



Global Compact
Network
Malaysia & Brunei

Wasco Forest: Advancing Biodiversity and Ecosystem Restoration

A Case Study of



Knowledge Partner:



Sunway
**BUSINESS
SCHOOL**

Wasco Berhad

Restoring Forest Landscapes Through Community-Based, Science-Led Reforestation



As a publicly listed company operating in the energy and oil & gas sector, Wasco is committed to strengthening its environmental stewardship and advancing its broader sustainability agenda, including its target to achieve Net Zero Scope 1 and 2 emissions by 2026. This commitment is anchored in operational measures to reduce emissions at source, including efficiency improvements, process optimisation, and technology upgrades across its operations. In parallel, recognising the limitations of relying solely on purchasing carbon credits—a transactional approach offering limited transparency and community benefit—the company launched Wasco Forest, a reforestation and conservation initiative grounded in ecological regeneration.

Wasco Forest complements Wasco's emissions-reduction efforts by delivering long-term, nature-based outcomes through the restoration of degraded landscapes, enhancing biodiversity, and improving soil and ecosystem health through sustained, science-based monitoring.

Company At A Glance

- Industry: Energy
- Headquarters: Kuala Lumpur, Malaysia
- Global Presence: Active operations in Australia, Canada, China, Dubai, India, Indonesia, Italy, the Netherlands, Qatar, Singapore, Tanzania, the United Kingdom, and the United States of America.
- Workforce: Over 5,000 employees

The Challenge

Rethinking Conventional Offsets: Recognising the Limitations of Open- Market Carbon Credits

Wasco recognised that conventional open-market carbon credit purchasing offered limited transparency, regional relevance, and community benefit. At the same time, the company observed that degraded forest areas, declining biodiversity, and deteriorating soil conditions were affecting the ecological balance of landscapes surrounding the regions in which it operates. These environmental concerns were reinforced through ongoing engagement with local communities and environmental authorities, who highlighted the need for more direct, locally grounded restoration efforts.

In response, Wasco sought a more meaningful and accountable approach, one that would deliver measurable, nature-based outcomes rather than relying solely on transactional mechanisms such as carbon credit purchases. This intention led to the establishment of the Wasco Forest initiative, marking a shift toward direct, locally grounded environmental restoration.

The Action

Launched in late 2021, Wasco Forest was designed as a long-term commitment to ecological regeneration. The initiative was implemented through cross-sector partnerships, internal leadership support, and a structured execution plan that enabled roll-out following the COVID-19 lockdown period.

1. Securing Land and Forestry Expertise

Wasco engaged the Pahang Forestry Department to identify suitable reforestation areas. A total of 100 hectares was allocated for restoration, with Pahang Forestry Department's experts providing technical guidance to support a learning-by-doing approach given Wasco's limited prior experience in forestry work.

2. Adopting a Native Species Mixed Forestry Model

Based on expert recommendations, Wasco adopted a mixed native species reforestation approach to strengthen ecosystem resilience and biodiversity recovery. The company set a density target to plant 160,000 trees across the allocated site to support healthy forest establishment.

3. Engaging Local Communities for Implementation

Wasco partnered with a local contractor who works closely with the indigenous Orang Asli community, ensuring that tree planting and ongoing site maintenance were carried out by local community members. The project team coordinated the work to ensure consistency and site-level continuity.

4. Securing Resources and Internal Alignment

Budget approval and organisational commitment were secured at the highest level, with Wasco's Managing Director/Group Chief Executive Officer (MD/GCEO) championing the initiative at Board level. Implementation was coordinated across three core departments:

- **Sustainability, providing strategic direction and environmental oversight**
- **Finance, managing resource allocation and budgeting**
- **Operations, overseeing daily execution and project management**

5. Establishing a Timeline

The project adopted a phased execution plan spanning two years, allowing planting activities to be sequenced according to seasonal suitability and enabling adaptive learning as the project progressed. This measured approach supported the stable establishment of young trees and long-term forest development.

6. Establishing Monitoring and Verification Mechanisms

To ensure transparency and credibility, an independent specialist was engaged to assess tree mortality, verify species composition, and review site conditions. Carbon sequestration potential was estimated using diameter-at-breast-height (DBH) measurements and species-specific biomass equations, providing Wasco with evidence-based insights for ongoing improvement and long-term impact assessment.

Enablers For Sustainability Performance And Impact



Leadership & Culture

Wasco's MD/GCEO visited the reforestation site to observe progress firsthand, and updates were integrated into existing governance structures, including regular presentations to the Sustainability Steering Committee.



Strategy

The Wasco Forest reforestation and conservation initiative supports Wasco's broader sustainability objectives, including its target of achieving Net Zero Scope 1 and 2 emissions by 2026. By investing in nature-based climate action and ecosystem restoration, the initiative complements the organisation's strategic commitment to long-term value creation and aligns with global sustainability priorities.



Process

The Head of Sustainability provided strategic direction and stakeholder coordination throughout the project. Weekly check-ins with the on-site team strengthened the connection between high-level oversight and operational realities, enabling informed and timely decision-making.



Governance

Wasco's Sustainability Steering Committee and Board Sustainability Committee convene quarterly, with the Wasco Forest progress included as a standing agenda item. This governance structure ensured clear milestones, visibility on implementation progress, and timely escalation of challenges or resource needs.



Resources

Wasco recognised Wasco Forest as a strategic sustainability investment and integrated it into core business planning. RM1.7 million was allocated for the first phase, with 85% directed toward the procurement of tree saplings and the fair compensation of Orang Asli community members involved in planting and maintenance.



People

Because the reforestation site is located in a remote area, volunteering opportunities were limited to employees directly involved in implementation. Wasco maintained organisational engagement through internal communications and employee sessions, enabling the wider workforce to understand and take pride in the initiative.



ESG Data

Wasco tracks key ecological metrics such as tree survival rates, species diversity, and carbon sequestration estimates using DBH-based biomass calculations. These data points inform ongoing forest management and are supplemented by qualitative updates shared through Wasco's sustainability reports.



Digital Transformation

A digital dashboard was established to track planting progress and site updates in real time, enabling improved visibility across departments and supporting data-driven decision-making.



Partnerships and Stakeholder Engagement

Strategic partnerships underpinned the initiative's success – combining regulatory support from the Forestry Department, indigenous knowledge from local communities, scientific expertise, and independent verification to ensure credible outcomes.



Supply Chain and Procurement

Wasco applied its standard corporate procurement processes to maintain financial controls and vendor accountability, while balancing procedural requirements with practical considerations needed for on-ground forest ecology and local community participation.

Overcoming Barriers

In undertaking its first reforestation and conservation initiative of this scale, Wasco encountered several key challenges that required careful coordination and adaptive learning.

1. Challenging Terrain and Site Accessibility

Only 75 hectares of the allocated 100-hectare site were suitable for planting, as certain areas were too steep for safe work. The remote location and seasonal monsoon rains also posed logistical constraints, requiring planting schedules to be adjusted around weather conditions and site accessibility.

2. Limited Internal Forestry Experience

As forestry was not a core competency, Wasco faced a steep learning curve in understanding native species selection, site preparation, and long-term forest maintenance. To address this, the team relied on technical guidance from the Pahang Forestry Department and incorporated traditional ecological knowledge through collaboration with the Orang Asli community.

3. Establishing Appropriate Measurement and Verification Methods

Measuring environmental outcomes required credible and context-specific methodologies. Wasco addressed this by working with specialists in forest carbon accounting and biodiversity monitoring to establish suitable metrics—ranging from tree survival rates and species composition to DBH-based biomass estimation—ensuring that assessment methods were both robust and tailored to the Wasco Forest context.

Impact and Results

The Wasco Forest initiative has delivered early but meaningful environmental, social, and organisational outcomes, supported by structured monitoring and multi-stakeholder collaboration.

1. Tangible Biodiversity and Ecosystem Recovery

Reforestation efforts have begun to restore ecological balance within the project site.

Key environmental outcomes include:



These observations indicate early signs of habitat restoration following reforestation.

2. Strengthened Climate-Related Environmental Performance

Wasco adopted recognised scientific monitoring approaches, including:



Through these assessments, Wasco estimates that the Wasco Forest site will achieve:



These results demonstrate the long-term climate contribution of restoring a previously degraded forest landscape.

3. Socioeconomic Uplift for Indigenous Communities

The initiative has supported local livelihoods through continued engagement with the Orang Asli community.

Confirmed outcomes include:



RM656,000
in community employment
contracts



Sustained job creation for
10 Orang Asli workers
who carry out planting and
maintenance activities



Opportunities for community
members to apply and strengthen
**traditional ecological
knowledge** through
active participation

4. Strengthened Institutional Credibility and External Recognition

Demonstrated progress and credibility have strengthened cross-sector relationships and external confidence:

- **The Pahang Forestry Department endorsed the initiative and allocated an additional 670 hectares for Phase 2, launched in 2025 and inaugurated by the Sultan of Pahang**



- **The initiative was recognised under the Purposeful Partnership category of the UNGCMYB ESG Select List, underscoring its collaborative approach and measurable environmental value**

5. Enhanced Organisational Purpose and Stakeholder Trust

Wasco Forest has reinforced organisational alignment around sustainability. The initiative has strengthened employee pride and increased stakeholder confidence by demonstrating transparent, measurable, and locally grounded environmental action.

Key Lessons Learned

1. Strong Partnerships are Essential for Successful Reforestation

The initiative demonstrated the value of collaborating with forestry authorities, the Orang Asli community, local contractors, and independent specialists. These partnerships helped bridge internal capability gaps and ensured technical, cultural, and operational insights were integrated into implementation.

2. Engage Technical Expertise Early to Strengthen Planning

Wasco found that earlier engagement of forestry and ecological experts would have strengthened species selection, planting design, baseline assessments, and monitoring setup. Clear technical planning upfront helps ensure smoother execution later.

3. Invest in Building Internal Capacity and Ecological Understanding

The project highlighted the importance of acknowledging internal knowledge gaps and strengthening ecological literacy. Continuous learning and hands-on experience contributed to better decision-making and alignment across teams.

4. Phased and Adaptive Implementation Improves Project Resilience

Executing the initiative in phases enabled Wasco to navigate terrain challenges, weather patterns, and on-ground realities more effectively. Remaining adaptable and adjusting plans as new insights emerged proved essential for successful establishment.

5. Robust Monitoring and Transparent Reporting Build Credibility

The use of scientific monitoring—such as DBH-based biomass estimation, species diversity

checks, and soil carbon analysis—reinforced the importance of credible data. Transparent reporting enhanced stakeholder trust and supported continuous improvement.

6. Long-Term Commitment is Critical for Meaningful Restoration

The initiative reaffirmed that reforestation is a long-term effort. Tree growth, ecosystem recovery, and biodiversity regeneration unfold gradually, requiring consistent maintenance, monitoring, and patience.

Wasco Berhad joined the UN Global Compact Malaysia & Brunei (UNGCMYB) network in November 2024 and has since participated in the Climate Ambition, IFRS S2, and Target Gender Equality Accelerators.

Wasco has been a member of the UN Global Compact Network Malaysia & Brunei (UNGCMYB) since November 2024, formalising its commitment to responsible business practices. Although the Wasco Forest initiative was launched prior to its membership, the project aligns with the UNGC's environmental principles by demonstrating measurable, transparent action in support of responsible environmental stewardship. Through participation in UNGCMYB platforms and engagements, Wasco has gained opportunities for learning, benchmarking, and connecting with organisations advancing sustainability in Malaysia. These interactions complement the company's broader sustainability efforts and reinforce its commitment to long-term environmental action.

“ Wasco Forest is more than a reforestation initiative — it is our long-term commitment to restoring ecosystems, strengthening communities, and demonstrating what responsible climate action looks like in practice. We chose to bring our own forest to life and nurture it because accountability must be tangible. Every tree we plant is a signal of our intent, and every partner in this journey reflects our belief in shared responsibility for the environment. ”

Giancarlo Maccagno,
Managing Director/Group Chief Executive
Officer, Wasco Berhad



“ The Wasco Forest shows that collaboration among companies, communities, government, and researchers can create robust nature-based solutions for climate resilience. What started as tree planting is now a hub for biodiversity, inclusive employment, and regeneration, delivering real value for people, ecosystems, and the future. ”

Ariesza Noor,
Chief Strategy Officer, Wasco Berhad



THE TEN PRINCIPLES OF THE UNITED NATIONS GLOBAL COMPACT



HUMAN RIGHTS

- 1 Businesses should support and respect the protection of internationally proclaimed human rights; and
- 2 make sure that they are not complicit in human rights abuses.



LABOUR

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- 4 the elimination of all forms of forced and compulsory labour;
- 5 the effective abolition of child labour; and
- 6 the elimination of discrimination in respect of employment and occupation.



ENVIRONMENT

- 7 Businesses should support a precautionary approach to environmental challenges;
- 8 undertake initiatives to promote greater environmental responsibility; and
- 9 encourage the development and diffusion of environmentally friendly technologies.



ANTI-CORRUPTION

- 10 Businesses should work against corruption in all its forms, including extortion and bribery.

The Ten Principles of the United Nations Global Compact are derived from: the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

ABOUT UN GLOBAL COMPACT NETWORK MALAYSIA & BRUNEI

United Nations Global Compact (UNGC) is a strategic policy initiative for businesses that are committed to take actions to advance broader societal goals. UN Global Compact Network Malaysia & Brunei (UNGCMYB), the official country network of UNGC, is the leading advocate for business sustainability action in Malaysia and Brunei. We empower both corporates and SMEs through value-creating initiatives across learning, connections, and enablers to Forward Faster a collective sustainable future. We support Malaysian and Bruneian companies in aligning with the Ten Principles and contributing meaningfully to the Sustainable Development Goals (SDGs), while providing access to partnerships, tools and knowledge sharing to advance responsible business practices.

Talk to us about joining us or visit our website at www.ungcmlyb.org



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