



CASE STUDY: TURNING AGRICULTURAL WASTE INTO CARBON-NEGATIVE LOGISTICS SOLUTION



1. BACKGROUND & PROBLEM ANALYSIS

Pallets form a critical but largely unregulated layer of global logistics infrastructure. In fact, pallets underpin global logistics, **moving roughly 80% of goods** worldwide. With more than **5 billion pallets** in use, over **90% made from wood**, demand is set to rise rapidly as e-commerce volumes expand toward 200 billion shipments per year by 2030¹.

At this scale, pallet material choices carry non-trivial environmental and regulatory consequences. Most wooden pallets are cheap, single-use export pallets that are discarded after one trip. This linear model contributes to deforestation, **estimated by FAO² (2020) at approximately 10 million hectares of forest loss** per year and exacerbates climate change through carbon emissions associated with forest conversion. Plastic pallets, while more durable, are derived from fossil fuels and involve high production emissions, with end-of-life risks related to persistent plastic waste and microplastics. As a result, both dominant pallet materials pose structural sustainability challenges, increasingly at odds with global climate and circular economy priorities.

In Vietnam, pallet market remains highly concentrated around conventional materials, with around 95% of pallets still produced from wood, supplied largely by fragmented domestic manufacturers serving export-oriented industries such as agriculture, manufacturing, and logistics. The market reached USD 341.8 million in 2025 and is projected to grow to USD 510.1 million by 2034, driven by the expansion of e-commerce, increasing warehouse automation, sustainability initiatives, and sector-specific requirements such as hygiene standards in food and beverage supply chains³.

On the other hand, the sustainability challenge is compounded by the scale of agricultural residues. The country generates approximately **150 million tons of agriwaste annually**⁴, much of which is openly burned or discarded due to limited reuse pathways, contributing to air pollution and greenhouse gas emission. At the same time, Vietnam's export-oriented supply chains continue to rely predominantly on wooden pallets, exposing exporters to rising compliance costs under phytosanitary controls, deforestation-related regulations, and packaging waste policies.

These pressures are intensifying as regulatory frameworks evolve. Exporters increasingly face overlapping sustainability and trade requirements, including:

- **EU Deforestation Regulation (EUDR)**, which restricts products linked to deforestation and forest degradation;
- **Carbon Border Adjustment Mechanism (CBAM)**, increasing scrutiny of embedded emissions;

¹ <https://www.industryresearch.biz/market-reports/pallets-market-102605>.

² FAO (2020). Global Forest Resources Assessment 2020: Key findings. Rome: Food and Agriculture Organization of the United Nations. DOI: 10.4060/ca8753en

³ Imarc group, 2026

⁴ <https://en.nhandan.vn/forum-highlights-untapped-potential-for-viet-nams-circular-economy-post156807.html>

- **Packaging and Packaging Waste Regulation (PPWR)** and **Extended Producer Responsibility (EPR)** schemes, mandating material reduction, recyclability, and traceability;
- **FSC and phytosanitary standards (ISPM 15)**, which raise compliance costs for wood-based pallets through fumigation and certification.

Under these conditions, traditional pallets face a dual challenge: cost instability driven by timber price volatility, and regulatory misalignment in markets moving rapidly toward low-carbon, deforestation-free, and circular supply chains.

Problem statement: Despite their central role in global trade, pallets remain one of the least optimized elements of logistics infrastructure. The industry lacks a scalable, cost-competitive, and regulation-ready pallet solution capable of decoupling logistics growth from deforestation and fossil plastics, while simultaneously valorizing agricultural waste at industrial scale.

2. THE SOLUTION: NETZERO PALLET

NetZero Pallet is a next-generation logistics pallet engineered from **agricultural and industrial residues**, designed to replace conventional wooden and plastic pallets across export-oriented supply chains. Rather than treating pallets as disposable packaging, NetZero Pallet reframes them as circular logistics infrastructure, one that simultaneously addresses deforestation, fossil plastic dependence, and agricultural waste mismanagement.

Product composition and materials: Each NetZero Pallet is manufactured using Proprietary Material Formula consisting of approximately:

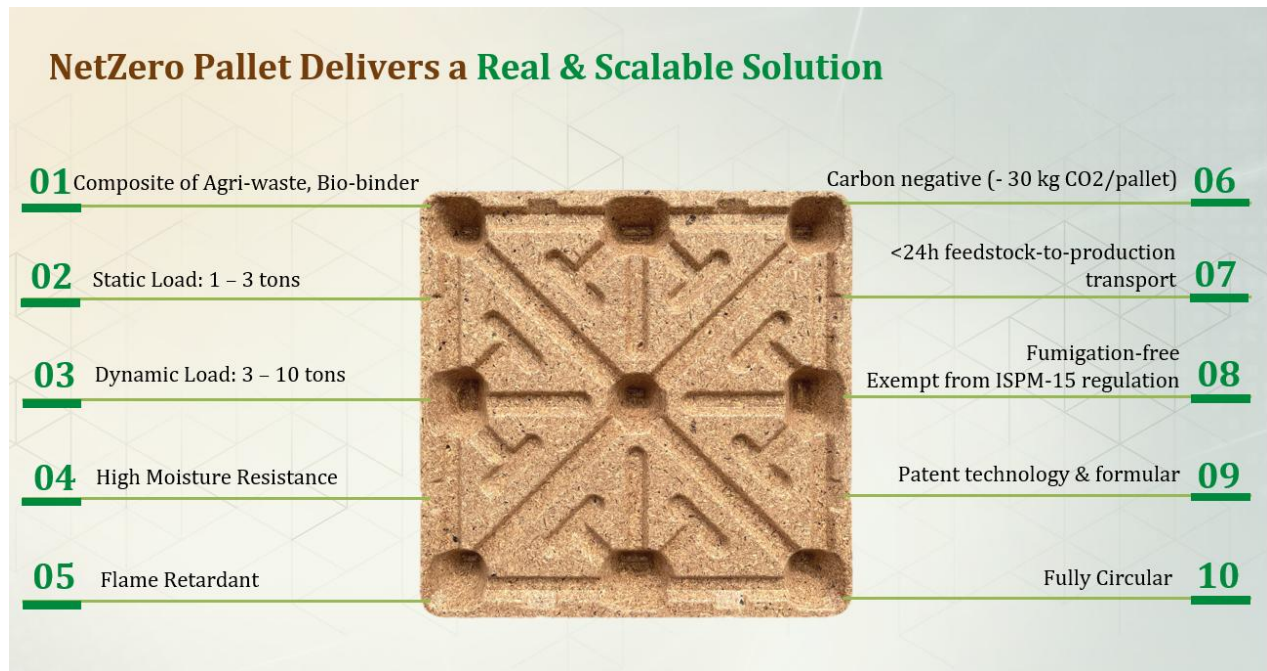
- 96% agricultural and industrial residues, including coconut husk, coffee husk, rice husk, bagasse, sawdust, and other locally available biomass streams;
- ~4% bio-based and low-emission binder, enabling structural integrity without reliance on virgin plastics or formaldehyde-based resins.

These feedstocks are abundantly available in Vietnam and across Southeast Asia, allowing NetZero Pallet to source raw materials locally while converting underutilized waste into a high-value industrial product.

Design and performance characteristics: NetZero Pallet is engineered to meet or exceed the functional requirements of standard export pallets:

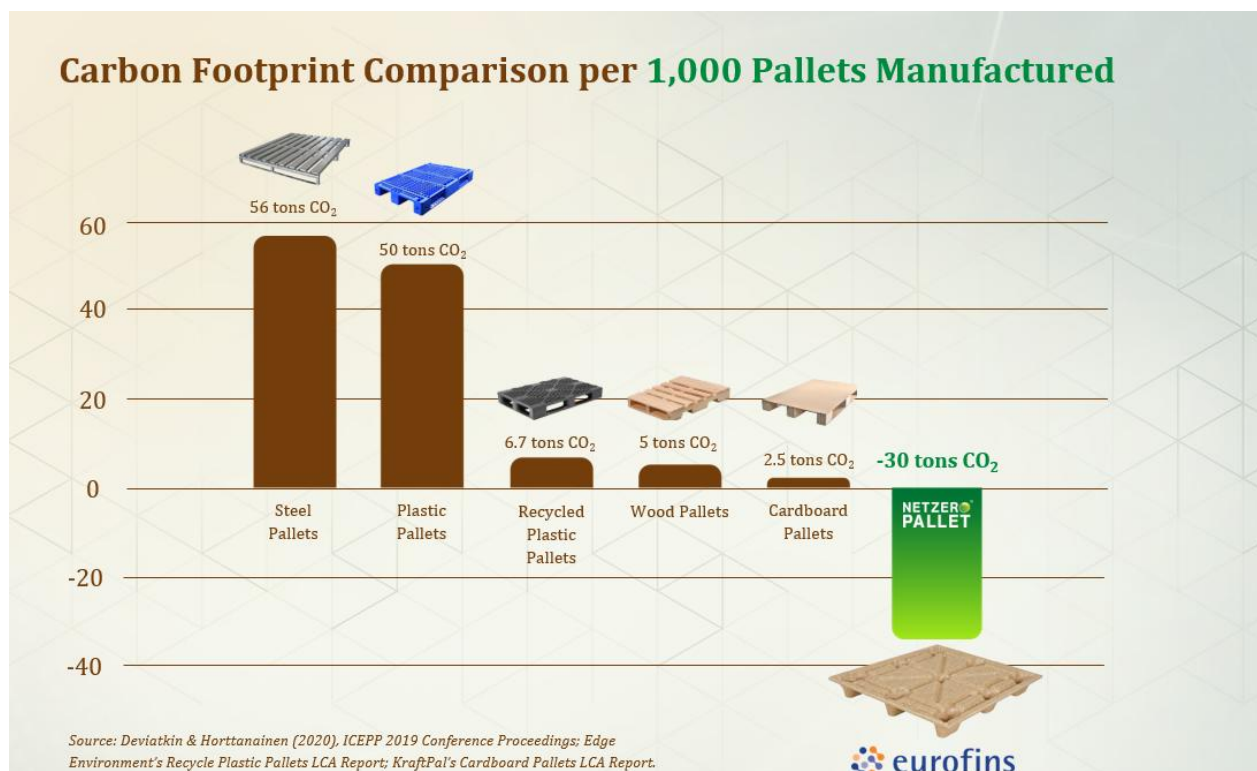
- Load-bearing capacity:
 - Static load: up to 1–3 tons.
 - Dynamic load: up to 10 tons.
- Suitable for forklifts, racking systems, and containerized shipping.

- Higher moisture resistance and dimensional stability.
- Flame-retardant properties, tested to meet industrial safety requirements.
- Automation compatibility and warehouse efficiency.
- ISPM-15 exempt, eliminating the need for heat treatment or chemical fumigation required for wooden pallets.



Carbon and environmental performance: NetZero Pallet is designed as a carbon-negative product across its cradle-to-gate lifecycle. Based on internal life cycle assessment (LCA):

- 1,000 NetZero Pallets capture ~30–34 tCO₂e, compared to ~5 tCO₂e emitted by 1,000 wooden pallets, while plastic pallets can emit up to 50 tCO₂e per 1,000 units.
- 1000 NetZero Pallet upcycles ~20–22 tons of agricultural residues, diverting biomass that would otherwise be openly burned or left to rot, thereby reducing local air pollutants and methane emissions.
- Every 6 NetZero Pallets produced prevent the harvesting of 1 mature tree, directly contributing to deforestation avoidance and long-term carbon sequestration.



Economic competitiveness: Beyond sustainability performance, NetZero Pallet is designed to be commercially competitive:

- 20–50% lower price compared to traditional wooden or plastic pallets;
- Up to 70% warehouse space savings due to nestable and stackable design;
- Up to 300% improvement in transport efficiency⁵;
- No operational friction: NetZero Pallet is a drop-in replacement that fits existing forklifts, racking systems, containers, and handling workflows without requiring changes to operations.

3. METHODOLOGY

NetZero Pallet is implemented through a commercially oriented methodology that integrates inclusive biomass sourcing, capital-efficient manufacturing, and a B2B-focused go-to-market strategy, enabling rapid scale while maintaining strong unit economics and investment readiness.

3. 1. Agricultural waste sourcing and farmer integration

At the foundation of NetZero Pallet's model is a decentralized sourcing system that converts agricultural residues into standardized industrial inputs. Each NetZero Pallet upcycles approximately **20–22 kg of agricultural waste**, including coconut husk, coffee husk, rice by-products, bagasse, sawdust, etc.

⁵ Calculated based on pallet nesting; up to 1,200 NetZero Pallets versus 400 wooden pallets per 40-foot container.

Feedstock is sourced through local collectors and farming cooperatives, primarily within short transport distances to minimize logistics cost and emissions.

From Q4 2024, when the Partnering for Green Growth and the Global Goals (P4G) commenced, through the end of 2025, NetZero Pallet's sourcing network engaged a total of **3,222 farming households**, collectively supplying approximately **1,611 tons of agricultural waste**. This model has generated additional income streams for rural households while diverting significant volumes of biomass from open burning and uncontrolled decomposition.

Based on internal life cycle assessment (LCA), the recovery and utilization of this agricultural waste has resulted in an estimated **6,178 tons of CO₂ captured and/or sequestered**, through a combination of avoided emissions from biomass burning and long-term carbon storage effects.

In employment terms, this sourcing model has supported approximately **6,444 part-time income earners** in the Mekong Delta and Central Highland, equivalent to around **2,148 full-time jobs**, across farming cooperatives supplying agricultural residues.

This sourcing approach delivers three strategic advantages:

- (i) Stable access to low-cost raw materials, reducing exposure to virgin material price volatility;
- (ii) Measurable social and environmental impact, with clear attribution at household and community levels;
- (iii) Strong alignment with circular economy and climate resilience objectives, increasingly prioritized by regulators, corporate buyers, and impact-focused investors.

3.2. Manufacturing strategy and scale pathway

NetZero Pallet's manufacturing strategy is designed to enable scalable production while maintaining product quality and material consistency.

a. Current phase – Direct manufacturing (2024-2025)

During the initial commercialization phase, NetZero Pallet operates its own production lines to validate product performance and optimize manufacturing processes. Production is based on standardized compression-molding technology with an installed capacity of approximately 300,000 pallets per year.

Operating in-house allows the company to refine material formulations, ensure consistent quality, and conduct performance validation with early B2B customers

b. Scale phase – Technology licensing and bio-binder supply (2026-2028)

As market demand grows, the manufacturing model evolves toward a decentralized network of partner-operated facilities. Under this structure, regional manufacturing partners establish pallet production capacity in biomass-rich regions while following NetZero Pallet's technical and quality standards. This distributed manufacturing approach enables:

- Faster geographic expansion close to biomass feedstock sources.
- Reduced logistics costs and emissions.
- Scalable production capacity without heavy capital investment.

3.3. Quality assurance and process control

Quality assurance at NetZero Pallet is embedded as a commercial and governance necessity, rather than a purely technical function, ensuring product consistency, regulatory compliance, and ESG integrity at scale.

- Standardized specifications for feedstock inputs (moisture content, particle size, contamination thresholds), supporting material traceability and responsible sourcing from farming communities.
- In-process controls for density, temperature, compression, and bonding performance, ensuring consistent mechanical properties and production efficiency across batches.
- Periodic performance testing for load capacity, moisture resistance, and flame retardancy, aligned with export and industrial logistics requirements.
- Design compliance with international trade standards, including ISPM-15 exemption, reducing phytosanitary risk and chemical treatment requirements.

From an ESG perspective, QA/QC systems also support:

- Environmental integrity, by ensuring accurate accounting of agriwaste utilization and carbon performance under LCA methodologies;
- Social safeguards, through documented sourcing channels that link feedstock volumes to farming households and cooperatives;
- Governance and audit readiness, via documented procedures, test records, and quality manuals that are transferable to licensed partners.

4. BUSINESS MODEL & MARKET APPROACH

NetZero Pallet operates a **B2B-focused, asset-light business model** designed to scale rapidly across export-oriented supply chains while maintaining strong unit economics and investment readiness.

4.1. Target market and customer segments

NetZero Pallet targets customers with **high pallet consumption, regulatory exposure, and ESG commitments**, where switching costs are low and value creation is immediate. Primary customer segments include:

- **Export-oriented manufacturers** (Petrochemical, Plastic, Packaging, FMCG, agriculture, electronics, textiles);
- **Logistics providers and warehouses** managing high pallet turnover;

- **Industrial parks and export hubs**, particularly those developing eco-industrial or low-carbon zones.

These segments are prioritized due to their:

- Large, recurring pallet demand;
- Exposure to **EUDR, CBAM, PPWR, EPR**, and Scope 3 reporting requirements;
- Strong incentive to adopt **drop-in, compliance-ready solutions**.

4.2. Value proposition to customers

NetZero Pallet delivers a **triple value proposition** that combines performance, cost efficiency, and regulatory and ESG compliance:

- **Operational performance and compatibility:** Durable and operation-ready, resistant to pests and mold (unlike wood), structurally stable without sagging under heavy loads (unlike plastic), and fully drop-in compatible with standard pallet sizes and automated logistics systems, ensuring zero operational disruption.
- **Cost advantage:** 20–50% lower unit price than wooden or plastic pallets, with additional savings from eliminated fumigation, reduced storage space, improved transport efficiency, and carbon tax.
- **Regulatory & ESG compliance:** Deforestation-free, ISPM-15 exempt, and carbon negative. According to LCA, 1,000 NetZero Pallets capture ~30-34 tCO₂e, compared to ~5 tCO₂e emitted by 1,000 wooden pallets, while plastic pallets can emit up to 50 tCO₂e per 1,000 units. NetZero Pallet initiative supports Scope 3 reporting and alignment with EUDR, CBAM, PPWR, and corporate ESG requirements.

4.3. Revenue model

NetZero Pallet captures value across the circular logistics ecosystem through multiple complementary revenue streams rather than relying solely on pallet manufacturing.

First, the company generates revenue from direct B2B pallet sales to exporters, manufacturers, and logistics providers. These customers require cost-competitive, export-ready pallets that comply with international trade regulations and ESG requirements.

Second, NetZero Pallet plans to monetise its proprietary biomaterial technology platform, including mold designs, material formulations, and process know-how. Industrial partners adopting the technology gain access to these components through licensing agreements and technical service arrangements.

Third, the company generates recurring income through the supply of proprietary bio-binder materials and technical quality protocols, which ensure consistent pallet performance across decentralized manufacturing partners.

Together, these revenue streams create an asset-light, scalable business model in which value is generated not only from pallet production but also from technology deployment, material supply, and ecosystem partnerships.

4.4. Go-to-market strategy

NetZero Pallet follows a **focused B2B go-to-market strategy**, emphasizing depth over breadth.

- Market entry begins with pilot projects to validate performance, cost, and compliance.
- Successful pilots convert into repeat orders and long-term supply agreements.
- Sales efforts prioritize high-volume accounts rather than fragmented distribution.
- Marketing activities emphasize:
 - Performance and cost benchmarking against wooden and plastic pallets.
 - Compliance narratives linked to EUDR, CBAM, and packaging regulations;
 - ESG and carbon impact data aligned with ESG frameworks.
 - **Certification**-backed product performance and environmental verification, strengthening credibility with multinational buyers and procurement teams.

Early customer acquisition: The company's first enterprise clients emerged through two complementary pathways during the early commercialization phase:

- Existing biomaterials relationships: Several industrial clients initially engaged with the company as buyers of bio-based materials. Through discussions around circular materials and sustainable supply chains, these customers identified pallet usage as a significant operational and sustainability challenge in their logistics operations. This naturally led to pilot collaborations evaluating NetZero Pallet as a replacement for conventional wooden pallets.
- Strategic visibility through national and international platforms: NetZero Pallet actively participated in sustainability forums, international trade fairs, and industry events. These platforms enabled the company to showcase product performance, carbon impact data, and circular economy benefits to procurement and sustainability leaders from large corporations. In several cases, these engagements directly resulted in pilot projects and commercial discussions with major exporters and logistics operators.

Brand visibility and trust are reinforced through:

- Participation in trade fairs, industry forums, and sustainability events;
- Media coverage and partnerships with corporates and development programs;
- Demonstration projects with anchor clients and industrial clusters.

5. RESULTS & IMPACT ACHIEVED

5.1. Financial performance and growth

Since entering commercialization and throughout the Partnering for Green Growth and the Global Goals (P4G) period, NetZero Pallet has demonstrated strong financial traction, validating both product–market fit and the scalability of its B2B business model.

- **Revenue performance:** NetZero Pallet achieved strong year-on-year revenue growth, with approximately **1.7× increase** compared to the previous year. Growth has been driven primarily by repeat orders from export-oriented manufacturers and logistics clients, reflecting sustained customer confidence and recurring demand.
- **Customer growth:** The B2B customer base expanded rapidly, recording nearly **ten-fold year-on-year growth**. Customer acquisition has been concentrated in high-volume, repeat-purchase accounts, supporting predictable demand and long-term commercial relationships.
- **Sales volume and pipeline:** Commercial deliveries have scaled steadily, alongside the establishment of a robust **multi-year pipeline under signed MOUs**, providing strong forward visibility and underpinning future growth..
- **Market expansion:** Export-ready products are distributed through 11 regional partners, serving customers across **21 countries in the United States, Europe, and Asia-Pacific**, demonstrating the transferability of the business model beyond the domestic market.

Investment mobilization under Partnering for Green Growth and the Global Goals (P4G):

- As part of its commitments under the Partnering for Green Growth and the Global Goals (P4G) program, NetZero Pallet set a target to mobilize USD 800,000 in investment from investors, green finance sources, and grant funding to support the next phase of production scaling and market expansion.
- To date, the company has successfully secured approximately 75% of the targeted investment, demonstrating strong investor confidence in the commercial viability and climate impact of the solution.
- The remaining portion of the target capital is currently under advanced negotiation with venture capital investors, with discussions progressing toward a term sheet. The investment is expected to be finalized in 2026 following completion of due diligence and transaction processes.

5.2. ESG impact

Alongside commercial growth, NetZero Pallet has delivered measurable environmental and social impact. Environmental and social impact metrics are monitored using internationally recognized methodologies to ensure transparency and credibility. Environmental performance is primarily assessed

through Life Cycle Assessment (LCA), which measures the carbon footprint and resource utilization associated with NetZero Pallet production.

Impact tracking during the implementation of the Partnering for Green Growth and the Global Goals (P4G) program follows the program's Monitoring, Evaluation, and Learning (MEL) framework, enabling systematic measurement of climate, environmental, and social outcomes.

In addition, the company is currently conducting GHG emissions accounting as part of the preparation of its ESG Report 2025, covering operational emissions and supply chain impact. The ESG report, which consolidates environmental, social, and governance performance indicators, is scheduled to be published by the end of Q1 2026.

a. Climate impact (Q4 2024 – end 2025)

- Approximately 33,000 NetZero Pallets deployed, utilizing 1,611 tons of agricultural waste that would otherwise have been openly burned or disposed of in landfill.
- Cumulative CO₂ captured and/or sequestered to date: 6,178 tons CO₂e, based on Life Cycle Assessment (LCA) methodology, reflecting both avoided emissions from biomass burning and carbon storage within pallet products.
- Deforestation avoidance: approximately 5,500 mature trees preserved through the replacement of conventional wooden pallets in export-oriented supply chains.

b. Social impact:

- 3,222 farming households engaged in agriwaste sourcing across the Mekong Delta and Central Highlands, creating additional income streams from previously underutilized biomass residues.
- Approximately 6,444 part-time income earners, equivalent to 2,148 full-time jobs, supported through the sourcing network connecting rural communities to circular manufacturing value chains.

5.2. Global recognition

In parallel with commercial and ESG performance, NetZero Pallet has received growing international recognition, reinforcing its credibility as a scalable climate and circular economy solution.

a. Funding and accelerators

- Supported by Partnering for Green Growth and the Global Goals (P4G) (2024), which promotes market-ready climate solutions across 6 partner countries, with a focus on public-private collaboration and impact-driven scale.
- Selected for Deltacelerate, supported by the Australian Department of Foreign Affairs and Trade, providing technical assistance and investment-readiness support.

b. Awards and international recognition

- Selected for the ASEAN Blue Innovation Challenge (ABIC), implemented by the United Nations Development Programme (UNDP).
- Recognized as a Small Business Champion by the World Trade Organization (2025), with public acknowledgment by Ngozi Okonjo-Iweala, and featured in WTO and ITC interviews.
- Awarded Innovation for Nature (2025), with an invitation to speak in Davos during activities linked to the World Economic Forum 2026.
- Recipient of the UNESCO Youth “Because You Matter” Award (2025).

c. Thought leadership and visibility

- Participation as panelist or delegate at high-level policy and sustainability events, including German Embassy Climate Talks, ASEAN Circular Economy Forum (ACEF) 2025, and Responsible Business Conduct (RBC) by the Embassy of the Kingdom of the Netherlands in Vietnam.
- Coverage by 60+ national and international published media articles, and 10+ television features at both city and national levels.

6. CHALLENGES & HOW THEY WERE ADDRESSED

6. 1. Policy and regulatory misalignment

Regulatory stakeholders: The regulatory landscape for pallet materials and circular logistics solutions involves several key stakeholders. These include government ministries responsible for agriculture, environment, and industry, which oversee biomass utilization, waste management, and industrial policy. Standards and phytosanitary authorities also play a critical role in defining export compliance requirements affecting pallet materials. In addition, industrial park authorities and export associations influence procurement practices and the adoption of new logistics materials within export-oriented supply chains.

Challenge: Despite strong alignment with Vietnam's green growth, circular economy, and net-zero commitments, agriwaste-based pallets are not explicitly recognized within existing regulatory frameworks. Current pallet-related regulations, covering packaging, phytosanitary control, timber legality, and waste management, remain largely designed around **wooden and plastic pallets**, creating regulatory ambiguity for new material categories.

In practice, this has led to:

- Lack of formal classification or national standards for agriwaste-based pallets;
- Inconsistent interpretation of ISPM-15 exemptions, sometimes resulting in unnecessary fumigation requests;
- Limited differentiation under EPR implementation, despite strong alignment with reuse and waste valorization objectives.

Response: NetZero Pallet proactively engaged with policymakers, development partners, and industry stakeholders to address these gaps:

- Developed a dedicated **Policy Brief** mapping global and Vietnamese regulatory frameworks, identifying material-specific gaps and proposing targeted policy adjustments;
- Leveraged platforms such as **P4G-supported dialogues and policy forums** to raise awareness of agriwaste-based pallets as a distinct, regulation-ready material category;
- Worked closely with exporters and logistics partners to document compliance pathways and reduce shipment-level uncertainty.

6. 2. Long sales cycles with large corporate buyers

Challenge: Adoption by large multinational buyers, particularly in FMCG and global logistics, requires extensive validation. For anchor clients such as multinational beverage and consumer goods companies, the sales cycle can extend **12 months or longer**, involving:

- Technical and performance testing;

- Warehouse and automation compatibility checks;
- ESG, procurement, and risk assessments.

While necessary, these long cycles can slow revenue conversion and strain early-stage cash flow.

Response: NetZero Pallet adapted its commercial strategy to manage long enterprise sales cycles without slowing overall growth:

- Running **multiple pilots in parallel** across different clients and sectors to diversify conversion timelines;
- Using **MOUs and non-binding agreements** to quantify projected demand during pilot phases, supporting production planning and pipeline visibility;
- Prioritizing pilot customers with high pallet volumes and clear ESG mandates to increase the likelihood of repeat orders;
- Converting successful pilots into **long-term supply arrangements**, rather than one-off transactions.

6. 3. Investment constraints in climate-tech solutions

Challenge: In Vietnam, early-stage venture capital has tended to prioritize “fast-scaling” digital sectors such as fintech, AI, and software platforms. Capital-intensive or long-term plays, particularly in **manufacturing and climate-tech**, often face longer fundraising timelines and limited local VC appetite. This creates a mismatch between the **long-term value creation profile** of circular manufacturing solutions and short-term investment expectations.

Response: NetZero Pallet addressed this challenge through a deliberate investment strategy:

- Shifting fundraising focus toward **impact-oriented investors** and climate funds in **Singapore, Europe, and the broader Asia-Pacific region**, where circular economy and supply chain decarbonization are established investment themes;
- Leveraging the **Partnering for Green Growth and the Global Goals (P4G)** to increase international visibility, credibility, and access to aligned investors and development partners;
- Prioritizing **strategic investors**, including industrial partners and supply chain stakeholders, who bring market access, technical expertise, and long-term alignment, rather than purely financial capital.

This approach supports patient capital formation and aligns financing with the company’s asset-light licensing strategy, enabling sustainable scale rather than short-term growth pressure.

7. LESSONS LEARNT

The implementation of NetZero Pallet has generated several key lessons relevant to scaling circular and climate-tech solutions in emerging markets:

- **Drop-in solutions accelerate adoption:** Sustainability innovations gain faster market acceptance when they integrate seamlessly into existing operations without requiring changes to infrastructure or workflows.
- **Policy engagement is as critical as product innovation:** For first-mover materials, early engagement with regulators and policymakers is essential to reduce uncertainty and unlock scale.
- **Enterprise customers require patience and structure:** Long pilot and validation cycles can be managed effectively through parallel pilots, MOUs, and pipeline planning.
- **Impact data strengthens commercial outcomes:** Credible, quantified ESG and climate data enhances trust with corporate buyers, development partners, and investors.
- **Capital strategy must match the business model:** Manufacturing-based climate solutions benefit from patient, strategic capital aligned with long-term value creation rather than short-term exits.

8. RECOMMENDATIONS & FUTURE OUTLOOK

Looking ahead, NetZero Pallet presents a scalable pathway for transforming agricultural waste into climate-positive logistics infrastructure.

a. Policy and ecosystem recommendations

- Recognize agriwaste-based pallets as a distinct material category within packaging, logistics, and circular economy regulations.
- Integrate such solutions into EPR, green procurement, and export compliance frameworks.
- Enable public-private collaboration with industrial park developers and local authorities to integrate circular pallets into national logistics infrastructure.

b. Business and scale outlook

- Scale production through a technology licensing and bio-binder supply model, enabling rapid regional expansion with limited capital intensity.
- Deepen partnerships with multinational buyers to convert pilots into long-term supply agreements.
- Expand into Southeast Asia, Europe, and other biomass-rich regions where regulatory pressure and supply chain decarbonization demand are increasing.

c. Investment outlook

- Continue engaging impact-oriented and strategic investors across Asia and Europe who align with circular economy and climate mitigation objectives.

- Leverage platforms such as Partnering for Green Growth and the Global Goals (P4G) to amplify visibility, credibility, and cross-border collaboration.

Conclusion: NetZero Pallet demonstrates how agricultural waste can be transformed into a commercially viable, regulation-ready, and climate-positive logistics solution. With the right policy alignment, strategic partnerships, and patient capital, the model offers strong potential to scale across global supply chains while delivering measurable environmental, social, and economic impact.