

# Awards Announcement

of

Sustainable International Business  
Global Poster Competition 2025



01

‘Decade of Action’  
Sustainable Development  
Award



# Global 'Decade of Action' Sustainable Development Award Cycle 1



## The Future of Fashion is Circular: Primark's Journey Towards Sustainability

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### 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG 12 (Responsible Consumption and Production) aims to ensure sustainable resource use, waste reduction, and ethical production practices across industries including fashion. The fashion industry, driven by high production volumes and short product lifecycles, significantly contributes to environmental degradation through excessive water use, carbon emissions, and textile waste. Moreover, consumer. To align with SDG 12, fashion brands must transition from linear production models to circular economy practices, promoting sustainability through responsible sourcing, waste reduction, and extended product lifespans.

**Infinite growth of material consumption in a finite world is an impossibility**  
— E. F. Schumacher

#### WICKEDNESS SCALE

SDG 12 is a wicked problem with total stakeholders count of 83 affected by complexity across multiple dimensions: 11 issues economic, environmental, and social challenges, requiring coordinated action at local, national, and global levels. The issue is complex and multi-faceted, involving multiple stakeholders, including governments, NGOs, and consumers. Addressing SDG 12 demands radical collaborative collaboration, with governments, corporations, and consumers taking public, shared, leadership responsibility, and embracing public, shared, leadership responsibility, and embracing public, shared, leadership responsibility.

#### WICKEDNESS OF THE PROBLEM

CATEGORY	SCOPE EXPLANATION
Multi-Dimensional	Fast fashion impacts environmental, social, and economic factors. Banned practices and resource depletion to labor rights and resource dependency (SMEP, 2022; European Parliament, 2023).
Multi-Level	From raw material extraction and global trade, leading to environmental degradation and social inequality (SMEP, 2022).
Multi-Class	Over-consumption, cheap labor, lack of regulations, and economic incentives drive fast fashion's unsustainable model (SMEP, 2022).
Multi-Ethnic	Fast fashion is driven by change, where policies, practices, and values change rapidly (SMEP, 2022).
Multi-Directional	Stakeholders involved include brands, governments, NGOs, and consumers, but conflicts arise due to different priorities (SMEP, 2022).
Multi-Fixed	The rapid production cycle of fast fashion makes it difficult to implement changes, making it difficult to implement (SMEP, 2022).
Multi-Frames	Stakeholders view the issue differently: businesses focus on profitability, governments on regulations, and consumers on affordability (SMEP, 2022).
Multi-Source	The problem originates from raw material sourcing, labor conditions, production waste, and consumer behavior, all of which need to be addressed simultaneously (SMEP, 2022).
Multi-Stakeholder	Involves governments, suppliers, NGOs, labor unions, and consumers, each with different roles and interests (SMEP, 2022).
Multi-Responsibility	Government, brands, and consumers all have responsibilities, but accountability remains unclear, with many offshoring (SMEP, 2022).

The Higher Wickedness Scale score for Fast Fashion (SDG 12) (89/70) is due to the unique and complex challenges presented by the fast fashion industry.

**Higher Complexity Impact:** Fast fashion directly amplifies multiple SDG 12 challenges, such as environmental degradation, labor rights, and resource dependency, leading to a higher complexity score.

**2. Interconnectedness:** Fast fashion's impact on the environment, social inequality, and resource depletion is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**3. New Stakeholders:** Involves governments, suppliers, NGOs, labor unions, and consumers, each with different roles and interests, making it a highly complex and interconnected issue.

#### PROMISING APPROACH PRIMARK

Primark is a leading fast fashion retailer with over 400 stores across 15 countries, offering affordable clothing at under €10 per item. To meet the SDG 12 challenge, Primark has implemented a circular economy approach, focusing on responsible sourcing, waste reduction, and extending product lifespans. The company has introduced a 'Wardrobe Revolution' program, encouraging customers to buy less, choose well, and care for their clothes. This approach aligns with SDG 12's goal to promote responsible consumption and production (Primark, 2023).

**PRIMARK CARES OVERVIEW**  
The circular economy is a key sustainability initiative, aiming to improve ethical and social responsibility across the value chain. Primark's commitment to the circular economy is reflected in its 'Wardrobe Revolution' program, which encourages customers to buy less, choose well, and care for their clothes. This approach aligns with SDG 12's goal to promote responsible consumption and production (Primark, 2023).

**SUSTAINABILITY INITIATIVES**

- Waste Reduction: Aimed to reduce waste by 20% by 2025, using 90% recycled and sustainable raw materials (Primark, 2023).
- Water Conservation: Aimed to reduce water consumption by 20% by 2025, using 90% recycled and sustainable raw materials (Primark, 2023).
- Responsible Sourcing: Aimed to ensure 100% of raw materials are responsibly sourced by 2025, using 90% recycled and sustainable raw materials (Primark, 2023).
- Product Longevity: Aimed to extend the life of products by 20% by 2025, using 90% recycled and sustainable raw materials (Primark, 2023).

**STRENGTHS**

- Clear Sustainability Goals & Accountability: Primark has set specific targets for carbon footprint, water consumption, and waste reduction, with progress reported in its annual sustainability report (Primark, 2023).
- Waste Reduction & Circular Economy: Primark has introduced single-use plastic and fast fashion packaging to promote responsible consumption, aligning with SDG 12's goal to reduce waste (Primark, 2023).
- Water Conservation & Sustainable Sourcing: Primark has introduced single-use plastic and fast fashion packaging to promote responsible consumption, aligning with SDG 12's goal to reduce waste (Primark, 2023).

**CHALLENGES**

- Complexity of the Circular Economy: Primark's high volume, low-cost production model presents unique challenges in implementing circular economy practices, such as responsible sourcing and waste reduction (Primark, 2023).
- Consumer Behavior Change: Encouraging customers to buy less, choose well, and care for their clothes is a significant challenge for Primark, as it requires a shift in consumer behavior (Primark, 2023).
- Supply Chain Complexity: Primark's global supply chain, involving multiple countries and suppliers, makes it difficult to implement circular economy practices consistently (Primark, 2023).
- Regulatory Hurdles: Navigating different regulatory requirements across various countries and regions is a challenge for Primark, as it seeks to implement circular economy practices (Primark, 2023).

#### TREND OVERVIEW

RESPONSIBLE FOR 8-10% OF GLOBAL CARBON EMISSIONS

78% BELLICIOUS LITERS OF WATER USED ANNUALLY

90% OF ALL OCEAN PLASTIC DEBRIS (WASTED) ENDS UP IN THE SEA

10% OF WASTED MATERIALS RECYCLED BACK

NO LARGEST CONTAINER OF WATER IN THE WORLD

NEW OUTLOOK FOR THE INDUSTRY - ADOPTION OF CIRCULAR FASHION MODELS

ENHANCED SUSTAINABILITY REGULATIONS

CONSUMER SHIFT TOWARDS SUSTAINABLE PRACTICES

CURRENT LEVELS OF INTERVENTION

- COMPLIANCE**  
Primark has surpassed the compliance stage, as Primark Cares was developed to go beyond legal requirements and set measurable sustainability goals. Their annual reports track progress and ensure transparency (Primark, 2023a).
- INTEGRATION**  
Primark is currently at this level, having integrated sustainability into its business model, but progress remains slow due to the fast-paced nature of its operations (Eram MacArthur Foundation, 2023). Key initiatives such as the Primark Cares Project, carbon reduction targets, and supply chain transparency support this classification (Primark, 2023b).
- TRANSFORMATION**  
To advance, Primark must align sustainability efforts with the speed of fast fashion by investing in durable clothing, expanding recycling and repair programs, enhancing online resale initiatives, and strengthening fair wage policies (SMT, 2024).
- REGENERATION**  
Primark's long-term goal is to create a lasting positive impact on society and the environment by investing in social impact projects like reforestation and advocating for stronger sustainability policies (European Parliament, 2023).

#### INTERCONNECTEDNESS

Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**1. SDG 12: Responsible Consumption and Production**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**2. SDG 13: Climate Action**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**3. SDG 14: Life Below Water**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**4. SDG 15: Life on Land**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**5. SDG 16: Peace, Justice, and Strong Institutions**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

**6. SDG 17: Partnerships for the Goals**  
Primark's SDG 12 strategy is interconnected with other SDG 12 goals, such as responsible consumption and production, making it a highly complex and interconnected issue.

#### SOCIETAL TRIANGULATION ANALYSIS

Fast fashion's rapid production cycles and disposable culture create a societal triangulation where consumers, corporations, and governments are interconnected, creating a complex web of relationships. Consumers are influenced by affordability and trends, while governments struggle to enforce sustainable regulations, leading to persistent environmental and ethical challenges.

STATE	MARKET	CIVIL SOCIETY
<p><b>CONSUMERS</b></p> <p>Driven by fast fashion's low prices and trends, leading to overconsumption and environmental impact.</p>	<p><b>CORPORATIONS</b></p> <p>Fast fashion brands like Primark, driven by profit, leading to unsustainable production and waste.</p>	<p><b>GOVERNMENTS</b></p> <p>Struggling to enforce sustainable regulations, leading to persistent environmental and ethical challenges.</p>

**PROPOSED HIGH LEVEL CSR STRATEGY**

Primark aims to become a circular fashion leader, promoting sustainable consumption and reducing its carbon footprint while maintaining affordability (SMT, 2024).

**KEY STRATEGIC AREAS & ACTIONS**

**CIRCULAR ECONOMY CHANGES**

- Greater Product Lifecycle:** Introduce product durability standards to extend the life of products, reducing waste and increasing value (SMT, 2024).
- Responsible Material Transition:** Shift to more sustainable materials, such as recycled and organic cotton, to reduce environmental impact (SMT, 2024).
- Waste Reduction:** Implement advanced recycling technologies to reduce waste and increase resource efficiency (SMT, 2024).

**Design for Longevity:** Introduce product durability standards to extend the life of products, reducing waste and increasing value (SMT, 2024).

**Water Conservation:** Implement advanced recycling technologies to reduce waste and increase resource efficiency (SMT, 2024).

**Responsible Sourcing:** Implement advanced recycling technologies to reduce waste and increase resource efficiency (SMT, 2024).

**Product Longevity:** Implement advanced recycling technologies to reduce waste and increase resource efficiency (SMT, 2024).

**Waste Reduction:** Implement advanced recycling technologies to reduce waste and increase resource efficiency (SMT, 2024).

# Global 'Decade of Action' Sustainable Development Award Cycle 1



## Nestle - Transformation through Partnerships

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University of Leeds (Undergraduate)

### Introduction of SDG 12

- Focus Sustainable consumption and production patterns.
- Objectives:
  - Resource and energy efficiency.
  - Sustainable infrastructure.
  - Access to basic services.
  - Quality of life.
- Goals:
  - Develop economic growth from environmental degradation.
  - Increase resource efficiency.
  - Promote sustainable lifestyles.
  - Key Targets:
    - Reduce waste.
    - Manage chemicals responsibly.
    - Encourage sustainable business practices.
    - Promote sustainability awareness and education.

### Nestlé contributions towards SDG 12

Nestlé has made recent efforts to report on its environmental impact, covering emissions, energy consumption, water use, and sustainable management. In 2023, Nestlé set targets for cutting greenhouse gas emissions, with a specific goal to achieve net zero by 2050.

- Reducing emissions by approximately 1 million metric tons compared to their 2018 baseline.
- Focusing on improvements in energy efficiency and sourcing renewable energy at their facilities (8.6bn invested in renewable electricity, reaching around 67% of its total electricity use from renewables globally).
- 13% of electricity at its global manufacturing sites came from renewable sources by 2023.
- In 2023, Nestlé achieved a 3.3% reduction in its greenhouse gas (GHG) emissions relative to its 2018 baseline.
- The company aims to reach a 20% absolute reduction by 2025, with methane emissions alone cut by over 35%. Most emissions reductions (84%) were achieved across Nestlé's operations and supply chain, including significant efforts in dairy, which is a major contributor to its GHG footprint.
- It has set ambitious science-based targets for net-zero emissions by 2050, validated by the Science Based Targets initiative (SBTi).

Nestlé Creating Shared Value Sustainability Report 2023

### Nestlé's use of Technology to address SDG 12

Through the use of technology, Nestlé has been able to address and tackle issues pertaining to responsible production and consumption of goods.

- Nestlé has used advanced agricultural technology to create high quality ingredients with less carbon.
- Their research from breeding less coffee varieties with lower carbon footprints is providing farmers with disease resistant cocoa (Nestlé, 2024).

Nestlé as an organization are in the process of developing methods to improve soil health and reduce emissions. Some of these strategies include:

- Zero-tillage farming, which minimizes soil disturbance, keeping carbon in the soil (Spears, 2024)
- Better crop protection methods (Nestlé, 2024).
- Energy efficient techniques, such as new coffee roasting methods to biomass heaters, which will improve spray drying efficiency (Nestlé, 2024).

These technological efforts are an integral part of Nestlé's broader commitment to sustainability and responsible production, as they seek to have a positive impact on society and the environment.

### Intervention levels

Creating Positive Externalities

- Sustainable Product Development: Innovate and offer products that have a lower environmental impact throughout their lifecycle.
- Environmentally Packaging: Design packaging that is recyclable, biodegradable, or reusable to reduce waste.
- Resource Efficiency: Optimize the use of resources in production to minimize waste and emissions.
- Green Supply Chain: Implement sustainable practices across the supply chain, from sourcing to distribution.
- Consumer Awareness: Educate consumers on the environmental impact of their choices and promote sustainable consumption.

Stimulating Collective Action

- Industry Collaboration: Work with other companies in the industry to set and adhere to sustainability standards.
- Public-Private Partnerships: Collaborate with governments and NGOs to develop and implement sustainability initiatives.
- Multi-Stakeholder Forums: Participate in platforms that bring together various stakeholders to address systemic issues.
- Joint Ventures: Enter joint ventures with other organizations to develop sustainable technologies and solutions.
- Collective Impact: Initiate Legacies in initiatives that aim to solve complex social and environmental issues through coordinated efforts.

### SDG 12 - Responsible Consumption and Production

#### Wickedness scale

SDG 12: Responsible Production and Consumption  
Focus: Encourage sustainable management and consumption

Assessment: Considered a wicked problem due to its **complexity and interconnectedness** with many other SDGs

**Key connections and impacts**

- Environmental Impact:** Directly related to SDG 13 (Climate Action), SDG 14 (Life Below Water), SDG 15 (Life on Land), SDG 16 (Peace, Justice and Strong Institutions), SDG 17 (Partnerships for Development).
- Economic Opportunities:** Positively impacts food security, relating to SDG 2 (Zero Hunger), SDG 8 (Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities).

**Challenges:**

- Complex Interconnectedness:** Solving one aspect does not provide a complete solution to the overall problem.
- Stakeholder Engagement:** Varying levels of engagement make finding consistent solutions challenging.
- Trade Effects:** Environmental effects of domestic trade policies can vary significantly.
- International Cooperation:** Difficult due to challenges in standardizing information across diverse countries.

**SDG 12 demonstrates high levels of wickedness, scoring 7 across most dimensions.**

Positively impacts food security, relating to SDG 2 (Zero Hunger), SDG 8 (Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities).

Necessitates various and innovative approaches that integrates diverse perspectives and solutions.

#### Business Model Canvas

### Trends in food and beverages industry

The food and drink industry is an evolving market with the following key trends:

- Plant-Based Foods:** The demand for plant-based alternatives continues to grow as consumers seek healthier and more sustainable options. This trend includes not only meat substitutes but also dairy alternatives and plant-based snacks.
- Sustainability and Eco-Friendliness:** Consumers are increasingly concerned about the environmental impact of their food choices. This has led to a rise in sustainable practices, such as using eco-friendly packaging, reducing food waste, and sourcing ingredients locally.
- Technology Integration:** The use of AI and machine learning in the food industry is on the rise. These technologies help in optimizing supply chains, predicting consumer preferences, and enhancing food safety.
- Health and Wellness Products:** Products that promote health and wellness, such as those with clean labels, organic ingredients, and low sugar content, are becoming more popular. This trend is driven by a growing awareness of the link between diet and health.

(EHL Insights: What's trending in the food and beverage industry in 2024?)

### Agency and governance

Nestlé's role in the SDG 12 is highlighted as:

- Publicly traded multinational enterprise.
- Global operations.
- Value Chain.
- Complexity of supply chain management.
- Consumer Targeting.
- Highly competitive market.
- Global footprint.
- Highly regulated industry.
- Highly visible and scrutinized.
- Highly visible and scrutinized.
- Highly visible and scrutinized.
- Highly visible and scrutinized.

### Transformation through Partnerships

**Intra-sector partnerships:** Working with non-profit organizations that share the same vision and perspectives to minimize waste and enhance sustainability.

**Bipartite partnerships:** Through the collaboration of different sectors, both organizations may have their own advantages, that assist in providing direct and more efficient solutions to the recurring problem. One firm may bring technological advancements while the other has more on-hand labour.

**Tripartite partnership:** Group effort is a key factor that can eradicate challenges involving environmental and health success. State bodies can serve as an additional messenger for organizations such as Greenpeace, which advocates for reducing plastic contamination and spreads awareness on health hazards that arise from unsustainable procedures.

### Risks and Opportunities

**Economic Risks:**

- Increased Operational Costs
- Supply Chain Disruptions

**Environmental Risks:**

- Climate Change Impact
- Waste management
- Carbon footprint

**Soils-cultural Risks:**

- Higher consumer expectations
- Cultural relativism
- Manufacturing and Activism

**Opportunities:**

- Cost savings through efficiency
- Innovation and product differentiation
- Access to sustainable investment
- Market Expansion
- Customer Loyalty

# Global 'Decade of Action' Sustainable Development Award Cycle 2



Methane absorption for a more sustainable  
agriculture and a better future  
Luka-Gabriel Wieczorek, Jana Lederer, Annika Haas,  
Antonia Mantey, Edmund Ye  
University of Applied Sciences Aachen (Undergraduate)

**VanDrie Green**

### Methane absorption for a more sustainable agriculture and a better future!

Jana Lederer – Antonia Mantey – Annika Haas – Edmund Ye – Luka Wieczorek

HT Aachen 2023

**Government**  
The government is a key stakeholder in the project. It provides funding and support for research and development. The government also sets regulations and standards for the agricultural sector.

**Market (Van Drie Group, Ag-Systems)**  
The market is a key stakeholder in the project. It provides funding and support for research and development. The market also sets regulations and standards for the agricultural sector.

**Less Methane Better Future**  
The project aims to reduce methane emissions from agriculture. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.

**Sustainable Partnerships**  
The project is a result of a partnership between the VanDrie Group, Ag-Systems, and the University of Applied Sciences Aachen. This collaboration allows for the sharing of resources and expertise.

**Marketing strategy**  
The project has a clear marketing strategy. This includes identifying target audiences, developing a value proposition, and implementing a communication plan.

**The New Sustainable Model**  
The project is developing a new sustainable model for agriculture. This model focuses on reducing methane emissions while maintaining or improving productivity and profitability.

**Carbon**  
The project is focused on reducing methane emissions, which is a key component of a low-carbon agricultural system. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.

**Less Methane Better Future**  
The project aims to reduce methane emissions from agriculture. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.

**Taking Methane on the Farm**  
The project is focused on reducing methane emissions from agriculture. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.

**Empowering Rural Innovation**  
The project is focused on reducing methane emissions from agriculture. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.

**Call to Action**  
The project is focused on reducing methane emissions from agriculture. This is achieved through various measures such as improved feed, better manure management, and more efficient farming practices.





# Global 'Decade of Action' Sustainable Development Award Cycle 2



## Unilever UK's Circular Leap: From Waste to Value in FMCG SDG

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**Unilever UK's Circular Leap: From Waste to Value in FMCG SDGs 12 and 13: Going Beyond Compliance**

**Authors:** Debarati Dutta, Syed Mohammed Khalil and Prashant Vishwambar Patil, MBA, Sheffield University Management School, University of Sheffield, July 2025.

**Company Background:** Unilever UK, a subsidiary of Unilever PLC, is a multinational FMCG company that integrates circular economy along with climate-smart innovation through refillable packaging as well as regenerative sourcing programs (Ellen MacArthur Foundation, 2021).

**1. Problem: Addressing SDG 12 & 13 in Fast-Moving Consumer Goods (FMCG)**  
Unilever UK works in an industry that is at the heart of SDGs 12 (Responsible Consumption) as well as 13 (Climate Action), where value chains are dominated by waste, emissions, and unsustainable sourcing (Unilever, 2024b). Consumer use and supply inputs account for more than 90% of Unilever's product emissions, which happen outside of its direct activities (Unilever UK, 2020). Notwithstanding increased scrutiny, single-use plastic, energy-intensive laundry practices, and sourcing practices linked to deforestation continue. Recognising these structural issues, Unilever deliberately reframes them as commercial possibilities. It strives for net-zero emissions by 2039 along with circular packaging by 2025 under the Compass strategy as well as Climate Transition Action Plan (Unilever, 2024b, 2021). There is also financial benefit to these shifts. Unilever's 'sustainable brands' expanded more quickly than the portfolio average, demonstrating that value is driven by climate-conscious innovation (Unilever, 2023a). With consumer demand, regulatory updates, and cost-saving efficiency all supporting it, there is a strong economic case to take decisive action on these interconnected SDGs.

**2. Analytics: Quantifying Waste, Impact and Emissions**  
UK factory emissions cut by 1% since 2015 through data-led solutions like heat pumps and renewables (Sustainability Magazine, 2023). Compass Dashboard tracks real-time GHG, deforestation, and food waste metrics (Unilever, 2024a). Digital twin, lifecycle analysis, and AI tools model value chain (Unilever, 2024b). AI models optimise energy use in internal audits and CRP disclosures (Unilever, 2024c). Unilever's AI-led supply chain optimisation program saves 1 million tonnes and drives sustainable procurement (Unilever, 2023b). Unilever's sustainability strategy ensures transparency, accountability, and sector leadership.

**3. Unilever UK's Current Approach to SDG 12 and SDG 13 - MISO UK**  
Through a comprehensive, data-driven sustainability strategy incorporated into its Compass and Climate Transition Action Plan, Unilever UK tackles SDGs 12 and 13. With the help of heat pumps and renewable energy, the company has reduced operating emissions by 74% since 2015, and it aims to achieve net-zero emissions by 2039 and 100% recyclable packaging by 2025 (Unilever, 2024a, Sustainability Magazine, 2023). Scope 3 decarbonisation is made possible by its Compass Dashboard and Supplier Climate Programme, which provide real-time data (Unilever, 2023b). Initiatives for behavioral change, such as UK collaborations and cold-wash detergent inventions, promote systemic impact that goes beyond adherence (Unilever UK, 2025; Unilever, 2023a).

**4. Unilever UK's SDG Strategy**  
**Strategic Framework:** Guided by the Compass Strategy and Climate Transition Action Plan, addressing SDG 12 (Responsible Consumption) and SDG 13 (Climate Action).  
**Target:** Net-zero emissions across the value chain by 2039.  
**100% recyclable packaging and 50% reduction in virgin plastic by 2025 (Unilever, 2024b).**  
**Data-Driven Governance**  
• Uses science-based targets, AI tools, digital twins, and lifecycle assessments (Unilever, 2024b).  
• Emissions and deforestation KPIs tracked via Compass Dashboard and Supplier Climate Programme (Unilever, 2023b).  
**Technology and Behavioral Innovation**  
• Develops cold-wash detergent solutions and smart packaging systems (Unilever UK, 2025).  
• Multi-systems like Loop UK and Aisle One design, Deep Med Partnership (Unilever, 2023a), and stakeholder integration.  
**Stakeholder Integration**  
• Aligns executive pay with sustainability KPIs (Unilever, 2023a).  
• Collaborates with NGOs, SMEs and policy platforms for systemic change.  
**Core BSH: Transforms sustainability from compliance to business value, embedding ESG across strategy, operations, and consumer impact (Sustainability Magazine, 2023).**

**5. Business Model**  
Unilever is shifting to a Fast-Moving Sustainable Consumer Goods (FMSC) paradigm from a traditional FMCG strategy. Sustainability is incorporated into all managerial decisions in this strategy. Unilever uses default settings such as "Turn to 30°C" cold wash advertising to push low-impact options. Regenerative sourcing and zero-waste logistics are promoted in the supply chain (Unilever, 2024a). While HRM educates managers on climate KPIs, France fees executive compensation to sustainability goals (Unilever, 2023b). Innovation is driven by open partnerships and internal research and development (e.g., AI for packaging with Google DeepMind). Strong local contextualisation is demonstrated by the fact that Persil and Dove dominate eco-format sales in the UK, globally, the company adapts by implementing plant-based foods in EU/US regions and palm oil traceability across Asia. Continuous business model evaluation is conducted using SBTi audits, MSC scores (AAA in 2023), and ESG (dishwashers by Unilever) (Unilever, 2024c). In the Decade of Action, Unilever is able to compete not only financially but also morally thanks to this sustainable model.

**6. Sustainable Technology Enabling SDG Strategy: Unilever UK**  
AI-driven detergent design enables cold-wash formulas, reducing water and energy emissions (Unilever, 2024a). SDG 13 & 12  
Digital twins simulate packaging circularity and eco-design options (Unilever UK Forum, 2023). SDG 9 & 12  
Industrial heat pumps replace fossil gas in UK factories, cutting Scope 1 emissions (Unilever, 2024a). SDG 7 & 13  
Loop UK's refillable packaging reduces single-use plastic in high-volume products (Unilever UK, 2025). SDG 12 & 14  
Smart tracking in Lighthouse Factory supports real-time emissions and waste monitoring (World Economic Forum, 2023). SDG 8 & 9  
Technologies deliver 25-30% efficiency gains and improve brand distinction (Sustainability Magazine, 2023).  
Success depends on hybrid innovation, pilot-to-plant scaling, and strong ecosystem partnerships (Unilever, 2024c).

**8. Partnerships**  
A multiered network of partnerships enables Unilever's transition: (1) The Roundtable on Sustainable Palm Oil (RSPO) ensuring sustainable palm oil sourcing; (2) creating the 'Home Advantage' behavioral intervention report; (3) Loop for reusable packaging systems; and (4) UK Plastics Pact for sectoral circularity standards (Unilever, 2024c; Unilever UK, 2023). An active member of the Through common platforms, like TerraCycle's Infrastructure of Policy Change through the Waste to Resources Action Programme (WRAP), these collaborations boost innovation.

**How to build and partnerships: Unilever uses portfolio reasoning to keep alignment-fair partnerships are changed or renewed, while high-impact agreements are kept. Open-source data protocols, cooperative ventures, and shared KPIs are some of the mechanisms. Dynamic monitoring and shared sustainability visions ensure better performance. Building capacity in the supply chain is a long-term investment in decarbonisation initiatives with SME partners (Unilever, 2024b). Partnerships include Unilever's supply chain SDGs 12 and 13, they are operational extensions, not just financial.**

**7. Risks arising from the SDG Problem**  
High Scope 3 exposure, strict emissions control, outside direct control (Unilever UK, 2025).  
• Tech race: Cost innovation may lead to loss in without policy support (Unilever, 2025).  
• Consumer inertia: Behavioral change in laundry habits is slow.  
• Reputational risk: Scrutiny over greenwashing and deforestation persists (Sustainability Magazine, 2023).  
• Regulatory uncertainty may disrupt packaging and sourcing strategies.  
According to an audit by the UN (2022), the SDGs are both "wicked problems" and "nicked opportunities," forcing organizations to build strategic frameworks to navigate their complexity.

**9. Opportunities arising from the SDG Problem**  
• **Innovation leadership:** Climate-smart products like cold-wash detergents open new markets (Unilever, 2023a).  
• **Brand growth:** Sustainable brands are outperforming others in portfolio expansion (Unilever, 2024a).  
• **Cost efficiencies:** Reduced energy use and material inputs improve margins (Sustainability Magazine, 2023).  
• **Digital advantage:** Data-driven ESG tools enhance operational transparency and stakeholder trust (Unilever, 2024b).  
• **Regulatory readiness:** Early alignment with climate and packaging rules reduces compliance risks (Unilever, 2024d).  
• **Partnership leverage:** Cross-sector alliances improve innovation scales and system resilience (Unilever UK, 2025).  
• **Consumer loyalty:** Purpose-led offerings build engagement and long-term value (Unilever, 2024a).

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02

Best Sustainable  
Strategy Award





# Best Sustainable Strategy Award Cycle 2



## SDG14 and Bayer

Ana Stinca, Tom Haridman, Andrew Sinevici, Aki Majoja Trinity

Trinity Business School (Postgraduate)

### SDG 14 - Life Below Water

#### 1 Trend Analysis

**14** **BELIEVING WATER**

Sustainable Development Goal 14, Life Below Water, aims to conserve and sustainably use oceans, seas, and inland waterways for sustainable development. This goal is critical as oceans regulate the global climate, provide oxygen, and are vital for biodiversity, food security, and livelihoods.

Over the past decade, there has been a significant increase in plastic pollution in the world's oceans, with an estimated 8 million metric tons of plastic waste entering the oceans each year. This has led to a decline in marine biodiversity and the health of coastal ecosystems. The goal is to reduce marine pollution and protect marine life by 2030.

#### 2 Wickedness Analysis

**Total Score = 51**

The Gulf of Mexico suffers from an increasing "dead zone," caused primarily by nitrogen and phosphorus runoff from farmlands used in the Mississippi River Basin. This runoff is exacerbated by climate change, making coastal management difficult. The diverse agricultural practices across such a large area exacerbate the challenge of engineering custom solutions.

#### 3 Societal Triangulation

**STATE**

- 1. Sectoral failures
- 2. Negative externalities
- 3. Positive externalities

**MARKET**

- 1. Sectoral failures in food security
- 2. Negative externalities
- 3. Positive externalities

**CIVIL SOCIETY**

- 1. Sectoral failures in food security
- 2. Negative externalities
- 3. Positive externalities

#### Linking Bayer's Business Activities to SDG 14

##### Overview of Business Activities

Bayer's products, a range of fungicides, herbicides, insecticides, and pesticides, are critical for global agriculture. These chemicals are used to protect crops from pests, diseases, and weeds, ensuring they can grow and produce food. However, these chemicals can also be harmful to the environment, particularly to aquatic life. Bayer is committed to reducing the environmental impact of its products and is working to develop more sustainable solutions.

##### Issues Confronted by Bayer

Bayer's products are used in agriculture, which has a significant impact on the environment. The primary concern is the potential for chemical runoff into water bodies, leading to eutrophication and hypoxia. This is particularly problematic in the Gulf of Mexico, where runoff from the Mississippi River Basin has created a large "dead zone." Bayer is working to reduce the environmental impact of its products and is investing in research and development to create more sustainable solutions.

##### Strategic Implications

Bayer's commitment to sustainability is a key part of its business strategy. The company is working to reduce its carbon footprint, improve its water management, and protect the environment. This is not only good for the planet but also good for the bottom line. Sustainable practices can help reduce costs, improve efficiency, and attract investors. Bayer is committed to being a leader in sustainable agriculture and is working to create a more sustainable future for all.

##### Need for Higher Level of Intervention in SDG 14

Increased toxicity in new formulations. Bayer's new formulations of insecticides, intended to replace glyphosate, have recently included substances that are potentially more harmful to aquatic ecosystems. The shift was initially seen as a positive step away from glyphosate, widely criticized for its environmental impacts.

Current Challenges. The shift in formulations, such as the shift from glyphosate to neonicotinoids, has led to increased toxicity in aquatic ecosystems. Neonicotinoids are highly toxic to bees and other pollinators, and they can also harm aquatic life. This has led to a decline in biodiversity and the health of ecosystems. Bayer is working to address these challenges and is investing in research and development to create more sustainable solutions.

Regulatory and Public Pressure. The need for higher levels of intervention in SDG 14 is underscored by both the increased toxicity of its new product formulations and the growing regulatory and public pressure. The potential regulatory changes, especially with regard to neonicotinoids, are influencing both the regulatory and public spheres in the U.S., suggesting a future where stringent controls on agricultural chemicals will be the norm.

##### Feasibility and Strategies for Bayer's Enhanced SDG 14 Engagement

**Background:** Bayer's current environmental efforts focus primarily on enhanced and gradual improvements in product formulations.

**Essential for Advancement:** Given Bayer's global reach, R&D capabilities, and financial resources, it is highly feasible for the company to implement more ambitious environmental strategies.

- Bioactive Product Development:** Invest in creating herbicides and pesticides that break down more quickly in the environment, reducing the risk of long-term pollution and eutrophication in aquatic systems.
- Precision Application Technologies:** Invest in and promote technologies that enable more precise application of chemicals, reducing runoff and impact on water bodies.

**Business Model Innovations:**

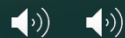
- Sustainable Supply Chain Initiatives:** Reducture the supply chain to prioritize environmental sustainability, incorporating eco-friendly materials and processes that reduce water pollution.
- Partnerships for Environmental Impact:** Form strategic alliances with environmental NGOs, research institutions, and technology companies to develop solutions that mitigate the impact of agricultural chemicals.

**Partnership Opportunities:**

- Collaboration with Academia and Tech Companies:** Partner with academic institutions to research less harmful chemicals and with tech companies to improve the precision and efficiency of chemical application.
- Joint Ventures in Environmental Technology:** Enter into joint ventures with companies specializing in water treatment and soil health technologies to develop new solutions that can be integrated into Bayer's product offerings.

**Business and Environmental Benefits:**

- Enhancing Compliance and Market Position:** By adopting these strategies, Bayer not only adheres to most stringent environmental regulations but also positions itself as a market leader in sustainable agriculture.
- Driving Innovation and Stakeholder Value:** These initiatives help Bayer to foster innovation, enhance stakeholder trust, and open new market opportunities in an increasingly eco-conscious global market.



03

Best Sustainable  
Business Model Award



# Best Sustainable Business Model Award Cycle 1



H&M Transformation to Sustainability  
 Jumie Jackson, Emma Sankey, Ava Barber,  
 Liza Macujeva, Ella D'Cruz  
 University of Leeds (Undergraduate)

**WHAT TRANSFORMATION SHOULD H&M ADOPT IN ORDER TO TAKE EFFECTIVE ACTION ON SDG #12?**

**THE SUSTAINABLE DEVELOPMENT GOAL (SDG) PROBLEM**  
 To conserve and protect freshwater resources, SDG 6 aims to ensure that all people have access to water and sanitation by 2030. However, the world's freshwater resources are being depleted and polluted at an alarming rate. This is due to a combination of factors, including population growth, climate change, and unsustainable water management practices. The world's freshwater resources are being depleted and polluted at an alarming rate. This is due to a combination of factors, including population growth, climate change, and unsustainable water management practices.

**SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION**  
 This goal aims to ensure that people everywhere have access to sustainable consumption and production patterns. This involves reducing waste, recycling, and using resources more efficiently. The goal is to ensure that we can meet our needs without compromising the ability of future generations to meet theirs.

**KEY TO SUCCESS APPROACH**  
 Market Customer Behaviour: Consumer behaviour is a key driver of change. Encouraging sustainable consumption and production patterns is essential for achieving SDG 12. This involves educating consumers about the environmental impact of their choices and providing them with sustainable alternatives.

**SDG WISDOMS**  
 Multi-stakeholder: Collaboration between governments, businesses, and civil society is essential for achieving SDG 12. This involves sharing knowledge and resources, and working together to address the challenges of sustainable consumption and production.

**RESEARCH PROBLEMS TO TACKLE SHORT?**  
 Water scarcity: The world's freshwater resources are being depleted and polluted at an alarming rate. This is due to a combination of factors, including population growth, climate change, and unsustainable water management practices. The world's freshwater resources are being depleted and polluted at an alarming rate. This is due to a combination of factors, including population growth, climate change, and unsustainable water management practices.

**KEYS FROM THE CASE**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

**SUSTAINABLE BUSINESS MODEL TRANSFORMATION**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

**TRANSFORMATION TO ADOPT**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

**OPPORTUNITIES FROM THE CASE**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

**CHALLENGES FROM THE CASE**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

**HOW'S OUR STRATEGY**  
 H&M's commitment to sustainability: H&M has a long history of commitment to sustainability, and this commitment is a key factor in its success. The company has a clear vision of what it wants to achieve, and it has the resources and expertise to make it happen.

# Best Sustainable Business Model Award Cycle 1




## Digital-Climate Paradox: MTN and the SDG13 Challenge in Africa

Amin Sartipi, Padideh Mohammadi


Manchester Metropolitan University (Postgraduate)

### DIGITAL-CLIMATE PARADOX



13 SDG

MTN & the SDG#13 Challenge in Africa



Amin Sartipi,  
Padideh Mohammadi  
July 2025

MTN Group, Africa's largest telecommunications operator, connects over 290 million subscribers across 16 countries. [1] Standing at the crossroads of digital inclusion and climate action, MTN's rapid expansion fuels socio-economic progress through digital access, but also intensifies energy demand and emissions, especially in regions where clean energy access is limited. This makes 'SDG13' (Climate Action) a strategic imperative for the MTN group's future transformation [2]. As a flagship African multinational, MTN's response will shape not only its business trajectory but also the continent's sustainable digital transformation. This poster unpacks the complexity of the digital-climate paradox, mapping its causes, effects, and stakeholders, and demonstrates how innovative, context-sensitive business models and their key enablers can unlock practical pathways for climate-positive, sustainable transformation.

#### Wicked Problem Analysis

The SDG13-Connectivity dilemma faced by MTN is a textbook wicked problem: it is multidimensional, driven by systemic forces across society, technology, and policy. It involves multiple stakeholders with diverging interests and responsibilities, and its solutions are neither linear nor straightforward [1]. Our assessment shows that the challenge is complex and affects many areas. We need to work together for systemic change. More ownership, and encourage collaborative innovation [2]. This diagram sets the stage for prioritizing interventions that align MTN's business model with the realities of Africa's climate and digital landscapes [2, 3].

- Multi-dimensional:** Involves climate, energy, digital access, policy, economics, and tech [1].
- Multi-level:** Affects global goals, national policies, and local African communities [4].
- Multi-causal:** Driven by climate risk, energy poverty, weak infrastructure, poor regulation, and market forces [1].
- Multi-effect:** Impacts jobs, access, emissions, and health [4].
- Multi-directional:** Goals in one area (e.g., networks) can lead to unintended outcomes in others (e.g., emissions) [5].
- Multi-paced:** Tech adoption outpaces energy and policy efforts, with regional variations [7].

- Multi-frame:** Conflicting views: governments, MTN, investors, communities [8].
- Multi-source:** Shaped by public, private, donor, and community efforts [9].
- Multi-stakeholder:** Many actors involved: government, MTN, SMEs, NGOs, academia agencies [6].
- Multi-responsibility:** Shared duty, single actor can induce a systemic outcome action is essential [10].

**Total Wickedness Score:** 65/70 (Systemic, persistent, deeply embedded challenge)

#### SDG Interlink & Prioritisation

MTN's rapid network expansion is a double-edged sword for sustainable development: it accelerates progress on education, health, equality, and growth SDGs 4, 3, 8, 9, 10, 11, 17, but also heightens pressure on climate and resource goals SDG 13, 7, 12. Prioritisation logic drives Africa's high climate vulnerability and MTN's substantial energy profile. SDG 13 emerges as the central, system-defining priority. Strategic solutions must amplify positive SDG synergies while reducing adverse spillovers, ensuring that digital inclusion and economic development do not come at the cost of climate resilience [11][12].

**Legend:**  
 (+) Positive/Synergy  
 (-) Negative/Trade-off  
 (↔) Mixed/Trade effect

Mapping SDG 13's positive and negative interactions with MTN key SDG touchpoints reveals critical trade-offs and synergy zones.

#### Strategic Recommendations

- Smart Clean Energy
- Circular Device Ecosystem
- Regenerative Networks
- Climate-Positive Mobile Money
- Ecosystem Platforms & Shared Energy
- Transaction Partnerships

#### Societal Triangulation

MTN's climate-positive transformation hinges on coordinated action across three sectors:

- State (policy, regulation, public investment)**
- Market (MTN, SMEs, supply chain, digital innovation)**
- Civil Society (NGOs, communities, impact investors)**

Each sector brings unique strengths but also exposes distinct gaps. The government sets climate and energy policy, but slow regulation can stall the growth of renewables. MTN drives network growth, but without systemic incentives, emissions and resource risks rise. Civil society pushes for inclusion and justice, but lacks the scale to drive infrastructure change [22][23].

**Societal Triangulation: Balancing Society, Economy & Ecology**

**Trade-off Example:** Risk Mitigation (e.g., switching towers to solar to reduce diesel reliance) vs. market expansion (increased network capacity) vs. emissions (increased energy demand).

**Trade-off Example:** Damage Reduction (managing e-waste) vs. network expansion (increased connectivity) vs. health (increased tower density).

**Trade-off Example:** Value Creation (jobs, access, digital skills) vs. market connectivity (cell towers) vs. collective action (cross-sector partnerships for climate finance and shared infrastructure).

**Social Gap Example:** These challenges and gaps are especially acute in sub-Saharan Africa, where regulatory inertia, limited investments in renewable energy, and fragmented market ecosystems hinder climate-positive innovation and inclusion [4]. Gaps remain greatest where climate efforts proceed, especially at the intersection of decentralized energy, network reach, and community uptake [18][19]. Only "tri-sectoral" collaboration can bridge these divides at scale.

#### Enablers: for BM+

Technology: Rapid adoption of AI, IoT, and modular architectures for real-time optimization, predictive maintenance, and innovative integration of renewables across the network. [2] For example, AI-based energy management systems can reduce network energy consumption by up to 20%, as demonstrated in multi-market field studies. [21, 13].

**Ecotrophic Partnerships:** Moving beyond transactional supplier relationships to multi-actor, co-creative partnerships with SMEs, public agencies, regulators, and climate investors—co-creating system-wide impact, risk sharing, and policy alignment [4].

#### BM+: Climate-Positive Innovation Blocks

A climate-positive transformation for MTN's business model necessitates a transition from linear, emissions-intensive growth to integrated value creation, where climate action drives new revenue streams, enhances resilience, and cultivates a competitive advantage. Five key innovation blocks are particularly significant:

#### Roadmap & KPI Dashboard:

Item	Key KPI / Metric	Timeline (2023-2030)
MTN Ops	4 sites with solar/rooftop	2025: Solar rollout to 30% sites
MTN Products	Green Mobile solution	2026: Launch green Mobile product
Supply Chain	20% renewable energy	2027: Overall 20% renewable energy
ESG Team	100% board diversity	2028: 100% board diversity
Partnerships	100% renewable energy	2029: 100% renewable energy
ESG Score	100% carbon reduction	2030: Carbon reduction 50% on scope 1

#### BM+ Canvas: Climate-positive business model (TO BE) for MTN

Key Partners: Government, Regulators, Local SMEs, Academia, NGOs, Climate Investors

Key Activities: Network Expansion, Digital Inclusion, Energy Efficiency, E-waste Management, Community Engagement

Key Resources: Network Infrastructure, Digital Skills, Renewable Energy, Community Support, Policy Alignment

Value Proposition: Digital Access, Network Reliability, Energy Efficiency, E-waste Management, Community Support

Channels: Mobile Networks, Digital Services, Community Centers, Policy Advocacy

Customer Relationships: Digital Inclusion, Energy Efficiency, E-waste Management, Community Support

Revenue Streams: Network Expansion, Digital Inclusion, Energy Efficiency, E-waste Management, Community Support

Cost Structure: Network Expansion, Digital Inclusion, Energy Efficiency, E-waste Management, Community Support

Sound Effect by [freesound\\_community](#) from [Pixabay](#)

04

Best Sustainability  
Analytics Award





# Best Sustainability Analytics Award Cycle 2



## Unilever UK's Circular Leap: From Waste to Value in FMCG SDG 12 and 13: Going Beyond Compliance

Debarati Dutta, Syed Mohammed Khalil, Prashant Vishwambar Patil

Sheffield University Management School (MBA)

**Unilever UK's Circular Leap: From Waste to Value in FMCG SDGs 12 and 13: Going Beyond Compliance**

**Authors:** Debarati Dutta, Syed Mohammed Khalil and Prashant Vishwambar Patil, MBA, Sheffield University Management School, University of Sheffield, July 2025.

**Company Background:** Unilever UK, a subsidiary of Unilever PLC, is a multinational FMCG company that integrates circular economy along with climate-smart innovation through refillable packaging as well as regenerative sourcing programs. (Ellen MacArthur Foundation, 2021)

**1. Problem: Addressing SDG 12 & 13 in Fast-Moving Consumer Goods (FMCG)**  
Unilever UK works in an industry that is at the heart of SDGs 12 (Responsible Consumption) as well as 13 (Climate Action), where value chains are dominated by waste, emissions, and unsustainable sourcing (Unilever, 2024b). Consumer use and supply inputs account for **more than 90% of Unilever's product emissions**, which happen outside of its direct activities (Unilever UK, 2020). Notwithstanding increased scrutiny, single-use plastic, energy-intensive laundry practices, and sourcing practices linked to deforestation continue. Recognising these structural issues, Unilever deliberately reframes them as commercial possibilities. It strives for **net-zero emissions by 2039** along with circular packaging by 2025 under the **Compass strategy as well as Climate Transition Action Plan** (Unilever, 2024b, 2021). There is also financial benefit to these shifts. Unilever's **'sustainable brands'** expanded more quickly than the portfolio average, demonstrating that value is driven by **climate-conscious innovation** (Unilever, 2023a). With consumer demand, regulatory media, and cost-saving efficiency all supporting it, there is a strong economic case to take decisive action on these interconnected SDGs.

**2. Analytics: Quantifying Waste, Impact and Emissions**  
UK factory emissions cut 19% since 2015 through data-led solutions like heat pumps and renewables (Sustainability Magazine, 2023). **Compass Dashboard** tracks real-time GHG, deforestation, and food waste metrics (Unilever, 2024a). **Digital twin, lifecycle analysis, and AI** boost model value chain (Unilever, 2024b). **AI-based waste audits** and **CDP disclosures** (Unilever, 2024c). **Programs like Green Pulse** link emissions and **CDP disclosures** (Unilever, 2023b). **Energy efficiency** enables transparency, accountability, and sector leadership.

**3. Unilever UK's Current Approach to SDG 12 and SDG 13 - MISO UK**  
Through a comprehensive, data-driven sustainability strategy incorporated into its Compass and Climate Transition Action Plan, Unilever UK tackles SDGs 12 and 13. With the help of heat pumps and renewable energy, the company has reduced operating emissions by 74% since 2015, and it aims to achieve net-zero emissions by 2039 and 100% recyclable packaging by 2025 (Unilever, 2024a, Sustainability Magazine, 2023). **Scope 3 decarbonisation** is made possible by its Compass Dashboard and Supplier Climate Programme, which provide real-time data (Unilever, 2023b). Initiatives for behavioral change, such as UK collaborations and cold-wash detergent inventions, promote systemic impact that goes beyond adherence (Unilever UK, 2025; Unilever, 2023a).

**4. Unilever UK SDG Strategy**  
**Strategic Framework:** Guided by the Compass Strategy and Climate Transition Action Plan, addressing SDG 12 (Responsible Consumption) and SDG 13 (Climate Action).  
**Target:**  
• Net-zero emissions across the value chain by 2039.  
• 100% recyclable packaging and 50% reduction in virgin plastic by 2025 (Unilever, 2024a).  
**Data-Driven Governance:**  
• Uses science-based targets, AI tools, digital twins, and lifecycle assessments (Unilever, 2024a).  
• Emissions and deforestation KPIs tracked via Compass Dashboard and Supplier Climate Programme (Unilever, 2023b).  
**Technology and Behavioral Innovation:**  
• Develops cold-wash detergent solutions and smart packaging systems (Unilever UK, 2025).  
• Multi-systems like Loop UK and Aisle One design, Deep Mind Partnership (Unilever, 2023a).  
**Stakeholder Integration:**  
• Aligns executive pay with sustainability KPIs (Unilever, 2023a).  
• Collaborates with NGOs, SMEs and policy platforms for systemic change.  
**Core B2B:** Transforms sustainability from compliance to business value, embedding ESG across strategy, operations, and consumer impact (Sustainability Magazine, 2025).

**5. Business Model**  
Unilever is shifting to a **Fast-Moving Sustainable Consumer Goods (FMSC) paradigm** from a traditional FMCG strategy. Sustainability is incorporated into all managerial decisions in this strategy. Unilever uses default settings such as "Turn to 30°C" cold wash advertising to push low-impact options. **Regenerative sourcing and zero-waste logistics** are promoted in the supply chain (Unilever, 2024a). While HRM educates managers on climate KPIs, France fees executive compensation to sustainability goals (Unilever, 2023b). Innovation is driven by open partnerships and internal research and development (e.g., AI for packaging with Google DeepMind). Strong local contextualisation is demonstrated by the fact that Persil and Dove dominate eco-format sales in the UK, globally, the company adapts by implementing plant-based foods in EU/US regions and palm oil traceability across Asia. **Continuous business model evaluation** is conducted using SBTi audits, MSC scores (AAA in 2023), and ESG (disruptors to track critical evaluation) (Unilever, 2024b). In the Decade of Action, Unilever is able to compete not only financially but also morally thanks to this sustainable model.

**6. Sustainable Technology Enabling SDG Strategy- Unilever UK**  
AI-driven detergent design enables cold-wash formulas, reducing consumer-use emissions (Unilever, 2024a). **SDG 13 & 12**  
Digital twins simulate packaging circularity and eco-design options (Unilever UK Forum, 2023). **SDG 9 & 12**  
Industrial heat pumps replace fossil gas in UK factories, cutting Scope 1 emissions (Unilever, 2024a). **SDG 7 & 13**  
Low UK's refillable packaging reduces single-use plastic in high-volume products (Unilever UK, 2025). **SDG 12 & 14**  
Smart tracking in Lighthouse Factory supports real-time emissions and waste monitoring (World Economic Forum, 2023). **SDG 9 & 12**  
Technologies deliver 25-30% efficiency gains and improve brand distinction (Sustainability Magazine, 2023).  
Success depends on **hybrid innovation**, pilot-to-plant scaling, and strong ecosystem partnerships (Unilever, 2024a).

**8. Partnerships**  
A multiered network of partnerships enables Unilever's transition: (1) The Roundtable on Sustainable Palm Oil (RSPO) ensuring sustainable palm oil sourcing; (2) creating the 'Home Advantage' behavioral intervention report; (3) Loop for reusable packaging systems; and (4) UK Plastics Pact for sectoral circularity standards (Unilever, 2024c; Unilever UK, 2025). **AI** and **digital twins** bridge through common platforms, like TerraCycle's infrastructure of policy co-design through the World to Restore Action Programme (WRAP), these collaborations boost innovation.

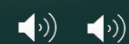
**How to build and partnerships: Unilever uses portfolio reasoning to keep alignment-failing partnerships are changed or retired, while high-impact agreements are kept. Open-source data protocols, cooperative ventures, and shared KPIs** are some of the mechanisms. Dynamic monitoring and shared sustainability visions ensure faster response. Building capacity in the supply chain is a long-term bet on decarbonisation initiatives with SME partners (Unilever, 2024c). **Partnerships include Unilever's supply chain, SDGs 12 and 13, they are operational extensions, not just.**

**7. Risks arising from the SDG Problem**  
High Scope 3 exposure, strict emissions control, outside direct control (Unilever UK, 2025).  
• **Technic:** Cold-wash innovation may need to look in without policy support (Unilever, 2025).  
• **Consumer inertia:** Behavioral change in laundry habits is slow.  
• **Regulatory risk:** Scrutiny over greenwashing and deforestation persists (Sustainability Magazine, 2023).  
• **Regulatory uncertainty:** may disrupt packaging and sourcing strategies.  
According to an **IEA** (IEA, 2023), the SDGs are both "wicked problems" and "wicked opportunities," forcing organizations to build strategic frameworks to navigate their complexity.

**8. Opportunities arising from the SDG Problem**  
• **Innovation leadership:** Climate-smart products like cold-wash detergents open new markets (Unilever, 2023a).  
• **Brand growth:** Sustainable brands are outperforming others in portfolio expansion (Unilever, 2024a).  
• **Cost efficiencies:** Reduced energy use and material inputs improve margins (Sustainability Magazine, 2023).  
• **Digital advantage:** Data-driven ESG tools enhance operational transparency and stakeholder trust (Unilever, 2024b).  
• **Regulatory readiness:** Early alignment with climate and packaging rules reduces compliance risks (Unilever, 2024d).  
• **Partnership leverage:** Cross-sector alliances improve innovation scales and system resilience (Unilever UK, 2025).  
• **Consumer loyalty:** Purpose-led offerings build engagement and long-term value (Unilever, 2024a).

**Actionability of the Sustainable Business Model:**  
Embedding sustainability across strategy, operations, finance and innovation ensures that the model remains actionable and adaptive. Unilever demonstrates this by **aligning SDGs with governance, KPIs and incentives** while enabling regional flexibility. Open innovation, partnerships and real-time data allow agile responses to local and global challenges. Accountability is upheld through **stakeholder engagement and ESG audits**. Local relevance (e.g. cold-wash, defaults in the UK and plant-based offerings in the EU) supports uptake. A **systems-thinking approach** enables ongoing evolution, balancing resilience, impact and profitability.

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### **Melanie Hassett**

**Senior Lecturer in International Business at University of Sheffield, United Kingdom**

We are all here at Sheffield University Management School immensely proud of Debarati Dutta, Syed Mohammad Khalill, and Prashat Vishwambar Patil for being awarded the **Best Sustainability Analytics Award** and the **Global 'Decade of Action' Sustainable Development Award** in the **MBA** category for their poster "Unilever UK's Circular Leap: From Waste to Value in FMCG SDGs 12 and 13: Going Beyond Compliance". They worked very hard and mostly independently and it is amazing to see their dedication and ambition being recognised. A warm congratulations to the whole team, you deserve this! Thank you also to the entire team and judges behind the **Sustainable Business Poster Competition**

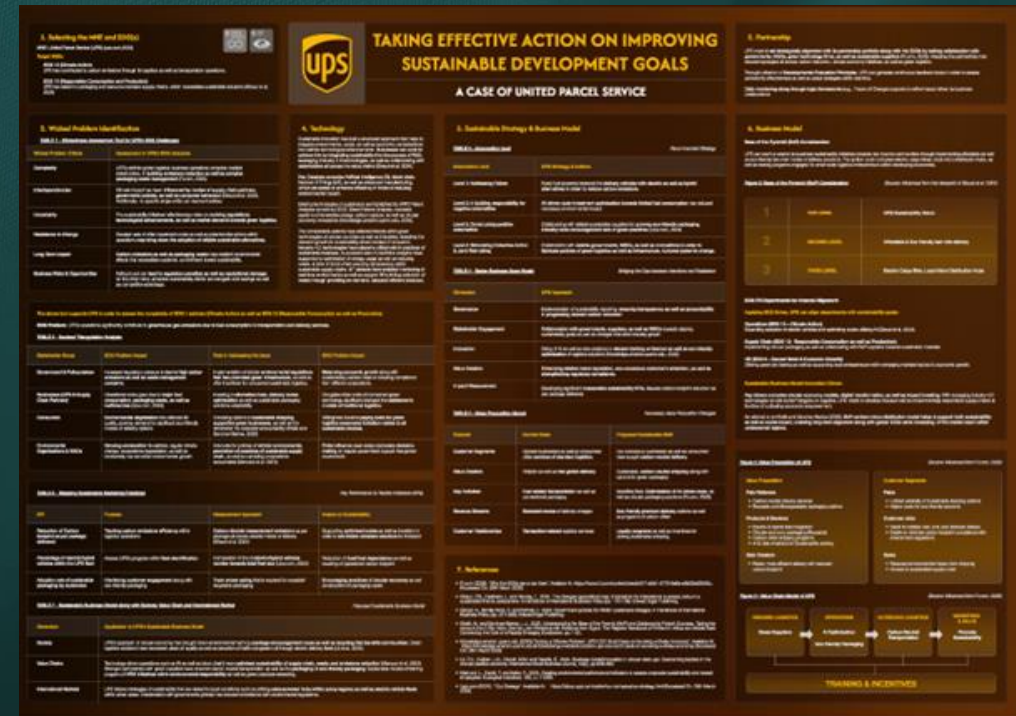
# Best Sustainability Analytics Award Cycle 2



Taking Effective Action on Improving Sustainable Development Goals: A case of United Parcel Service

Ali Hussain, Nimal Raju, Pranav Alamkunnparambil Prabhakara, Ramanpreet Kour, Umair Hussain, Vijayadithya Nallacheruvu

Leeds Beckett University (Postgraduate)



# Best Sustainability Analytics Award Cycle 2



## How can Nike move to the next level of sustainability regarding SDG 12?

Zahra Ali, Matthew Brabender, Courtney Mckenzie, Liam Saayman, Mohammed-Qamran Siraj, Ahmed-Issap  
Leeds Beckett University (Undergraduate)

**How can Nike move to the next level of sustainability regarding SDG 12?**

### 1. Nike Background:

- The largest and most recognized global sports and athletic brand
- Headquartered in Beaverton, Oregon
- Global presence with athletes such as Tiger Woods, LeBron James, and Serena Williams
- Revenue of \$48.9 billion (2020)
- Nike's commitment to sustainability is reflected in its corporate social responsibility reports and its commitment to its stakeholders
- Nike's commitment to sustainability is reflected in its corporate social responsibility reports and its commitment to its stakeholders

### 2. The SDG problem:

The SDG problem is to address the significant challenges in achieving SDG 12 of Responsible Consumption and Production. The goal of SDG 12 aims to fundamentally shift away from unsustainable consumption and production patterns and towards more environmentally and socially sound practices across the entire economic lifecycle. The core of the problem lies in the historically fragmented 'make-take-dispose' model of economic activity, which is unsustainable for the future (Bhargava et al., 2020).

The 'take-make-dispose' model that modern companies are using on extracting finite resources, manufacturing products, and then discarding them at the end of their useful life, leads to significant resource depletion and environmental degradation. The unsustainable consumption and production patterns generate negative impacts on natural resources such as pollution (air, water, land, deforestation, and climate change). These also create negative social externalities, including poor working conditions and health issues (Bhargava et al., 2020).

### 3. Table 2:

In 2020, the apparel and footwear industry emitted approximately 1.2 billion tonnes of CO<sub>2</sub>, accounting for about 6% of global carbon emissions (Dunne, R., 2020).

The apparel and footwear industry is a high emitter of greenhouse gases, with the industry accounting for 10% of the global carbon footprint (McIntyre, K., 2020).

Nike, Nike's total emissions in 2020 were 1.2 billion tonnes of CO<sub>2</sub>, equivalent to 1.2 billion tonnes in 2019 and 1.1 billion tonnes in 2018 (Nike, 2020).

### 4. All 3 social sectors are responsible for the SDG 12 that Nike face:

The market, affected by specific factors, is consumer demand (driven by the fashion industry), the environmental impact of production (the fashion industry), and the environmental impact of production (the fashion industry).

The market, affected by specific factors, is consumer demand (driven by the fashion industry), the environmental impact of production (the fashion industry), and the environmental impact of production (the fashion industry).

### 5. Nike's current approach to SDG 12

Historically, Nike used the 'take-make-dispose' model to address the SDG 12 issue through a variety of measures. Nike's current approach to SDG 12 is to address the SDG 12 issue through a variety of measures. Nike's current approach to SDG 12 is to address the SDG 12 issue through a variety of measures.

### 6. Nike's SDG Strategy

Nike is responding to its stakeholders and launching pilot programs to empower athletes and consumers to become more sustainable. Nike's current approach to SDG 12 is to address the SDG 12 issue through a variety of measures.

### 7. Opportunities arising from SDG 12

Opportunities	Action
Engaging customers to sustainable practices (consumers)	Nike has a great market base. This is an opportunity to educate its customers on sustainable practices and encourage them to adopt more sustainable consumption patterns (Dunne, R., 2020).
Invest in developing sustainable materials (production)	Will increase the availability of sustainable products while also reducing the environmental impact of production (Dunne, R., 2020).
Shift to more ethical suppliers (production)	Reduce the environmental impact of production while also reducing the environmental impact of production (Dunne, R., 2020).
Expanding product lines with specific campaigns which are purely manufactured to be sustainable (production)	Not only will this help to reduce the environmental impact of production, but it will also help to reduce the environmental impact of production (Dunne, R., 2020).
Collaborate with NGOs to support global sustainability (consumers)	Can increase market awareness by helping Nike to reach its target audience and support its sustainability goals (Dunne, R., 2020).

### 8. Risks arising from SDG 12

Risks	Impact
High price point	High price point
Low brand loyalty	Low brand loyalty
Highly competitive	Highly competitive
Highly volatile market	Highly volatile market
Highly volatile market	Highly volatile market

### 9. Sustainable partnerships

Sustainable partnerships are long-term relationships designed for competitive and organizational value and alignment (Ali, M., 2020).

Sustainable partnerships are long-term relationships designed for competitive and organizational value and alignment (Ali, M., 2020).

### 10. Sustainability of Nike

Nike is a global leader in sustainable fashion and is committed to reducing its carbon footprint by 25% by 2030 and achieving net-zero emissions by 2050 (Nike, 2020).

Nike is a global leader in sustainable fashion and is committed to reducing its carbon footprint by 25% by 2030 and achieving net-zero emissions by 2050 (Nike, 2020).

### 11. Actionability

To ensure that Nike's sustainable model is sustainable and addresses the global and local conditions there are a few key strategies. By reducing its carbon footprint Nike can reduce its environmental impact and align with SDG 12. Sustainable engagement is vital for forming partnerships with NGOs, governments and industry actors and contributes to the sustainability of production (Dunne, R., 2020).

### 12. Responsible Consumption and Production

Responsible Consumption and Production (SDG 12) is a goal that aims to fundamentally shift away from unsustainable consumption and production patterns and towards more environmentally and socially sound practices across the entire economic lifecycle.

### 13. Nike Jordan

Nike Jordan is a sub-brand of Nike that focuses on basketball shoes and apparel. Nike Jordan is a sub-brand of Nike that focuses on basketball shoes and apparel.

### 14. Strategic Actions for SDG 12

Strategic Actions for SDG 12 include: reducing carbon footprint, increasing sustainable materials, and increasing sustainable production.

### 15. Nike's Sustainability Report 2020

Nike's Sustainability Report 2020 provides a comprehensive overview of Nike's sustainability performance and commitments.

05

Best Sustainability  
Partnership Award



# Best Sustainability Partnership Award Cycle 1



## Nestle - Transformation through Partnerships

Emmanuella Baba-agba, Sebrina Lam, Arianna Monni, Khadijah Winder, Yujin Noh, William Troy

University of Leeds (Undergraduate)

### Introduction of SDG 12

- Focus on Sustainable consumption and production patterns.
- Objectives:
  - Resource and energy efficiency.
  - Sustainable infrastructure.
  - Access to basic services.
  - Quality of life.
- Goals:
  - Develop economic growth from environmental degradation.
  - Increase resource efficiency.
  - Promote sustainable lifestyles.
  - Key Targets:
    - Reduce waste.
    - Manage chemicals responsibly.
    - Encourage sustainable business practices.
    - Promote sustainability awareness and education.

### Nestlé contributions towards SDG 12

Nestlé has made recent efforts to report on its environmental impact, covering emissions, energy consumption, water use, and waste management. In 2023, Nestlé set targets for cutting greenhouse gas emissions, with a specific goal to achieve net zero by 2050.

- Reducing emissions by approximately 1 million metric tons compared to their 2018 baseline.
- Focusing on improvements in energy efficiency and sourcing renewable energy at their facilities (8.6% of electricity at its global manufacturing sites came from renewable sources by 2023).
- In 2022, Nestlé achieved a 3.3% reduction in its greenhouse gas (GHG) emissions relative to its 2018 baseline.
- The company aims to reach a 20% absolute reduction by 2025, with methane emissions alone cut by over 35%.
- Most emissions reductions (84%) were achieved across Nestlé's operations and supply chain, including significant efforts in dairy, which is a major contributor to its GHG footprint.
- It has set ambitious science-based targets for net-zero emissions by 2050, validated by the Science Based Targets initiative (SBTi).

Nestlé Creating Shared Value Sustainability Report 2023

### Nestlé's use of Technology to address SDG 12

Through the use of technology, Nestlé has been able to address and tackle issues pertaining to responsible production and consumption of goods.

- Nestlé has used advanced agricultural technology to create high-quality ingredients with less carbon.
- Their research from breeding less coffee varieties with lower carbon footprints to providing farmers with disease-resistant cocoa plants (Nestlé, 2024).

Nestlé, as an organization, is in the process of developing methods to improve soil health and reduce emissions. Some of these strategies include:

- Zero-tillage farming, which minimizes soil disturbance, keeping carbon in the soil (Spears, 2024).
- Better crop protection methods (Nestlé, 2024).
- Energy-efficient techniques, such as new coffee roasting methods to biomass heaters, which will improve spray-drying efficiency (Nestlé, 2024).

These technological efforts are an integral part of Nestlé's broader commitment to sustainability and responsible production, as they seek to have a positive impact on society and the environment.

### Intervention levels

Creating Positive Externalities

- Sustainable Product Development: Innovate and offer products that have a lower environmental impact throughout their lifecycle.
- Environment-friendly Packaging: Design packaging that is recyclable, biodegradable, or reusable to reduce waste.
- Resource Efficiency: Optimize the use of resources in production to minimize waste and emissions.
- Green Supply Chain: Implement sustainable practices across the supply chain, from sourcing to distribution.
- Consumer Awareness: Educate consumers on the environmental impact of their choices and promote sustainable consumption.

Stimulating Collective Action

- Industry Collaboration: Work with other companies in the industry to set and adhere to sustainability standards.
- Public-Private Partnerships: Collaborate with governments and NGOs to develop and implement sustainability initiatives.
- Multi-Stakeholder Frameworks: Participate in platforms that bring together various stakeholders to address systemic issues.
- Joint Ventures: Enter into joint ventures with other organizations to develop sustainable technologies and solutions.
- Collective Impact: Initiate Legacies in initiatives that aim to solve complex social and environmental issues through coordinated efforts.

### SDG 12 - Responsible Consumption and Production

### Wickedness scale

SDG 12: Responsible Production and Consumption  
Focus: Encourage sustainable management and consumption

Assessment: Considered a wicked problem due to its complexity and interconnectedness with many other SDGs

Key connections and impacts

- Environmental Impact:** Directly related to SDG 13 (Climate Action), SDG 14 (Life Below Water), SDG 15 (Life on Land), SDG 16 (Peace, Justice and Strong Institutions), SDG 17 (Partnerships for Development).
- Economic Opportunities:** Positively impacts food security, relating to SDG 2 (Zero Hunger), SDG 8 (Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities).

Challenges

- Complex Interconnectedness:** Solving one aspect does not provide a complete solution to the overall problem.
- Stakeholder Engagement:** Varying levels of engagement make finding consistent solutions challenging.
- Trade Effects:** Environmental effects of domestic trade policies can vary significantly.
  - One country's natural resource policy may have downstream effects on other countries.
- International Cooperation:** Difficult due to challenges in standardizing information across diverse countries.

SDG 12 demonstrates high levels of wickedness, scoring 7 across most dimensions.

It poses significant challenges in addressing the interconnected issue of sustainable consumption and production. Necessitates various and innovative approaches that integrate diverse perspectives and solutions.

### Business Model Canvas

### Trends in food and beverages industry

The food and drink industry is an evolving market with the following key trends:

- Plant-Based Foods:** The demand for plant-based alternatives continues to grow as consumers seek healthier and more sustainable options. This trend includes not only meat substitutes but also dairy alternatives and plant-based snacks.
- Sustainability and Eco-Friendliness:** Consumers are increasingly concerned about the environmental impact of their food choices. This has led to a rise in sustainable practices, such as using eco-friendly packaging, reducing food waste, and sourcing ingredients locally.
- Technology Integration:** The use of AI and machine learning in the food industry is on the rise. These technologies help in optimizing supply chains, predicting consumer preferences, and enhancing food safety.
- Health and Wellness Products:** Products that promote health and wellness, such as those with clean labels, organic ingredients, and low sugar content, are becoming more popular. This trend is driven by a growing awareness of the link between diet and health.

(EHL Insights - What's trending in the food and beverage industry in 2024?)

### Agency and governance

Nestlé's use of the SDG 12, its strengths are:

- Global research and efforts to meet SDG targets.
- Comprehensive value chain for supply chain systems and sustainability practices.
- Commitment to sustainability and transparency in its operations.

However, there are some weaknesses:

- Complexity of addressing a wide range of issues.
- Fragmented efforts across different business units.
- High resource use across various geographical regions.
- Management capabilities for sustainable consumption and production.

### Transformation through Partnerships

**Intra-sector partnerships:** Working with non-profit organizations that share the same vision and perspectives to minimize waste and enhance sustainability.

**Bipartite partnerships:** Through the collaboration of different sectors, both organizations may have their own advantages that assist in providing direct and more efficient solutions to the recurring problem. One firm may have technological advantages while the other has more on-hand labour.

**Tripartite partnership:** Group effort is a key factor that can eradicate challenges hindering environmental and health success. State bodies can serve as an additional messenger for organizations such as Greenpeace, which advocates for reducing plastic contamination and spreads awareness on health hazards that arise from unsustainable practices.

### Risks and Opportunities

**Economic Risks:**

- Increased Operational Costs
- Supply Chain Disruptions

**Environmental Risks:**

- Climate Change Impact
- Waste management
- Carbon footprint

**SoCo-cultural Risks:**

- Higher consumer expectations
- Cultural differences
- Manufacturing and Activism

**Opportunities:**

- Cost savings through efficiency
- Innovation and product differentiation
- Access to sustainable investment
- Market Expansion
- Customer Loyalty

# Best Sustainability Partnership Award Cycle 1

## CRH's SDG 14 Strategy: Repurposing Construction Waste for Marine Conservation

Aoibhin Bardon, Shauna Fitzmaurice, Olivia Brigagliano, Shea Livingston

Trinity College Dublin (MBA)



### SDG STRATEGY POSTER

**INTRODUCTION: SDG 14 AND CRH IN AUSTRALIA**  
SDG 14 focuses on conserving and sustainably using oceans, seas, and marine resources, with a key emphasis on protecting coral reefs. These reefs, which cover just 1% of the ocean floor, support 25% of marine species but are threatened by climate change, pollution, overfishing, and coastal destruction. In response, many organisations are creating artificial reefs from materials like decommissioned ships. However, these reefs also cause pose risks such as pollution, structural instability, and potential safety hazards. CRH's marine resources programme focuses on the primary cause of decline, how to fix it, repurpose waste, the habitats and protect marine life.

CRH has been operating in Australia since 2009, focusing on construction accessories and infrastructure products for the houses and energy sectors, as well as major civil and infrastructure projects. After securing a majority share in Abris in 2021, CRH became the leading, largest cement supplier in Australia, with additional strengths in slag aggregates, concrete, lime, and concrete products. In 2024, CRH further expanded its portfolio by acquiring Cimatrix, a leading manufacturer and distributor of civil infrastructure products across the country. CRH

### INDICATORS SDG 14 AUSTRALIA (2)

**SDG 14 - Life Below Water**  
Mean area that is protected in marine sites important to biodiversity (B1)  
Ocean Health Index: Clear Waters score (B1-B10) (B1)  
Fish caught from overexploited or collapsed stocks (B1) (total catch) (B1)  
Fish caught by trawling or dredging (B1)  
Fish caught in the bottom discarded (B1)  
Marine biodiversity threat indicator: marine population (B1)  
Biodiversity's marine ecosystem: particularly the Great Barrier Reef, face significant challenges under SDG 14: Life Below Water. Coral bleaching, driven by climate change and rising sea temperatures, has severely impacted coral reefs. In 2016 and 2017, severe bleaching events affected over 50% of the Great Barrier Reef. The reef was added to the UNESCO 'In Danger' list in 2020. Efforts are underway to combat these challenges. The Australian government and private organisations have committed significant funding to reef restoration and water quality improvement. In 2021, the government pledged \$200 million for reef protection. The Great Barrier Reef Foundation is actively involved in coral restoration programs. Significant efforts are still needed to address climate change, reduce pollution, and protect biodiversity to ensure the long-term health of Australia's marine environment. This is of vital importance as the Great Barrier Reef, once held coral cover a decreasing, and is expected to decline due to the long-term changes are not reversed (B1). The proportion of fish stocks assessed as 'not subject to over-fishing' has declined from 82% in 2018 to 72% in 2022. Additionally, 'toxic substances' operations in Australia contribute less than 30% toward achieving SDG 14 - one of the lowest contributions for of this segment to any SDG, surpassed only by its minimal contribution to SDGs 13 and 15 underscoring the urgent need for sustainability initiatives by business to mitigate environmental threats, particularly in marine conservation, climate action, and biodiversity protection. (B1)

### CRH

GROUP MEMBERS  
Olivia Brigagliano  
Shauna Fitzmaurice  
Aoibhin Tutty-Bardon  
Shea Livingston

**14 LIFE BELOW WATER**

**Wickedness Scale**

**WICKED PROBLEM**

SDG 14 represents a highly complicated problem, scoring 87 due to its multi-dimensional nature. The least score given, by factors, included the economic instability of fishing and tourism, the destruction of marine habitats, environmental degradation, and the urgent need for effective protective policies. Legal considerations extend to the involvement of shipping and military sectors in marine conservation efforts. This process affects a broad and diverse population equally, with climate change and pollution identified as the primary drivers, compounded by numerous interconnected causes—making it a quintessential 'wicked' problem. The dynamic complexity of this issue is high, given the critical importance of time and the interdependencies between environmental, economic, and social factors. However, the complexity of this problem is relatively low, as climate and effect relationships are generally straightforward and supported by strong evidence. Societal consensus is moderate to high, as numerous stakeholders, including governments, industries, and citizen-dependent communities, need to coordinate and collaborate in addressing the challenges. This intricate web of factors underscores the difficulty in finding viable, sustainable solutions to the problem.

**OCEAN TEMP. INC. ACIDIFICATION, FISHING/ MACHINERY, TOURISM**

**CORAL BLEACHING, 50% REEF DESTRUCTION**

**RESTORE**

**CRH**

CRH Sustainability Development Goals

By increasing environmental performance, we will contribute to the UN Sustainable Development Goals.

**Priority Sustainable Development Goals**

**1. Climate Change** (SDG 13)  
CRH is a global leading materials company specialising in cement, aggregates, and concrete products, operating in over 28 countries. It contributes to the UN Sustainable Development Goals (SDGs) as outlined below. However, at present it does not contribute to SDG 14. CRH's operations and CRH have had locally based impacts on the SDGs, with moderate/high positive and negative impacts. Therefore, we recommend that CRH should think about how to achieve positive impacts with reducing negative impacts while maintaining its business model. (7)

**2. Biodiversity** (SDG 15)  
CRH's operations and CRH have had locally based impacts on the SDGs, with moderate/high positive and negative impacts. Therefore, we recommend that CRH should think about how to achieve positive impacts with reducing negative impacts while maintaining its business model. (7)

**RECOMMENDATIONS FOR CRH**

To assess suitability for artificial reefs, CRH should:

1. Quantify Impacts: Measure net biodiversity gains and CO2 savings from slag reuse.
2. Engage Stakeholders: Collaborate with marine biologists, local communities, and regulators.
3. Disclose Outcomes: Report via CRH-aligned frameworks to highlight financial and sustainability benefits.

**Market**

**1. Regulatory Failure:** Improve compliance with environmental standards and regulations, minimise marine pollution from industrial activities, increase transparency about environmental impacts and sustainability efforts.

**2. Negative Externalities:** Implement sustainability measures to reduce harmful externalities like coral bleaching, ocean acidification, and marine pollution. Regulate harmful activities like overfishing, coastal development, and marine pollution to reduce marine degradation. Implement marine protected areas (MPAs) to safeguard critical ecosystems (18). Implement coastal zone management plans to reduce coastal erosion and degradation.

**3. Capacity Building Initiatives:** Fund restoration projects, support the development of sustainable marine research, provide incentives for businesses to adopt environmentally responsible practices.

**4. Engage a Coalition for Action:** Partner with international organisations, e.g. the UN, other nations for global marine conservation efforts, collaborate with local communities, businesses, and NGOs, participate in global marine treaties to ensure sustainable use of the world's oceans. Government research body CSIRO collaborates with government agencies, private sector users, and civil society to develop solutions for marine conservation. Support marine conservation projects through financial or technical contributions.

**SOCIETAL TRIANGULATION ANALYSIS**

**Government**

Respond to environmental crises (e.g., coral bleaching events), act swiftly by implementing emergency policies and recovery programs, enforce environmental regulations, strengthen existing laws to ensure better protection of marine ecosystems, provide financial support for the restoration of degraded marine environments.

**Market**

Regulate harmful activities like overfishing, coastal development, and marine pollution to reduce marine degradation. Implement marine protected areas (MPAs) to safeguard critical ecosystems (18). Implement coastal zone management plans to reduce coastal erosion and degradation.

**Society**

Mobilise communities to address awareness, advocate for action on environmental crises (e.g., coral bleaching, coastal erosion).

**2. Marine Education:** Adopting sustainable practices (e.g., reducing plastic use, sustainable fishing practices), start campaigns and watchdog activities.

**3. Public Education:** Lead marine conservation initiatives, e.g. ocean clean-ups, develop educational programs to raise awareness, provide research that explores sustainable ways to use marine resources (e.g., Reef Check Australia 12).

**4. Capacity Building Initiatives:** Foster multi-stakeholder collaborations to collective marine conservation efforts, support global initiatives by participating in or leading international marine conservation efforts, engage indigenous communities in the management of marine resource leveraging traditional knowledge for sustainable practices (22).

**HEALTHY**

**BLEACHED**

**CRH**

# Best Sustainability Partnership Award Cycle 2

## Best Sustainability

# The Intention-Realization Gap: Rethinking Dove's Plastic Strategy in Southeast Asia

Luisa Maria Wynne

Zhejiang University (Postgraduate)



**The Intention-Realization Gap: Rethinking Dove's Plastic Strategy in Southeast Asia** *Dove*

Author: Luisa Maria Wynne | Zhejiang University

**Problem**

Dove, Unilever's flagship personal care brand, has high market penetration in Southeast Asia, especially in Vietnam and Thailand. While it promotes refillable packaging and recycled plastic globally, these innovations are not scaled in SEA, where Dove still relies heavily on single-use sachets and bottles.

SEA 31 million tonnes of plastic waste annually with more than 50% mismanaged. Countries like Indonesia, Vietnam, and the Philippines are among the top global waste polluters, making the region central to SDG 12.

Dove accounts for 6.4B of Unilever's \$38 sachets/year. Yet only 0.2% of packaging is reusable and recycled content is 22%.

Dove in SEA: In Vietnam, Unilever's sales exceed €1.1B, with Dove among its top 10 brands. In Thailand, Dove is used in 98% of households.

Despite this scale, circular solutions are limited. Most Dove packaging ends up incinerated or leaked into nature, contributing to SDG 13 through CO<sub>2</sub> emissions. Closing this gap requires SDG 17 which is partnerships with local governments, retailers, tech platforms, and communities, to shift from single-use to reuse.

**Societal Triangulation Analysis**

**State (Low)**  
Weak enforcement of plastic bans, limited recycling infrastructure, and lack of support for refill.

**Civil Society (High)**  
Civil society is active, with NGOs, waste pickers, and eco-conscious consumers, but faces limited funding, poor integration, and lack of platform support.

**Market (Medium)**  
Strong global commitments, but poor localization of circular systems in SEA. Still focused on sachet model for affordability.

**Current Business Approach**

Dove promotes its global plastic strategy through the 'No | Better | Less Plastic' framework:

- NO Plastic:** Plastic-free packs for the Beauty Bar.
- BETTER Plastic:** Launch 100% recycled (PCR) bottles for some products in North America and Europe.
- LESS Plastic:** Reusable packaging pilots (e.g. stainless deodorant sticks).

Dove aims to cut 20,500 tonnes of virgin plastic per year, which is equivalent to clogging Earth 2.7 times.

SEA still dominated by single-use sachets and bottles. However, in SEA, plastic reduction solutions remain limited, especially for low-income consumers. This is showing a clear intention-realization gap. Pilots not scaled or accessible in SEA.

**Strategy Proposal: Localizing Circular Beauty for Southeast Asia**

**Refill Access at Scale**  
Partner with malls, apartment complexes, and minimarkets in urban areas (e.g., Jakarta, Manila) to install refill stations.  
Launch mobile refill carts in dense neighborhoods.

**Affordable Reuse Formats**  
Introduce "micro-pack, refill" for sachet users: low-cost, recyclable, and refillable pouches.  
Offer starter kits (small refillable bottles) with reward points.

**Digital Engagement + Tracking**  
Use QR-coded packaging to track reuse and offer digital rewards via apps like Doodle or Shopee.  
Monitor emissions and waste avoided to report SDG impact.

**Local Co-Creation & Inclusion**  
Partner with waste banks, women-led cooperatives, and NGOs to design campaigns and manage refill stations.  
Include local influencers and beauty salons to normalize refilling.

**2030 SDG-Aligned Targets**

- 50% of Dove packaging sold in SEA is made or refill.
- 40% reduction in Scope 3 plastic emissions in SEA.
- Localized circular systems in 5+ SEA cities.
- Formal partnerships with at least 10 community or logistics actors.

**Technology**

- QR-Coded Packaging:** Track refill behavior, link users to reward systems (Doodle/Shopee).
- Mobile Refill Carts:** Affordable, low-tech retail kiosks deployed in dense urban areas.
- Micro-Pack Refill Pods:** Low-cost, refillable sachet alternatives for 840 consumers.
- Digital Twin Packaging:** Reduce design waste via virtual prototyping.
- Lifecycle Emissions Tracking:** Monitor Scope 3 emissions across packaging.

**Opportunities**

- Eco-conscious Consumer Demand:** 82% of global consumers prefer sustainable packaging, refill and QR systems build loyalty, especially with Gen Z in SEA.
- Lower Material & Design Costs:** Digital tech cut virgin plastic by 21%, and speed up design by 84%. Helps reduce packaging costs.
- Improved ESG & Transparency:** QR codes + emission tracking enable real-time monitoring, partner accountability, and better ESG reporting.
- Stronger Local Partnerships:** Collaborate with platforms like Go-Jek/Shopee to improve reach and rewards engagement.

**Partnership**

- Tech Platforms:** Doodle, Shopee, QR tracking, digital rewards, wide reach.
- Retail & Malls:** Indonesia, 7-Eleven, ALON, Refill stations, locations, shopper access.
- NGOs & Waste Banks:** Generation ALON, Plastic Bank, Community outreach, waste collection.
- Universities:** MIT, MIT D-Lab, Chulalongkorn, Local design, digital twin co-creation.
- Local Governments:** Jakarta, Bangkok, ESG, Policy support, public infrastructure.

**Risks**

- Infrastructure Gaps:** Many SEA areas lack proper waste systems, hindering and making refill and reuse models hard to scale without local infrastructure support.
- High Cost:** Refill stations and each need consistent funding and maintenance. Return investment may take time in low-margin markets.
- Consumer Habit Barriers:** Many consumers rely on sachets, and each need consistent on-the-go convenience, needs education, and low-margin support.

**Sustainable Business Model**

- Marketing:** Promote refill partner for culture.
- Supply Chain:** Partner for refill two tech logistics.
- Innovation:** Use digital culture.
- Finance:** ESG budgeting + shared cost.
- HR:** Train retail agents.
- Comms:** Report plastic & CO<sub>2</sub> saved.

# Best Sustainability Partnership Award Cycle 2



Methane absorption for a more sustainable agriculture and a better future  
Luka-Gabriel Wieczorek, Jana Lederer, Annika Haas, Antonia Mantey, Edmund Ye  
University of Applied Sciences Aachen (Undergraduate)

**VanDrie Green**

### Methane absorption for a more sustainable agriculture and a better future!

Jana Lederer – Antonia Mantey – Annika Haas – Edmund Ye – Luka Wieczorek

HT Aachen 2023

**Government**

The government is a key stakeholder in the project, providing funding and support for the research and development of the technology. The project is funded by the German Federal Government and the State of North Rhine-Westphalia.

**Market (Van Drie Group, Ag-Systems)**

The market is the primary focus of the project, with the goal of developing a technology that can be used by farmers to reduce methane emissions from their livestock. The project is currently in the development phase, with the technology expected to be available in the next few years.

**Customer Partners, Comments**

The project has received positive feedback from several customer partners, including the Van Drie Group and Ag-Systems. These partners have expressed interest in the technology and are looking forward to using it in their operations.

**Less Methane Better Future**

The project aims to reduce methane emissions from livestock, which is a major contributor to climate change. By using the technology, farmers can reduce their carbon footprint and contribute to a more sustainable future.

**Sustainable Partnerships**

The project is a result of a partnership between the VanDrie Group, Ag-Systems, and the University of Applied Sciences Aachen. This partnership has allowed the project to benefit from the expertise of all three organizations.

**The New Sustainable Model**

The project is a key component of the VanDrie Group's new sustainable model, which focuses on reducing methane emissions and improving the efficiency of livestock production.

**Carbon**

The project is a key component of the VanDrie Group's carbon footprint reduction strategy, which aims to reduce the company's overall carbon emissions.

**Empowering Rural Innovation**

The project is a key component of the VanDrie Group's rural innovation strategy, which aims to support and empower rural communities.



06

Best Visualisation for  
Sustainability Award



# Best Visualisation for Sustainability Award Cycle 1



Sustainability Analysis of an International Business: Thai President Foods PCL

Xiaoyue Shi, Pattra Phasook, Siwat Siwapinyoyos, Wichayada Simjaidee, Benyapa Phakjiratham, Narawit Pornthippithak

Mahidol University (Undergraduate)

**SUSTAINABILITY ANALYSIS OF AN INTERNATIONAL BUSINESS**

**Thai President Foods Public Company Limited**

**CREATED BY GROUP 3:**  
XIAOYUE SHI  
PATTRA PHASOOK  
SIWAT SIWAPINYOYOS  
WICHAYADA SIMJADEE  
BENYAPA PHAKJIRATHAM  
NARAWIT PORNTHIPPITHAK

**DATE: MARCH 2025**

**1. About the Company**  
President Foods Public Company Limited (PFL) was merged with Thai President Foods Public Company Limited (TFPL) in 2015. The company was registered as a public company in the Securities Exchange Thailand with the stock symbol "TFPL".

**2. Products and Market Share**  
The company provides 23,790 products in 100+ brands and 100+ SKUs. The company's products are widely available in 100+ countries and 100+ cities. The company's products are widely available in 100+ countries and 100+ cities.

**3. Current Approach**  
The company's current approach is to focus on sustainable growth and innovation. The company's current approach is to focus on sustainable growth and innovation.

**4. Wicked Problem**  
The company's wicked problem is to address the challenge of climate change. The company's wicked problem is to address the challenge of climate change.

**5. Social Trilateralism**  
The company's social trilateralism is to engage with stakeholders and create value. The company's social trilateralism is to engage with stakeholders and create value.



**Isabel Pereira Rodrigues**  
**Assistant Professor of Business Economics at the Mahidol**  
**University International College, Thailand**

It has been a great pleasure to be part of this project, to see how much it has engaged students, creating awareness and stimulating their thoughts for very concrete and actionable ideas on how companies can boost their sustainability performance, while at the same time keeping track of the tough competition environment that companies nowadays face. This type of initiatives is very enriching for students' learning and preparation for job market, but also has great potential for companies to get fresh ideas on how to do their current sustainability initiatives even better. As a mentor (supervisor) for my students' projects, it has been demanding since mentoring, providing feedback and guidance requires a huge investment of time and effort also from my side, but seeing the results my students achieve is a great reward for such investment. Also, from my side, I look forward to continuing the collaboration with this amazing network!

07

Best Sustainable  
Technology Award



# Best Sustainable Technology Award Cycle 1



## Thai Union Sustainable Analysis Hance Pesarillo, Nattima Rungsai, Noraphatr Yanil, Pairoow Nakyuti, Phattaraphon Banjongkan, Theeraphorn Phumphuang

Mahidol University (Undergraduate)

**Mahidol University International College** Thai Union Sustainable Analysis

**Company Background**

The Thai Union Group was founded in 1977 as Thai Union Manufacturing Company Limited and has grown into one of the world's leading seafood companies. Initially focusing on canned tuna production for export, the company reorganized in 1988, becoming Thai Union From Products Public Company Limited (TUP). The company operates in over 100 countries, with 80% of its revenue from international markets. Its four key business segments include ambient seafood (canned tuna, sandwiches, frozen seafood, pet food (in-Tai Corporation)), and value-added businesses. Thai Union uses a hybrid production model, sourcing raw materials from various countries and leveraging in-house and outsourced manufacturing. The company dominates several markets, including Thailand's canned tuna (70%) and the U.S. premium sardine market (60%), growing through retail, e-commerce, food services, and contract manufacturing.

**International Value Chain of Canned Tuna**

**What has Thai Union already done?**

**Overarching Program: SeaChange 2030**  
Goal: To reduce environmental impact from sea food, reduce and recover waste.  
Responsible and Caught Seafood  
Goal: By 2030, all wild-caught seafood to be responsibly sourced and 80% of the fishing practices are 100% traceable (Thai Union Group, PLC, 2024a).

**By Achievement:**

- Signed Protecting Ocean Wildlife Pledge to audit the supply chain from vessels that reduce bycatch risks.
- Collaborative with Sustainable Fisheries Partnership (SFP) on marine habitats and fishing impacts research (Thai Union Group, PLC, 2023).
- Established the Policy for the Responsible Sourcing of Tuna (2020) to minimize overfishing and protect endangered species (Thai Union Group, PLC, 2024a).
- Compliance to supply chain traceability standards by Global Dialogue on Seafood Traceability (GDST).
- 71.62% of farmed shrimp is traceable (Thai Union Group, PLC, 2024a). The rest are still questionable.
- Land-based production traceability across different supply chains can be more transparent.

**Sustainable Aquaculture**  
Goal: Ensure all shrimp and aquaculture productions are sustainable.  
Key Achievements:

- 13,700 metric tonnes of shrimp farms entered the Improver Program by Aquaculture Stewardship Council (ASC) (Thai Union Group, PLC, 2024a).
- The company's feed mill is certified by ASC (Thai Union Group, PLC, 2024a).

**Coastal and Mangrove Restoration**  
Key Achievements:

- ASC (The Aquaculture Stewardship Council)
- ASC (The Aquaculture Stewardship Council)
- ASC (The Aquaculture Stewardship Council)

**Challenges that remain:**

- Greenpeace International (2020) alerted for Thai Union's slow progress.
- Shrimp Sustain (2024) signaled critical to meeting achievement, could be improved.
- low to avoid risk of greenwashing.

**Recommendations**

- In line with SDG 14 (Life Below Water), Thai Union's SeaChange 2030 aims to protect people and resources.
- The Union could provide a clearer, actionable path instead of the plans that are currently in place.
- Tuna farming is seen as sustainable (Global Dialogue, 2024), so it is suggested to maintain it.

**Tuna Farming as a Competitive Advantage**

- Put more money into tuna aquaculture and boost the supply without hurting the wild populations.
- Tuna farms are an answer, but they have high cost (€3.3 million) (Santaput, 2023).
- Tuna fishing should only be allowed from June to July so that stocks could last longer and fuel costs could go down.

**Integrating technology**

- Artificial intelligence and smartfish could be implemented at Thai Union's strategy.
- Blockchain could be implemented to track legal fishing alongside GDST standards.

**Partnership**

- For responsible sourcing, TU could make more relationship with ASC and MSC.
- Work with groups that protect marine wildlife to restore habitats.
- Work together more with tech companies to make AI-powered monitoring tools.
- Impose how the government and policymakers work together to handle marine resources (Forbes, 2023, p.12).

**Materiality of SDG 14: Life Below Water for Thai Union**

Thai Union relies on healthy marine ecosystems, making SDG 14 the most critical SDG for its long-term success. Compared to SDG 12 (Responsible Consumption & Production) and SDG 13 (Climate Action), which also influence operations, SDG 14 is central to Thai Union's operations, as its seafood supply and industry sustainability depend on healthy marine ecosystems. Overfishing, pollution, and climate change threaten marine resources, disrupt operations, and increase costs. Compliance with stricter regulations is crucial to maintaining market access, while growing consumer demand for sustainability makes action essential. Addressing SDG 14 strengthens Thai Union's leadership, protects resources, and ensures long-term profitability (Thai Union Group, PLC, 2024a).

**Threat of Overfishing: A Wicked Problem**

The threat of Overfishing is associated to complex challenges with no single solution.

- Environmental Impact:** Depletion of fish stocks, harming biodiversity.
- Economic Consequences:** Rise of sourcing costs and supply chain instability, which threaten industry profitability.
- Regulatory Challenges:** Inconsistency of global regulations on illegal, unreported, and unregulated (IUU) fishing.
- Stakeholder Conflicts:** Governments, NGOs, and businesses have different, possibly competing interests.
- Climate Change:** Alters fish migration patterns and ocean temperatures.
- Reputation Risks:** As consumer demand for sustainable seafood grows, inaction could lead to loss of market trust and revenue.

**Societal Triangulation Analysis for Stakeholders**

WIS (Wicked Issue) requires a multi-stakeholder approach to address the environmental impact of the food system and the depletion of marine resources. The interconnected nature of the issue requires a holistic approach that involves the government, industry, and consumers. The interconnected nature of the issue requires a holistic approach that involves the government, industry, and consumers.

Stakeholders involved in this issue include:

- Government: Responsible for regulating the industry and ensuring sustainable practices.
- Industry: Responsible for producing and distributing seafood products.
- Consumers: Responsible for making choices that support sustainable seafood.
- NGOs: Responsible for advocating for sustainable practices and protecting the environment.
- Scientists: Responsible for providing research and data to inform policy and industry practices.

Key challenges in addressing this issue include:

- Complexity: The issue is highly complex and involves multiple stakeholders with different interests.
- Uncertainty: There is significant uncertainty about the best way to address the issue.
- Scale: The issue is global and requires a coordinated effort across many countries.
- Time: It will take a long time to see the results of any intervention.



**Congratulations!**

