

Supply Chain and Operations Management

Advancing Green Procurement in Humanitarian Supply Chains

An Assessment of Supplier Sustainability, Circular Economy Systems, and Market Readiness in Western Kenya

September 2026



About HELP Logistics

As a unique non-profit subsidiary of the Kühne Foundation, HELP Logistics AG has been advancing logistics excellence in the humanitarian and development sectors since 2014. Headquartered in Switzerland, we operate across the Middle East, Africa, Asia-Pacific, and Europe. Our team of over 40 professionals supports governments, international and local NGOs, UN agencies, the IFRC and its national societies, and private-sector partners. Through these partnerships, we strengthen supply chain strategy and operations, advance professional and talent development, and shape policy and innovation through thought leadership.

The Nairobi office plays a pivotal role in advancing humanitarian supply chain transformation across the region. With a strong focus on the unique operational and contextual challenges of East and Southern Africa, the office supports partners through evidence-based analysis, capacity strengthening, and co-creation of innovative solutions. Over the years, it has built trusted partnerships with local and international organizations, government institutions, and academic networks, positioning itself as a key enabler of resilient and inclusive supply chains in both Anglophone and cross-border context.

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Abbreviations

CHORD	Centre for Humanitarian Logistics and Regional Development
CGHR	Centre for Global Health Research
HELP	Humanitarian and Emergency Logistics Project
ICT	Information and Communication Technology
ISO	International Organization for Standardization
KEMRI	Kenya Medical Research Institute
NGO	Non-Governmental Organization
PSA	Pamela Steele Associates
SME	Small and Medium-Sized Enterprise
TCO	Total Cost of Ownership
UN	United Nations
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
WASH	Water, Sanitation and Hygiene
WORM	Waste-Oriented Resource Management Project
WREC	Waste and Resources Coalition

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Executive Summary

Background

Environmental sustainability is becoming a progressively important priority within humanitarian and development supply chains. Procurement decisions influence greenhouse gas emissions, resource consumption, packaging waste, transportation impacts, and end-of-life disposal practices. As humanitarian organizations seek to reduce their environmental footprint while maintaining operational effectiveness, green procurement has emerged as a key mechanism for integrating environmental considerations into supply chain decision-making (Carter & Rogers, 2008; UNHCR, 2023).

In Kenya, these sustainability pressures overlap with broader challenges, including climate vulnerability, increasing waste generation, infrastructure limitations, and growing donor expectations regarding environmentally responsible operations. While sustainability commitments continue to expand across humanitarian and development organizations, limited evidence exists regarding the readiness of local supplier markets to support large-scale green procurement implementation (UNFPA, CHORD, 2024; Steele et al., 2026b).

To support ongoing efforts to strengthen sustainable procurement practices within humanitarian and development supply chains, the Waste and Resources Coalition (WREC) initiated a Green Procurement Market Assessment within Kenya. The assessment was implemented by HELP Logistics in collaboration with Pamela Steele Associates (PSA) and sought to evaluate supplier sustainability maturity, environmental performance, circular economy systems, reporting capacity, and market readiness across procurement categories relevant to humanitarian and development operations in Western Kenya.

Assessment Overview

The assessment adopted a mixed-methods approach combining literature review, supplier interviews, field observations, site visits, document review, and sustainability maturity scoring. Eleven representative organizations were assessed across sectors including healthcare, renewable energy, WASH infrastructure, packaging and manufacturing, waste management, recycling, mobility, and medical supply systems.

Suppliers were evaluated across five dimensions:

- Environmental governance;
- Sustainable products and operations;
- Circular economy and waste management;
- Environmental reporting and data systems; and
- Market readiness and supply chain integration.

The resulting sustainability maturity assessment provides one of the first market-based evaluations of green procurement readiness within the Western Kenya supplier ecosystem.

Key Strategic Finding

The assessment finds that green procurement in Western Kenya is increasingly feasible, not because sustainability systems are already fully mature, but because a growing number of suppliers have begun integrating renewable energy, circular economy practices, resource-efficiency measures, and environmentally preferable products into their operations.

The market should therefore be understood as a sustainability ecosystem in transition rather than a market lacking sustainability capability.

The key constraints to wider adoption are no longer the absence of greener alternatives. Instead, the most significant barriers relate to weak environmental reporting systems, limited sustainability demand outside donor-funded procurement, financing constraints, fragmented sustainability standards, and insufficient procurement incentives.

This finding suggests that future interventions should focus less on awareness creation and more on strengthening procurement systems, supplier development, environmental reporting, and market incentives.

Key Findings

Sustainability Capability Already Exists Within the Market

The assessment identified multiple examples of sustainability innovation across the supplier ecosystem. Examples include solar-powered water infrastructure, biomass briquette production from agricultural waste, circular manufacturing using bagasse-based inputs, community-based recycling and composting systems, sustainable packaging alternatives, and low-emission mobility solutions.

The overall supplier sustainability maturity score was 3.35 out of 5, indicating an emerging-to-intermediate sustainability landscape. The strongest-performing sectors were WASH and solar infrastructure, renewable energy, mobility systems, and sustainable packaging, all of which demonstrated commercially viable sustainability solutions and relatively strong operational performance.

These findings challenge the common assumption that local supplier markets lack the capacity to support sustainable procurement objectives. In several sectors, sustainability capability already exists and is operationally proven.

Operational Sustainability Often Exceeds Governance Maturity

One of the most significant findings emerging from the assessment is the distinction between operational sustainability and institutional sustainability maturity.

Several suppliers demonstrated renewable energy integration, waste recovery systems, circular economy practices, and resource-efficiency measures despite lacking formal environmental certifications, carbon accounting systems, sustainability reporting frameworks, or dedicated sustainability departments.

This finding suggests that sustainability innovation within Western Kenya is frequently driven by operational adaptation, entrepreneurial problem-solving, and resource-efficiency considerations rather than formal compliance systems. Consequently, supplier sustainability assessments should evaluate operational performance alongside governance structures rather than relying exclusively on certification status as an indicator of sustainability performance.

Stakeholder validation reinforced this interpretation of the market. Participants broadly confirmed that sustainability capability and environmentally preferable solutions already exist across the assessed sectors, while emphasizing that the next phase of progress depends on stronger procurement demand, practical environmental reporting systems, supplier development, financing, and clearer market incentives. The validation therefore supports the characterization of Western Kenya as a **market in transition**: operational sustainability is emerging faster than the institutional systems required to measure, reward, and scale it.

Circular Economy Systems Represent a Major Opportunity

Circular economy implementation emerged as one of the strongest dimensions of sustainability performance across the supplier ecosystem.

Examples identified during the assessment included biomass fuel production, agricultural waste utilization, plastics recovery, composting initiatives, repairable mobility systems, and circular manufacturing processes. These activities align closely with circular economy principles emphasizing resource recovery, reuse, recycling, and waste-to-value approaches (Kirchherr, Reike, & Hekkert, 2017).

The findings indicate that circular economy initiatives already provide a practical foundation for advancing green procurement within sectors characterized by high material consumption and waste generation.

Environmental Reporting Remains a Critical Weakness

Despite evidence of operational sustainability practices, environmental measurement and reporting systems remain significantly underdeveloped.

Most suppliers lacked carbon accounting systems, environmental baselines, lifecycle assessment capability, emissions inventories, and standardized sustainability indicators. As a result, procurement actors face challenges when attempting to compare supplier performance, evaluate environmental outcomes, or integrate sustainability criteria into procurement decision-making (Sarah, Besiou, & Soulier, 2024).

Strengthening environmental reporting systems therefore represents one of the most important opportunities for accelerating green procurement adoption.

Market Readiness Assessment

The assessment found substantial variations in market readiness across procurement categories.

High Readiness

- Renewable Energy
- WASH and Solar Infrastructure

These sectors demonstrated strong supplier capability, commercially viable sustainability solutions, and clear environmental and operational benefits.

Moderate Readiness

- Packaging and Manufacturing
- Healthcare Procurement

Greener alternatives already exist but remain constrained by cost considerations, certification requirements, regulatory obligations, and scaling challenges.

Low Readiness

- Municipal Disposal Systems

Infrastructure limitations, governance challenges, and limited investment continue to restrict sustainability adoption within municipal waste-management systems.

Overall, the findings indicate that green procurement implementation is increasingly feasible across several procurement categories, particularly where sustainability improvements generate both environmental and operational benefits.

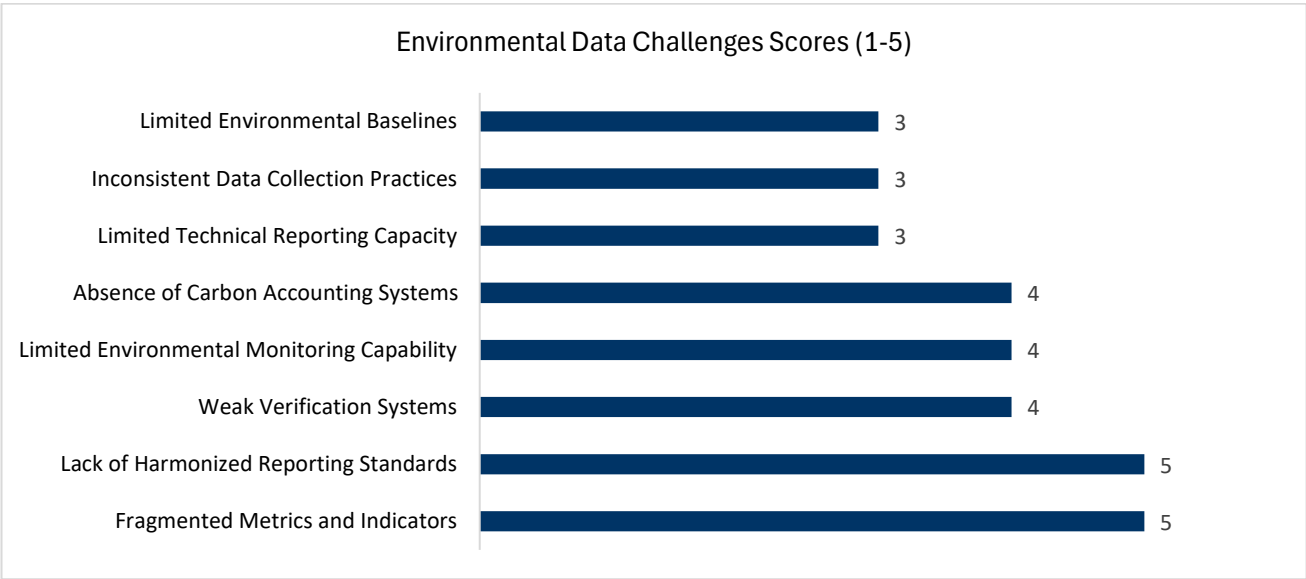
Key Barriers

Five recurring barriers emerged across the assessment:

1. Cost sensitivity and higher perceived costs of sustainable alternatives;
2. Weak sustainability demand outside donor-funded procurement;
3. Limited environmental reporting and measurement systems;
4. Infrastructure constraints, particularly in waste management; and
5. Fragmented sustainability standards and procurement requirements.

These findings are consistent with broader sustainable procurement literature, which identifies cost sensitivity, supplier capability limitations, reporting weaknesses, and governance fragmentation as persistent barriers to green procurement implementation (Brammer & Walker, 2011; UNFPA, CHORD, 2024).

Figure 1: Environmental Data Challenges



Source: HELP Logistics (2026)

Strategic Priorities

The assessment identifies six strategic priorities for advancing green procurement in Western Kenya:

1. Strengthen Procurement Governance

Integrate sustainability criteria into procurement evaluation systems and promote lifecycle procurement approaches that consider long-term environmental and operational value rather than acquisition cost alone (Hunkeler et al., 2008).

2. Develop Supplier Sustainability Capacity

Support suppliers, particularly SMEs, through training, reporting support, supplier development programs, and certification readiness initiatives.

3. Improve Environmental Measurement and Reporting

Establish simplified environmental reporting frameworks and common sustainability indicators to strengthen supplier evaluation and sustainability performance monitoring.

4. Expand Circular Economy Systems

Promote circular procurement approaches and strengthen partnerships supporting recycling, recovery, repair, reuse, and waste-to-value initiatives.

5. Create Financing and Market Incentives

Develop financing mechanisms and procurement incentives that encourage supplier investment in sustainability improvements.

6. Strengthen Ecosystem Coordination

Improve collaboration among suppliers, humanitarian organizations, donors, county governments, and sustainability initiatives to support market development and knowledge sharing.

Conclusion

The assessment demonstrates that Western Kenya possesses many of the foundational elements necessary to support green procurement within humanitarian and development supply chains. Sustainability innovation is already evident across multiple sectors, and several procurement categories demonstrate strong readiness for wider adoption.

The priority now is to strengthen existing sustainability capabilities, measure their performance, create appropriate incentives, and integrate them systematically into procurement processes.

If procurement actors, suppliers, donors, and policymakers work collectively to address the barriers identified in this assessment, Western Kenya is well positioned to become a leading regional example of practical, market-driven, and operationally grounded green procurement implementation.

Table 1: Market Readiness Assessment by Procurement Category

Category	Readiness Level	Key Barrier	Strategic Opportunity
Renewable Energy	High	Financing	Industrial fuel substitution
WASH Infrastructure	High	Upfront costs	Low-emission infrastructure
Packaging	Moderate–High	Scaling	Plastic substitution
Healthcare	Moderate	Certification and safety requirements	Sustainable healthcare products
Waste Management	Moderate–Low	Infrastructure	Circular recovery systems
Municipal Disposal	Low	Infrastructure and governance	Formal recycling ecosystems

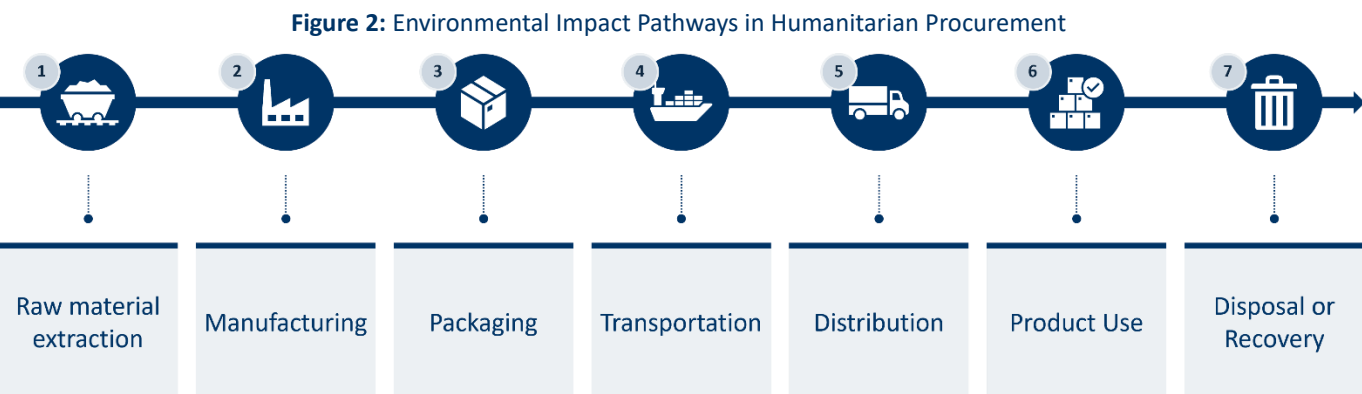
1. Introduction and Context

Why Green Procurement Matters

Procurement is one of the most influential functions within humanitarian and development supply chains. Decisions regarding the products and services organizations purchase affect not only cost, quality, and operational performance, but also the environmental footprint of supply chain activities. The environmental impacts associated with procurement extend across the entire product lifecycle, including raw material extraction, manufacturing, packaging, transportation, use, and end-of-life disposal (Carter & Rogers, 2008).

Historically, humanitarian procurement systems have prioritized speed, availability, reliability, and cost-effectiveness. These priorities remain essential given the urgent and resource-constrained environments in which humanitarian organizations operate. However, growing concern regarding climate change, resource depletion, waste generation, and environmental sustainability has increased attention on how procurement systems can contribute to more sustainable humanitarian operations (UNHCR, 2023).

Humanitarian supply chains are particularly relevant to sustainability discussions because they manage significant volumes of goods, infrastructure, transport services, packaging materials, healthcare commodities, and waste streams. Procurement decisions therefore influence greenhouse gas emissions, material consumption, packaging waste, healthcare waste generation, and broader environmental impacts throughout the supply chain (Kovács & Spens, 2007; Carter & Rogers, 2008).



Source: Adapted from (Carter & Rogers, 2008) and project assessment framework.

Figure 2 illustrates how environmental impacts are generated throughout the procurement lifecycle. Decisions regarding sourcing, product selection, transportation, packaging, durability, and disposal all influence the overall environmental footprint of procurement activities. Consequently, procurement systems represent an important leverage point for reducing environmental impacts while improving resource efficiency and operational sustainability.

Green Procurement in the Humanitarian Context

The growing emphasis on green procurement reflects broader changes occurring across humanitarian and development sectors. Donors, governments, international agencies, and humanitarian organizations are increasingly seeking to reduce the environmental impacts associated with aid delivery while maintaining operational effectiveness (UNHCR, 2023; UNFPA, CHORD, 2024).

At the same time, humanitarian organizations face a number of structural challenges when integrating sustainability into procurement systems. Humanitarian supply chains frequently operate under conditions characterized by demand uncertainty, compressed procurement timelines, infrastructure limitations, supplier constraints, and strict budgetary oversight (Kovács & Spens, 2007; Abidi, de Leeuw, & Klumpp, 2021).

These conditions can make sustainability integration more complex than in conventional commercial supply chains. Procurement teams must often balance environmental objectives against operational requirements such as rapid response, product availability, affordability, and service continuity.

Despite these challenges, sustainable procurement is increasingly viewed as a practical mechanism for reducing environmental impacts while supporting broader organizational commitments related to climate action, circular economy principles, and responsible resource management (Carter & Rogers, 2008; Kirchherr, Reike, & Hekkert, 2017).

Assessment Rationale

Although interest in green procurement continues to grow, relatively little evidence exists regarding the readiness of supplier markets in Kenya to support sustainability-oriented procurement systems. Existing discussions often focus on organizational commitments, sustainability policies, and procurement frameworks, while comparatively less attention is given to supplier capability, market readiness, environmental performance, and operational feasibility.

Several knowledge gaps remain.

First, there is limited evidence regarding the maturity of supplier sustainability practices within procurement categories commonly used by humanitarian and development organizations.

Second, little is known about the availability of environmentally preferable products and services within local markets and the extent to which suppliers are prepared to respond to sustainability requirements.

Third, environmental reporting and measurement systems remain underexplored despite their importance for supplier evaluation, sustainability monitoring, and procurement decision-making (Sarah, Besiou, & Soulier, 2024).

Addressing these gaps is important because supplier markets ultimately determine the practical feasibility of implementing green procurement systems. Procurement policies alone cannot deliver sustainability outcomes if supplier ecosystems lack the capacity, products, services, or infrastructure necessary to support implementation.

Assessment Objectives

The overall objective of this assessment was to evaluate supplier sustainability maturity and market readiness for advancing green procurement within humanitarian and development supply chains in Western Kenya.

The assessment sought to:

- Assess supplier sustainability maturity across governance, operational, and environmental dimensions;
- Evaluate the availability of environmentally preferable products and services;
- Identify barriers and opportunities affecting green procurement implementation;
- Assess environmental reporting and measurement capability;
- Evaluate market readiness across key procurement sectors; and
- Develop evidence-based recommendations to support the adoption of green procurement practices.

Report Structure

The report is organized into eight chapters.

Chapter 1 introduces the assessment context, rationale, objectives, and scope.

Chapter 2 describes the assessment approach, methodology, supplier sample, and sustainability maturity framework.

Chapter 3 presents the supplier landscape, sustainability maturity assessment, and availability of green alternatives across key procurement sectors.

Chapter 4 examines environmental performance, circular economy practices, sustainable products and packaging, and low-emission operational systems within the supplier ecosystem.

Chapter 5 analyzes environmental reporting systems, market barriers, and sector-level readiness for green procurement implementation.

Chapter 6 presents strategic recommendations for strengthening green procurement through procurement reform, supplier development, environmental reporting, circular economy initiatives, financing mechanisms, and ecosystem coordination.

Chapter 7 outlines a phased implementation roadmap, including priority actions, stakeholder responsibilities, and timelines for advancing green procurement adoption.

Chapter 8 synthesizes the key findings of the assessment, discusses their strategic implications, and reflects on the future outlook for green procurement in Western Kenya.

The report is supported by four annexes containing the supplier interview protocol, sustainability maturity framework and scoring methodology, supplier assessment summary, and detailed methodology.

2. Assessment Approach

Assessment Scope

The assessment examined supplier sustainability maturity and market readiness for advancing green procurement within humanitarian and development supply chains in Western Kenya. The study focused on supplier categories and procurement sectors commonly used by humanitarian organizations, development agencies, public institutions, and donor-funded programs.

The assessment was designed to evaluate not only the availability of environmentally preferable products and services, but also the operational systems, governance structures, circular economy practices, environmental reporting capabilities, and market conditions that influence the implementation of green procurement.

Table 2: Scope of the Assessment

Assessment Dimension	Coverage
Geographic Scope	Western Kenya and Lake Basin Region
Assessment Approach	Supplier-focused market assessment
Methodology	Mixed-methods assessment combining interviews, field observations, site visits, document review, and sustainability scoring
Supplier Sample	11 representative organizations
Product Categories	Medical supplies, renewable energy products, WASH infrastructure, packaging materials, mobility solutions
Service Categories	Waste management, recycling, healthcare waste treatment, transport and logistics
Assessment Dimensions	Environmental governance, sustainable operations, circular economy, environmental reporting, market readiness
Intended Users	Humanitarian organizations, development agencies, procurement practitioners, donors, policymakers, and suppliers

The supplier-focused approach was selected because supplier capability ultimately determines whether sustainability objectives can be translated into practical procurement outcomes. Understanding supplier readiness therefore provides a more realistic assessment of green procurement feasibility than policy analysis alone.

Assessment Methodology

The assessment adopted a mixed-methods approach integrating qualitative and quantitative data collection techniques. Information was gathered through:

- Semi-structured supplier interviews;
- Operational site visits;
- Direct field observations;
- Document review; and
- Sustainability maturity scoring.

The combination of these methods enabled the triangulation of multiple sources of evidence and reduced reliance on self-reported information alone. Site visits and field observations were particularly important for verifying waste-management practices, circular economy initiatives, renewable energy systems, environmental infrastructure, and operational sustainability measures.

The assessment was conducted with suppliers operating across multiple sectors relevant to humanitarian and development procurement systems, including healthcare, renewable energy, WASH infrastructure, packaging and manufacturing, mobility, waste management, and recycling.

Supplier Sample

A purposive sampling strategy was used to identify organizations operating within procurement categories of strategic relevance to humanitarian and development supply chains. The sample was designed to capture variation in organizational size, sector representation, sustainability maturity, and operational function.

Table 3: Assessed Suppliers

Supplier	Sector
Davis & Shirliff	WASH and Solar Infrastructure
IMA Trading Company	Renewable Energy
Kibos Paper & Packaging	Packaging and Manufacturing
Buffalo Bicycles	Mobility and Transport
Clean Kisumu	Waste Management and Recycling
KEMRI–CGHR Kisumu	Healthcare Research
Kisumu County Referral Hospital	Public Healthcare
Avenue Healthcare Kisumu	Private Healthcare
EcoMed Supplies Ltd	Medical Distribution
Premium Solutions Kenya	Healthcare Waste Services
Kasese Dumpsite	Municipal Waste System

The sample includes manufacturers, service providers, healthcare institutions, renewable energy suppliers, recyclers, waste-management operators, and public-sector infrastructure systems. Together, these organizations provide a representative view of sustainability capability across procurement categories commonly used within humanitarian and development operations.

Sustainability Maturity Framework

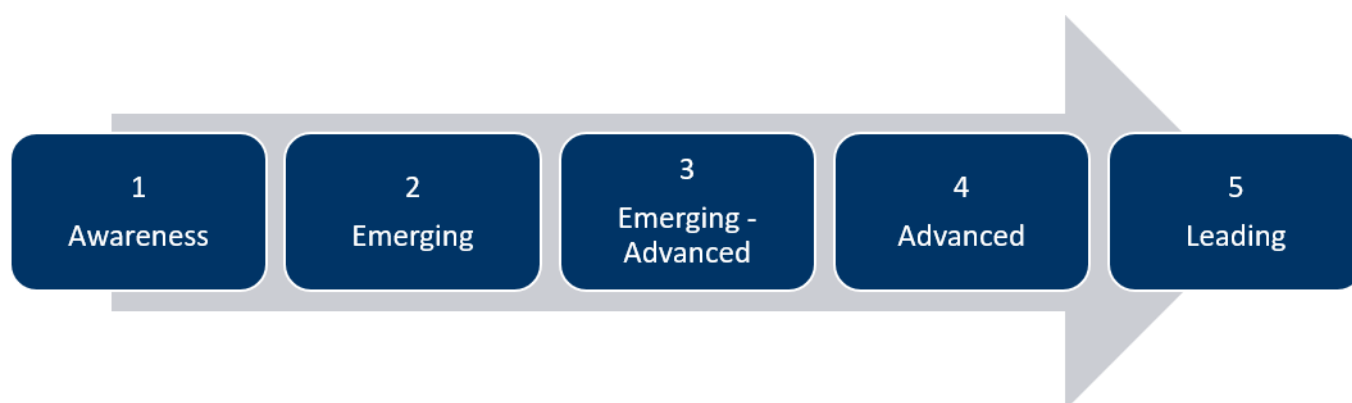
Supplier sustainability performance was assessed using a structured sustainability maturity framework developed from sustainable procurement literature and adapted to the humanitarian procurement context (Carter & Rogers, 2008; Suering & Muller, 2008; UNFPA, CHORD, 2024).

The framework evaluates suppliers across five dimensions:

1. Environmental Governance;
2. Sustainable Products and Operations;
3. Circular Economy and Waste Management;
4. Environmental Reporting and Data Systems; and
5. Market Readiness and Supply Chain Integration.

Each supplier was scored using a five-point maturity scale ranging from basic awareness to leading practice.

Figure 3: Sustainability Maturity Framework



Source: Adapted from sustainable procurement maturity models and project assessment framework.

The framework recognizes that sustainability is not a twofold condition. Organizations typically progress through different stages of development as environmental practices become increasingly integrated into governance systems, operational activities, reporting mechanisms, and supply chain relationships.

Importantly, the framework was designed to assess both institutional capability and practical implementation. This distinction proved particularly important because several suppliers demonstrated strong operational sustainability practices despite having relatively limited reporting systems, certifications, or formal sustainability governance structures.

Stakeholder Validation

Following completion of the assessment, the findings and strategic recommendations were presented to participating suppliers and relevant stakeholders during a validation workshop held in August 2026. Participants broadly confirmed that the findings reflected current market conditions and provided additional perspectives on product suitability, market demand, infrastructure accessibility, supplier development, environmental reporting, and implementation priorities. These observations were considered in finalizing the report.

Limitations

Several limitations should be considered when interpreting the findings.

First, some information relied on supplier self-reporting. Although site visits, field observations, and document reviews were used to verify findings where possible, independent environmental verification systems were not consistently available across all suppliers.

Second, environmental reporting systems remain underdeveloped across much of the supplier ecosystem. Limited availability of carbon accounting systems, environmental baselines, and standardized sustainability indicators restricted the ability to independently verify environmental performance in some cases.

Third, the assessment focused on Western Kenya and the Lake Basin region. While the findings provide valuable insights into supplier sustainability capability within this context, they may not fully represent conditions across all regions of Kenya.

Finally, the purposive sampling approach was designed to assess strategically relevant suppliers rather than generate statistically representative market estimates. Consequently, findings should be interpreted as an assessment of supplier capability and market readiness rather than a comprehensive census of the wider supplier market.

Despite these limitations, the assessment provides a robust evidence base for understanding the opportunities, constraints, and readiness conditions affecting the implementation of green procurement within Western Kenya.

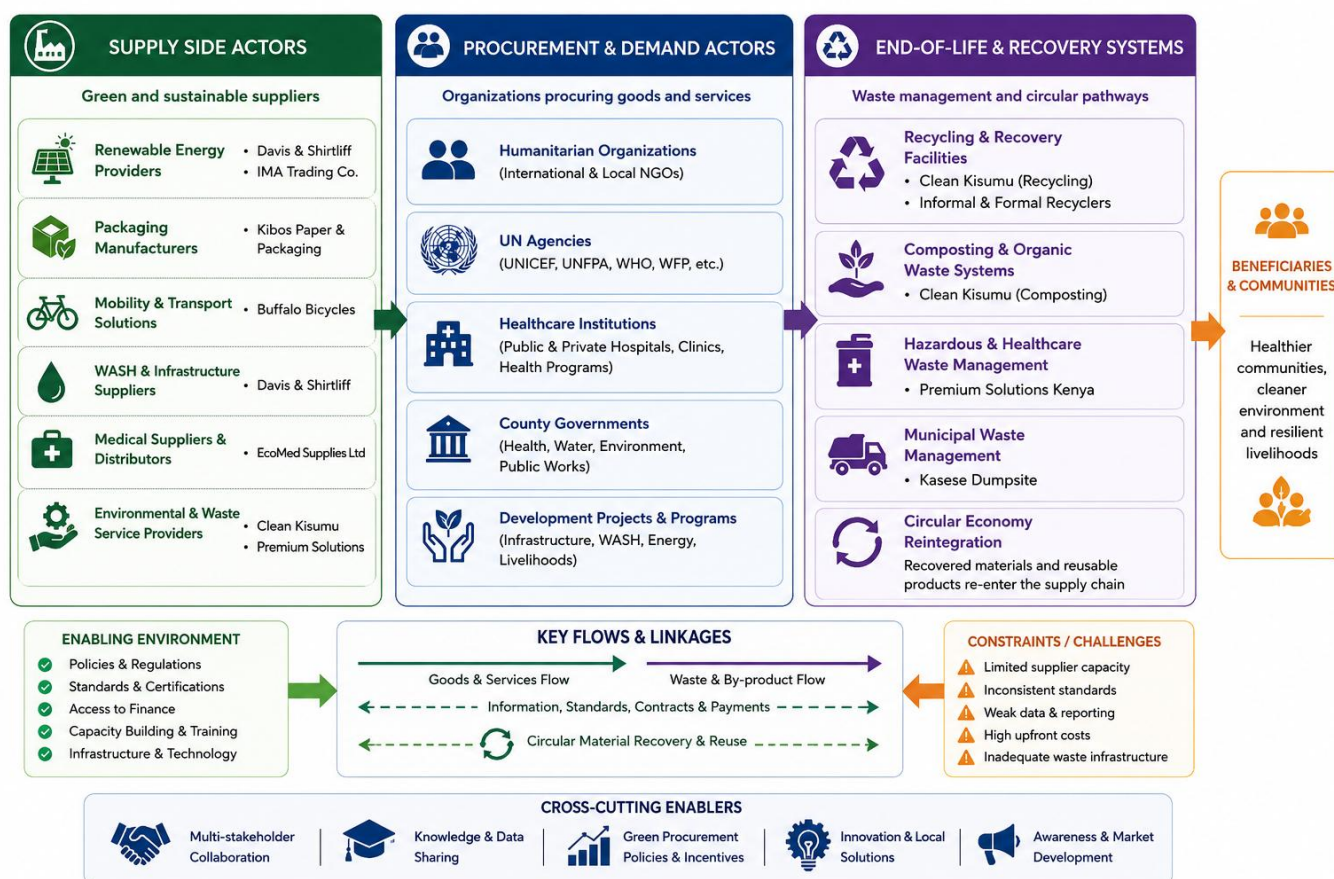
3. Market Landscape and Supplier Sustainability

Overview of the Green Procurement Ecosystem

The supplier ecosystem supporting humanitarian and development procurement in Western Kenya is diverse and increasingly characterized by emerging sustainability practices. The assessment identified organizations operating across renewable energy, WASH infrastructure, healthcare, packaging and manufacturing, waste management, recycling, mobility, and medical supply systems. Together, these sectors influence the environmental footprint of procurement activities through their production methods, sourcing practices, transport systems, waste-management approaches, and end-of-life product handling.

Unlike many discussions of sustainable procurement that focus primarily on policy commitments and procurement procedures, this assessment examined supplier capability and market readiness. The findings demonstrate that sustainability capability is already present across several procurement categories and is increasingly reflected in operational practices and business models.

Figure 4: Green Procurement Ecosystem in Western Kenya



Source: HELP Logistics (2026).

The ecosystem illustrates the interconnected nature of procurement, service delivery, waste management, and resource recovery. Renewable energy providers, manufacturers, healthcare institutions, transport providers, recyclers, and waste-management operators each contribute to the environmental performance of procurement systems. The assessment also identified emerging circular economy linkages through recycling, composting, waste recovery, and renewable energy production.

However, sustainability capability remains unevenly distributed across the ecosystem. While some sectors demonstrate relatively advanced sustainability integration, others continue to face significant infrastructure, financing, and governance constraints.

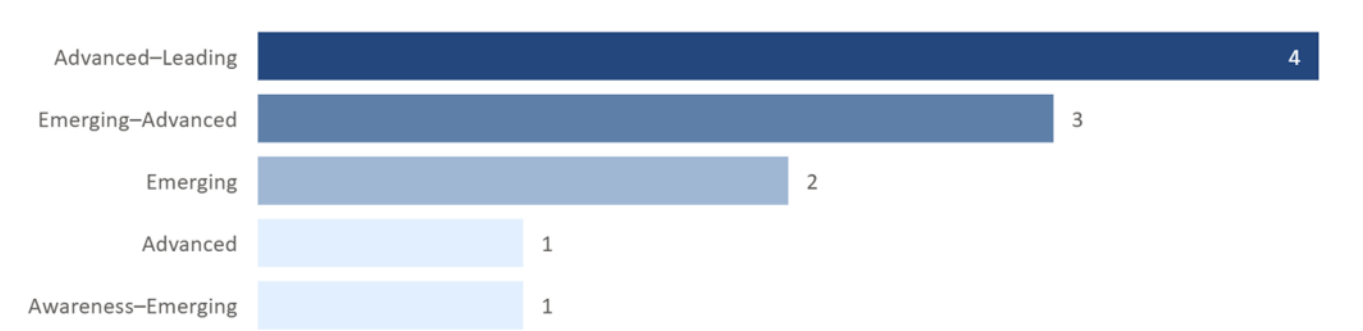
Supplier Sustainability Maturity

Supplier sustainability maturity was assessed across five dimensions:

- Environmental governance;
- Sustainable products and operations;
- Circular economy and waste management;
- Environmental reporting and data systems; and
- Market readiness and supply chain integration.

The assessment generated an overall average sustainability maturity score of **3.35 out of 5**, indicating an emerging-to-intermediate sustainability landscape.

Figure 5: Supplier Sustainability Maturity Distribution



Source: HELP Logistics (2026).

The maturity distribution demonstrates that sustainability capability already exists across much of the supplier ecosystem. Four suppliers were classified within advanced maturity categories, while several others demonstrated emerging-to-advanced sustainability capability.

Importantly, the findings suggest that sustainability maturity should not be viewed as a dual condition. Suppliers occupy different stages of development and frequently demonstrate strengths in some dimensions while facing limitations in others. This variation highlights the importance of supplier development approaches that support progressive improvement rather than relying exclusively on compliance-based requirements.

Table 4: Supplier Sustainability Summary

Supplier	Sector	Maturity Classification
Davis & Shirliff	WASH and Solar Infrastructure	Advanced-Leading
IMA Trading Company	Renewable Energy	Advanced
Kibos Paper & Packaging	Packaging and Manufacturing	Advanced
Buffalo Bicycles	Mobility and Transport	Emerging-Advanced
Clean Kisumu	Waste Management and Recycling	Emerging-Advanced
KEMRI-CGHR Kisumu	Healthcare Research	Advanced-Leading
Kisumu County Referral Hospital	Public Healthcare	Emerging-Advanced
Avenue Healthcare Kisumu	Private Healthcare	Emerging
EcoMed Supplies Ltd	Medical Distribution	Emerging
Premium Solutions Kenya	Healthcare Waste Services	Emerging-Advanced
Kasese Dumpsite	Municipal Waste System	Awareness-Emerging

The results demonstrate substantial variation in sustainability maturity across sectors. Organizations operating in renewable energy, sustainable infrastructure, mobility, and circular manufacturing generally demonstrated stronger sustainability integration than suppliers operating within municipal waste systems and conventional healthcare service environments.

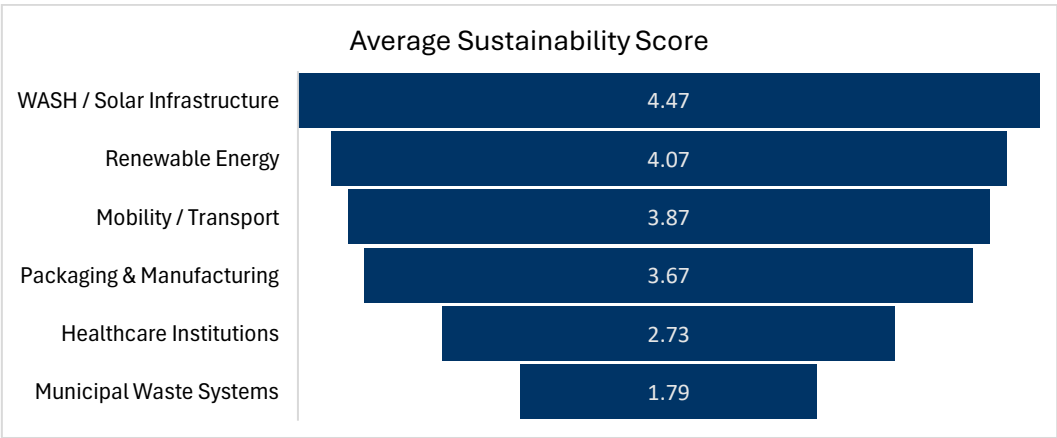
A distinctive finding of the assessment is that sustainability maturity within Western Kenya is frequently stronger operationally than institutionally. Several suppliers demonstrated renewable energy integration, resource-efficiency measures, waste recovery, circular economy practices, and environmentally preferable products despite having limited formal environmental certification, carbon accounting, sustainability reporting, or dedicated sustainability functions.

This suggests that sustainability innovation is often driven by operational adaptation, entrepreneurship, resource efficiency, and business value rather than by compliance requirements alone. Procurement systems should therefore assess practical environmental performance alongside governance structures and certification status. Otherwise, suppliers already delivering meaningful sustainability outcomes may remain insufficiently recognized within conventional supplier evaluation systems.

Sector Sustainability Performance

The assessment identified significant differences in sustainability maturity across procurement sectors.

Figure 6: Average Sustainability Scores by Sector



Source: HELP Logistics (2026).

The strongest-performing sectors were:

- WASH and Solar Infrastructure (4.47);
- Renewable Energy (4.07);
- Mobility and Transport (3.87); and
- Packaging and Manufacturing (3.67).

These sectors benefit from business models in which environmental sustainability is closely linked to operational efficiency, resource optimization, and long-term cost savings.

By contrast, healthcare institutions and municipal waste systems recorded lower sustainability scores. These sectors face more complex regulatory requirements, infrastructure limitations, and operational constraints that restrict opportunities for rapid sustainability integration.

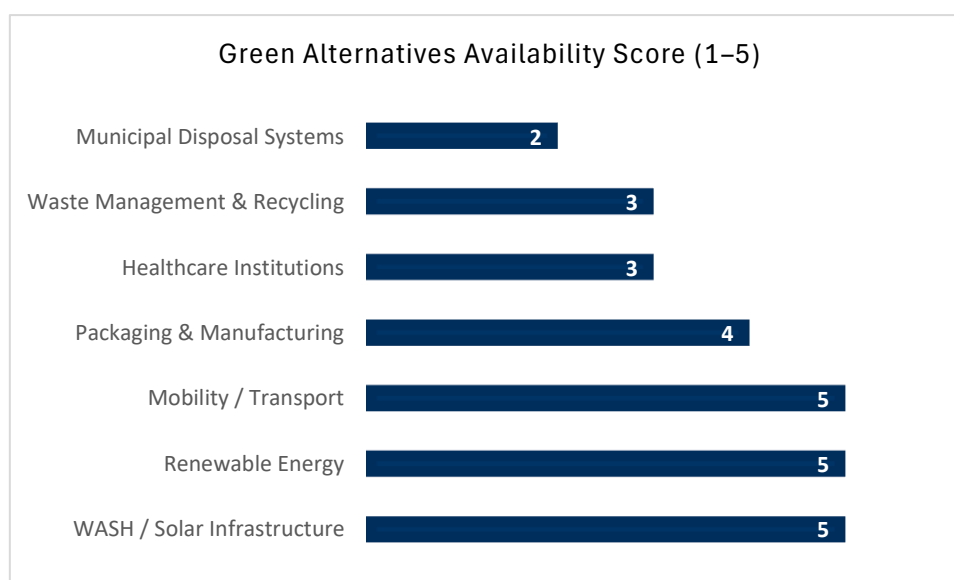
The findings suggest that market readiness for green procurement is not uniform across sectors. Instead, sustainability capability reflects the interaction between commercial incentives, infrastructure availability, organizational capacity, and operational requirements.

Availability of Green Alternatives

The central objective of the assessment was to determine whether environmentally preferable alternatives already exist within procurement categories commonly used by humanitarian and development organizations.

The findings demonstrate that green alternatives are already available across several sectors.

Figure 7: Availability of Green Alternatives by Sector



Source: HELP Logistics (2026)

The strongest availability of green alternatives was observed within:

- Renewable energy systems;
- WASH and Solar Infrastructure;
- Mobility and transport systems; and
- Sustainable packaging.

Examples identified during the assessment included:

- Solar-powered water systems;
- Biomass briquettes produced from agricultural waste;
- Durable cargo bicycles;
- Recyclable paper packaging; and
- Circular manufacturing systems using recovered materials.

Healthcare procurement demonstrated moderate availability of greener alternatives, including reusable products, reduced-plastic packaging systems, and selected environmentally preferable consumables. However, wider adoption remains constrained by regulatory requirements, product approvals, and infection-control considerations.

Municipal waste systems demonstrated the lowest availability of sustainable alternatives due to infrastructure limitations, limited investment, and continued reliance on disposal-oriented waste-management systems.

Importantly, the existence of a greener alternative does not automatically make it suitable for procurement. Validation participants emphasized that environmentally preferable alternatives must also be **fit for purpose**, meeting required standards for technical performance, safety, durability, maintenance, regulatory compliance, and operational reliability. This consideration is particularly important in healthcare and technical procurement categories, where environmental preference cannot override essential functional or safety requirements.

The findings indicate that the primary challenge is no longer the complete absence of sustainable alternatives. Instead, the challenge lies in scaling existing solutions and integrating them more effectively into procurement systems.

Supplier Spotlight: Circular Economy Innovation

IMA Trading Company

IMA Trading Company represents one of the strongest examples of circular economy implementation identified during the assessment. The company converts sugarcane bagasse, an agricultural by-product traditionally treated as waste, into biomass briquettes that provide a lower-emission alternative to conventional fuels.

The business model demonstrates how waste streams can be transformed into productive economic inputs while simultaneously reducing waste disposal challenges and creating commercially viable sustainability solutions.

Clean Kisumu

Clean Kisumu provides an example of community-based circular economy implementation through waste collection, plastics recovery, composting, recycling partnerships, and environmental awareness initiatives.

The organization demonstrates how localized sustainability solutions can emerge even in contexts characterized by limited infrastructure and financing constraints. Its activities highlight the important role that SMEs and community enterprises can play in supporting circular procurement objectives.

Strategic Interpretation

The market assessment reveals a supplier ecosystem that is simultaneously promising and uneven.

The most important finding emerging from the assessment is that Western Kenya already possesses many of the foundational elements necessary to support green procurement. Sustainability innovation is evident across renewable energy, WASH infrastructure, mobility systems, sustainable packaging, recycling initiatives, and circular manufacturing.

At the same time, significant challenges remain. Sustainability capability is unevenly distributed, environmental reporting systems remain weak, and several sectors continue to face infrastructure and financing constraints.

The market should therefore not be viewed as lacking sustainability capability. Rather, it should be understood as a sustainability ecosystem in transition. The next phase of market development will depend less on introducing new sustainability concepts and more on strengthening existing supplier capability, expanding market demand, and creating procurement systems that recognize and reward sustainability performance.

4. Environmental Performance and Circular Economy Systems

Overview

The previous chapter demonstrated that sustainability capability already exists across several sectors within the Western Kenya supplier ecosystem. This chapter examines how sustainability is implemented operationally and evaluates the environmental practices that currently support green procurement objectives.

The assessment focused on four areas of environmental performance:

- Resource efficiency and sustainable operations;
- Circular economy and waste-management practices;
- Sustainable product and packaging systems; and
- Low-emission infrastructure and mobility solutions.

The findings reveal that environmental performance is often stronger than formal sustainability governance systems would suggest. Many suppliers demonstrated practical sustainability innovations despite having limited certification systems, environmental reporting frameworks, or dedicated sustainability departments.

This finding reinforces an important conclusion emerging throughout the assessment: sustainability capability within Western Kenya is frequently driven by operational adaptation, resource efficiency, and business innovation rather than compliance-driven sustainability frameworks.

Resource Efficiency and Operational Sustainability

Several suppliers demonstrated significant efforts to reduce resource consumption, improve operational efficiency, and integrate sustainability into core business activities.

Renewable energy providers and infrastructure suppliers demonstrated particularly strong performance. Solar-powered water systems, decentralized energy solutions, and renewable fuel alternatives were already being deployed in commercial, public-sector, and community settings.

Similarly, several organizations reported initiatives focused on:

- Energy efficiency;
- Water conservation;
- Waste reduction;
- Sustainable material use; and
- Product durability.

In many cases, sustainability initiatives were adopted because they generated operational benefits, including reduced operating costs, improved efficiency, and increased resilience.

This finding is consistent with sustainable procurement literature, which suggests that sustainability interventions are most likely to be adopted when environmental and operational objectives reinforce one another (Carter & Rogers, 2008).

Figure 8: Resource and Waste Management Performance Across Suppliers

Entity	Energy Score	Materials Sourcing Score	Recycled Inputs Score	Waste Management Score	Recycling Score	Circular Initiatives Score	Sustainable Packaging Score	Reduction Efforts Score	Emissions Reduction Score
Avenue Healthcare Kisumu	1		5	5	1	1	5	1	5
Buffalo Bicycles / World Bicycle Relief	3	3	2	4	3	5	2	2	5
Clean Kisumu General Investments Ltd	3	3	4	5	5	4	3	3	4
Davis & Shirtliff				4	4	4	3		5
EcoMed Supplies Ltd				3	2	1	3		1
IMA Trading Company Ltd	4	5	5	5	5	5	3	2	5
Kasese Dumpsite / Informal Recycling Ecosystem	1			2	3	2		1	1
KEMRI-CGHR Kisumu	3	2	1	5	2	4	2	2	2
Kibos Paper & Packaging Ltd	3	5	3	4	4	5	5	4	3
Kisumu County Referral Hospital / JOOTRH	2	2	1	4	1	2	2	1	1
Premium Solutions Kenya	2	2	1	5	2	2	2	1	2

Score Key: 1 – Very Low 2 – Low 3 – Moderate 4 – High 5 – Very High

Source: HELP Logistics (2026)

The figure illustrates substantial variation in environmental performance across suppliers and sustainability dimensions. Strong performance was observed among renewable energy providers, circular manufacturers, mobility systems, and community-based recycling initiatives.

The results also demonstrate that environmental performance is multidimensional. Suppliers frequently performed strongly in one area, such as waste reduction or circularity, while facing limitations in areas such as emissions measurement or sustainability reporting.

Circular Economy Systems

Circular economy implementation emerged as one of the strongest sustainability dimensions identified during the assessment.

Rather than relying exclusively on disposal-oriented approaches, several suppliers have developed systems that recover value from waste streams through reuse, recycling, repair, composting, and waste-to-energy initiatives. These approaches align with circular economy principles that seek to keep materials in productive use for as long as possible while reducing waste generation and resource consumption (Kirchherr, Reike, & Hekkert, 2017).

The strongest examples were identified within renewable energy, packaging and manufacturing, mobility, and waste-management sectors.

Table 5: Circular Economy Performance

Supplier	Circularity Score
IMA Trading Company	5
Buffalo Bicycles	5
Kibos Paper & Packaging	5
Clean Kisumu	4
Kasese Dumpsite	2

The results indicate that several suppliers have already embedded circular economy principles within their operational models. In contrast, municipal disposal systems remain heavily dependent on conventional waste-disposal approaches and demonstrate more limited circularity.

The presence of high-performing suppliers suggests that circular economy capability is already present within the market and represents one of the strongest foundations for future green procurement initiatives.

Circular Economy Spotlight: Industrial Innovation

Figure 9: Circular Economy Activities at IMA Trading Company



IMA Trading Company provides one of the strongest examples of industrial circular economy implementation identified during the assessment.

The company converts sugarcane bagasse, an agricultural by-product traditionally treated as waste, into biomass briquettes that provide a lower-emission alternative to conventional fuels. This model simultaneously addresses waste management challenges, reduces dependence on fossil fuels, and creates commercially viable products from previously underutilized materials.

The case illustrates how sustainability can be embedded directly within manufacturing and production systems while generating both environmental and economic value.

Community-Based Circular Economy Systems

Circular economy innovation is not limited to industrial-scale operations. The assessment also identified strong examples of community-based sustainability initiatives operating within local waste-management systems.

Figure 10: Circular Economy Operations at Clean Kisumu



Source: HELP Logistics (2026).

Clean Kisumu operates a range of activities focused on waste collection, plastics recovery, composting, recycling partnerships, and environmental awareness.

Unlike many large-scale waste-management systems, these activities rely on localized resource recovery and community participation. The model demonstrates how practical sustainability solutions can emerge even in contexts characterized by infrastructure limitations and resource constraints.

The findings suggest that SMEs and community enterprises may play an important role in supporting future circular procurement initiatives, particularly in sectors where formal infrastructure remains underdeveloped.

Sustainable Products and Packaging

The assessment identified several examples of environmentally preferable products and packaging systems across the supplier ecosystem.

Notable examples include:

- Bagasse-based paper production;
- Recyclable packaging materials;
- Reduced-plastic packaging systems;
- Durable mobility products;
- Reusable healthcare products; and
- Renewable energy technologies.

Packaging represents a particularly important opportunity for green procurement because packaging materials accompany almost every category of procured goods, including medical supplies, WASH commodities, relief items, and healthcare products.

Several suppliers demonstrated that sustainable packaging alternatives are already commercially available. However, wider adoption remains dependent on procurement demand, market awareness, and the ability of procurement systems to recognize lifecycle value rather than focusing exclusively on acquisition costs.

Healthcare procurement presents a more complex challenge. Although some environmentally preferable alternatives are available, healthcare providers continue to operate under strict infection-control, safety, and regulatory requirements that limit opportunities for rapid product substitution.

Consequently, sustainability improvements within healthcare procurement are likely to occur progressively rather than through large-scale transformation.

Low-Emission Infrastructure and Mobility

The assessment identified several examples of low-emission technologies and operational models that could support green procurement objectives.

Solar-powered water infrastructure, renewable energy systems, and durable cargo bicycles demonstrated particularly strong potential for reducing environmental impacts while maintaining operational effectiveness.

These solutions are notable because they often generate environmental and operational benefits simultaneously. Reduced fuel consumption, lower operating costs, increased durability, and improved service reliability can strengthen the business case for sustainability investments.

This finding supports the growing emphasis on lifecycle procurement approaches, which evaluate products and services based on long-term value rather than acquisition cost alone (Hunkeler, Lichtenvort, & Rebitzer, 2008). In practical terms, lifecycle procurement should also consider expected product lifespan, maintenance and after-sales support, availability of spare parts, energy consumption, supplier take-back arrangements, and responsible end-of-life disposal.

Strategic Implications

Three strategic conclusions emerge from the environmental performance assessment.

First, sustainability capability already exists across multiple procurement categories. Renewable energy, circular manufacturing, sustainable packaging, mobility systems, and waste recovery initiatives demonstrate that environmentally preferable alternatives are not merely theoretical possibilities but operational realities within the market.

Second, operational sustainability frequently exceeds governance maturity. Several suppliers demonstrated strong environmental performance despite lacking formal certifications, advanced reporting systems, or dedicated sustainability departments. This suggests that procurement systems should evaluate practical sustainability outcomes alongside governance structures.

Third, circular economy systems represent one of the most significant opportunities for advancing green procurement. Existing examples of waste recovery, recycling, repair, composting, and waste-to-value initiatives provide a strong foundation upon which future procurement strategies can build.

Taken together, these findings indicate that the sustainability transition within Western Kenya is already underway. The challenge is no longer whether sustainability practices exist, but how they can be strengthened, measured, and integrated more systematically into procurement systems.

5. Environmental Reporting, Market Barriers and Readiness Assessment

Introduction

The previous chapters demonstrated that sustainability capability already exists across several procurement sectors within Western Kenya. Renewable energy systems, circular manufacturing, sustainable packaging, waste recovery initiatives, and low-emission mobility solutions all illustrate the growing presence of environmentally preferable alternatives within the supplier market.

However, the assessment also revealed a significant gap between sustainability capability and sustainability adoption. While suppliers are increasingly implementing sustainability practices, these practices have not yet translated into widespread procurement transformation.

This chapter examines three interrelated issues affecting the adoption of green procurement:

- Environmental reporting and measurement systems;
- Market barriers affecting sustainability adoption; and
- Procurement sector readiness.

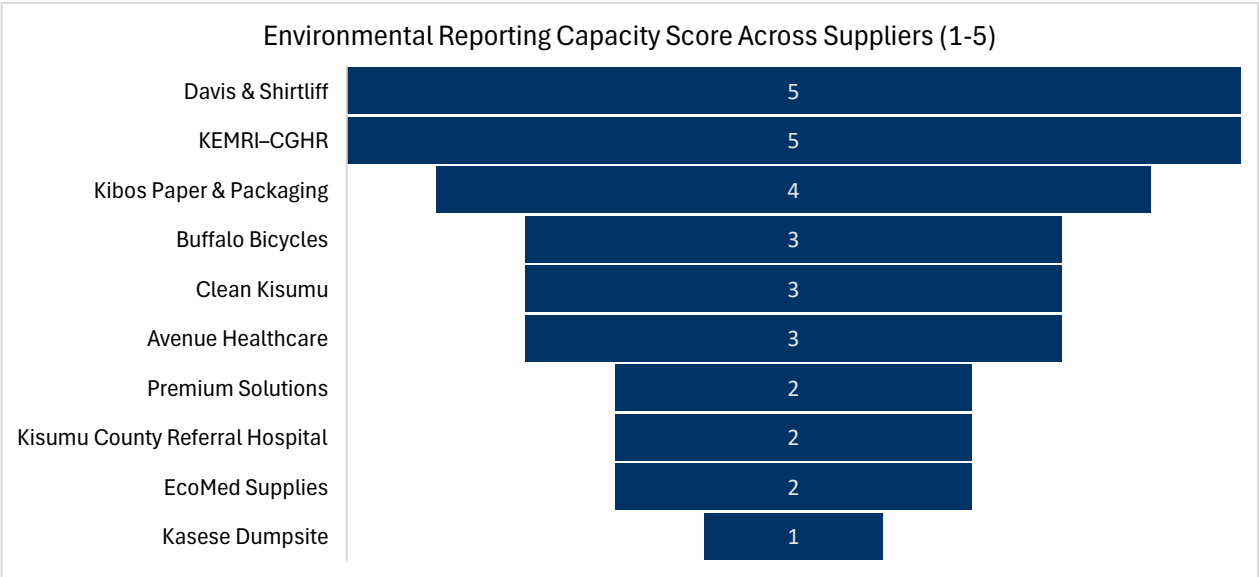
Together, these factors help explain why sustainability innovation remains concentrated within specific organizations and sectors rather than becoming standard procurement practice.

Environmental Reporting and Measurement Systems

Environmental reporting emerged as one of the weakest dimensions across the supplier ecosystem.

Although many suppliers demonstrated sustainability practices such as renewable energy integration, waste recovery, resource efficiency, and circular economy initiatives, relatively few organizations possessed systems capable of measuring and reporting environmental performance in a consistent manner.

Figure 11: Environmental Reporting Capacity Across Suppliers



Source: HELP Logistics (2026).

The assessment found that most suppliers lacked:

- Carbon accounting systems;
- Environmental baselines;
- Lifecycle assessment capability;
- Emissions inventories; and
- Standardized sustainability indicators.

This finding is consistent with broader research on sustainable procurement and humanitarian supply chains, which identifies environmental measurement as a persistent challenge affecting sustainability implementation and supplier evaluation (Schaltegger, Burritt, Beske, & Suering, 2014; Sarah, Besiou, & Soulier, 2024).

Importantly, the absence of formal reporting systems should not be interpreted as evidence of weak sustainability performance. In many cases, suppliers maintained operational data systems capable of supporting future environmental reporting. Fuel consumption records, waste-management logs, production records, and inventory systems were commonly observed during the assessment.

The challenge is therefore less about creating entirely new data systems and more about adapting existing operational data to generate meaningful environmental indicators.

Implications for Procurement

Weak environmental reporting creates significant challenges for procurement actors.

Without reliable environmental data, procurement teams cannot consistently:

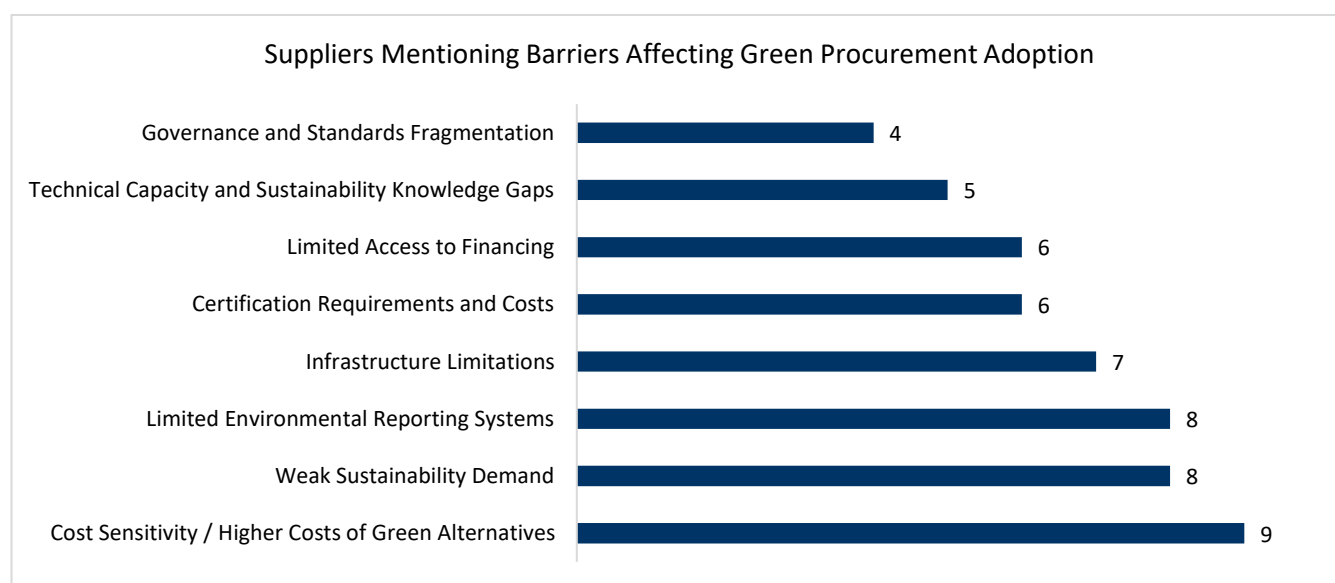
- Compare supplier sustainability performance;
- Evaluate environmental outcomes;
- Apply sustainability scoring systems;
- Track procurement-related environmental impacts; or
- Demonstrate progress toward sustainability objectives.

Consequently, strengthening environmental reporting systems represents one of the highest-priority opportunities for accelerating green procurement implementation.

Market Barriers Affecting Green Procurement

The assessment identified several recurring barriers affecting sustainability adoption across procurement sectors.

Figure 12: Key Barriers Affecting Green Procurement Adoption



Source: HELP Logistics (2026).

The findings demonstrate that barriers are not limited to supplier capability alone. Instead, sustainability adoption is influenced by a combination of financial, institutional, technical, and market-related factors.

Financial Constraints

Cost sensitivity emerged as the most frequently cited barrier.

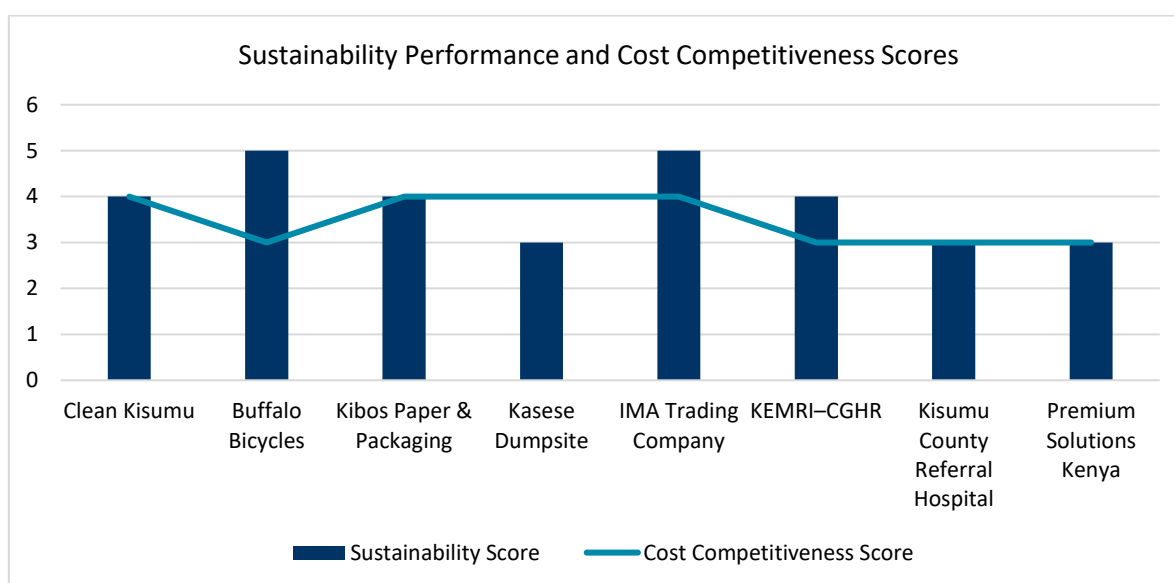
Suppliers consistently identified:

- Higher upfront costs of sustainable alternatives;
- Certification expenses;
- Limited access to financing;
- Import dependency; and
- Uncertain demand for sustainable products.

These findings mirror broader sustainable procurement literature, which identifies cost considerations as one of the most persistent barriers to sustainability adoption (Brammer & Walker, 2011).

However, the assessment also found evidence that sustainability and commercial competitiveness are not necessarily contradictory.

Figure 13: Sustainability Performance and Cost Competitiveness



Source: HELP Logistics (2026).

Several suppliers demonstrating strong sustainability performance also maintained relatively competitive cost profiles. Resource efficiency, waste recovery, localized sourcing, and renewable energy adoption often generated operational benefits that helped offset sustainability investments.

This finding supports the growing emphasis on lifecycle costing approaches, which evaluate products and services based on long-term value rather than acquisition cost alone (Hunkeler, Lichtenvort, & Rebitzer, 2008).

Weak Sustainability Demand

Suppliers repeatedly reported that sustainability demand remains concentrated among:

- United Nations agencies;
- International NGOs;
- Donor-funded programs; and
- Development organizations.

Outside these market segments, procurement decisions remain largely driven by cost, technical compliance, and availability.

This weak demand signal reduces incentives for suppliers to invest in sustainability reporting, certifications, product innovation, and environmental performance improvements. The validation discussion further highlighted that supplier development depends on the creation of predictable demand. Suppliers may be unable to justify investment in redesigned products, alternative materials, certification, or reporting systems where sustainability requirements remain isolated or project-specific. Greater coordination among humanitarian buyers, earlier communication of green technical specifications, and aggregation of

demand could provide suppliers with stronger incentives and sufficient lead time to develop environmentally preferable alternatives.

Supplier Capacity Constraints

Several suppliers reported challenges related to:

- Sustainability expertise;
- Environmental reporting capability;
- Certification readiness; and
- Technical sustainability knowledge.

These constraints were particularly evident among SMEs, despite the fact that many smaller enterprises demonstrated some of the strongest examples of sustainability innovation identified during the assessment.

This suggests that supplier development programs may generate greater impact than compliance-driven approaches alone.

Infrastructure Limitations

Infrastructure constraints remain particularly significant within waste-management and municipal disposal systems.

Several challenges were consistently identified:

- Landfill dependence;
- Limited recycling infrastructure;
- Weak waste segregation systems;
- Insufficient recovery facilities; and
- Limited investment.

These constraints restrict opportunities for circular economy implementation and environmentally responsible end-of-life management. The validation workshop also highlighted an important geographic dimension to infrastructure constraints. Recycling and recovery capacity may exist elsewhere in Kenya, but distance, transportation costs, limited aggregation systems, and logistical access can make these services difficult to utilize from Western Kenya. Infrastructure readiness should therefore be understood in terms of both the existence and practical accessibility of recovery systems.

Governance and Standards Fragmentation

Suppliers also highlighted challenges associated with differing sustainability requirements across procurement organizations.

Variations in:

- Reporting requirements;
- Sustainability criteria;
- Supplier assessment approaches; and
- Environmental standards

increase complexity and create additional burdens for suppliers attempting to engage with multiple procurement systems.

These findings are consistent with previous research highlighting fragmented governance arrangements as a barrier to sustainable procurement implementation (UNFPA, CHORD, 2024; Steele et al., 2026a).

Market Readiness Assessment

The assessment evaluated the readiness of different procurement sectors to support wider adoption of green procurement practices.

Readiness was assessed based on:

- Supplier sustainability capability;
- Availability of green alternatives;
- Infrastructure conditions;
- Reporting capacity; and
- Potential for scaling sustainability solutions.

Table 6: Market Readiness Assessment by Procurement Category

Category	Readiness Level	Key Constraint	Strategic Opportunity
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Renewable Energy	High	Financing	Industrial fuel substitution and renewable energy expansion
WASH and Solar Infrastructure	High	Upfront investment costs	Low-emission infrastructure
Packaging and Manufacturing	Moderate–High	Market scaling	Sustainable packaging and plastic substitution
Healthcare Procurement	Moderate	Regulatory and certification requirements	Sustainable healthcare products
Waste Management and Recycling	Moderate–Low	Infrastructure limitations	Circular economy partnerships
Municipal Disposal Systems	Low	Infrastructure and governance weaknesses	Formal recovery and recycling ecosystems

Source: HELP Logistics (2026).

High-Readiness Sectors

Renewable energy and WASH infrastructure demonstrated the highest readiness levels.

These sectors benefit from:

- Strong supplier capability;
- Proven sustainability solutions;
- Commercial viability; and
- Clear environmental and operational benefits.

Importantly, sustainability interventions within these sectors often deliver measurable cost savings and resilience benefits in addition to environmental improvements.

Moderate-Readiness Sectors

Packaging and healthcare procurement occupy an intermediate position.

Greener alternatives are already available, but adoption remains constrained by:

- Market demand;
- Regulatory requirements;
- Product approvals;
- Certification requirements; and
- Cost considerations.

Future progress within these sectors will likely depend on procurement incentives and stronger sustainability demand signals.

Low-Readiness Sectors

Municipal disposal systems demonstrated the lowest readiness levels.

Although informal recovery systems and emerging recycling initiatives exist, significant improvements in infrastructure, governance, financing, and waste-management systems will be required before large-scale sustainability transformation becomes feasible.

Strategic Interpretation

Three important conclusions emerge from the assessment.

First, the principal challenge facing green procurement in Western Kenya is no longer the absence of sustainability capability. Sustainable products, services, and operational models already exist across several procurement sectors.

Second, environmental reporting systems represent one of the most significant barriers to wider adoption. Without reliable sustainability data, procurement actors cannot consistently evaluate supplier performance or integrate environmental considerations into procurement decisions.

Third, procurement systems themselves must evolve alongside suppliers. Many suppliers already demonstrate sustainability capability, but procurement evaluations continue to prioritize acquisition cost, technical compliance, and delivery performance. As a result, sustainability performance is often insufficiently recognized or rewarded.

The assessment therefore suggests that future progress will depend less on introducing new sustainability technologies and more on strengthening environmental reporting systems, supplier development mechanisms, procurement incentives, and market coordination.

Western Kenya's supplier market is in transition: it already has a foundation for green procurement, but stronger reporting, incentives, supplier support, and coordination are needed to expand and embed these practices.

6. Strategic Recommendations

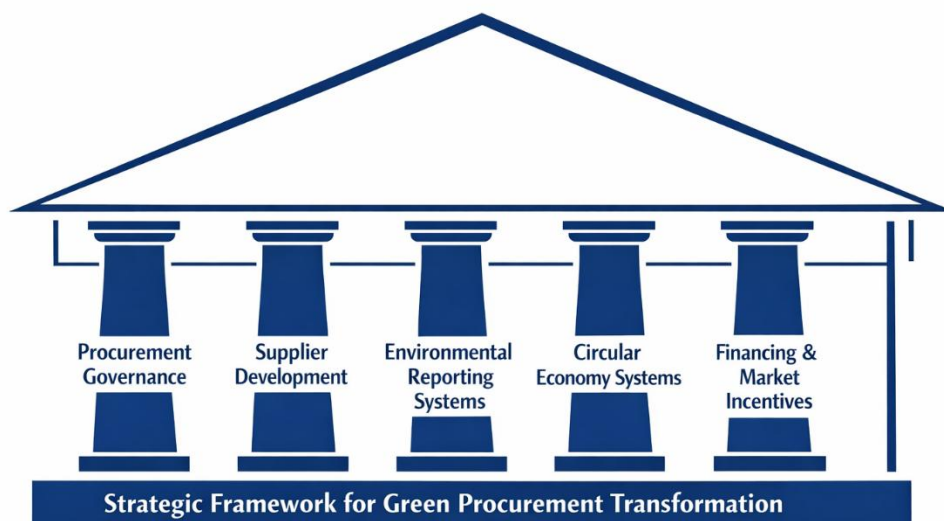
Introduction

The assessment demonstrates that Western Kenya possesses many of the foundational elements necessary to support green procurement within humanitarian and development supply chains. Sustainability capability already exists across several procurement sectors, including renewable energy, WASH infrastructure, packaging, mobility systems, and circular economy initiatives.

However, the assessment also identified several constraints limiting wider adoption. These include weak environmental reporting systems, fragmented sustainability requirements, limited procurement incentives, financing barriers, infrastructure limitations, and uneven supplier maturity.

The recommendations presented in this chapter are designed to address these constraints while strengthening the enabling conditions required for green procurement implementation. They are organized around six strategic pillars that collectively support supplier development, procurement reforms, environmental performance measurement, and market transformation.

Figure 14: Strategic Framework for Green Procurement Transformation



Source: HELP Logistics (2026).

Pillar 1: Strengthen Procurement Governance

Strategic Objective

Integrate sustainability into procurement decision-making and strengthen the role of environmental performance within supplier evaluation systems.

Why This Matters

The assessment found that sustainability capability has often progressed more rapidly than procurement systems themselves. While suppliers are increasingly adopting sustainable practices, procurement decisions continue to be driven primarily by cost, technical compliance, and delivery performance. Similar challenges have been identified across humanitarian procurement systems globally (Brammer & Walker, 2011; UNFPA, CHORD, 2024).

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Integrate sustainability criteria into tender evaluations	Include environmental performance as a measurable procurement criterion	Humanitarian organizations, UN agencies	Short-term
Harmonize sustainability requirements	Develop common sustainability expectations across procurement organizations	Procurement networks, donors	Medium-term
Introduce lifecycle costing approaches	Consider durability, maintenance, waste and operating costs alongside purchase price	Procurement practitioners	Medium-term
Strengthen supplier sustainability assessments	Incorporate sustainability performance into supplier evaluation frameworks	Procurement organizations	Short-term

Expected Outcome

Procurement systems create stronger market incentives and reward sustainability performance alongside cost and quality considerations.

Pillar 2: Develop Supplier Sustainability Capacity

Strategic Objective

Strengthen supplier capability to participate effectively in sustainability-oriented procurement systems.

Why This Matters

Supplier maturity varies significantly across sectors. While several organizations demonstrate strong operational sustainability performance, many require support to strengthen reporting systems, governance structures, environmental management capability, and certification readiness.

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Establish supplier sustainability maturity programs	Support suppliers through staged improvement pathways	Development partners, procurement organizations	Short-term
Build SME sustainability capacity	Provide training on reporting, waste management, and sustainability systems	NGOs, business associations	Short-term
Support certification readiness	Assist suppliers seeking relevant sustainability certifications	Industry associations, donors	Medium-term
Facilitate supplier learning platforms	Promote peer learning and knowledge exchange	Supplier networks	Medium-term

Expected Outcome

Improved supplier readiness and increased availability of sustainable procurement options.

Pillar 3: Strengthen Environmental Reporting Systems

Strategic Objective

Improve the quality, consistency, and availability of environmental performance information.

Why This Matters

Environmental reporting emerged as the weakest dimension across the supplier ecosystem. Without reliable environmental data, procurement actors cannot consistently evaluate sustainability performance or demonstrate environmental outcomes (Schaltegger, Burritt, Beske, & Suering, 2014; Sarah, Besiou, & Soulier, 2024).

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Develop simplified reporting frameworks	Create practical reporting tools suitable for suppliers of different sizes	Procurement organizations	Short-term
Establish common sustainability indicators	Standardize reporting metrics across procurement systems	Sector stakeholders	Short-term
Pilot environmental reporting systems	Test reporting frameworks in priority sectors	Donors, humanitarian organizations	Medium-term
Introduce progressive emissions measurement	Develop basic carbon and fuel-use reporting capability	Suppliers, technical partners	Long-term

Expected Outcome

More transparent supplier evaluation and improved sustainability performance measurement.

Pillar 4: Expand Circular Economy Systems

Strategic Objective

Strengthen resource recovery, recycling, reuse, repair, and waste-to-value systems across procurement sectors.

Why This Matters

Circular economy implementation represents one of the strongest sustainability dimensions identified during the assessment. Existing examples demonstrate practical and commercially viable pathways for reducing waste and improving resource efficiency (Kirchherr, Reike, & Hekkert, 2017).

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Promote circular procurement	Prioritize recyclable, reusable, repairable, and recycled products	Procurement organizations	Short-term
Strengthen recycling partnerships	Expand collaboration with recycling and recovery enterprises	Suppliers, county governments	Medium-term
Support waste-to-value initiatives	Encourage investment in resource recovery systems	Development partners	Medium-term
Strengthen producer-responsibility linkages	Improve linkages between Extended Producer Responsibility mechanisms and waste collection, aggregation, recycling, and material-recovery actors	Producers, EPR schemes, county governments, waste-management and recycling actors	Medium-term
Improve healthcare waste sustainability	Promote sustainable healthcare waste-management practices compatible with infection-control requirements	Healthcare institutions	Long-term

Expected Outcome

Increased resource recovery, reduced waste generation, and stronger circular procurement systems.

Pillar 5: Create Financing and Market Incentives

Strategic Objective

Reduce financial barriers that constrain supplier investment in sustainability.

Why This Matters

Cost sensitivity emerged as the most frequently cited barrier affecting sustainability adoption. Many suppliers indicated that sustainability investments remain difficult to justify in the absence of clear market rewards.

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Establish sustainability innovation funds	Support supplier investment in sustainability improvements	Donors, development finance institutions	Medium-term
Expand access to concessional finance	Reduce financial barriers to sustainability investments	Financial institutions	Medium-term
Create procurement incentives	Reward sustainability performance through procurement mechanisms	Procurement organizations	Short-term
Increase demand for sustainable alternatives	Use purchasing power to stimulate supplier investment	Humanitarian organizations	Ongoing

Expected Outcome

Improved supplier investment and wider adoption of sustainable products and services.

Pillar 6: Strengthen Ecosystem Coordination

Strategic Objective

Leverage the existing Kenya Environmental Sustainable Logistics Working Group and other relevant networks to facilitate procurement dialogue, supplier engagement, knowledge sharing, and collective demand generation.

Why This Matters

Green procurement is influenced by interactions across the wider ecosystem. Supplier capability, procurement requirements, financing mechanisms, policy frameworks, and infrastructure conditions all affect sustainability outcomes.

Priority Actions

Priority Action	Description	Lead Actors	Timeframe
Build green procurement coordination through existing platforms	Facilitate coordination and knowledge sharing	Humanitarian organizations, county governments, WREC	Short-term
Develop a supplier sustainability database	Improve visibility of sustainability-oriented suppliers	Procurement actors	Medium-term
Support collaborative pilot projects	Test reporting systems, procurement criteria, and innovative products	Donors, suppliers	Medium-term
Maintain market intelligence	Periodically update supplier and market readiness information	Sector stakeholders	Long-term

Expected Outcome

Improved coordination, stronger market signals, and accelerated sustainability adoption.

Priority Actions for the Next Two Years

While all recommendations are important, the first three interventions should be prioritized because they address the most significant barriers identified during the assessment and offer the greatest potential leverage.

Table 7: Immediate Priority Actions

Priority	Action	Rationale
Highest Near-Term Leverage Priorities		
1	Establish simplified environmental reporting frameworks and common sustainability indicators	Addresses the most significant systemic gap identified in the assessment
2	Integrate sustainability criteria into procurement evaluations	Creates immediate demand signals and market incentives
3	Launch supplier development programs focused on SMEs	Strengthens existing sustainability capability and market readiness
Supporting Priorities		
4	Expand circular economy partnerships	Builds on existing market strengths and proven initiatives
5	Develop financing mechanisms for sustainability investments	Supports scaling and long-term adoption

Conclusion

The assessment demonstrates that Western Kenya already possesses many of the building blocks necessary for green procurement implementation. The challenge is not the absence of sustainability capability, but the absence of systems capable of recognizing, rewarding, measuring, and scaling that capability.

The six strategic pillars presented in this chapter provide a practical framework for strengthening supplier readiness, improving procurement systems, expanding sustainability reporting, and accelerating the transition toward greener procurement practices. If implemented progressively and collaboratively, these actions can help transform the current market from one characterized by isolated sustainability initiatives into a more mature and integrated green procurement ecosystem.

7. Implementation Roadmap

Introduction

The assessment demonstrates that Western Kenya already possesses many of the foundational elements necessary to support green procurement within humanitarian and development supply chains. Sustainability capability exists across multiple procurement categories, and several suppliers have already integrated renewable energy, circular economy practices, resource-efficiency measures, and environmentally preferable products into their operations.

However, achieving widespread adoption will require more than isolated sustainability initiatives. Progress will depend on coordinated action among procurement actors, suppliers, donors, county governments, and sustainability initiatives. It will also require realistic sequencing, recognizing that some interventions can be implemented immediately while others depend on longer-term investments in systems, infrastructure, and institutional capacity.

This roadmap provides a phased approach for implementing the recommendations presented in Chapter 6. The proposed sequencing is designed to strengthen the foundations for green procurement before progressively advancing toward more mature and institutionalized sustainability systems.

Short-Term Priorities (0–2 Years)

The first phase should focus on addressing the most significant barriers identified during the assessment: weak environmental reporting systems, insufficient procurement incentives, and uneven supplier capability.

Priority actions should include:

- Developing simplified environmental reporting frameworks;
- Establishing common sustainability indicators;
- Integrating sustainability criteria into procurement evaluations;
- Launching supplier development programs;
- Building green procurement coordination through existing platforms; and
- Initiating pilot procurement projects focused on sustainability; and
- Engaging suppliers around green technical specifications and fit-for-purpose alternatives.

These interventions are relatively low-cost and can generate visible progress within a short period while creating the foundations required for longer-term market transformation.

Medium-Term Priorities (2–5 Years)

The second phase should focus on scaling successful initiatives and strengthening supporting market systems.

Priority actions should include:

- Expanding supplier sustainability programs;
- Harmonizing sustainability requirements across procurement organizations;
- Strengthening circular economy partnerships;
- Establishing sustainability financing mechanisms;
- Expanding supplier reporting systems; and
- Developing a regional green supplier database.

By this stage, sustainability considerations should increasingly become embedded within procurement processes rather than remaining project-specific initiatives.

Long-Term Priorities (5+ Years)

The final phase should focus on institutionalizing sustainability within procurement systems and supporting broader market transformation.

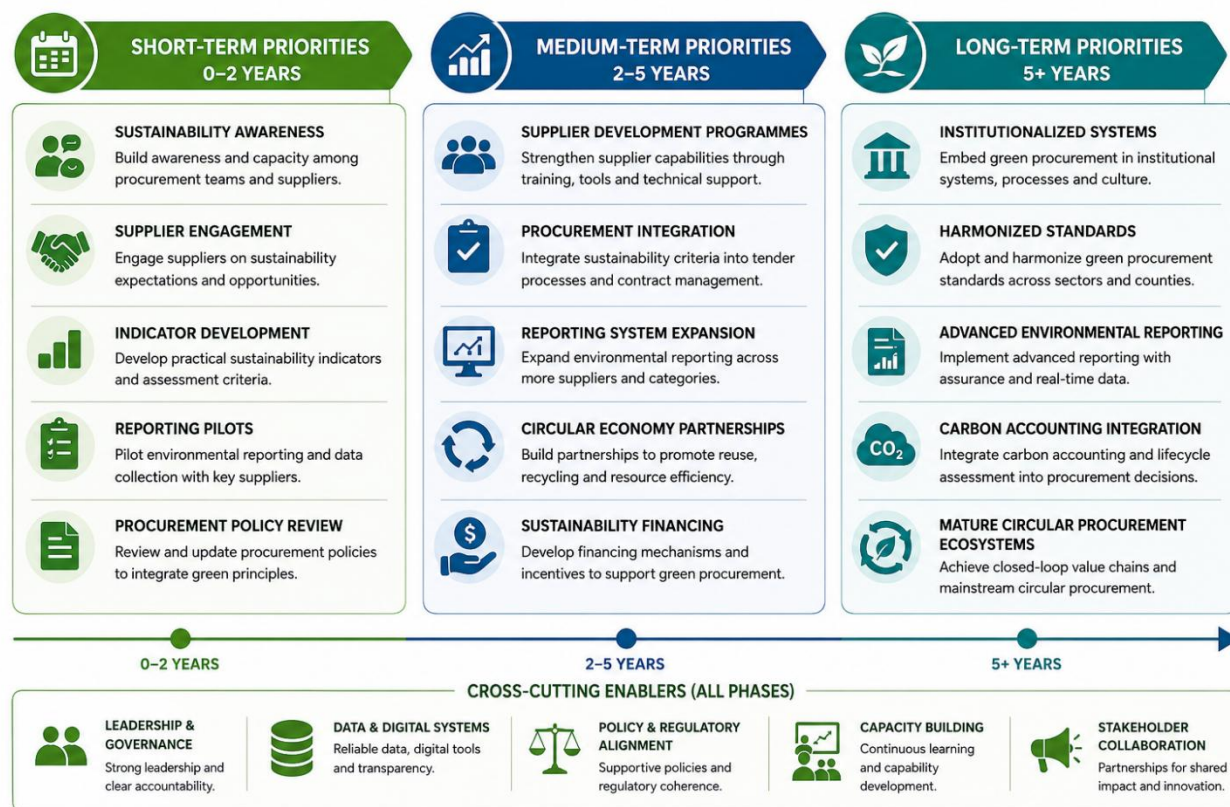
Priority actions should include:

- Advanced environmental reporting and emissions measurement systems;
- Integration of lifecycle costing approaches across procurement categories;
- Expansion of circular procurement systems;

- Strengthening municipal recovery and recycling infrastructure;
- Wider adoption of sustainability certifications; and
- Continuous monitoring and reporting of procurement-related sustainability outcomes.

At this stage, sustainability considerations should be routinely integrated into procurement governance, supplier management systems, and organizational decision-making processes.

Figure 15: Green Procurement Implementation Roadmap



Source: HELP Logistics (2026).

The roadmap illustrates a progressive transition from foundational activities focused on reporting, supplier development, and procurement reform toward more mature systems characterized by harmonized standards, stronger environmental measurement, and institutionalized sustainability practices.

Phased Implementation Priorities

Table 8: Phased Implementation Priorities

Phase	Priority Focus	Key Outputs
Short-Term (0-2 Years)	Reporting systems, procurement reform, supplier development	Sustainability indicators, reporting frameworks, procurement criteria, supplier support programs
Medium-Term (2-5 Years)	Scaling and coordination	Harmonized standards, financing mechanisms, circular economy partnerships, supplier database
Long-Term (5+ Years)	Institutionalization and market transformation	Lifecycle procurement systems, advanced reporting, mature circular procurement ecosystems

Implementation Matrix

Successful implementation will require clearly defined responsibilities across stakeholder groups.

Table 9: Implementation Matrix

Priority Action	Lead Actors	Supporting Actors	Timeframe
Develop sustainability reporting framework	Humanitarian organizations	Suppliers, sustainability initiatives	Short-Term
Establish common sustainability indicators	Procurement actors	Donors, technical partners	Short-Term
Integrate sustainability into procurement evaluations	Procurement organizations	UN agencies, NGOs	Short-Term
Launch supplier development programs	Development partners	Business associations, suppliers	Short-Term
Build green procurement coordination through existing platforms	Humanitarian organizations	County governments, WREC, suppliers	Short-Term
Establish sustainability financing mechanisms	Donors, development finance institutions	Financial institutions	Medium-Term
Develop supplier sustainability database	Procurement actors	Supplier networks	Medium-Term
Expand circular economy partnerships	County governments	Waste-management operators, suppliers	Medium-Term
Introduce progressive emissions reporting systems	Suppliers	Technical partners	Long-Term
Scale lifecycle procurement approaches	Procurement organizations	Donors, technical experts	Long-Term
Strengthen municipal recovery infrastructure	County governments	Development partners	Long-Term

Critical Success Factors

While the roadmap provides a structured implementation pathway, progress will depend on several enabling conditions.

First, leadership commitment will be essential. Procurement reform requires sustained organizational support and the willingness to integrate sustainability considerations into procurement decisions.

Second, stakeholder collaboration will be critical. Many of the barriers identified during the assessment, including reporting gaps, infrastructure limitations, and fragmented sustainability requirements, cannot be addressed by individual organizations acting independently.

Third, procurement systems must create stronger and more predictable demand signals. Suppliers are unlikely to invest in sustainability improvements unless environmental performance is consistently recognized and rewarded. Where possible, humanitarian organizations should coordinate sustainability requirements and communicate future needs early enough to allow suppliers to adapt products, reporting systems, and production processes.

Finally, implementation should remain adaptive. Sustainability capability, reporting systems, technologies, and market conditions will continue to evolve. Periodic review and adjustment of implementation priorities will therefore be necessary to ensure continued relevance and effectiveness.

Conclusion

The assessment indicates that green procurement implementation in Western Kenya is both achievable and increasingly practical. The market already contains suppliers capable of supporting sustainability-oriented procurement across multiple sectors. The challenge now is to strengthen the systems, incentives, partnerships, and governance arrangements required to scale existing capability.

The roadmap presented in this chapter provides a realistic pathway for achieving that transition. By focusing first on reporting systems, procurement reform, and supplier development, stakeholders can establish the foundations necessary for longer-term market transformation. Over time, these efforts can support the emergence of a more mature and integrated green procurement ecosystem capable of delivering both environmental and operational benefits.

8. Conclusions and Strategic Implications

Introduction

This assessment evaluated supplier sustainability maturity, market readiness, and the practical feasibility of advancing green procurement within humanitarian and development supply chains in Western Kenya. The analysis combined literature review, supplier interviews, field observations, site visits, document review, and sustainability maturity scoring to determine whether the local market can support more environmentally sustainable procurement practices.

The assessment was motivated by the growing recognition that procurement decisions shape a large share of the environmental footprint associated with humanitarian operations. Procurement affects material consumption, packaging waste, transport emissions, product durability, resource use, and end-of-life disposal. Sustainable procurement therefore represents one of the most direct ways for humanitarian and development actors to reduce environmental impact while maintaining operational effectiveness (Carter & Rogers, 2008; UNHCR, 2023).

This chapter draws together the report's key findings, highlights their strategic implications, and outlines the outlook for green procurement in Western Kenya.

Summary of Key Findings

Sustainability capability already exists within the market

One of the most important findings from the assessment is that environmentally preferable products, services, and operational practices are already present within the Western Kenya supplier market. Examples identified during the assessment included biomass briquette production from agricultural waste, solar-powered water infrastructure, circular manufacturing using bagasse-based inputs, community-based recycling and composting systems, reusable healthcare products, and low-emission cargo mobility solutions.

These findings demonstrate that the market is not constrained by a complete absence of green alternatives. Instead, sustainability capability already exists but is unevenly distributed and often underutilized because of structural and institutional barriers. The assessment produced an overall supplier sustainability maturity score of 3.35 out of 5, indicating an emerging-to-intermediate sustainability landscape across the supplier ecosystem.

Operational sustainability often exceeds governance maturity

A second major finding is the distinction between operational sustainability and formal institutional maturity. Several suppliers demonstrated strong resource-efficiency practices, waste recovery systems, renewable energy integration, circular economy initiatives, and environmentally preferable operational models despite lacking formal environmental certifications, carbon accounting systems, structured sustainability reporting frameworks, or dedicated sustainability departments.

This matters because it shows that sustainability innovation in Western Kenya is often driven by operational necessity, entrepreneurial adaptation, cost-efficiency, and local problem-solving rather than by compliance-driven sustainability systems. For procurement actors, this means that supplier assessment should look beyond certification status and include operational performance, practical environmental outcomes, and evidence of continuous improvement.

Circular economy systems represent a major opportunity

The assessment identified circular economy implementation as one of the strongest sustainability dimensions in the regional supplier ecosystem. Industrial-scale biomass production, bagasse-based manufacturing, composting systems, plastics recovery initiatives, repairable mobility systems, and recycling partnerships were all observed.

These examples align closely with circular economy principles emphasizing reuse, recovery, recycling, and regeneration (Kirchherr, Reike, & Hekkert, 2017). They also show that circularity is not an abstract concept in the region; it is already being implemented in practical and commercially relevant ways. As a result, circular economy approaches represent one of the strongest foundations for future green procurement action.

Environmental reporting remains a major weakness

Despite the presence of operational sustainability practices, environmental reporting and measurement systems remain significantly underdeveloped. Most suppliers lacked carbon accounting systems, environmental baselines, lifecycle assessment capability, emissions inventories, and standardized sustainability indicators.

This is a critical constraint because procurement actors cannot easily compare supplier performance, evaluate environmental impacts, or demonstrate sustainability outcomes without reliable data. The report therefore identifies environmental reporting

and measurement as one of the highest-priority investment areas for accelerating green procurement adoption (Schaltegger, Burritt, Beske, & Suering, 2014; Sarah, Besiou, & Soulier, 2024).

Cost remains the dominant barrier

Financial constraints emerged consistently across nearly all procurement categories. Suppliers repeatedly cited higher costs of greener alternatives, financing limitations, certification expenses, import dependency, and weak market demand as major barriers to adoption.

This finding is consistent with the wider sustainable procurement literature, which identifies cost sensitivity as a persistent obstacle to implementation, particularly in donor-funded and humanitarian environments (Brammer & Walker, 2011). At the same time, the assessment found that several sustainability interventions generate operational benefits that can offset initial investment over time. This means lifecycle costing approaches may be especially useful in helping procurement actors recognize long-term value rather than focusing only on acquisition price (Hunkeler et al., 2008).

Strategic Implications

Green procurement is feasible in Western Kenya

The most important strategic conclusion is that green procurement is increasingly feasible in Western Kenya. The market has moved beyond an awareness stage and now demonstrates meaningful operational capability across several procurement categories, including renewable energy, WASH infrastructure, packaging, healthcare products, waste management, and mobility systems.

The challenge is no longer whether sustainability capability exists. The challenge is how to strengthen, scale, and institutionalize that capability through procurement systems that create stronger demand signals and reward environmental performance.

Procurement systems must evolve alongside suppliers

A second implication is that supplier capability has progressed faster than procurement systems in many cases. Several suppliers are already demonstrating sustainability innovation, but procurement decisions still tend to prioritize cost, compliance, and delivery speed over environmental value.

This suggests that supplier transformation alone will not be sufficient. Procurement organizations must also evolve by integrating sustainability criteria into sourcing decisions, applying lifecycle thinking, and requiring clearer environmental information from suppliers. Without changes on the demand side, sustainability capability may remain underused.

Supplier development is more important than compliance alone

The assessment also suggests that supplier development approaches are likely to be more effective than purely compliance-based strategies. Many suppliers already have promising sustainability practices, but need support in areas such as reporting, certification readiness, environmental measurement, and sustainability governance.

This is particularly relevant for SMEs, which often show strong operational innovation but limited institutional capacity. Targeted supplier development can help translate practical sustainability performance into procurement-relevant evidence and improve market readiness over time.

Humanitarian organizations can drive market transformation

The assessment consistently found that sustainability demand currently originates primarily from humanitarian organizations, donor-funded programs, UN agencies, and development actors. That places these institutions in a uniquely influential position.

Through procurement decisions, humanitarian actors can create demand for sustainable alternatives, encourage supplier investment, strengthen reporting systems, and accelerate market transformation. In this sense, humanitarian procurement is not only a purchasing function; it is also a market-shaping mechanism.

Future Outlook

The sustainability transition in Western Kenya is still in its early stages, but the assessment shows that important foundations are already in place. Several trends point toward continued growth in sustainability capability over the coming years, including rising donor interest in environmental sustainability, increasing awareness of climate-related risks, growing demand for resource-efficient solutions, expansion of circular economy initiatives, and ongoing innovation among local suppliers.

At the same time, several uncertainties could influence the pace and scale of progress. Humanitarian organizations operate in an environment shaped by funding pressures, shifting donor priorities, inflationary conditions, supply chain disruptions, and changing public-sector investment patterns. The pace at which sustainability considerations are embedded within procurement policies at organizational, county, and national levels also remains uncertain.

These factors mean that progress toward green procurement is unlikely to be linear. It will require sustained commitment from multiple stakeholders over time, supported by procurement reforms, financing mechanisms, reporting systems, and supplier development initiatives.

If these enabling conditions are strengthened, the region could significantly accelerate adoption of green procurement practices and establish itself as a practical example of market-led sustainability transformation in humanitarian and development supply chains.

Final Reflection

The findings of this assessment point toward a cautiously optimistic conclusion. That optimism is conditional: it depends on the adoption of sustainability criteria and lifecycle costing approaches within major procurement systems, the establishment of simplified environmental reporting frameworks, and continued investment in supplier development and circular economy initiatives.

Western Kenya is not yet a fully mature green procurement market. It does not have standardized reporting systems, universal certifications, or fully developed procurement infrastructure for sustainability. But neither is it a market lacking sustainability capability. It is a market in transition.

Across sectors, suppliers are already demonstrating practical examples of renewable energy integration, circular manufacturing, waste recovery, sustainable packaging, resource efficiency, and low-emission service delivery. The central task now is to create the enabling conditions required to scale these innovations and integrate them more systematically into procurement practice.

If suppliers, procurement practitioners, humanitarian organizations, development partners, county governments, and sustainability initiatives work together to address the barriers identified in this report, Western Kenya has the potential to become a leading example of operationally grounded green procurement within humanitarian and development supply chains.

The region's immediate task is to scale the solutions already available by improving environmental reporting, developing supplier capacity, expanding access to financing, harmonizing sustainability requirements, and ensuring that procurement systems recognize environmental performance. Progress in these areas would mark the transition from an emerging sustainability ecosystem toward a mature green procurement market.

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Annexes

Annex A: Green Procurement Supplier Interview Protocol

Purpose

The supplier interview protocol was developed to collect structured and comparable information on supplier sustainability practices, environmental performance, market readiness, operational challenges, and opportunities for green procurement implementation. The tool combined qualitative interview questions with quantitative scoring indicators to support both narrative analysis and sustainability maturity assessment.

Assessment Structure

The assessment framework consisted of eight sections:

Section A: Supplier Profile

- Company information
- Sector classification
- Supplier type
- Business size
- Client profile
- Humanitarian market exposure

Section B: Products and Services

- Availability of green alternatives
- Sustainable product portfolio
- Product design and lifecycle considerations

Section C: Environmental Practices

- Environmental management systems
- Resource efficiency
- Waste management
- Circular economy initiatives
- Packaging sustainability
- Transport and logistics performance

Section D: Supply Chain and Operations

- Supplier sustainability assessments
- Sustainability contract requirements

Section E: Measurement and Data Systems

- Environmental data collection
- Reporting capability
- Data reliability

Section F: Cost and Commercial Considerations

- Cost competitiveness
- Market demand for sustainable alternatives

Section G: Barriers and Challenges

- Sustainability constraints
- Market barriers
- Regulatory limitations

Section H: Opportunities and Future Readiness

- Investment intentions
- Capacity development needs
- Future sustainability opportunities

Annex B: Sustainability Maturity Framework and Scoring Methodology

Assessment Dimensions

Supplier sustainability performance was assessed across five dimensions:

Assessment Dimension	Description
Environmental Governance	Policies, management systems, certifications and monitoring mechanisms
Sustainable Products and Operations	Resource efficiency, sustainable products, renewable energy and operational sustainability
Circular Economy and Waste Management	Recycling, recovery, reuse, waste reduction and circular initiatives
Environmental Reporting and Data Systems	Environmental indicators, reporting capability and data reliability
Market Readiness and Supply Chain Integration	Supplier engagement, scalability and procurement readiness

Scoring Scale

Each indicator was scored using a five-point maturity scale.

Score	Interpretation
1	Very Limited / No Evidence
2	Emerging Practice
3	Moderate Implementation
4	Advanced Implementation
5	Leading Practice

Supplier Maturity Classification

Overall Score Range	Maturity Level
1.0–1.9	Awareness–Emerging
2.0–2.9	Emerging
3.0–3.9	Emerging–Advanced
4.0–4.4	Advanced
4.5–5.0	Advanced–Leading

Assessment Process

Supplier scores were generated through a combination of:

- semi-structured interviews
- field observations
- document review
- indicator scoring
- and comparative analysis.

Scores were aggregated across assessment dimensions to generate overall supplier maturity ratings used throughout the report.

Annex C: Supplier Assessment Summary

Assessed Suppliers

Supplier	Sector	Maturity Level
Davis & Shirtliff	WASH and Solar Infrastructure	Advanced–Leading
IMA Trading Company	Renewable Energy	Advanced
Kibos Paper & Packaging	Packaging and Manufacturing	Advanced
Buffalo Bicycles	Mobility and Transport	Emerging–Advanced
Clean Kisumu	Waste Management and Recycling	Emerging–Advanced
KEMRI–CGHR Kisumu	Healthcare Research	Advanced–Leading
Kisumu County Referral Hospital	Public Healthcare	Emerging–Advanced
Avenue Healthcare Kisumu	Private Healthcare	Emerging
EcoMed Supplies Ltd	Medical Distribution	Emerging
Premium Solutions Kenya	Healthcare Waste Services	Emerging–Advanced
Kasese Dumpsite	Municipal Waste System	Awareness–Emerging

Supplier Assessment Summary Matrix

Supplier	Sustainability Score
Davis & Shirtliff	4.47
IMA Trading Company	4.07
Buffalo Bicycles	3.87
KEMRI–CGHR Kisumu	3.73
Kibos Paper & Packaging	3.67
Clean Kisumu	3.47
Avenue Healthcare Kisumu	3.00
Premium Solutions Kenya	2.87
Kisumu County Referral Hospital	2.73
EcoMed Supplies Ltd	2.20
Kasese Dumpsite	1.79

Sector Sustainability Scores

Sector	Average Sustainability Score
WASH and Solar Infrastructure	4.47
Renewable Energy	4.07
Mobility and Transport	3.87
Packaging and Manufacturing	3.67
Healthcare Institutions	2.73
Municipal Waste Systems	1.79

Annex D: Detailed Methodology and Data Collection Approach

Assessment Design

The assessment adopted a mixed-methods approach to evaluate supplier sustainability maturity and market readiness for green procurement within humanitarian and development supply chains in Western Kenya.

A mixed-methods approach was selected because sustainability maturity cannot be adequately understood through quantitative indicators alone. Many sustainability practices are operational, context-specific, and shaped by local market conditions. Consequently, the assessment combined qualitative and quantitative evidence to develop a more comprehensive understanding of supplier capability and market readiness.

The assessment integrated:

- Literature review;
- Supplier interviews;
- Site visits;
- Direct field observations;
- Document review; and
- Comparative market analysis.

The combination of these methods enabled the triangulation of evidence and strengthened the reliability of findings.

Data Collection Methods

Primary Data Collection

Primary data were collected through semi-structured interviews, operational site visits, and direct observations.

Supplier interviews explored:

- Environmental governance;
- Sustainable products and services;
- Resource-efficiency practices;
- Waste management systems;
- Circular economy initiatives;
- Environmental reporting capability;
- Market barriers; and
- Future sustainability priorities.

Site visits and operational observations were undertaken to verify reported practices and assess sustainability implementation in practice.

Particular attention was given to:

- Renewable energy systems;
- Manufacturing processes;
- Waste recovery operations;
- Recycling activities;
- Packaging systems;
- Healthcare waste-management practices; and
- Resource-efficiency initiatives.

Photographic documentation was also used to support field verification and operational interpretation.

Secondary Data Collection

Secondary sources included:

- Academic literature;
- Sustainable procurement guidance;
- Humanitarian sustainability frameworks;
- Circular economy studies;
- Environmental reporting guidance;
- Sector publications; and
- Relevant policy and regulatory documents.

Secondary sources informed the development of the assessment framework and provided context for interpreting findings.

Supplier Selection

A purposive sampling strategy was used to identify organizations operating within procurement categories relevant to humanitarian and development supply chains.

Selection was guided by the following considerations:

- Relevance to humanitarian procurement systems;
- Sector representation;
- Sustainability significance;
- Operational importance within the regional market; and
- Potential contribution to understanding market readiness.

The final sample included eleven organizations operating across renewable energy, WASH infrastructure, healthcare, packaging and manufacturing, mobility, medical distribution, waste management, recycling, and municipal service sectors.

Table 10: Supplier Sample by Sector

Sector	Number of Organizations
Healthcare and Medical Supply Systems	4
Renewable Energy	1
WASH and Solar Infrastructure	1
Packaging and Manufacturing	1
Mobility and Transport	1
Waste Management and Recycling	2
Municipal Waste Systems	1

The sample was designed to provide a representative overview of sustainability capability across strategically important procurement sectors rather than generate statistically representative market estimates.

Assessment Process

Information collected through interviews, site visits, observations, and document review was consolidated and analyzed through a structured assessment process.

Figure 16: Supplier Assessment Process



Source: HELP Logistics (2026).

The process combined multiple sources of evidence to improve consistency and reduce reliance on self-reported information alone.

Interview findings provided insights into governance systems, sustainability practices, and operational challenges, while field observations and document reviews were used to verify reported practices wherever possible.

Data Analysis

The assessment combined qualitative and quantitative analysis techniques.

Qualitative Analysis

Qualitative analysis focused on identifying recurring themes relating to:

- Sustainability practices;
- Circular economy implementation;
- Environmental reporting capability;
- Market barriers;
- Procurement readiness; and
- Opportunities for future development.

Interview findings, site observations, and documentary evidence were reviewed collectively to identify patterns across suppliers and sectors.

Quantitative Analysis

Quantitative analysis focused on:

- Supplier sustainability maturity scores;
- Sector comparisons;
- Market readiness assessments;
- Sustainability performance trends; and
- Cross-sector benchmarking.

Comparative analysis was undertaken to identify stronger-performing sectors, common barriers, and areas requiring additional support.

Geographic Scope

The assessment focused primarily on Western Kenya and the Lake Basin region.

This area was selected because of its relevance to humanitarian and development operations and the presence of suppliers operating across healthcare, renewable energy, WASH infrastructure, packaging, mobility, recycling, and waste-management sectors.

The region also provides an important testing ground for green procurement due to increasing sustainability activity, expanding circular economy initiatives, and growing interest among development partners in environmentally sustainable supply chains.

Limitations

Several limitations should be considered when interpreting the findings.

First, some findings relied on supplier self-reporting. Although site visits, field observations, and document reviews were used to verify information where possible, independent environmental verification systems were not consistently available across all organizations.

Second, environmental reporting systems remain underdeveloped across much of the supplier ecosystem. Limited availability of environmental baselines, carbon accounting systems, and standardized sustainability indicators restricted the ability to independently verify environmental performance in some cases.

Third, the assessment focused on Western Kenya and the Lake Basin region. While the findings provide valuable insights into supplier sustainability capability within this context, they may not fully represent conditions in other regions of Kenya.

Finally, the purposive sampling approach intentionally prioritized organizations with relevance to humanitarian and development procurement systems. The findings should therefore be interpreted as an assessment of supplier capability and market readiness rather than a statistically representative survey of the wider supplier market.

Despite these limitations, the assessment provides a robust evidence base for understanding sustainability capability, market readiness, and opportunities for advancing green procurement within Western Kenya.

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