

ZERO WASTE × VERIMPACT

WHITE PAPER

The Data Intelligence Advantage

Verified Value through Connected Traceability and Sustainability Intelligence



Connecting Greenshare's data and traceability foundation and the Verimpact Sustainability Intelligence Platform — turning verified data into stakeholder trust, compliance and sustainable value.

Prepared by Zero Waste and Verimpact

Edition June 2026

Audience Governments, regulators, industry leaders, investors, and ecosystem partners

Contents

Executive Summary	3
1. The Data Imperative.....	3
2. Greenshare: The Data & Traceability Foundation	8
3. Verim	9
4. The Combined Value Proposition	11
5. Advancing Sustainability through Data Intelligence	12
6. From Vision to Implementation	13
7. Conclusion	14

Executive Summary

Sustainability, circularity and stakeholder trust now rest on a single foundation: **trusted, traceable, connected data**. As disclosure regimes become more specific and targeted and stakeholders demand proof rather than promises, the organisations that lead will be those that can capture verifiable data at the source and turn it into intelligence. Data is no longer a by-product of operations — it is the asset that determines whether a sustainability claim can be believed, financed and acted upon.

This white paper sets out the value proposition of a partnership between **Zero Waste** and **Verim**impact, built around two complementary digital platforms. **Greenshare**, Zero Waste's platform, is the essence of the concept: it establishes a **data and traceability foundation**, capturing granular, provenance-rich operational data in relation to materials management and driving stakeholder engagement on the basis of that data. The **Verim**impact Platform combines data from the Greenshare platform with other sustainability and ESG Data that it collects on its side, and offer this combination a broadened value: extending trusted data into full sustainability intelligence: double materiality, performance assessment, non-financial risk, forecasting, on the basis of recognised disclosure frameworks, and emissions accounting across **Scope 1, Scope 2 and Scope 3**.

*Greenshare makes the materials management data trustworthy and traceable. Verim*impact makes it intelligent and far-reaching. Together they form one connected data backbone — from a single verified data point to enterprise-wide sustainability intelligence.

What this partnership delivers

- **A trusted data foundation** — traceable, provenance-rich data captured at the source, with certificates providing assurance.
- **Data-driven stakeholder engagement** that aligns governments, industry, investors and communities around verifiable evidence rather than claims.
- **Broader sustainability intelligence** — materiality, non-financial risk, forecasting and audit-ready disclosure across GRI, IFRS S1/S2, TNFD, VSME, CSRD, and available for specialised reporting frameworks such as GRESB.
- **Full-scope emissions visibility** across Scope 1, 2 and 3, plus verified avoided-emissions data from circular activity.
- **Investable, defensible outcomes** — connected data that de-risks capital and investment, satisfies regulators and compounds in value over time.

1. The Data Imperative

Circularity and emissions management have entered a new phase. The question facing leaders is no longer “are we doing the right things?” but “can we prove it, in the language regulators and investors require?” In that shift, data has become the decisive asset. A circular claim is only as credible as the trail that proves it; an emissions figure is only as useful as the system that captured it; an investment in sustainable assets is only as sound as the evidence behind it. The global evidence points consistently to the same conclusion: the binding constraint on sustainability progress is no longer ambition or even capital — it is **trusted, traceable, connected data**.

∞ Data is the connective tissue of sustainability

Every disclosure framework, every circular claim and every financing decision now resolves to a question of data. Yet the data foundation is strikingly weak. In Deloitte’s Sustainability Action Report, **88% of executives cited data quality as a top reporting challenge**, and more than half ranked it their single greatest obstacle. KEY ESG’s analysis finds that **fewer than 30% of organisations feel confident in the accuracy of their ESG data**, while around 60% of finance leaders struggle with data fragmented across systems. The ambition exists; the trustworthy data to back it does not yet.

The data is not yet trusted

Share of organisations reporting each data challenge — global executive & investor surveys

Cite data quality as a top ESG reporting challenge



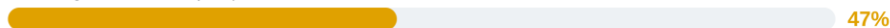
Lack of standardised ESG data is a major obstacle



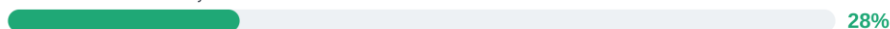
Finance leaders struggle with fragmented data across systems



Still manage ESG data mainly in spreadsheets



Feel confident in the accuracy of their ESG data



Sources: Deloitte Sustainability Action Report; KPMG ESG survey; SG Analytics ESG Data Insights; KEY ESG (2024–2026).

Figure 1 · Across global surveys, the recurring barrier to sustainability progress is the trustworthiness of the underlying data.

🐟 Stakeholder engagement is now data-driven

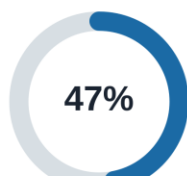
Engagement has shifted from narrative to evidence. Governments require verifiable diversion and compliance data; investors price what they can measure; communities expect transparent outcomes; and partners need interoperable records simply to transact. This is not a soft preference — it is a stringent expectation. **85% of investors now regard greenwashing as a more serious problem than five years ago**, 47% cite ESG data coverage gaps as their single biggest challenge, and 90% of organisations plan to increase sustainability-reporting investment over the next three years. Data is the common language that aligns these stakeholders — and its absence is the most frequent reason collaboration stalls.

Stakeholders now demand proof, not promises

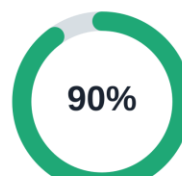
What investors and markets are signalling



of investors say greenwashing
is more serious than 5 yrs ago



cite ESG data coverage gaps
as their biggest challenge



plan to increase reporting
investment over three years

Sources: KEY ESG investor statistics; SG Analytics ESG Data Insights 2025; KPMG ESG survey.

Figure 2 · Markets are rewarding verifiable evidence and penalising unsubstantiated claims — engagement must now be data-led.

✕ Disclosure is becoming mandatory — and data-hungry

Regulation is becoming specific, stringent and global.. The EU's Corporate Sustainability Reporting Directive brings roughly **50,000 companies into scope**, and the IFRS sustainability standards (S1/S2) are now adopted or required in more than 20 jurisdictions representing close to 60% of global GDP. Critically, these regimes increasingly demand **Scope 3 disclosure** — the value-chain emissions that account for an estimated 70–90% of a typical organisation's footprint and are by far the hardest to capture. Disclosure is no longer a periodic, boundary-limited exercise; it is a continuous, value-chain-wide data obligation.

Disclosure is becoming mandatory — and data-hungry

The regulatory mandate driving demand for connected, verifiable data



Sources: European Parliament (CSRD scope); ISSB / IFRS Foundation adoption trackers; GHG Protocol (Scope 3 share).

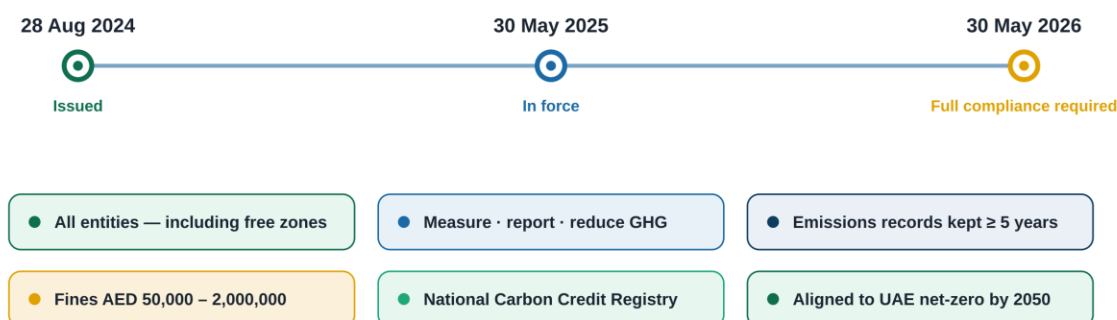
Figure 3 · Mandatory, globalising disclosure — reaching deep into the value chain — sharply raises the demand for connected data.

✓ Spotlight: the UAE Climate Change Law

This global shift has arrived home, in concrete and mandatory form. According to analysis by PwC Middle East, the UAE's **Federal Decree-Law No. (11) of 2024 on the Reduction of Climate Change Effects** — issued in August 2024, in force from 30 May 2025, with full compliance required by 30 May 2026 — for the first time requires **all entities, public and private, including those in free zones**, to measure and report their greenhouse-gas emissions and to submit plans to reduce them. PwC describes this as a decisive move from voluntary sustainability initiatives to mandatory obligations, with the Ministry of Climate Change and Environment setting annual reduction targets that entities must build into their strategies, in support of the UAE's net-zero-by-2050 goal.

Spotlight: the UAE Climate Change Law

Federal Decree-Law No. (11) of 2024 — mandatory GHG measurement, reporting and reduction for all entities



Source: PwC Middle East, "UAE Climate Change Law: What it means for entities and how to prepare," June 2025; Federal Decree-Law No. (11) of 2024.

Figure 4 · The UAE Climate Change Law turns data capture, reporting and reduction into a legal obligation — the capabilities the partnership provides. Source: PwC Middle East (June 2025).

The stakes are explicit: PwC notes that entities failing to measure, keep records, or report will face fines ranging from **AED 50,000 to AED 2 million**, that emissions records must be retained for at least five years, and that enforcement is expected to be strict. Just as importantly, the law pairs obligation with opportunity — incentives for low-carbon technology and innovation, and a National Carbon Credit Registry enabling entities to offset unavoidable emissions. PwC's recommended first actions map almost exactly onto what this partnership delivers: assess current GHG data and identify gaps; build a robust data-collection and reporting system, ideally through digital solutions that improve accuracy; develop a reduction roadmap aligned to national targets; and secure independent assurance for credibility. Greenshare provides the verified, traceable data foundation and the long-term records; Verimarket converts that data into audit-ready reporting across Scope 1, 2 and 3 and into reduction-plan analytics and forecasting — together turning a compliance burden into a defensible, investable position.

The gap to close

Despite this pressure, most value chains remain data-fragmented. Around 65% of institutions cite the lack of standardised ESG data as a major obstacle, and nearly half still manage that data in spreadsheets. Materials and activities change hands, change form and cross jurisdictions, while reporting rules differ by market. The consequence is a persistent **trust deficit**: claims cannot be independently verified, secondary materials lack provenance, and the value-chain data needed for disclosure is incomplete. This challenge is also asymmetric — mature markets face a data-integration problem, while emerging markets face an infrastructure-and-inclusion one — and a credible model must bridge both.

Why connected data matters now

A visibility gap to close — and a mandate to act



Figure 5 · A visibility gap to close and a rising mandate to act together make connected, trusted data urgent.

A fast-growing market for trusted data

These pressures have created a fast-growing market. Driven by mandatory disclosure, demand for sustainability data and reporting intelligence is expanding at double-digit annual rates, with the fastest growth in forward-looking analytics and forecasting — a clear signal that organisations want data not only to comply, but to anticipate and decide.

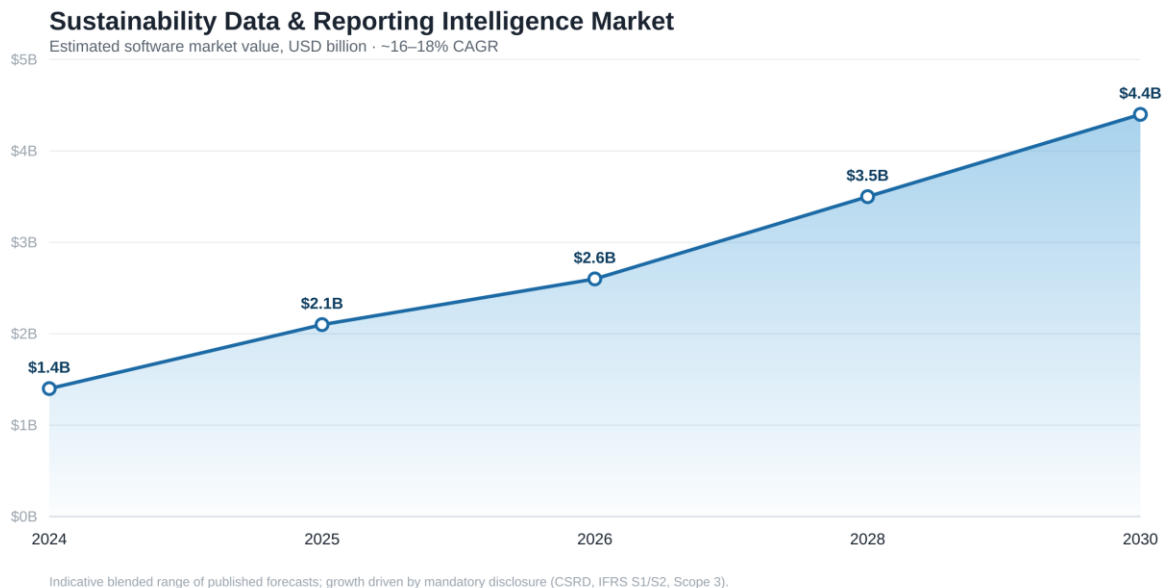


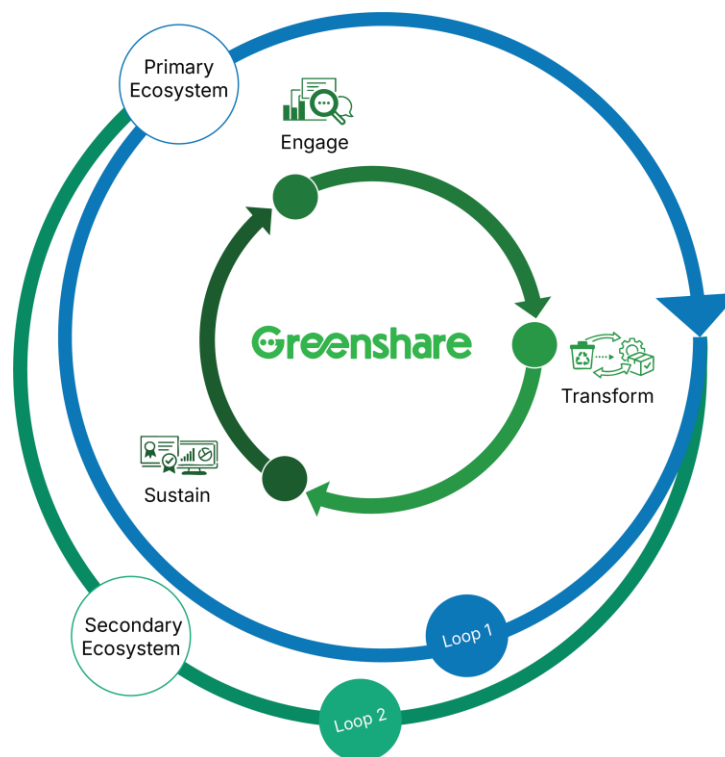
Figure 6 · Mandatory disclosure is converting sustainability data from a cost centre into a fast-growing intelligence market.

Two forces are converging to close the gap: regulation is becoming more stringent (CBAM, digital product passports, Scope 3 disclosure, mandatory non-financial reporting), and AI, analytics and traceability technologies have matured enough to deliver end-to-end visibility and prediction. What has been missing is an integrated capability that links *trusted data captured at the source* with *the intelligence and*

disclosure that data must ultimately serve. That is exactly what the Zero Waste–Verimpart partnership provides.

2. Greenshare: The Data & Traceability Foundation

Zero Waste built its system on a simple conviction: in sustainability, **data and traceability are everything**. Its digital intelligence and traceability layer, **Greenshare**, is the embodiment of that conviction — the foundation on which trusted outcomes, stakeholder engagement and broader intelligence are built. It integrates physical infrastructure and operational processes with digital technology to ensure traceable resource flows, data-driven insight and transparent reporting.



2.1 Three pillars, one data foundation

Greenshare is organised around three integrated pillars. Read through a data lens, each is a stage in building a continuous, verifiable record:

Pillar	Data role	Core activities
Engage	Establish the data baseline and engage stakeholders around it	Waste characterisation, baseline development, material-flow mapping, system-level assessment, training, awareness and gamified rewards
Transform	Generate traceable resource-flow data	Conversion of inputs into secondary materials and energy at Circular Processing Facilities, captured as value-creation flows
Sustain	Record, certify and visualise the data	Real-time dashboards, integrated traceability, certification and adaptive feedback

2.2 Data-driven stakeholder engagement

Greenshare's Engage pillar is, at its core, a stakeholder-engagement engine powered by data. Through waste characterisation studies, baseline development and material-flow mapping, it gives governments, industry and communities a shared, evidence-based picture of operational reality — the foundation for coordinated participation, target-setting and accountability. Engagement built on this shared data is more durable than engagement built on intent, because every stakeholder is working from the same verified facts.

2.3 Provenance-rich data and verified outcomes

The Sustain pillar turns activity into trustworthy records. Dashboards quantify quantities processed, stream classification and type, landfill diversion, CO₂ and GHG emissions reduced, and resource flows to the economy. Greenshare issues **Certificates of Reception** and **Certificates of Circularity** — effectively giving each material a verifiable data passport — supported by a Research & Innovation Lab spanning materials, energy and waste analysis. Zero Waste operates within an integrated ecosystem of authorities, municipalities, certification bodies (ISO 9001, 14001, 45001) and a partner network exceeding 500 primary and 30 secondary partners, all transacting on shared, traceable data.

Greenshare answers the questions that make data trustworthy: what was received, how it was processed, where it went, and who can verify it. That provenance is the foundation everything else builds on.

3. Verimply: Broadening Data into Sustainability Intelligence

If Greenshare establishes trusted data, Verimply complements it with related disclosures, **enhances its decision-making value and broadens its reach**. Verimply specialises in advanced data analytics and forecasting for non-financial risk, sustainability assessment and compliance reporting. Its AI-powered, cloud-based Sustainability Intelligence Platform takes verified data and extends it into enterprise-wide intelligence, supporting organisations across leading global frameworks including **GRI, IFRS S1/S2, VSME**,

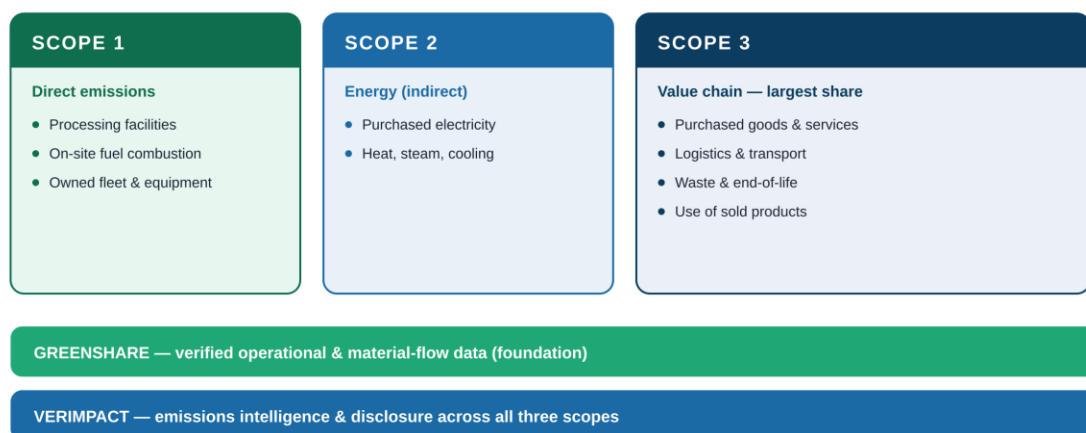
TNFD, CSRD and sector-specific standards such as GRESB for real estate. The platform is developed under the “Greece 2.0” National Recovery and Resilience Plan, funded by the European Union—NextGenerationEU, and is trusted by clients and partners ranging from the European Commission and UN Environment Programme to enterprises across the EU, the Mediterranean and Gulf regions.

3.1 From a data foundation to full-scope intelligence

Verimarket’s most significant contributions are breadth and analytics. Greenshare’s operational data is rich but bounded to the circular loop; Verimarket extends it across the full sustainability picture — and importantly, across all three greenhouse-gas accounting scopes. Operational data that begins as facility and material-flow records becomes an input to a complete value-chain emissions inventory and a forward-looking risk model.

Broadening the data lens: Scope 1, 2 and 3

From operational data to full value-chain emissions intelligence



Plus verified avoided-emissions data from circular activity — reported alongside the inventory, not netted against it.

Figure 7 · Greenshare anchors verified operational data; Verimarket broadens it into emissions intelligence across Scope 1, 2 and 3.

Scope 1 covers direct emissions from owned operations such as processing facilities and fleet; Scope 2 covers purchased energy; and Scope 3 — typically the largest and hardest-to-measure share — covers the wider value chain, including purchased goods, logistics, waste and end-of-life. The Verimarket Platform allows accounting across all three, and can also quantify **verified avoided-emissions** from circular activity — reported alongside the inventory rather than netted against it — giving partners a defensible, data-backed view of their full climate position.

3.2 Platform capabilities

Capability	What it delivers
Data collection	Optimised, automated capture with minimal manual effort and materially reduced reporting time
Data intelligence	Transformation of raw, fragmented data into clear, strategic intelligence
Risk insights	Visibility on non-financial risks — climate, compliance and reputational
Strategic guidance	Direction for addressing social and environmental risks at decision level
Sustainability compliance	Audit-ready reporting aligned to GRI, IFRS S1/S2, VSME, TNFD, CSRD and sectoral standards.
Forecasting analytics	Forward-looking, causality-based modelling that turns disclosure into business intelligence

3.3 How the platform works: from data to decision

- 1. Automated data collection.** Ingests ESG and non-financial data across environmental, social and governance categories — including verified inputs from Greenshare — reducing manual effort.
- 2. Stakeholder mapping and double materiality.** Identifies which issues matter most to the business and its stakeholders, the foundation of credible reporting under GRI, IFRS, and CSRD/ESRS and beyond.
- 3. Intelligence and risk profiling.** Converts inputs into structured intelligence, surfacing emerging climate, compliance and reputational risks early.
- 4. Causality and forecasting.** Models cause-and-effect between variables to enable forward-looking projections rather than backward-looking reporting.
- 5. Audit-ready disclosure.** Produces outputs aligned to recognised frameworks across all emission scopes, ensuring transparency and assurance for investors and regulators.

3.4 From compliance burden to strategic advantage

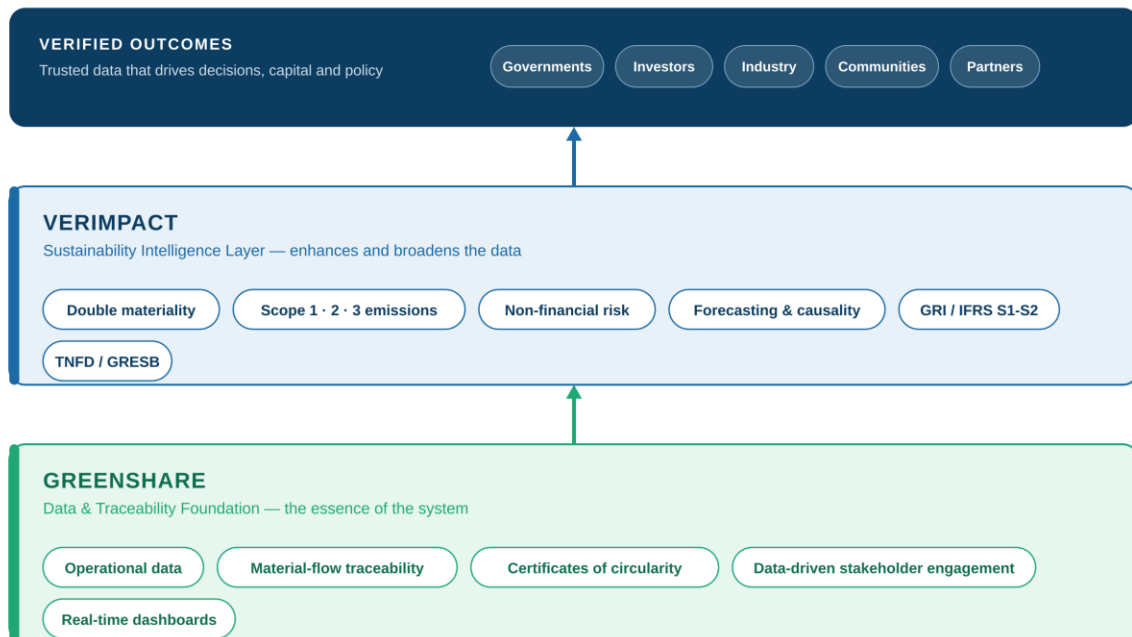
Veriimpact reframes disclosure from a defensive, retrospective cost into a forward-looking management tool — strengthening data integrity, enhancing transparency, and reinforcing long-term resilience and reputation. It offers 360-degree compliance and data-analytics services spanning consulting, impact assessments and specialised training, and its First Adopter Programme (free GRI reporting preparation for the 2026 cycle, including stakeholder mapping, double materiality and forecasting) deliberately lowers the barrier to entry. Complementing the platform, the **Veriimpact Academy** builds institutional capacity through certified training on sustainability, ESG and frameworks such as CSRD/ESRS — addressing both the tooling and the talent dimensions of the data-intelligence challenge.

4. The Combined Value Proposition

The two platforms are complementary layers of a single value chain for data. Greenshare provides the circularity and material **data and traceability foundation**; the Verimpact Platform provides the sustainability and emissions **intelligence and disclosure layer** that enhances and broadens it. Connected, they form a streamlined data backbone running from a single verified data point to enterprise-wide sustainability intelligence.

One connected data backbone

From a single verified data point to enterprise-wide sustainability intelligence



Greenshare captures trusted, traceable data; Verimpact broadens it into full sustainability intelligence.

Figure 8 · One connected data backbone — Greenshare captures trusted data; Verimpact broadens it into intelligence that reaches every stakeholder.

4.1 How the platforms interlock

Dimension	Greenshare (Zero Waste)	Verimply Platform
Primary role	Data & traceability foundation	Sustainability intelligence & disclosures
Core data	Operational, material-flow and circular data with provenance	Sustainability performance, Scope 1/2/3 emissions, non-financial risk, forecasts
Key output	Certificates and dashboards — verified data at source	Audit-ready Carbon Accounting reporting, ESG reporting (GRI / IFRS / TNFD / VSME, GRESB, etc.)
Scope of data	The circular loop and its stakeholders	Full value chain sustainability, Emission scopes 1/2/3
Time horizon	Real-time and historical record	Real-time and historical record, plus Forward-looking forecasting and risk anticipation

4.2 The integrated data journey

Combining the platforms services creates a single, unbroken chain of custody for data — from a physical activity to a verified, forward-looking disclosure:

- 1. Capture.** Greenshare records circularity operations, characterisation and processing, generating granular, provenance-rich data and certificates. Verimply logs all sustainability-related data and information.
- 2. Engage.** Stakeholders are aligned around that shared, verified data — the basis for coordinated action.
- 3. Broaden.** Verimply ingests the data and extends it across the full value chain sustainability performance and all emission scopes.
- 4. Analyse.** Forecasting and causality analytics convert data into forward-looking intelligence — risks, targets and scenarios.
- 5. Disclose and decide.** Audit-ready outputs reach investors, regulators and boards, turning data into capital and policy decisions.

4.3 Value created for each stakeholder

Stakeholder	Value unlocked through connected data
Governments & regulators	Verifiable, framework-aligned data; an evidence base for policy, EPR and ESG compliance and disclosure oversight
Industry & corporates	Lower reporting cost and risk; provable claims; full sustainability reporting and Scope 1/2/3 visibility and resilience
Investors & financiers	Trusted, comparable, forward-looking data that de-risks capital and supports sustainable finance
Communities	Transparent, verifiable environmental and social outcomes they can see and trust
Ecosystem partners	Interoperable data-based reporting enabling traceable flows and collective reporting

5. Advancing Sustainability through Data Intelligence

The partnership's significance extends beyond the two organisations. It offers a working model for how trusted, connected data advances sustainability at system scale.

Closing the trust deficit with verifiable data

By pairing data captured at the source with framework-aligned intelligence, the partnership makes sustainability claims independently verifiable. Materials gain provenance; figures gain assurance; impact gains an audit trail. Trust — the scarce resource — becomes a designed property of the data itself rather than a matter of reputation.

Engaging stakeholders on shared evidence

Because both platforms speak in verifiable data, they give every stakeholder — government, investor, partner, community — a common, trusted basis for participation. Engagement grounded in transparent evidence is faster to build and harder to dispute, turning data into the connective tissue of collaboration.

Full-scope visibility across the value chain

Extending data across the entire value chain and Scope 1, 2 and 3 closes the most significant blind spot in corporate sustainability. With Greenshare anchoring verified operational circularity and material data and Verimply broadening it across the value chain, organisations can finally see, report and manage the emissions and impacts that have historically been invisible — and quantify the avoided emissions their circular activity delivers.

Aligning physical and financial systems

Data only scales sustainability when capital follows it. By rendering verified performance in the language investors and regulators use — GRI, IFRS S1/S2, TNFD, VSME, GRESB — the partnership connects

operational reality to the financial systems that allocate capital, turning data into investable, reportable assets.

Turning regulation into readiness

Nowhere is this more immediate than in Zero Waste's home market. As PwC Middle East sets out, the UAE Climate Change Law now obliges every entity to measure, report and reduce its emissions, retain records for at least five years, and align with national reduction targets — with non-compliance carrying fines of up to AED 2 million. PwC's recommended path to readiness is, in effect, a description of what this partnership delivers as a turnkey capability: assess and close data gaps, stand up a robust digital data-collection and reporting system, build a credible reduction roadmap, and secure independent assurance. By pairing Greenshare's verified data foundation with Verimpact's full-scope intelligence and disclosure, entities can move from regulatory exposure to regulatory readiness — and convert a compliance obligation into a strategic, investable advantage.

Compounding value through continuous intelligence

Because the data feeds forward-looking analytics, every cycle improves the next. Forecasting and causality modelling identify inefficiencies, anticipate risk and reveal higher-value opportunities — shifting sustainability from periodic reporting to live, data-driven management.

Where data is fragmented, sustainability stalls. Where data is trusted, connected and intelligent, sustainability scales — and capital follows.

6. From Vision to Implementation

Realising the combined proposition is best approached as a phased, data-first collaboration — connecting data, proving value on a focused scope, then scaling across the value chain and geographies.

Phase	Focus	Indicative outcomes
1 · Connect	Integrate Greenshare data with the Verimpact Platform on a defined stream and partner cohort	A verified data pipeline; first framework-mapped disclosures from live data
2 · Broaden	Extend the data across Scope 1, 2 and 3 and report based on double materiality and forecasting	Full-scope inventory; audit-ready report; quantified risk insights
3 · Scale	Roll out across operational domains, partners and jurisdictions	Interoperable, transparent data-based reporting across the ecosystem
4 · Sustain	Embed continuous intelligence, capacity building via the Verimpact Academy, and investor-grade reporting	Live, data-driven management; strengthened access to sustainable finance

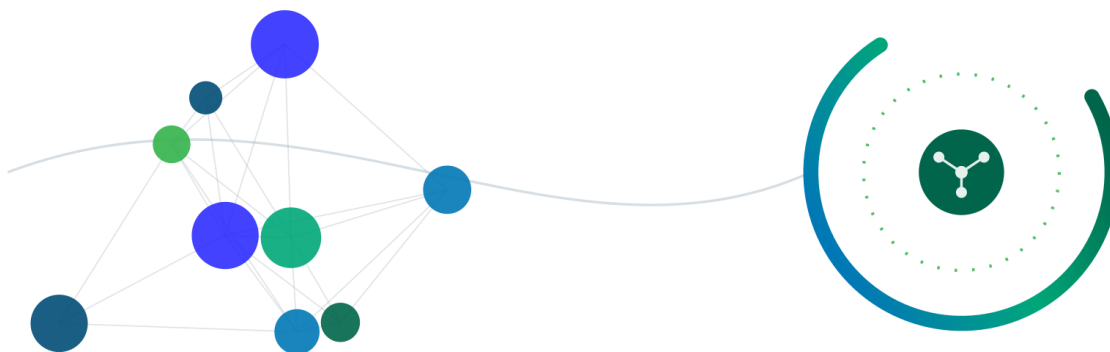
6.1 Guiding principles

- **Data at the source.** Capture verifiable data where activity happens, so everything downstream inherits its provenance.
- **Interoperability first.** Adopt open, framework-aligned standards so the partnership extends rather than fragments the ecosystem.
- **Assurance by design.** Build verification into the data flow so outputs are audit-ready from the outset.
- **Capacity alongside technology.** Pair platform adoption with training so organisations can act on the intelligence they gain.

7. Conclusion

The future of sustainability will be defined by data — by who can capture it credibly, connect it across the value chain, and turn it into intelligence that stakeholders trust. Zero Waste, through Greenshare, has built a structural pillar: a data and traceability on circularity and materials system that proves what happened and engages stakeholders around shared evidence. Verimpact's 3rd Reporting Platform edition enhances and broadens that pillar, extending trusted data into full sustainability intelligence and across Scope 1, 2 and 3 and the frameworks that govern global capital.

Combined, the two platforms form a single data backbone that links operational reality to the financial and regulatory systems shaping our collective future. This is how sustainability moves from aspiration to infrastructure: a single verified data point becomes a credible disclosure, a basis for engagement, and the foundation for the next, better decision. The advantage is no longer simply doing the right things — it is being able to prove them. That is **the data intelligence advantage**.



Sustainability scales on trust. Trust scales on data. The Zero Waste–Verimpact partnership turns verified data into intelligence — and intelligence into sustainable value.

Contact

Zero Waste - zerowaste.ae

Verimpact - verimpact.com

This white paper is prepared for informational purposes to describe a proposed collaboration and value proposition. It does not constitute legal, financial or investment advice. Market figures are indicative, drawn from published third-party industry estimates that vary by source and methodology, and are used illustratively. Details of the UAE Climate Change Law (Federal Decree-Law No. (11) of 2024) are drawn from PwC Middle East, "UAE Climate Change Law: What it means for entities and how to prepare" (June 2025); for specific obligations, entities should consult the law and qualified advisors. Framework references (GRI, IFRS S1/S2, TNFD, GRESB, ISO, GHG Protocol) are used descriptively and remain the property of their respective standard-setters.