

GS1 Sustainability Discovery Project: findings and way forward



Introduction: the urgency for sustainability action

The need for sustainability action has never been more critical for both businesses and society. The impacts of climate change are becoming increasingly apparent, affecting industries globally. Sustainability regulations, particularly in the EU, are rapidly emerging, with many taking effect in the coming years. These regulations will necessitate standardised data and digital solutions for data sharing. While many companies recognise the need to act, they often lack the necessary capabilities to act effectively.

GS1 is committed to supporting members in addressing these emerging challenges. As data standardisation and trusted data sharing have long been central to GS1's mission, we see a unique opportunity to offer global standards and core data services that meet these new sustainability demands, empowering members across the value chain.

GS1 is actively exploring the emerging opportunities within the evolving sustainability landscape, recognising that many industries have immediate needs and are already working on solutions. As regulatory compliance becomes increasingly dependent on open standards and interoperability, GS1 has a central role to play in supporting the industries we serve.

GS1's role: paving the way for sustainability in global value chains

Sustainability continues to dominate corporate agendas and GS1 is increasingly recognised as a key enabler for companies striving to achieve their sustainability goals. Leveraging the global standards and data services that have been built by industry, GS1 has analysed and identified key sustainability priorities. Through collaboration with industry stakeholders and expert analysis, GS1 has identified four strategic sustainability focus areas:

Regulatory Compliance Supply Chain Responsibility & Transparency Material & Resource Management

Energy & Climate Action

These priorities address the growing need for transparency, efficiency and accountability throughout the value chain.

"This is going to be a value chain transformation and collaboration is going to be extremely important.
The [companies] who also have better sustainability performance are those that will succeed and also meet customer requirements".

Anna Belvén Töndevold,
 Nordic Lead for Sustainability
 Services & Strategy, Accenture

Background

From March to May 2024, GS1 launched a 10-week Sustainability Discovery Project in partnership with Accenture. The project explored how GS1 can provide significant value to its members by addressing their sustainability needs. Insights were gathered to address the key question: How can GS1 deliver the most value for industry by addressing the key sustainability challenges companies are facing?

To support its approach, GS1 conducted research, gathering insights from various stakeholders, including interviews with industry professionals, workshops and surveys, comprehensive desktop research and best practices sourced from sustainability experts. The initiative culminated in a 2-year strategic roadmap aimed at guiding GS1's sustainability efforts.

Aligning GS1's core strengths with member needs

To ensure industry relevance, GS1 conducted a materiality assessment to identify the most pressing sustainability issues across various sectors. The project identified seven major sustainability challenges for companies and prioritised four key areas aligned with GS1's core strengths and highly relevant to its members — indicating "where to play".

- Regulatory compliance: As sustainability regional and local regulations evolve, businesses are challenged to adjust their business processes to comply. GS1 aims to provide tools and templates to help its members navigate this landscape, ensure compliance and work towards harmonised sustainability data.
- Supply chain responsibility & transparency: Increasingly, companies need to track and trace products across their entire lifecycle. GS1's standards can enhance product traceability, digital exchange and validation of certifications, helping to ensure transparency across the value chain.
- Material & resource management: Circular economy principles are becoming more prevalent, necessitating effective material and resource tracking. GS1 supports circularity by facilitating the tracking of products and packaging which can optimise waste management and enable take-back programmes.
- Energy & climate action: As the demand to reduce emissions intensifies, companies are expected to report their carbon footprint and transition for cleaner energy. GS1 can help industry to link emission data to globally unique product, location and company identity.

A strategic approach to sustainability

GS1 identified five strategic focus areas as, shortand medium-term goals, critical to driving value for members, delivering sustainability impact, and leveraging GS1's capabilities. Each of the focus areas underwent a detailed analysis, assessing the capabilities required for implementation, the challenges involved and the anticipated outcomes. This in-depth analysis serves as the



foundation for GS1's strategic approach to sustainability. These are the "how to win" strategic focus areas.

These focus areas were developed through extensive interviews with industry partners and collaboration with representatives from the Global Office, Member Organisations, and the Project Steering Committee. This approach aims to leverage GS1's capabilities to overcome the sustainability challenges faced by its members.

Focus areas	Outcomes
Education & Awareness: provides federation with the knowledge and tools to execute prioritised key use cases in Capabilities work	Raised awareness and more effective engagement
Capabilities: focuses on prioritised key use cases to enable effective in-market implementation	GS1 standards and data services are ready for prioritised key use cases
Stakeholder engagement and partnerships: feeds information to the Capabilities work, while ensuring strategic external positioning	Stronger stakeholder engagement with coordinated global agenda

The enablers: education & awareness and stakeholder engagement and partnerships

GS1's focus on sustainability goes beyond standards and data services. To effectively address sustainability challenges, GS1 has identified two key enablers: education and awareness and stakeholder engagement and partnerships. These are designed to enhance the capabilities of GS1 Member Organisations and members, ensuring the successful implementation of GS1 standards and services across the value chain. These enablers will provide the necessary tools and resources to drive sustainable practices across the value chain.

To support implementation, GS1 will emphasise education, awareness, and stakeholder engagement by working on the following pillars:

Collateral and support for members

To address sustainability challenges and streamline the adoption of GS1 standards and data services across the value chain, the focus area will provide members with comprehensive resources, including clear and concise HOW-TO guides and quick start tools, while also strengthening the expertise of the GS1 staff from foundational to advanced levels with sector-specific knowledge.

Identification of key stakeholder(s)

Stakeholder identification and engagement will be central as GS1 progresses with the sustainability work, as we select the most vital partners locally and globally and ensure we stay connected in our engagements.

To enhance the impact of GS1's sustainability efforts, we will prioritise fostering partnerships and strategic collaborations by conducting a stakeholder analysis to identify key stakeholders and developing tailored engagement plans.

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Unlocking GS1's capabilities: standards and data services

At the core of GS1's sustainability initiatives is the ability to connect sustainability data across products, locations and entities. Through unique identification, data sharing and interoperability, GS1 helps businesses make data-driven decisions and navigate sustainability regulations and trading pressure more efficiently. We aim to unlock the following capabilities with industry:

Product-level sustainability data

Enable connectivity to sustainability data through unique product identification and AIDC standards, aiming for future standardisation of sustainability attributes using 2D barcodes, RFID and other data sources.

A common language for sustainability data

Develop and offer a common language for sharing sustainability data on the web (e.g., the GS1 Web Vocabulary) and, where needed, via other data sharing mechanisms. In parallel, improve traceability and enable sustainable supply chain management by enabling links to sustainability data connected to GLNs.

Ecosystem of sustainability data sharing

Facilitate sustainability data sharing within the GS1 member ecosystem, focusing on prioritised topics through registries and the Global Data Synchronisation Network (GDSN).

Other areas that are being considered under this workstream and will be addressed as the programme evolves include Footprint Calculation, Enablement of Digital Product Passport, Connect data and standards for certifications, Transport Optimisation, Resource Management and waste reduction through better stock management and visibility upstream, Extended Producer Responsibility (EPR), Interoperability with external standards to facilitate reporting and compliance and additional standards development.

Conclusion

The findings of the GS1 Sustainability Discovery Project present a clear, actionable path for GS1 to help address the members' sustainability needs and challenges. By focusing on the strategic areas outlined above, GS1 can create significant value for members, supporting regulatory compliance, trader requirements and traceability, but also promote sustainable supply chain management and resource optimisation.

GS1 is well-positioned to create substantial industry value while strengthening GS1's role as a sustainability leader in the global business ecosystem.