

Low-Carbon, High-Resilience

The Sustainable Supply Chain Blueprint for Restaurants



About This White Paper

This white paper aims to support **the food and foodservice industry** in advancing its sustainability transformation. It focuses on key decision-making areas, including :

- Supply Chain Risk Management
- Sustainable Certification & Operations
- Low-Carbon, Zero-Risk Tableware

Supply Chain



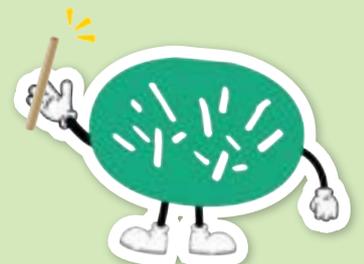
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Sustainable Strategies

- New Tableware Solutions 10



Make every choice
regenerate our planet!



What Key Insights You Will Gain

- Key Supply Chain Risks and 2026 Trends
- Core Pillars of a Resilient Supply Chain
- Low-Carbon Supply Chain and Sustainable Operations Strategies

Three Immediate Actions You Should Take !

1. Conduct a Full Supply Chain Risk Assessment

Evaluate raw materials, consumables.

→ Reduce exposure to supply interruptions and cost volatility.

2. Set New Supplier Standards for Transparency and Compliance.

Request origin documentation, testing reports, and traceability data from vendor partners—aligned with due diligence and traceability expectations.

→ Strengthen compliance readiness and prevent reputational, social, and environmental risks.

3. Pilot Low-Carbon, Traceable, Sustainable Materials

Consider a natural, additive-free, low-carbon, and fully traceable material.

→ Meet ESG targets, simplify waste handling, and enhance customer experience.

Escalating Costs in a Market Driven by External Pressures?

The food and beverage industry, spanning from farm to table, is significantly impacted by external factors across the entire supply chain. According to The Association for Supply Chain Management (ASCM)'s Top 10 Supply Chain Trends for 2025 report, key risks for the industry include :

Top2 : Global Trade Dynamics and Geopolitical Policies



Geopolitical tensions increase supply chain instability, causing raw material price hikes and transport delays that affect costs and reliability.

Top6 : Visibility and Traceability

Complete supply chain transparency builds brand trust and ensures compliance by enabling quick problem detection and better risk management.



Top8 : Strategic Sourcing and Supplier Management



Diverse, reliable suppliers and ethical, eco-friendly sourcing reduce risks while supporting cost efficiency and corporate responsibility.

The food and beverage industry faces ongoing inflation and supply disruptions, accelerating digital adoption and supplier diversification to boost resilience.

Supply Chain Challenges and Solutions



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From Farm to Table : Building Green Resilience Amid Growing Supply Chain Volatility

A 2024 report by A.P. Moller–Maersk found that over 76% of companies faced supply chain disruptions in the past 12 months, leading to delays and financial strain.

| Key Risk Factors :

- Geopolitical conflicts
- Extreme Weather Events

Directly impacting agricultural sourcing in the restaurant industry.



At the same time, governments worldwide are tightening corporate sustainability due diligence standards, requiring businesses to embed sustainability principles into their core strategies—from supply chain management and procurement to brand governance. For the restaurant sector, the intersection of supply chain fragility and regulatory pressure is accelerating the shift toward resilient and transparent green supply systems.

The question for the industry is no longer whether to act, but **how to act** :



- Strengthen Supply Chain Stability
- Ensure Regulatory Compliance
- Sustain Long-Term Brand Value
- Enhance Operational Resilience

Localized Procurement

Aligning with Low-Carbon Dining Trends



Reducing Food Waste and Lightening Meals

According to WRAP, each kilogram of food waste generates an average total cost of over £4, resulting in approximately **£19,600 in annual** losses per restaurant site.

Sourcing Seasonal and Local Ingredients Meals

Using seasonal and locally sourced ingredients reduces transportation costs, lead times, and food miles.



Air Freight : $\approx 500\text{g CO}_2\text{e}$ per ton-kilometer

Sea Freight : $10\sim 40\text{g CO}_2\text{e}$ per ton-kilometer



Reducing cold-chain logistics and spoilage losses can lower operating costs by an average of **5–15%**.

Using Sustainable or Minimal Packaging Meals

Using eco-friendly single-use products or reusable containers, combined with the implementation of Extended Producer Responsibility (EPR) programs, can :

- Reduce waste management costs by **15–30%**
- Increase recycling rates by over 40%



Diversified Green Supply

Reducing Risks from the Source

Risk Diversification

Avoid overreliance on a single supplier by building close and flexible partnerships across the supply network.

Comprehensive Due Diligence

Ensure that upstream, midstream, and downstream suppliers comply with ethical practices and legal standards throughout the value chain.

Real-Time Monitoring Systems

Enhance inventory precision and improve supply chain agility and resilience through data analytics and digital tracking tools.

| Acting to Mitigate Risks |





FOOD MADE GOOD

The Sustainable Restaurant Association, SRA

In 2023, SRA introduced the Food Made Good Standard, a comprehensive third-party sustainability certification tailored for the foodservice industry.

Built on an action-oriented approach, the standard helps restaurants and food businesses systematically enhance their sustainability performance while demonstrating transparent and measurable commitments to stakeholders.

📍 Geographical Reach:

73 countries 10,500 certified restaurants

🍴 Key Benefits:

- Reduced Operating Costs and Improved Efficiency
- Enhanced Market Competitiveness
- Sustainable Talent Attraction and Retention

🍴 Evaluation Criteria :

Sourcing

Understanding Supply Chain Environmental Impact



celebrate
provenance



support Farmers
and Fishers



More Plants,
Better Meat



Source Seafood
Sustainably

Society

Supporting Local Communities and
Advancing Social Responsibility



Treat Staff
Fairly



Feed People
Well



Support the
Community

Environment

Supporting Local Communities and
Advancing Social Responsibility



Reduce Your
Footprint



Waste No
Food



Reduce, Reuse,
Recycle



Sustainable Strategies

Wonder Greener

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Certified & Trusted

- ★ SGS tested: **Free from PFAS**, pesticides & heavy metals.
- ★ EU REACH, Packaging Directive 94/62/EC,
- ★ EC No 1935/2004 compliant.
- ★ German LFGB food contact approved.

Make every choice
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Lepironia articulata



Perennial aquatic species

Typically reaches 2–3 meters in height

| Plant Characteristics

- **Hollow**, silica-rich stems with distinct nodes
- **Naturally water-resistant**, decay-resistant, and flexible
- Without the use of pesticides, herbicides, or insecticides

| Distribution

Commonly found across **tropical and subtropical regions**, especially in Southeast Asia.

| Sustainability Benefits

- Each plant can **sequester around 20 grams of carbon**
- Cultivation fields host twice the biodiversity of rice paddies



Single-Use, Yet Truly Sustainable!

The Lepironia Grass Straw is made from the natural stems of native plants, without any chemical additives. It preserves the plant's inherent water resistance and flexibility, offering a pure and authentic sustainable solution.



Fair Farming, Youth Empowered



As the global farming population ages, abandoned farmland continues to increase worldwide. Many farmers have given up cultivation due to the difficulty of annual planting and maintenance.

Unlike conventional crops, Lepironia is a **perennial plant** that requires only one planting but allows for multiple harvests.



Ensure stable yields and income



Reduce the labor burden
for elderly farmers



Encourage young people
to return to agriculture

We are committed to purchasing Lepironia from farmers at prices higher than rice, supporting fair income and sustainable rural development.

Wonder Greener operates under a vertically integrated model, managing its own farms and processing facilities.

- **Transparent product traceability**
- **Stable and low-carbon supply**
- **Reliable and trusted quality**



The Lowest-Carbon Straw !

Lepironia is a perennial plant with natural carbon-sequestration capacity, and its production involves only a few processing steps—while still ensuring thorough cleaning and internal tube flushing. As a result, Grass Straws generate significantly lower emissions across every stage of their life cycle.

Beyond their carbon benefits, Grass Straws also serve as an effective medium for **communicating a brand's sustainability story and values.**



| Carbon Comparison of Common Straws

- PLA Straws : 17g
 - Paper Straws : 13g
 - **Lepironia Grass Straws : 4.4g**
- and provides 15.6g negative carbon benefit



* calculated using median average values only.



* This calculation is proprietary to Wonder Greener.

We are Wonder Greener !

The world's most sustainable straw

Our journey began with Lepironia grass—a natural, renewable material that embodies our commitment to sustainability. We continue to explore, collaborate, and innovate with like-minded partners across industries, believing that even the smallest utensil — the straw — can play a vital role in healing the planet with every use and choice.

Reusability is not the only path to sustainability. True environmental responsibility lies in materials and processes that are carbon-free and harmless to nature. The Grass Straw, made entirely from plant-based stems, represents the purest form of sustainable action—a single-use product that leaves no trace behind.



Make every choice ✦
regenerate our planet.





Bar



Coffee Shop



Fast Food Chain



Daily Use

Canada
United States

United Kingdom
Germany
France

Vietnam
Singapore
Australia

South Korea
Japan
Taiwan
Hong Kong

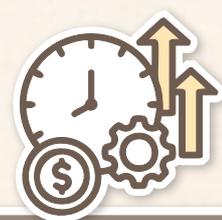
Effortless Disposal, Naturally

After use, Grass Straws can be disposed of together with food waste, requiring no additional sorting.

Like fallen leaves, they naturally decompose into water and nutrients in the soil, reducing both waste-handling time and operational workload for restaurant staff.



Optimize Waste Management



Enhance Operational Efficiency

Brand consistency in dining detail

Gen Z consumers show greater willingness to pay for sustainable products. As prices adjust to reflect real costs, brands must enhance the dining experience and express authentic values to meet expectations—using social media to deepen engagement and strengthen brand influence.

- **Durable** : Lasts 8+ hours in hot or cold drinks.
- **Certified Safe** : Free from PFAS, heavy metals, pesticides.
- **Sparks photos, shares, and viral social buzz.**

Single-use Convenience

Eliminates cleaning and hygiene concerns

Brand Interaction

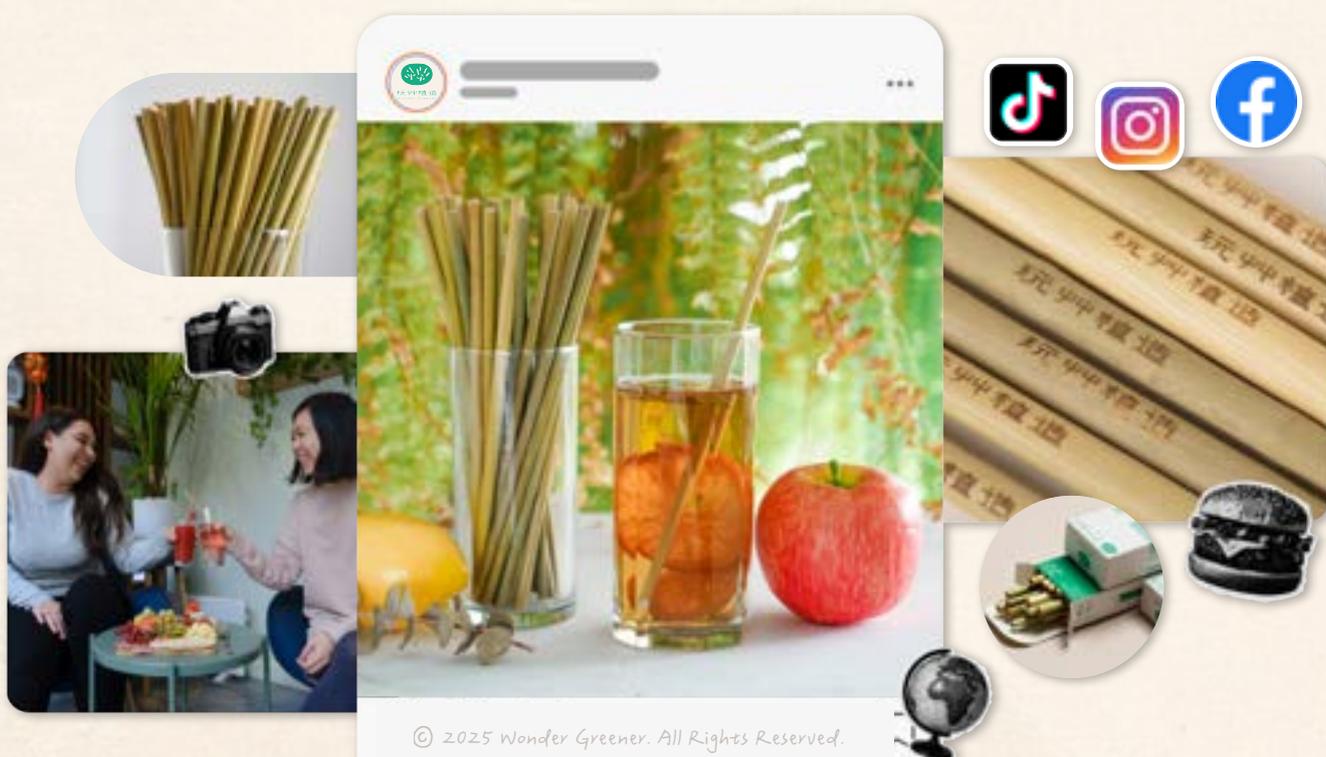
Sparks social engagement and discussion

Custom Laser Engraving

Showcase your brand logo on each straw

Unique Texture

Enhances brand distinction and dining experience





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Sustainability isn't
complete without you!

| Restaurant Industry Series

- Efficient and Low-Impact Operations Guide
- Green Supply Chain Blueprint
- Building High-Trust Sustainable Brands



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