give an idea of generalised risk, but not a clear picture to act on because it's not specific to the given facility or supplier. By adding additional and specific data (which the risk layer facilitates), the more granular and accurate the risk evaluation is.

"With the risk layer, you have the abstract risk and then you have the concrete risk that is not only concrete because it has relevant data for your specific suppliers, but also because it's within the context of how the brand wants to view risk (its subjective lens)."

The limitation of the risk layer, according to the COO and co-founder, is the availability of granular data that can be obtained from the suppliers.

What would it take to model climate

mitigation and climate adaptation in the TrusTrace platform?

"We are looking to have some goals to set in the system, so that if a brand has to decrease their emissions by a certain percentage, we could provide alternative supply chains, simulations and what to focus on."

"But we're starting by showing a mirror of brands [supply chains] and a more targeted control to say: if there is a problem in your supply chains, address it here. But does it result in 20 or 30% emissions? We can't answer that yet."

How are brands responding?

"A couple of brands have mentioned the information they collect about green energy has been a fundamental factor in deciding what volume of orders is given to a particular facility."

"They broadly know the grid efficiency per country in terms of emission calculations, and if a factory has invested heavily in solar or wind power, it enables the brand to adjust to say: Hey, this particular facility has [low] emissions, so I will divert orders there – those things are happening already." Today, achieving 'nominated supplier' status is heavily dependent on social audit performance, but Parisutham says this will change:

"It is just a matter of time [before] the C-Suite decides it has to move towards more green facilities, and environmentally friendly facilities will become part of the supplier selection criteria, alongside social audits."

While the widening of supplier evaluations to include environmental factors will be a promising step, it will result in yet more auditing. Chan and Parisutham share distinct legal and supply chain risk framings – both equally compelling.

In the textiles and clothing sector, climate litigation used to focus mainly on 'Green claims' - challenging how companies communicated their sustainability efforts. But in recent years, cases have also started targeting how companies are actually 'Integrating climate considerations' into their operations. This marks a significant shift: litigation is moving beyond marketing and messaging to scrutinize the materials, products, and practices at the core of businesses.

The cases should act as a wakeup call to fashion and retail companies, and illustrate how due diligence and compliance may not offer the broad safeguards brands believe they do.

Chan explained that assessing and declaring data gaps and documenting plans to address them are essential voluntary steps that companies should take to safeguard against litigation. The near total absence of Climate Adaptation plans published by brands is possibly the largest red flag arising from the legal expert's contributions; especially considering the recent modelling of a 3% increase in COGS in Asia-based manufacturing hubs within the next few years due to increased heat, climaterelated extreme weather and lost productivity in production facilities.

Chan went on to explain that recognition of the wider societal context of eco-influence and concern is causing progressive companies to plan and voluntarily disclose climate transition plans, which could offer defence against climate litigation.

Parisutham outlined traditional supply chain risk management approaches, illuminating where they fall short under today's newly regulated conditions. He says the defining factor in supply chain risk management today is a brand's ability to gather high quality data across the supply chain to comply with all the regulations, with their varying scope and enforcements.
The two major threats to achieving this goal are: lack of visibility beyond direct suppliers (often in Tier 1), and collecting the right data of the right quality, and validating its accuracy.

This is clearly where access to primary data is of immense value to avoid sourcing materials from deforested land, for example, and to better model and mitigate production impacts.

By introducing a new risk layer onto the traceability platform, TrusTrace is offering brands the ability to upload granular data (including primary data from suppliers) for augmented supply chain risk analysis.

Flagging suppliers as 'high risk' merely due to geographic location was once the 'norm' in management strategies, but the risk layer allows integration of data that illustrates supplier credentials and includes data relevant to the brand's subjective interpretation and 'risk appetite', instead of using databases with fixed platform parameters.

On the horizon for expansion of risk services is production order evaluations according to environmental targets, including simulation of emissions based on order placements (where mapped suppliers' grid energy mix, onsite 'green energy' generation and utilization data is available, for example).

Ultimately, the expert insights show that today's 'New Age' expanded regulatory requirements encompass more business functions, demanding a broader and more integrated risk management strategy.

While the risk of non-compliance may block market entry for brands' products on the supply chain side; the risk of ignoring their part in the Climate Crisis (and transition plans) may cost brands far more if dropped firm stock prices in the wake of litigation cases are anything to go by.

IN SUMMARY

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WHERE NEXT?

 We have ventured through the data and regulatory domains of 3 global brands, 3 suppliers, and Policy and Innovation organisations representing both brand and supplier groups. In addition, legal and supply chain experts shared climate litigation cases and supply chain data gaps that are widening, not narrowing.

To help close the gap The TrusTrace Compliance Canvas[™] offers the minimum necessary data for brand compliance, reducing the burden and complexity for suppliers. But in all, what are the starkest warnings and lessons?

- Data demands will only increase so standardization and harmonisation is crucial – the burden is already too big and will become crushing for suppliers if interventions are not made.
- Collaborative streamlining of regulations among the governments imposing them (with input from brands and suppliers) will avoid watering down laws and help achieve tangible outcomes.
- Brands should start with basic data infrastructure to map their supply chain and gather essential data to comply, then integrate impact data next – The Compliance Canvas can help to plan and execute this.

While the need for data collection to comply with regulations is undeniable, it

comes at a cost. Previously, regulations mostly targeted corporations, but now SMEs are also in scope. Smaller businesses are particularly vulnerable to data collection costs, supply chain consolidation and corporate due diligence 'ripple effects' as they work to comply with unprecedented data demands.

Using The Canvas can allow brands and suppliers to set clear and equitable data processes to enable efficient compliance now, but also inform future sourcing and production strategy to reduce risk and help achieve impact reduction targets.

Regardless of your readiness today, this Playbook offers a framework for fair, honest and efficient data partnerships between brands and suppliers. In service to the needs of both stakeholder group; it recognizes brands' need to comply, and suppliers' need for clarity and efficiency.

A final question for executives at the helm: *How much risk are you willing to take?*

With evolving legislation, failure to map supply chains and gather and share verifiable data may increase the risk of climate litigation.

Guidance from legal and supply chain management experts is this: define your desired 'risk profile' for climate litigation and plan accordingly, using tracing and data management, transition planning, reporting and voluntary disclosures.

FURTHER READING AND RESOURCES

FURTHER READING AND RESOURCES

A collaborative industry resource with statistics and key metrics of Asia's manufacturing hubs, jointly developed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the International Labour Organization (ILO) and now merged with Common Objective: <u>Asia Garment Hub</u>; GIZ, ILO, Common Objective

A report on the stakeholder structures and power dynamics of multi-stakeholder initiatives and how they influence industry initiatives and targets: <u>Collective Action Reimagined: A Call for Fair Process and Supplier Inclusion in</u> <u>Fashion's Multi-Stakeholder Initiatives</u>; Transformers Foundation

A business and policy report on the rising importance of data regarding water use and management in supply chains, and how this is reflected in European legislation: WaterAid WASH Corporate Playbook: Water, Sanitation and Hygiene (WASH) in the Evolving EU Legislative Environment; Quantis

A database of climate litigation and human rights cases around the world, maintained by the researchers of the Climate Rights and Remedies (CRRP) project at the University of Zurich:

Climate Rights Database: https://climaterightsdatabase.com/

Two databases of climate change litigation (U.S. Climate Change Litigation and Global Climate Change Litigation), managed by the Sabin Center for Climate Change Law at Columbia University:

Climate Case Chart: https://climatecasechart.com/

A database of over 5000 Climate Change Laws drawing on a decade of data collection by the Grantham Research Institute at LSE and the Sabin Center at Columbia Law School and using machine learning and natural language processing technology developed by Climate Policy Radar:

Climate Change Laws of the World: https://climate-laws.org/

APPENDICES

APPENDIX 1

REGULATIONS OVERVIEW

The below table summarizes the regulations covered in The TrusTrace Compliance Canvas[™], including jurisdiction, proposal and enforcement timings, and scope.

REGULATION	ABBREVIATION	JURISDICTION	PROPOSED	ENFORCEMENT	SCOPE OF COMPANIES AFFECTED
Corporate Sustainability Due Diligence Directive	CS3D	EU	2022	2025 – phases	(Large) EU & Non-EU companies with >1000 employees, indirect effect on SMEs. Scope being amended due to OMNIBUS.
German Supply Chain Act	LKSG	Germany	2021	2023	(Large) Companies in Germany with ≥3,000 employees (2023), ≥1,000 (2024); indirect effect on SMEs. Scope being amended due to OMNIBUS.
Consumer Product Safety Information Act	CPSIA	US	2008	2008	All manufacturers and importers of consumer products in the U.S.
General Product Safety Regulation	GPSR	EU	2021	2024	All economic operators selling non-food consumer products in the EU
Corporate Sustainability Reporting Directive	CSRD	EU	2021	2025	(Large) EU companies; listed SMEs; Non-EU companies with €150M+ EU turnover. Scope being amended due to OMNIBUS.
Packaging and Packaging Waste Regulation	PPWR	EU	2022	2026	All producers placing packaging on the EU market
Waste Framework Directive	WFD	EU	2008	2025	All waste holders; national flexibility for micro-enterprises
Green Claims Directive	GCD	EU	2023	2026	All traders making voluntary environmental claims
Empowering Consumers for the Green Transition	ECGT	EU	2022	2026	All traders offering products and making sustainability claims
Uyghur Forced Labor Prevention Act	UFLPA	US	2021	2022	All U.S. importers of goods from high-risk regions
EU Ban on Products Made with Forced Labor	EU FLR	EU	2022	2027	All companies; lighter obligations for SMEs
EU Deforestation-Free Products Regulation	EUDR	EU	2021	2025	All operators and traders placing relevant commodities on the EU market
Lacey Act	Lacey Act	US	2008	2009	All U.S. importers of covered plant and wildlife products
UK Environment Act (Forest Risk Commodities)	UK Forest Act	UK	2021	2021	All UK companies trading in regulated forest-risk commodities
Ecodesign for Sustainable Products Regulation	ESPR	EU	2022	2029 (DPP)	All manufacturers and importers of covered product groups in the EU
Anti-Waste Law for a Circular Economy	AGEC	France	2020	2021 – phases	All producers and products sold in France

APPENDIX 2

THE TRUSTRACE COMPLIANCE CANVAS™: GUIDANCE FOR USE AND IMPLEMENTATION

The Compliance Canvas aims to help brands and suppliers navigate regulations that require supply chain transparency and traceability.

Brands can use the Canvas to identify foundational data needs, assess internal gaps, and align with regulatory timelines; it also supports technology decisions and team education.

Suppliers can map current requirements (shipment or procurement documents, material certificates, etc), plan for future demands (traceability, recyclability) and assess readiness.

Beyond day-to-day compliance, the Canvas also acts as a strategic mapping tool for internal readiness, helping both brands and suppliers identify not only what systems, documentation, and data flows already exist, but where improvements are needed.

This creates a clear picture of how prepared the organization is for the more ambitious legislative frameworks on the horizon, such as the Digital Product Passport. With this clarity, teams can take confident, proactive steps to align their operations, build resilience, and turn data collection for compliance into a capability that creates long-term value. For both brands and suppliers, the Canvas is a tool for planning, prioritisation, and communication, ensuring compliance becomes a shared, strategic goal across the value chain.

HOW TO USE THE CANVAS

How Should the Data be Collected?

Data collection strategies often include several approaches to gathering information. The first stage, supply chain mapping, is focused on information on the supply chain network at large, whereas traceability (which can be done forward or backwards) will gather information from the supply chain in the context of a specific product. In relation to The TrusTrace Compliance Canvas[™], traceability covers both the product and the procurement data.

- **Supply chain mapping**, which includes identifying all suppliers across multiple tiers, from final product (Tier 1) to origin (Tier 4), documenting locations, facilities, and relationships between suppliers and subsuppliers, mapping product flows, and capturing key data such as certifications, audit reports, and environmental- or social compliance information.
- Forward traceability, also called 'fibreforward', covers information and evidence gathering (from origin (Tier 4) - to product (Tier1)), which happens as materials move

through the supply chain, giving realtime visibility into production steps, volumes, and more. This approach requires active participation from suppliers inputting information as it happens.

 Backward traceability, also called 'product-backwards', covers information and evidence gathering (from product (Tier 1) to origin (Tier 4)), which gives visibility and evidence of the product supply chain after the final product has been delivered.

From Where Should Data be Collected?

Data is held in different systems and formats, including:

- ERP systems (e.g., SAP, Oracle): order data, facility IDs, procurement records.
- PLM systems: BOMs, technical product specifications.
- LIMS/laboratories: test reports and chemical composition data.
- Supplier platforms or portals: onboarding forms, audit uploads, certificates.
- Certification and standard organisations:
 e.g., Textile Exchange, LWG, GOTS,
 OEKO-TEX, FSC and others.
- Manual forms and spreadsheets: especially common for upstream suppliers in early digitization phases.

By collecting data from the stakeholders and systems across the supply chain and housing it in a traceability platform, it's possible to build interoperable and reusable data sets that meet multiple regulatory and business objectives and avoid duplication.

In this sense, traceability platforms can act as the 'central hub', consolidating and structuring the data inputs from multiple sources, streamlining collection.

Additional Data and Validation

Certain regulations demand more granular and specialised traceability than that outlined above. For example, the Uyghur Forced Labor Prevention Act (UFLPA) requires the submission of a detailed traceability file that can demonstrate supply chain paths down to raw material origins, particularly in high-risk regions.

The EU Deforestation Regulation (EUDR) calls for not only the submission of Due Diligence Statements, but the integration of geolocation coordinates and geospatial deforestation risk analysis, often requiring partnerships with specialized mapping- and satellite data providers.

Furthermore, regulations including forced labor due diligence and environmental risk assessments are beginning to ask companies to use third-party verification tools like risk screening platforms and audit databases. This additional level of validation is having a knock-on effect on suppliers, who are fielding requests for additional third party verifications, often at their own expense.

While The TrusTrace Compliance Canvas[™] offers a high-level, holistic framework for understanding traceability and data requirements, individual regulations may impose additional, casespecific demands such as third party verifications.

We therefore urge brands to collaborate with solution providers that not only support core, automated data collection but that also deliver or integrate specialized capabilities, such as geospatial analysis, risk scoring, and validation of certifications, through credible partnerships. This approach will ensure both broad compliance coverage and the agility to meet unique regulatory challenges as they evolve.

Limited Data Utility

Critically (and as highlighted in the brand and supplier interviews) the regulatory baseline covered in the Canvas may fall short of the needs to meet ambitious internal ESG goals, brand-led sustainability programs, or customerdriven transparency initiatives.

In such cases, companies often adopt customised facility assessments, enhanced audit protocols, or third-party verification schemes to capture additional data points that go beyond compliance – such as worker well-being, chemical management practices, or carbon footprint calculations.

REGULATORY OVERLAP AND ADDITIONAL CONSIDERATIONS

Looking at CSRD and ESRS, at first glance, CSRD may appear to have limited overlap with traceability data points, but this is because its requirements are framed as indicators and metrics within the ESRS framework, rather than as discrete line-item attributes.

While the data collected through a traceability system is essential for compliance, it must be analyzed, aggregated, and rearticulated to align with the reporting structure and narrative demands of CSRD. Note: The scope and timeline of CSRD may change pending final decisions on the Omnibus Directive.

Additionally, it's important to note that the upcoming Digital Product Passport (DPP) will require data points beyond those captured in this Compliance Canvas. While the Canvas primarily focuses on upstream data collection, the DPP is considered a tool to enable a more circular EU market, and will therefore also include downstream data, such as information related to product durability, repairability, recyclability, and post-sale handling.

The exact DPP requirements will be defined in the Delegated Acts, which are expected in 2027, but early preparation should account for the fact that DPP goes beyond compliance and into circularity-related disclosures across the full product life cycle, from cradle-to-grave.

For a deeper dive into Digital Product Passports, explore our previous playbook <u>here</u>.

DYNAMIC DATA NEEDS

Whether a data point is "Required" or "Supporting" depends on its relevance to the regulatory requirement or business priority. Understanding this documentation architecture is essential for building a traceable and regulation-ready data foundation.

As regulatory frameworks evolve, the types of data required to demonstrate compliance also shift. The relevance and granularity of data points may also change over time – what is defined as "Supporting" in the Canvas today, could become "Required" tomorrow — so building a flexible and future-proof data structure is paramount.

Coming back to the EUDR as an example, compliance requires a high level of granularity, such as the geo-coordinates of the plot of land or farm where the in-scope commodities originate from. In addition, companies must carry out due diligence and legality assessments to verify that no deforestation or associated illegality has occurred.

While the EUDR regulation³⁰ does not explicitly mandate the collection or disclosure of certain specific data (such as certification, shipment documents or facility assessment), legal interpretations suggest that gathering such information can significantly reduce the risk of noncompliance. Therefore, these datapoints are mapped in the Compliance Canvas[™] as "Supporting" not "Required" Data Points.

RECOMMENDATION: A PHASED, SCALABLE DATA STRATEGY

A pragmatic, staged data approach might begin with implementing mapping, tracing and collection of the data listed in The Canvas to ensure foundational compliance. The scope can then be expanded to include impact-related data for strategic sustainability decision-making.

Building flexible documentation and data models that can accommodate both regulatory obligations and voluntary ESG ambitions is essential for leveraging traceability and the data collection it affords.

²⁹ <u>https://trustrace.com/knowledge-hub/how-to-comply-with-eudr</u>

³⁰ <u>https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en</u>



