



The Global Language of Business

GS1 Sustainability

Patrik Jonasson, Sustainability Senior Director
GS1 Global Office

9 September 2025





1

Let's shape the future of
sustainability together

VIDEO



Vision 2030: Ambition for Industry

Sustainability is at the core as we address industry needs



Market access and product listing

Companies of all sizes can seamlessly reach markets and list products globally, relying on trusted GS1 identification, registries and product data standards.



Operational efficiency across supply chain

Businesses enhance supply chain visibility, efficiency and resilience in global trade, leveraging GS1 standards and services to gain instant access to trusted product data.



Consumer experience and Patient safety

Billions of consumers have instant access to the story behind each product, whether shopping online or scanning a 2D barcode powered by GS1.



Patients benefit from improved safety and better outcomes as healthcare products carry a 2D barcode, scanned and used at point of care and across the supply chain.



Sustainability and circular economy

Companies can comply with sustainability and regulatory needs while supporting the circular economy across global value chains, using GS1 standards and services for efficient product traceability.

Sustainability & circular economy: Importance of product identification and verifiable data



Increasingly regulatory initiatives have **product identification rules** (DPP, DRS) and/or **verifiable claims/data** (EUDR, CSRD, Scope 3)



Consumers demand real transparency on product footprint, traceability and recycling. This is both a **value driver** and a reputational **risk!**



Standards are key to ensure products, people, places and more are identified in an interoperable way, reducing implementation costs and missing data risks



Sustainability regulation demands global compliance: **it impacts companies globally** exporting/manufacturing products, components and packaging

GS1 Global Sustainability Programme

Global research identified four interrelated areas
– central to the GS1 sectors

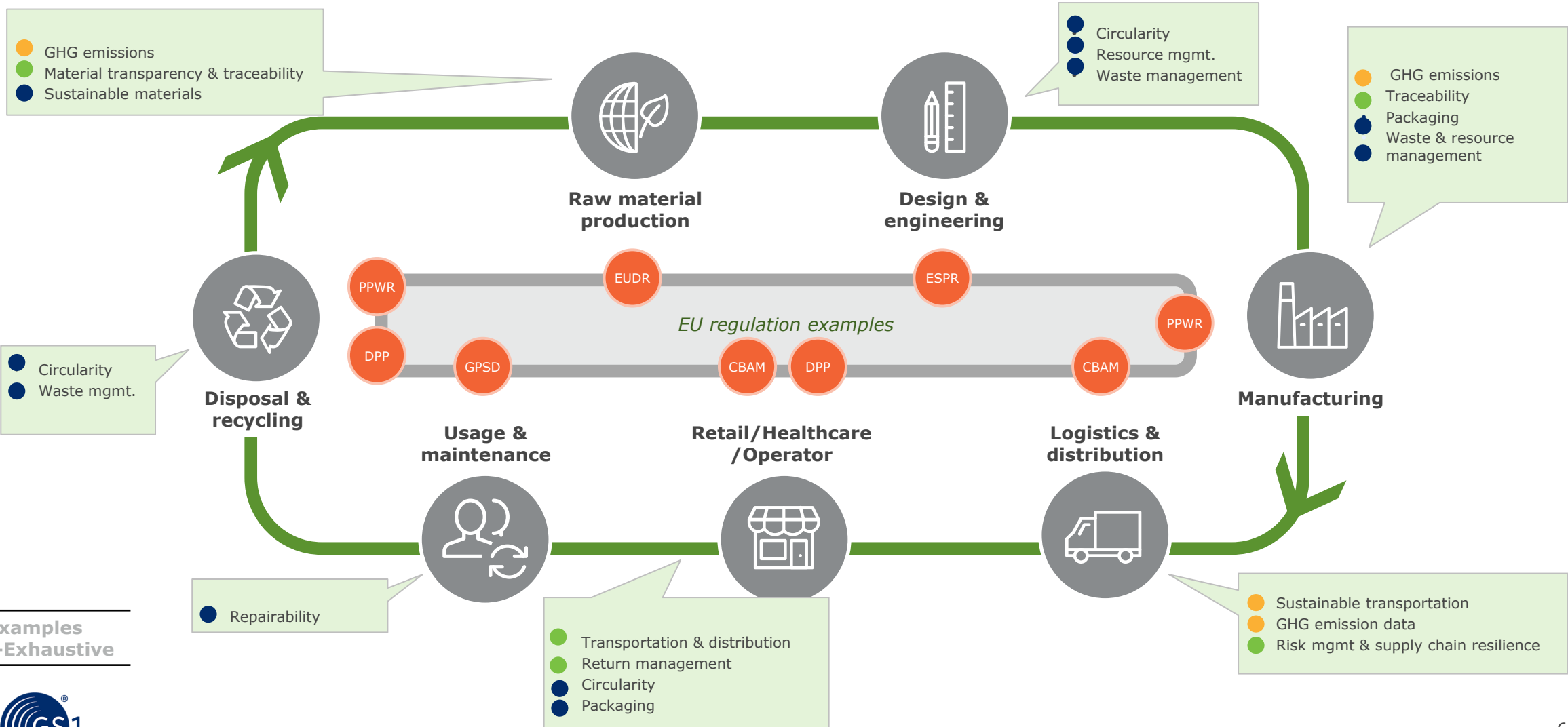
Regulatory

**Supply Chain
Responsibility
&
Transparency**

**Material &
Resource
Management**

**Energy &
Climate Action**

Value chain perspective



Industry needs being addressed

Regulatory

Supply Chain Responsibility & Transparency

- Certifications & claims
- Due diligence & deforestation

Energy & Climate Action

- Sustainability Data, Packaging Data & ESG Reporting

Material & Resource Management

- Deposit Return Scheme (DRS)
- Reusable packaging



Supply Chain Responsibility & Transparency

- **Certifications & Claims**
- **Due diligence & Deforestation**



EU Deforestation Regulation

GS1 EUDR Standard

GS1 is proactively engaging with stakeholders and responding to emerging industry needs, ensuring that standards remain aligned with evolving regulatory expectations

- The GS1 community has developed a **global standards approach** to address requirements
- **In the first phase** the GS1 Implementation Standard has been developed for the use of GS1 data sharing standards for the required Reference and Verification numbers across the value chain.
- **In the second phase** the standards work will be approaching the required data sharing from upstream data sources



Energy & Climate Action

- **Sustainability Data, Packaging Data & ESG Reporting**



Exploratory work ongoing supporting industry’s need for efficient and reliable exchange of sustainability data

GS1 to leverage global scale, neutral position & network

Key data points for data exchange at product level

| Data point no. | ESRS | Data point name | Data point short name |
|----------------|-------------------------|--|--------------------------|
| 1 | ESRS E1: Climate change | GHG emissions – by country, operating segments, economic activity, subsidiary, GHG category or source type | Product carbon footprint |
| 2 | ESRS E2: Pollution | Microplastics generated or used | Microplastics |
| 3 | ESRS E2: Pollution | Amount of generated or used substances of concern during production or that are procured | Substances of concern |

EXAMPLE

Role for GS1:

Identify industry sustainability data needs, including those driven by regulation e.g. CSRD and ISSB

Align on and develop the required attributes / data model, and ensure timely development through global standards development process as needed

Coordinate and collaborate working towards timely development through global standards development process



Material & Resource Management

- **Deposit Return Schemes**
- **Reuse / Reusable Packaging**



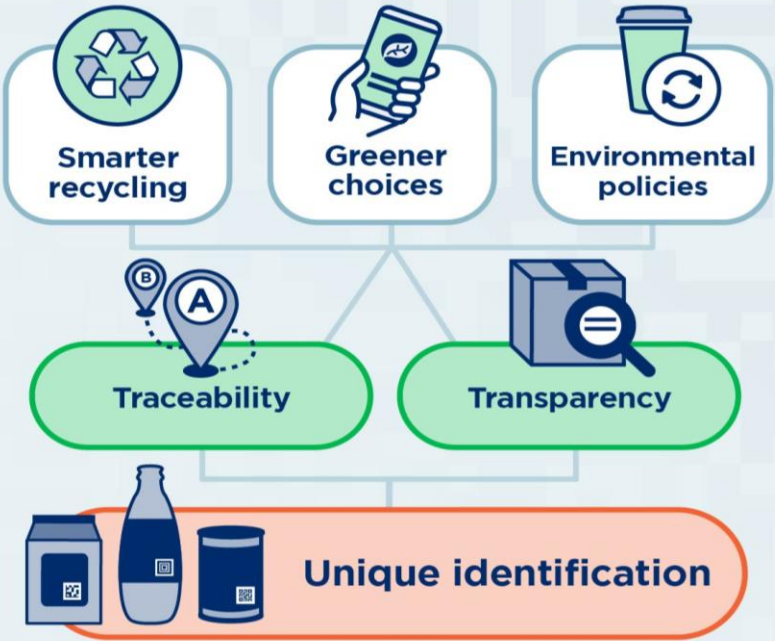
GS1 standards in packaging



GOAL
To enable more efficient recycling, reusing, sorting and traceability to support the circular economy

HOW GS1 STANDARDS HELP

GS1 standards help promote a shift towards the circular economy and smart packaging policies.



- WHY GS1?**
- Neutral and not-for-profit
 - User-driven and governed
 - Global and local
 - Inclusive and collaborative
 - Supporting the transition toward next-generation barcodes



Additional Programme Resources

White Paper



The Global Language of Business

Accelerating Value Chain Digitalisation

A Position Paper on the use of GS1 standards and services as a tool to help companies address regulation more efficiently



Accelerating Value Chain Digitalisation

A GS1 White Paper addressing the emergence of data requirements that companies increasingly face, and how traceability and transparency are emerging as strategic imperatives to address these requirements on a global scale



Case Study

TCO Certified IT Products

Building a Sustainable Foundation that Link IT Products and Certifications using GS1 Standards



The Global Language of Business

GS1 Sweden

Building a Sustainable Foundation that Link Products and Certifications



A challenging environment

As digital markets expand, the demand for product transparency has grown significantly, particularly in areas such as sustainability and ESG-related certifications and claims. Consumers and purchasing organisations are increasingly shifting their spending toward products that align with their values, while new regulations are mandating clearer labelling and traceability.

While this presents opportunities for businesses to meet these expectations, it also introduces complex challenges related to:

- **Outdated systems:** Many certification bodies operate on legacy systems that lack scalability and digital readiness. Certificates are often shared in non-digital formats like PDFs, which are prone to fraud and difficult to verify.
- **Unstructured data:** The data format used to prove compliance according to a certification scheme is often unharmonised, requiring labour-intensive, manual, non-scalable validation processes.
- **Lack of standardisation:** Less than 10% of certification schemes use unique identifiers like the GS1 Global Trade Item Number* (GTIN*) or Global Location Number (GLN), making it hard to consistently link certifications to products and creating significant inefficiencies for marketplaces and retailers.

These issues have created a fragmented system that undermines trust, increases operational burdens across the ecosystem, and makes it more difficult to reliably identify more sustainable products in the marketplace. Addressing these gaps is crucial for building a seamless, reliable framework for managing and sharing certification data.

Taking the lead

GS1 Sweden collaborated with TCO Development, the not-for-profit organisation behind TCO Certified, to integrate the GS1 GTIN into their certification process, establishing a critical link between GS1 product identifiers and certificates. TCO Certified is a global leader as the world's only sustainability certification for IT products. This foundational step has paved the way for further collaboration in which GS1 Registries could provide trusted certification data through Verified by GS1.

In today's certification process, certificates are many times issued before the product has started to be manufactured with testing done on engineering samples, documentation and supply chain audit reports. This means that at the time a certificate is issued, usually no GTIN has been assigned to the product, which makes it difficult to use as identification for certified products. However, if certification agencies require GTINs at the time of certification, then this will no longer be an issue.

Thank you.



Patrik Jonasson
Sustainability
Senior Director
GS1 Global Office
Patrik.Jonasson@gs1.org

