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Carbon Market Solutions for Decarbonising Fashion

Assessing the role of market-based mechanisms to address fashion value chain emissions

Fashion for Climate

About this white paper

This white paper explores the role of carbon markets in financing decarbonisation measures for fashion and apparel sector value chains. While the analysis draws on global insights, the carbon pricing landscape in Southeast Asia is examined in greater detail as it is a hotspot for fashion value chain emissions. This paper is intended for decision-makers across the fashion ecosystem, including brands and retailers seeking credible strategies to reduce Scope 3 emissions; manufacturers navigating emerging carbon pricing frameworks; financial institutions enabling the uptake of carbon finance models; and policymakers shaping enabling environments for carbon pricing and market-based solutions.

Disclosure

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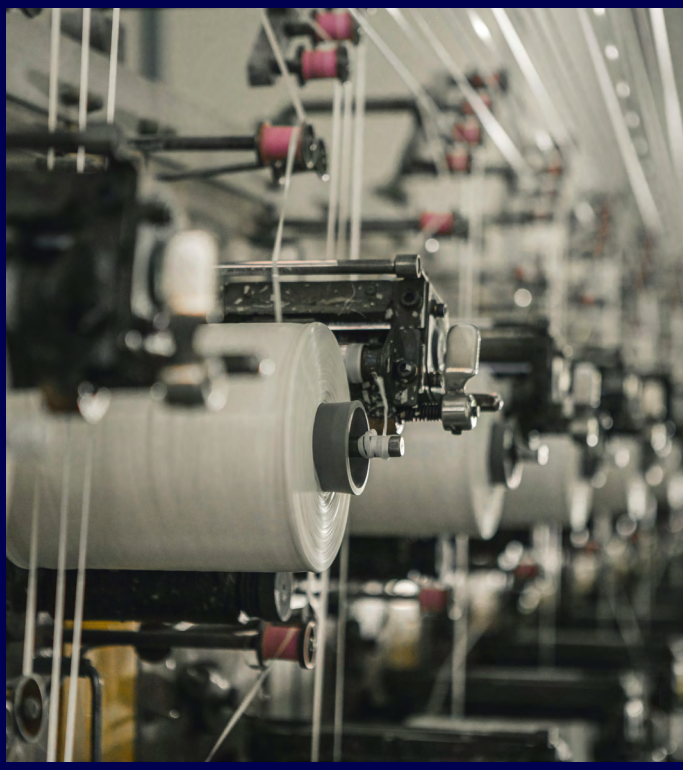

Acknowledgements and credits

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Fashion for Climate

Contents

ABBREVIATIONS

ACX	Air Carbon Exchange
AMC	Advanced Market Commitment
ACCF	ASEAN Common Carbon Framework
BCX	Bursa Carbon Exchange
BVCM	Beyond Value Chain Mitigation
CAR	Climate Action Reserve
CCP	Core Carbon Principles
CDR	Carbon Dioxide Removal
CTB	Climate Transition Budget
DAC	Direct Air Capture
EAC	Environmental Attribute Certificate
ETS	Emissions Trading System
GHG	Greenhouse Gas
ICP	Internal Carbon Pricing
ICVCM	Integrity Council for the Voluntary Carbon Market
JCM	Joint Crediting Mechanism
MRA	Mutual Recognition Agreement
MRV	Monitoring, Reporting and Verification
PACM MCU	Paris Agreement Crediting Mechanism Mitigating Contribution Unit
PDD	Project Design Documents
ROI	Return on investment
SBTi	Science-based Targets Initiative
SME	Small and medium-sized enterprise
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCI	Value Change Initiative
VCIU	Verified Carbon Intervention Unit
VCM	Voluntary Carbon Market
VCMI	Voluntary Carbon Market Initiative

INTRODUCTION

Introduction

Fashion is among the most resource-intensive sectors and accounts for a significant share of global greenhouse gas (GHG) emissions.[1] Most emissions occur upstream during raw material production, textile processing, and garment manufacturing. These stages are concentrated in Southeast Asia, where coal-fired boilers and fossil-heavy grids dominate industrial energy use, creating a dual challenge for value chain actors: high emissions intensity combined with limited access to affordable climate finance.

Despite ambition among fashion brands to achieve net zero and science-based targets, progress remains constrained by structural barriers. Fragmented supply chains, short-term contracting, and limited oversight of third-party producers make it difficult for brands to influence emissions reductions and suppliers to invest in decarbonisation measures, a challenge highlighted in the Fashion Charter's recent white paper on supply chain decarbonisation, *Fashion's Supply Chain Challenge*.[2] At the same time capital-intensive upgrades needed for cleaner production – such as electrifying thermal systems and deploying renewable energy – are often needed in markets where concessional finance is scarce and risk premiums are high.[3] Small and medium-sized enterprises (SMEs), which form the backbone of Southeast Asia's manufacturing base, face additional hurdles due to limited credit history and collateral, amplifying the transition gap.[4]

Alongside traditional financing approaches, carbon market mechanisms provide one potential pathway to address these barriers. Carbon markets are carbon pricing mechanisms enabling governments and non-state actors to trade GHG emission credits, with the aim of achieving climate targets and implementing climate actions cost-effectively.[5] Carbon pricing and market mechanisms can be integrated across multiple dimensions of corporate climate strategy: embedding carbon costs in business decisions, financing supplier-level interventions, supporting contributions beyond companies' own value chains, and incorporating carbon removals as part of long-term net zero commitments.

While the paper focuses on carbon market mechanisms, it is important to acknowledge that decoupling value creation from resource extraction and volume growth – while improving wellbeing – remains a fundamental solution for the fashion sector's long-term sustainability.[6] Transforming the fashion industry to meet climate goals will require a broad range of investment strategies, including supply chain upgrades, circularity initiatives, and new business models. Carbon markets represent one potential lever among these options, enabling both brands and suppliers to access finance for decarbonisation alongside other sustainability investments.

Carbon-market mechanisms are explored in conjunction with the evolving policy landscape in Southeast Asia, where emerging carbon pricing frameworks signal new opportunities and challenges for fashion supply chains. Drawing on global case studies and regional insights, this paper provides practical considerations for brands, manufacturers, financial institutions, and policymakers seeking to navigate carbon markets responsibly as part of a broader decarbonisation strategy.

1 Mayer & Birkocak, (2024) Carbon Footprint of Fashion: Assessing and Addressing Carbon Emissions in Textile Production
2 Fashion Industry Charter for Climate Action, (2025) Fashion's Supply Chain Challenge
3 IEA & IFC, (2023), Scaling Up Private Finance for Clean Energy in Emerging Markets and Developing Economies
4 Asian Development Bank Institute, (2018) The Role of SMEs in Asia and their Difficulties in Accessing Finance
5 United Nations Environment Programme, (2025) Carbon Markets
6 UNEP & UNFCCC, (2023) The Sustainable Fashion Communication Playbook

EXECUTIVE SUMMARY

Executive summary

Fashion supply chains are under increasing pressure to decarbonise, driven by science-aligned, net zero corporate climate commitments and heightened scrutiny from investors, regulators, and consumers. Most emissions occur upstream during raw material production, textile processing, and garment manufacturing, making Scope 3 emissions the largest and most challenging part of the industry's footprint. Achieving climate targets requires new financing pathways that go beyond traditional approaches, which have not delivered the necessary scale and speed.

This white paper explores how carbon market-based approaches can support value chain decarbonisation when integrated into science-aligned strategies. Four carbon market approaches are examined:

- **Internal carbon pricing:** Embeds carbon costs into business decisions and funds supplier interventions.
- **Insetting:** Delivers direct emissions reductions within the value chain, including through collaborative finance models such as pooled funds targeting shared supplier networks, requiring robust industry standards and collaborative approaches.
- **Addressing ongoing emissions:** Leverages carbon market mechanisms to support climate action on residual emissions that persist during the transition to net zero, in line with the evolving SBTi ongoing emissions responsibility framework.
- **Carbon removals:** Essential for neutralising residual emissions, with a focus on high-integrity solutions and emerging technologies.

The analysis draws on global insights from international brands and initiatives and examines how carbon pricing is evolving in Southeast Asia, where rapidly evolving carbon markets are reshaping the cost structure and financing opportunities for fashion supply chains. The ongoing evolution of new carbon pricing instruments, globally aligned crediting frameworks, and mutual recognition agreements, are creating new pathways for fashion brands and suppliers to finance decarbonisation and participate in carbon markets.

KEY INSIGHTS

Carbon market mechanisms and carbon projects offer multiple pathways to fund decarbonisation and drive low-carbon decision-making. Leading fashion companies demonstrate some early successes.

These approaches are still emerging, but sector-wide initiatives and integrity frameworks are supporting robust scaling to ensure credibility and trust.

The effectiveness of carbon market mechanisms and carbon projects depends on harmonised governance, robust carbon accounting standards, and alignment with the mitigation hierarchy.

Collaborative models, including pooled finance and shared monitoring, reporting and verification (MRV) systems, can help overcome supply chain fragmentation and reduce costs, but need to align with carbon accounting standards and guidance.

Early engagement in regional carbon pricing systems, especially in Southeast Asia, can help suppliers mitigate compliance risks and enable greater access to carbon finance.

Strategic priorities for fashion sector stakeholders

1 Link climate action to business value and risk management

Connect carbon market mechanisms to measurable business benefits, including avoided compliance costs, supply chain resilience and brand differentiation. Demonstrate return on investment (ROI) to strengthen internal buy-in and position climate investments as strategic rather than discretionary.

2 Evolve from an offsetting to mitigation contribution approach

Alongside corporate net zero strategy implementation, support greenhouse gas mitigation that advances global net zero goals and enables benefit-sharing with countries hosting climate mitigation projects and climate-vulnerable developing countries (e.g. via the Paris Agreement Crediting Mechanism). Prioritising mitigation contributions in supplier countries can also help address broader climate risks while directing climate investment where it is needed most.

3 Invest in supplier capacity and enabling capital

Build technical capacity among suppliers, especially SMEs, for credible participation in carbon markets. Training on MRV, carbon accounting, and credit generation can support suppliers to access carbon finance, alongside the provision of upfront capital to enable capital investment. Decarbonisation measures must be aligned with factories' requirements for quality standards to ensure a robust business case.

4 Prioritise integrity and transparency

For the supply of credits, it is paramount to align with the requirements and high-integrity standards established under the Article 6.4 mechanism, the Paris Agreement Crediting Mechanism (PACM), which serves as the global benchmark. For demand-side claims, alignment with the Voluntary Carbon Markets Integrity Initiative (VCMI) guidance is recommended. The Integrity Council for the Voluntary Carbon Market (ICVCM) Core Carbon Principles can also be used to ensure consistency with high-integrity pathways.

5 Collaborate beyond finance

Move beyond pooled funding to shared governance and verification systems. Collaborative MRV platforms harmonise standards reduce verification costs and accelerate adoption of credible interventions across fragmented supply chains. This approach lowers transaction costs for multi-brand projects.

FINDINGS

Using carbon markets and carbon pricing to achieve corporate climate targets

Corporate climate targets are the primary driver of decarbonisation in the fashion industry. Leading brands and suppliers have committed to science-based pathways and net zero goals, requiring them to measure emissions across their operations and value chains, and implement strategies to reduce them. The fashion industry is responsible for between 2 and 8% of global greenhouse gas (GHG) emissions and a large proportion of these emissions occur in the manufacturing sector of the fashion industry's complex and fragmented supply chain (Scope 3).[2] While many fashion and apparel sector companies have ambitious climate targets, translating these targets into action is not straightforward. Brands often lack direct operational control, while suppliers face high capital costs and insufficient access to finance. This gap has driven the search for innovative mechanisms that mobilise funding for value chain decarbonisation.

EVOLUTION: FROM COMPENSATION TO CONTRIBUTION

Corporate climate strategies have historically relied on carbon credits to claim carbon neutrality. Companies, including those in fashion and apparel, purchased credits to offset emissions they could not eliminate. However, growing scrutiny about whether offsetting delayed real emissions reductions has driven a fundamental shift in standards and expectations. Today, science-aligned frameworks prioritise deep value chain reductions, reshaping how companies engage with carbon markets.

A carbon credit is a tradable permit that represents the reduction or removal of one tonne of carbon dioxide equivalent (CO_2e) from the atmosphere. These credits are generated by emissions reductions or removal projects such as reforestation or renewable energy development and can be bought by companies or individuals to offset their own emissions that cannot be avoided. Some organisations use carbon credits to support carbon neutrality claims – public statements that the carbon impact of their operations or products was neutralised by purchasing an equivalent amount of carbon credits as their residual emissions. The buying and selling of these credits is largely done through the Voluntary Carbon Market (VCM), which channels finance from organisations and individuals toward emissions mitigation activities. Over time, however, concerns have intensified over whether carbon neutral claims actually drive companies to decarbonise their operations. In tandem, the integrity of some of the VCM methodologies have been called into question.

As a response, net zero corporate standards emerged in 2021. These frameworks prioritise substantial emissions reductions within a company's own value chain and complement them with external mitigation, rather than focus on using carbon credits to claim carbon neutrality. This shifts the corporate use of carbon credits from an offsetting approach to a *mitigation* contribution approach. Rather than an organisation claiming that they have "cancelled out" their emissions by buying carbon credits, they have mitigated their emissions by making a contribution to the achievement of their country's Nationally Determined Contributions or climate targets.

Mitigated/compensated: the actor fully acknowledges that their emissions are not zero, but mitigates the impact of these emissions by supporting an equal (or greater) reduction of emissions.

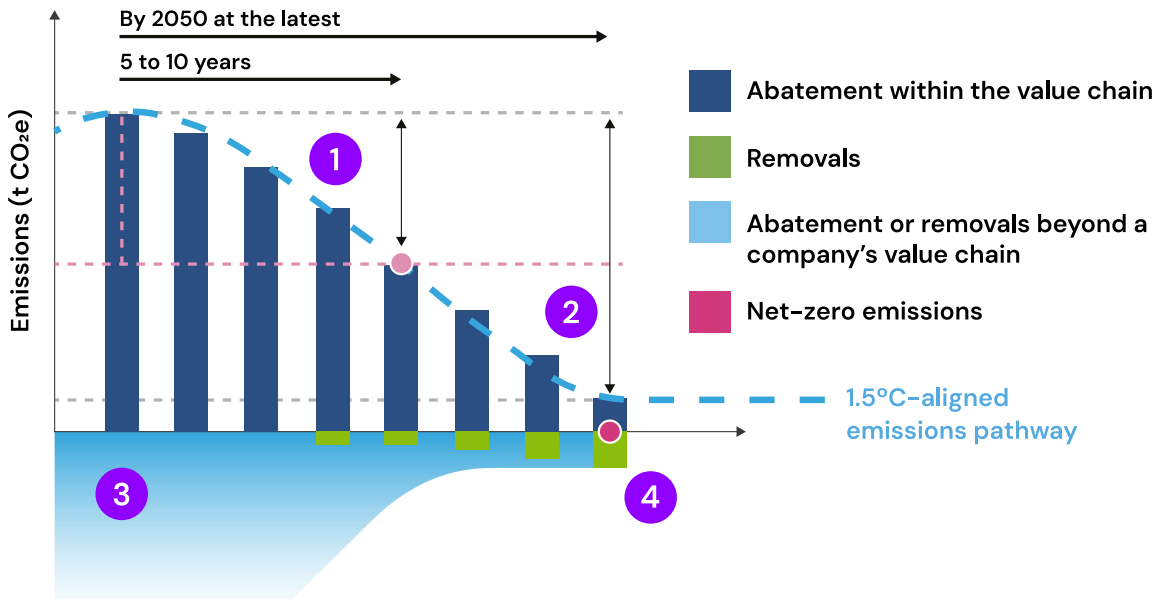
Science-aligned net zero frameworks require companies to reduce their emissions by 90 to 95% before neutralising remaining emissions through investment in high-quality carbon removals.[7] The Science Based Targets initiative (SBTi) reinforces this transition through its *Corporate Net-Zero Standard*[7], underpinned by the mitigation hierarchy (see Figure 1), which sets clear priorities for climate action:

1. **Near-term target to reduce value chain emissions** in line with 1.5-degree pathways and with near- and long-term science-based targets.
2. **Long-term target to reduce value chain emissions** to a residual level in line with 1.5-degree scenarios by no later than 2050.
3. **Contribute beyond the value chain** to accelerate global decarbonisation, without using these contributions to offset corporate emissions.
4. **Neutralise residual emissions** with permanent removals credits when the company has achieved their long-term science-based targets.

What does this mean for the fashion and apparel sector?

This transition means moving beyond carbon neutrality claims toward strategies that deliver measurable absolute emissions reductions. The focus is increasingly on interventions within the value chain, where mechanisms such as internal carbon pricing and insetting can mobilise finance and drive implementation of decarbonisation measures. Carbon removals and beyond-value-chain contributions remain relevant, but as complementary actions that support long-term climate goals rather than substitutes for internal reductions. The following sections examine these carbon market approaches in detail, highlighting practical pathways, challenges, and opportunities for implementation.

FIG. 1 Four elements of SBTi's Net-Zero Standard[8]



7 SBTi, (2025) The Corporate Net-Zero Standard
8 MyClimate, (2025) What is Beyond Value Chain Mitigation

APPROACH 1: INTERNAL CARBON PRICING

Internal carbon pricing (ICP) is a voluntary mechanism through which a company assigns a monetary value to its GHG emissions to guide business decisions and prepare for future climate regulations. By making the cost of emissions explicit, ICP helps integrate climate risk into financial planning, generate dedicated funds for low-carbon initiatives and incentivise sustainable innovation. Adoption is growing. A recent cross-sector analyses drawing on CDP data show 1,753 companies across 56 countries used ICP in 2024, an 89% increase since 2021.[9] Internal carbon price levels applied by companies vary significantly. In 2024, ICP levels ranged from below USD 10 per tCO_2e to more than USD 130 per tCO_2e, with roughly one quarter of organisations applying a price less than USD 20 per tCO_2e.[9] ICP can take three operational forms:

Shadow pricing: A shadow price is a theoretical carbon price that is assigned to greenhouse gas emissions for the purpose of evaluating business decisions. No actual money is exchanged, but this approach allows companies to simulate how carbon costs would impact financial performance. Shadow pricing is typically used to assess the financial feasibility of new projects or strategies, ensuring that potential carbon risks are taken into account before any investment is made. It can cover Scope 1, 2 or 3 emissions.

Internal levy or fee: An internal carbon fee applies a real charge to business units based on their emissions. The revenue collected from these fees can then be earmarked for emissions-reduction initiatives such as boiler electrification, renewable energy deployment, or regenerative agriculture within supplier networks. This method creates a direct financial incentive for departments to reduce their carbon emissions, as lowering emissions also lowers costs.

Implicit pricing: Implicit pricing is calculated retrospectively, based on how much a company spends on carbon reduction initiatives, such as abatement measures or renewable energy investments. This type of internal carbon pricing allows businesses to measure the true cost of reducing emissions and to evaluate the effectiveness of their sustainability efforts over time.

Microsoft provides a cross-sector example. The company implemented an internal carbon fee in 2012 for Scope 1, Scope 2, and business air travel, and expanded it in 2020 to include Scope 3 emissions.[10] The carbon fee works by setting organisational carbon reduction targets for all business units. Carbon emissions are tracked and analysed across Microsoft's operations and supply chain. An internal price on carbon is set annually in line with the company's targets, and this is translated into a carbon fee that charges business units for their GHG emissions. All carbon fees are collected into a fund that subsidises investments in sustainable projects. By attaching a tangible cost to carbon emissions, the scheme allows participants to highlight priority areas for decarbonisation and create incentives for progress in them. For example, since 2022, Microsoft has hardened its stance on business air travel by increasing the associated fee from $15 to $100 per metric ton of CO_2 equivalent. The internal carbon fee has led to more informed, environmentally conscious decision making and a shift in mindset across the organisation to embrace sustainability as a strategic business investment.[11]

Setting an internal carbon price

Establishing an internal carbon price requires the consideration of four dimensions in its design and then four steps to its implementation. These steps are the same with each type of internal carbon pricing.

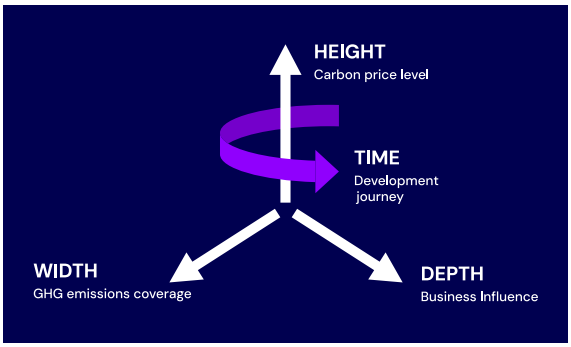


FIG. 2 Four Dimensions of Internal Carbon Pricing[12]

9 World Bank, (2025) State and Trends of Carbon Pricing 2025
10 Microsoft, (2022) How Microsoft is using an internal carbon fee to reach its carbon negative goal
11 World Economic Forum (2023) Microsoft - An internal carbon tax to cut Scope 3 emissions
12 Adapted from How-to Guide to Corporate Internal Carbon Pricing, (2017)

Table 1. The Four Dimensions Explained

Dimension	ICP Parameter	Best Practice ICP approach
Height	Price level per unit of GHG emitted (e.g. US$/tCO2) that the company uses in business decisions	Rise to a carbon price capable of changing decisions in line with the ICP objectives
Width	The GHG emissions covered throughout the value chain by the ICP approach	Grow to cover all GHG emissions hotspots in the entire value chain that can be influenced
Depth	The level of influence the ICP approach has on business decisions of a company and its value chain partners	Become increasingly influential to have a material impact on business decisions
Time	The development of the first three dimensions over time	Be evaluated regularly to bring the company's strategy in line with a low-carbon economy

The consideration of these four dimensions is essential to designing an effective ICP approach. Implementation of an effective ICP requires the necessary buy-in from across the business and appropriate engagement to ensure the ICP is implemented to drive the intended impact. The steps for an effective ICP approach are[13]:

1. **Engaging the business on ICP**
   - Engage relevant teams across the business (finance, sustainability, procurement, strategy, operations, and executive management)
   - Set clear objectives
   - Build the business case (quantify expected impacts on costs, investment decisions, and supplier engagement; outline how funds will be used)
2. **Designing the best practice ICP approach**
   - Gather detailed information needed for design across the four dimensions of ICP
   - Develop the right type of ICP to drive the approach
   - Set a carbon price level that drives action – high enough to influence investment decisions and consistent with the organisation's climate targets
3. **Rolling out the ICP approach**
   - Test the approach through pilot projects
   - Apply supporting tools
   - Plan the rollout
4. **Monitoring and evaluating the ICP approach**
   - Enforce and monitor the approach
   - Evaluate and realign the approach

The Change Climate Project offers a framework to formalise internal carbon pricing as a credible climate action tool. Under its certification, The Climate Label, companies must establish a Climate Transition Budget (CTB) proportional to their emissions footprint. This is calculated using a minimum internal carbon fee of US $15 per tonne of unabated emissions. At least 10% of the CTB must fund qualifying projects within the company's own value chain, ensuring that supply chain mitigation is not overlooked. Certified companies must disclose how their CTB is allocated and report annually on progress, strengthening accountability and transparency. Examples of certified brands include REI and Vuori.[14]

13 Ecofys, The Generation Foundation & CDP, (2017) How-to Guide to Corporate Internal Carbon Pricing
14 Change Climate Project, (2025) The Climate Label Certified Standard

Global frameworks increasingly recognise an ICP. The GHG Protocol, a leading global standard for measuring and reporting emissions, acknowledges internal carbon pricing as a voluntary mechanism to embed climate costs into decision-making and fund Scope 3 interventions, provided it is supported by robust MRV and transparent disclosure. Both frameworks emphasise that internal carbon pricing must complement, not replace, deep value chain decarbonisation and align with the mitigation hierarchy.

Building on this foundation, the next mechanism, insetting, takes the principle of internal action further by enabling fashion and apparel companies to deliver measurable emissions reductions within their own value chains through supplier-level interventions.

APPROACH 2: INSETTING

Carbon Insetting refers to investments in practices that reduce emissions within an organisation's value chain. It involves direct interventions with suppliers and partners. This could mean supporting regenerative agricultural practices on farms you source from, improving the energy efficiency of manufacturing processes, transitioning logistics partners to electric vehicles, or working directly with suppliers to reduce their carbon footprint. These projects require the use of credible third-party programmes for Monitoring, Reporting and Verification (MRV) of emissions and additionality checking, to ensure that emissions reductions are real and measurable.

Carbon offtake agreements represent an innovative financing approach for insetting projects. Traditionally used in the power sector to secure long-term supply of renewable energy through power purchase agreements, this model is relatively new in carbon markets and even more so in the fashion sector. By guaranteeing future demand for verified emissions reductions at a pre-agreed price per tonne of CO_2e, these agreements provide suppliers with price certainty and predictable revenue streams, enabling them to secure financing for capital-intensive decarbonisation measures. While primarily focused on carbon credits, brands could explore complementing these agreements with long-term sourcing commitments as a way to strengthen supplier confidence and align commercial incentives. Linking future demand for credits with procurement strategies could help reduce financial risk for suppliers and create a stronger business case for large-scale interventions within the value chain. However, some practitioners argue that decoupling decarbonisation from sourcing decisions is preferable, as it removes complexity and avoids making emissions reductions contingent on procurement cycles. Currently the most challenging part of undertaking insetting is attribution. For organisations to benefit they must be able to link their insetting investments to a reduction in their Scope 3 emissions. However, without robust attribution rules, interventions risk double counting when multiple brands source from the same supplier or when claims overlap. Therefore, despite its potential, scaling insetting across the fashion sector has proven difficult.

Organisations have highlighted several other barriers to scaling, including:

- **High implementation complexity and cost:** Insetting requires intensive supplier engagement, robust MRV systems and governance structures, making it resource-intensive for both brands and suppliers.
- **Inconsistent definitions and risk of misclassification:** The absence of a universally accepted definition of insetting leads to inconsistent application and reputational risk. While bodies such as the International Platform for Insetting defines it as interventions within a company's own value chain[15], some brands apply the term to projects in adjacent supply chains or regional landscapes.
- **Fragmentation of standards:** Lack of harmonised frameworks for attribution and co-claiming results in inconsistent reporting and governance gaps.
- **Verification cost challenges**: For small projects, verification costs can equal project costs, making insetting financially prohibitive without collaborative MRV systems.

15 International Platform for Insetting, (2022) Insetting Guide

To overcome these barriers, some initiatives are working to standardise approaches and provide shared governance structures. Emerging platforms are also working to facilitate collaborative models that make insetting practical and scalable across fragmented supply chains. Book-and-claim schemes offer a related but distinct approach that has gained traction in other hard-to-abate sectors, where physical delivery of low-carbon goods is decoupled from the transfer of environmental attributes — notable examples include the Zero Emission Maritime Buyers Alliance (ZEMBA) for shipping and the Sustainable Aviation Buyers Alliance (SABA) for aviation, both of which aggregate corporate demand to accelerate the adoption of low-carbon fuels and technologies.

Emerging platforms for credible value chain interventions

Several initiatives are leading efforts to enable companies to credibly account for supplier-level emissions reductions. Examples of organisations developing approaches to value chain interventions include the Value Change Initiative (VCI) and the Advanced and Indirect Mitigation (AIM) Platform.

VCI is a member-based, multi-stakeholder platform established in 2017 to advance credible Scope 3 emissions accounting and market-based solutions across complex value chains. Membership is open to brands, suppliers, and other stakeholders, who can join by applying through the VCI website or by invitation. Members participate in working groups, pilot projects, and consultations, contributing to the development of guidance and standards for Scope 3 interventions. The initiative runs programmes of market-based mechanisms and regularly consults on reporting and supplier data use.

The AIM Platform is a collaborative initiative that brings together brands, suppliers, and technical experts to develop and pilot practical approaches for Scope 3 interventions. Companies can participate in AIM pilots or working groups by expressing interest through the AIM Platform's website or by invitation. AIM is developing auditable systems that allow companies to claim verified Scope 3 reductions through Environmental Attribution Certificates (EACs). Its *Association Test* determines whether an intervention qualifies as "within the value chain" and sets requirements for MRV and disclosure. AIM is piloting these rules with fashion companies such as Patagonia, H&M Group, and Levi Strauss.[16]

To address traceability challenges, VCI introduced the concept of a *Supply Shed*; a geographically defined group of suppliers that provide similar goods or services and are demonstrably part of a company's value chain. This model enables multiple brands sourcing from the same region to share recognition for emissions reductions when full traceability is impractical, supported by contractual safeguards and digital registries to prevent double counting. Supply Sheds aim to offer companies greater flexibility to address value chain emissions while ensuring that reductions are directly linked to the commodities and products within their supply chain.

The following example explains how the Supply Shed approach could work in practice for multiple apparel brands sourcing from the same dyeing and finishing clusters. Instead of implementing isolated projects, these brands could pool resources to finance renewable energy installations and thermal system upgrades, with interventions aggregated at a regional level. This model would enable fashion companies to claim emissions reductions while improving cost efficiency and enabling suppliers to directly access carbon market finance for decarbonisation.

Beyond individual projects, industry-wide programmes that provide shared validation and traceability architecture, such as collaborative regenerative agriculture initiatives, can further reduce barriers. By delivering economies of scale for governance and verification, these programmes lower transaction costs and create a credible framework for multi-brand participation. Such approaches could not only accelerate adoption but also strengthen resilience across sourcing regions, positioning insetting as a strategic lever for sector-wide decarbonisation,

16 AIM, (2025) AIM Platform launches Association Test pilot program to address major barrier to scope 3 climate action

CASE STUDY 1

Patagonia's insetting model

Patagonia is emerging as a leader in insetting, investing directly in emissions reductions within its supply chain. Its insetting approach aligns with a science-based target to cut emissions by 55% by 2030 and reflects a broader industry move from having a carbon neutrality goal to focusing on absolute emissions reductions.

98% of Patagonia's emissions stem from the supply chain, particularly Tier 2 textile mills. To be able to make measurable reductions to these Scope 3 emissions, Patagonia has worked with Verra and the AIM platform to adapt carbon market methodologies, traditionally used for offsets, to support insetting projects. The initiative is built around monetising carbon reductions to finance supplier-level decarbonisation projects. Patagonia undertook technical studies of textile mills in several countries to provide insights into CapEx and OpEx associated with large-scale decarbonisation interventions. The studies were then used internally to financially model an internal carbon price, called a Verified Carbon Intervention Unit (VCIU), which ranges between $92 and $350 per ton of CO_2e. The VCIU is then incorporated into a legal contract between Patagonia and their suppliers who are implementing the project. This provides the certainty needed for suppliers to commit to large scale decarbonisation projects. Importantly, Patagonia uses internal carbon pricing as the mechanism to generate the funds necessary to commit to these carbon offtake agreements — the VCIU price is applied internally to secure capital before it is deployed into supplier-level decarbonisation projects. In Patagonia's view, a key advantage of this model is that it intentionally decouples decarbonisation investment from sourcing decisions, removing the complexity of aligning procurement commitments with climate action. More detail can be found in Patagonia's Progress Report (October 2025).

A key challenge of insetting approaches is balancing attribution with collaboration. Fashion supply chains are highly interconnected, and collaborative interventions across multiple brands could unlock large-scale decarbonisation at a lower cost than isolated efforts. Shared projects can spread financial risk and accelerate implementation timelines. Collaboration also creates opportunities for aligning standards and joint MRV systems. However, science-based targets are driven by individual performance, making attribution critical. Decarbonisation investments must be linked to measurable reductions and claims to satisfy corporate reporting requirements. In addition, securing multiple board-level approvals for joint projects can delay implementation and increase risk. To overcome the challenges of attribution and transparency in supply chain decarbonisation, Patagonia maintains that registry-based systems are fundamentally needed for scaling insetting. The company considers it essential that such registries, capable of tracking environmental attributes generated from insetting projects, provide a transparent and auditable mechanism for allocating emissions reductions and preventing double counting. While Patagonia acknowledges that early-stage, multi-brand collaboration remains complex due to the need for alignment across legal, financial, and governance structures, it views robust registry infrastructure as a critical enabler for broader industry adoption and future co-claiming models.

Source: Patagonia, (2025)

APPROACH 3: USING CARBON MARKETS OR CARBON PRICING TO ADDRESS ONGOING EMISSIONS

While the shift from carbon neutrality to net zero is clearly beneficial for encouraging organisations to prioritise absolute emissions reductions within their operations and value chains, it has not removed the emphasis on compensating for ongoing emissions during the decarbonisation process. These residual emissions persist while companies implement long-term reduction measures and credible mechanisms remain essential to compensate for them in a measured and verified way. Such mechanisms can accelerate investment in solutions that support sector-wide decarbonisation and climate resilience, including financing regenerative agriculture beyond sourcing regions, supporting carbon removal technologies, and investing in conservation programmes that protect critical landscapes.

Organisations can use carbon markets in two main ways to address ongoing emissions.

1. Mitigation Contributions using carbon credits

Most organisations have yet to achieve the substantial emissions reductions required for net zero, resulting in ongoing residual emissions that continue to place pressure on the global carbon budget. Consequently, a range of mechanisms allows organisations to mitigate these ongoing emissions by financing high integrity emissions reduction or removal activities in parallel with their net zero transition pathway. Today, buyers increasingly seek high-impact projects, such as nature-based solutions and engineered carbon removals, supported by clearer standards and independent rating agencies. This change reflects growing demand for credible climate action and the need to avoid reputational risks linked to low-quality offsets. As a result, low-rated credits are declining, while high-integrity credits command premium prices.[17]

To ensure quality and credibility, organisations should adopt a robust due diligence process that includes the following actions:

- **Prioritise recognised third-party certification:** Choose credits certified by reputable, internationally recognised standards such as the Paris Agreement Crediting Mechanism (PACM), Gold Standard, Verra (Verified Carbon Standard), and the Climate Action Reserve (CAR).
- **Align with integrity initiatives:** Use guidance from initiatives such as the UN Carbon Offset Platform[18], ICVCM Core Carbon Principles (CCPs), or the VCMI Claims Code of Practice to guide purchasing and claims.
- **Leverage independent ratings:** Consult third-party rating agencies (e.g. BeZero Carbon, Sylvera, Renoster) which provide project-level assessments of quality and associated risks (delivery, reputational, regulatory).
- **Use credible claims terminology:** Specify how credits contribute to mitigation, including compensation or mitigation contributions, by supporting emission reductions or removals that advance national or international climate goals.
- **Understand project type and vintage:** Diversify across project types (nature-based vs. technology-based; reduction vs. removal) and vintages (calendar year in which the reduction or removal occurred). Older credits may carry higher risk methodologies that are outdated.
- **Ensure transparent reporting:** Require clear and publicly accessible documentation, including project design documents (PDDs) and verification reports, and confirm credits are officially retired in the organisation's name on a public registry.
- **Engage experts or platforms:** If in-house expertise is limited, work with reputable brokers, climate consultancies, or transparent marketplaces to navigate complexity and vet projects effectively.

17 Sylvera, (2024) How to increase carbon credit quality and price: What's important for project developers
18 United Nations, (2025) Carbon offset platform

High-integrity projects can face delivery risks, such as long lead times for nature-based solutions, high upfront costs for engineered removals such as Direct Air Capture (DAC), and strict monitoring and verification requirements. There is also uncertainty around permanence and reversal risk, particularly for land-based projects.

To manage these challenges, organisations can create a diverse portfolio across different project types, geographies, and methodologies in line with its risk appetite. This approach is recommended by integrity initiatives and rating agencies because it reduces exposure to delivery delays, regulatory changes, and reputational risks, while ensuring continuity of climate action.

CASE STUDY 2

Vestiaire Collective – Monetising circularity through carbon credits

Vestiaire Collective, a global resale platform, introduced a methodology in October 2025 to convert the climate benefits of resale into certified carbon credits. Developed in partnership with Inuk and verified by independent auditors, this approach quantifies avoided emissions from second-hand purchases and issues tradable credits on the VCM. Revenues from credit sales are reinvested into initiatives that strengthen circularity, such as improving product authentication and expanding resale infrastructure. This approach is an example of how contributions linked to voluntary climate commitments can create new financial pathways for circular business models, supporting decarbonisation beyond direct value chains.

While the model introduces an innovative approach to monetising circularity, it also presents important considerations for ensuring credibility and scalability. Avoided-emissions credits, which rely on counterfactual baselines, require rigorous methodologies to maintain accuracy. Clear attribution rules are essential to prevent potential double counting when both resale platforms and fashion brands seek to claim the same reductions, and operational emissions such as shipping and packaging should be transparently addressed. Strengthening governance frameworks and integrating these contributions into recognised disclosure standards can enhance transparency and market confidence. This approach can also complement collaborative funding models, such as pooled finance initiatives discussed below, which aggregate resources from multiple brands to scale impact. Together, these strategies position resale crediting as a strategic lever for climate action rather than a discretionary initiative.

Source: Vestiaire Collective, (2025)

2. Using internal carbon price revenues for pooled financing

As outlined in previous sections, an internal levy can generate dedicated funds for climate mitigation, linking financial planning to an organisation's purpose and impact strategy. Collaborative finance models are emerging as a practical way to scale such contributions earmarked for climate initiatives. These mechanisms pool capital from multiple brands to fund large-scale interventions that no single company could finance alone, reducing individual risk and amplifying impact. By aggregating resources, initiatives such as the *Fashion Climate Fund* and the *LEAF Coalition* channel resources into investments into regenerative agriculture, forest conservation, and carbon removal technologies at a landscape level. This approach not only spreads costs but also enhances credibility through shared governance and transparent reporting. For fashion companies, participation in pooled funds offers a pathway to contribute to industry climate solutions while strengthening resilience in sourcing regions and meeting growing stakeholder expectations for collective action. As these models mature, they have the potential to become a driving force for financing interventions that deliver benefits beyond individual supply chains.

CASE STUDY 3

Kering's Regenerative Fund for Nature

In January 2021, Kering partnered with Conservation International to launch the Regenerative Fund for Nature, a pooled finance mechanism designed to accelerate the transition to regenerative agriculture across fashion's raw material systems. The fund targets four high-impact commodities (cotton, wool, leather, and cashmere) with an initial goal to transform 1 million hectares of farmland and rangelands into regenerative agricultural spaces by 2025.

By 2024, the fund had surpassed its original goal two years early, enrolling 1.1 million hectares across eight countries and benefiting approximately 105,000 people, including farmers and local communities. Projects span regions such as Argentina, France, India, Mongolia, Pakistan, South Africa, Uganda, and Spain, with interventions ranging from crop diversification and organic certification to wildlife-friendly grazing practices that restore ecosystems while improving livelihoods.

In 2023, Inditex joined as a strategic co-investor, contributing €15 million to scale the fund's impact and signalling a broader industry trend toward collaborative finance models that go beyond offsetting and drive regenerative action at scale. To attract additional brands, the fund introduced a tiered partnership structure in 2025, lowering the entry threshold to $200,000 annually while maintaining a $3 million tier for principal partners. This flexible model enables more companies to participate and share costs, encouraging collective action across the fashion industry.

Sources: Kering, (2025); Inditex (2023)

Barriers to adoption

Under current standards such as the SBTi, addressing emissions outside of a company's direct value chain (termed *Beyond Value Chain Mitigation* or "BVCM") is recommended but voluntary. Unlike insetting, which delivers measurable Scope 3 reductions and counts toward corporate targets, these contributions do not reduce a company's own reported emissions. This limits their perceived ROI, especially when budgets focus on near-term, quantifiable progress. In addition, there are no widely accepted methodologies for reporting or benchmarking these activities, and fashion companies note that BVCM lacks clear visibility among customers. As a result, these investments can be difficult to justify internally within companies.

Emerging opportunities

Opportunities exist to position these contributions as strategic rather than discretionary. Investments in landscape-level initiatives can strengthen ecosystems that fashion supply chains depend on. Funding carbon removal technologies or circularity hubs can create first-mover advantage and signal industry leadership. Demonstrating climate responsibility beyond the value chain can also build consumer trust as stakeholders increasingly expect companies to contribute to global mitigation beyond their own footprint.

Draft updates to the SBTi Corporate Net-Zero Standard indicate a shift away from the BVCM terminology toward an *Ongoing Emissions Responsibility* framework. Under this approach, companies will be publicly recognised for voluntarily addressing ongoing emissions through a tiered system, with options to cover between 1% and 100% of these emissions. This evolution could make such contributions more visible and valuable, creating stronger incentives for brands to act.

APPROACH 4: CARBON REMOVALS

Decarbonisation frameworks recognise that limiting global warming requires not only deep, absolute emissions reductions but also a rapid and large-scale deployment of carbon dioxide removal (CDR). CDR is the process of actively extracting carbon dioxide from the atmosphere and storing it durably in geological, terrestrial, or ocean reservoirs, or in products. While nature-based solutions such as afforestation have existed for decades, the landscape is evolving rapidly as corporate demand drives investment in durable, engineered approaches such as DAC and mineralisation. These technologies offer long-term storage, often exceeding 1,000 years.

Net zero standards, including the SBTi, require companies to neutralise residual emissions with high-quality removals after deep value chain reductions. In practice, this means that carbon credits linked to removals become the final offsetting tool: once a company reaches their long-term emissions reduction target, it balances out residual emissions to achieve net zero by purchasing verified removal credits representing verified tonnes of CO_2e permanently store. Recognising this future need, some organisations are already investing in CDR technologies to help ensure they can deliver the removals required between 2030 and 2050, depending on the target date.

Carbon markets typically work on a results-based payment. The project developer can sell credits once the emissions avoidance or removal is achieved. However, some CDR technology is not yet at the stage to deliver carbon removals and therefore new financing models are emerging to fund this technology development through the carbon market. Advance Market Commitments (AMCs) are one example. Companies pledge to purchase a set amount of carbon removals in the future at a guaranteed price. This creates predictable demand and gives innovators financial certainty to invest in research and development, build facilities, and reduce costs. Multi-year purchase agreements work similarly, supporting solutions such as DAC and mineralisation.

These corporate actions reflect a broader scientific consensus: emissions reductions alone will not suffice to limit warming to 1.5°C – gigaton-scale removals will be required. For fashion companies, engaging in removals could play a supportive role in long-term decarbonisation by investing in the technologies that will neutralise future emissions that cannot yet be eliminated.

CASE STUDY 4

H&M Group – Driving innovation in carbon removals

H&M Group illustrates how fashion companies are engaging in forward-looking carbon removal strategies. Through a multi-year agreement with ClimeWorks, the company committed to remove 10,000 tonnes of CO_2e via DAC, creating predictable demand to help drives technology development and scale-up. H&M Group also participates in Frontier, an advance market commitment coalition that aggregates corporate demand for permanent carbon removals.

Through Frontier, H&M Group joined companies such as Google and Stripe in committing capital toward early-stage technologies as part of an $80 million investment round, paying prices well above $200 per tonne to secure high-integrity removal credits and accelerate innovation. This is part of a broader advance market commitment from Frontier to purchase more than $1 billion of permanent carbon removal between 2022 and 2030, sending a demand signal to accelerate the development and scaling of early-stage carbon removal technologies.

Sources: ClimeWorks (2023); CarbonCredits (2024)

However, there are practical challenges associated with carbon removals that companies should also consider. Engineered removals such as DAC and mineralisation remain prohibitively expensive and are not yet available at the scale required to meet global climate targets. Nature-based removals, while more established, face risks related to permanence (e.g. reversal from fire or land-use change), additionality, and land competition. The overall capacity for high-quality removals is currently far below what is needed, and scaling these solutions will require significant investment, innovation, and supportive policy frameworks.

There is also a risk that over-reliance on removals investments could delay or dilute efforts to achieve deep value chain decarbonisation, as companies may be tempted to use removals as a substitute for internal action rather than as a complement. Companies must therefore ensure that investments are made in high-integrity projects, that claims are transparent, and that removals are used only to address residual emissions after all feasible reductions have been achieved.

SUMMARY OF CARBON MARKET APPROACHES

Table 2 provides a comparative overview of the four carbon market approaches, outlining their primary purpose, scope, financial models, and enabling frameworks. This summary is intended to help stakeholders evaluate how each approach can support corporate climate strategies and identify the most relevant approaches for addressing fashion sector emissions.

Table 2. Comparison of Carbon Market Approaches

Approach	Purpose	Scope	Financial model	Examples of enablers
Internal Carbon Pricing	Integrate carbon cost into decisions; generate fund decarbonisation	Within value chain	Internal levy or shadow price; funds earmarked for Scope 3 interventions	The Climate Label Certification Standard
Insetting	Reduce Scope 3 emissions at source; strengthen supplier relationships	Within value chain	Brand-funded interventions; may include co-financing and carbon offtake agreements	AIM Platform, VCI
Ongoing emissions reduction/BVCM	Contribute to global mitigation; support systemic climate solutions	Outside direct value chain	Voluntary contributions; pooled finance models (e.g. Fashion Climate Fund, Leaf Coalition)	SBTi Net Zero Corporate Standard, PACM standards, VCMI Claims Code, ICVCM Guidance
Carbon Removals	Neutralise residual emissions after deep reductions	Outside direct value chain	Purchase of removal credits or advance purchase agreements (e.g. AMCs)	PACM standards, ICVCM Core Carbon Principles, VCMI, Frontier Coalition

HOW TO ENGAGE

The following recommendations outline practical steps for translating carbon market mechanisms and carbon projects into action. Success requires more than financial commitments; it depends on collaboration across brands, suppliers, financiers, and policymakers, supported by capacity building and advocacy. These actions provide a roadmap for engaging effectively with each mechanism.

Internal carbon pricing

- **Engage the business on ICP:** Build a compelling business case for internal carbon pricing by linking it to risk management, regulatory preparedness, and strategic value. Present expected ROI from expected cost savings from energy and emission reductions and avoided future compliance costs to the CFO and executive team. Revisit and reaffirm buy-in regularly as market conditions and climate targets evolve.
- **Design a best practice ICP framework:** Decide whether to implement a shadow price (for investment decision-making) or an internal carbon levy/fee (to generate funds for decarbonisation), or both. Consider the four dimensions of an ICP: carbon price level, GHG emissions coverage, business influence and development journey.
- **Rolling out the ICP approach:** Pilot the chosen approach in a business unit or project before scaling. Apply supporting tools and plan the full rollout.
- **Monitor and evaluate the ICP approach:** Track the impact of your ICP with factors such as investment decisions, emissions reductions, and fund deployment. Disclose outcomes annually to internal and external stakeholders. Adjust the mechanism and price as needed to maintain effectiveness and alignment with science-based targets.

Insetting

- **Identify emissions hotspots and integrate insetting into sourcing strategies:** Use supply chain mapping and supplier engagement to pinpoint where the majority of Scope 3 emissions occur; typically, Tier 2 (fabric processing) and Tier 4 (raw material production). Prioritise interventions such as renewable energy deployment and regenerative agriculture in these tiers. Select projects based on emissions intensity, supplier readiness, and opportunities for collaboration. Ensure MRV (Monitoring, Reporting, and Verification) data, aligned with internationally recognised standards, is collected to verify reductions and maintain credibility.
- **Leverage financing tools such carbon offtake agreements:** Structure carbon offtake agreements to provide suppliers with price certainty and predictable revenue streams, enabling them to secure financing for capital-intensive decarbonisation projects. Set a pre-agreed price per tonne CO_2e, define clear project eligibility criteria, and establish internationally recognised MRV standards and verification protocols. Align legal and commercial terms with suppliers and consider potentially bundling offtake agreements with long-term sourcing commitments if appropriate.

Insetting continued

- **Initiate or join collaborative models such as Supply Sheds:** Pool resources with other brands to finance interventions in shared sourcing regions. Identify common suppliers or regions, engage with other brands, and participate in platform-led pilots (e.g. VCI and AIM). Use contractual safeguards and digital registries to manage attribution risks, prevent double counting, and ensure traceability of emissions reductions. Collaborative models can reduce costs, accelerate project implementation, and strengthen governance across fragmented supply chains.

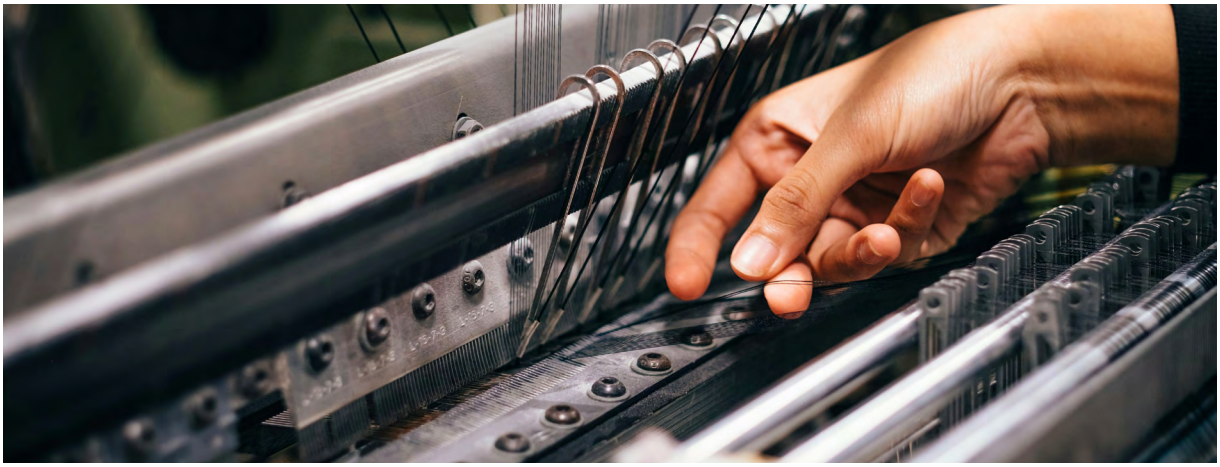
Ongoing emissions reductions

- **Build a compelling business case for ongoing emissions reductions:** Link contributions to measurable business benefits such as avoided future compliance costs, enhanced supply chain resilience, and brand differentiation. Demonstrating ROI (through cost savings, risk mitigation, and positive stakeholder perception) strengthens internal buy-in and positions climate investments as strategic rather than discretionary.
- **Contribute to pooled finance models to scale systemic solutions:** Consider joining collaborative initiatives (e.g. Fashion Climate Fund and LEAF Coalition) to co-finance large-scale interventions in regenerative agriculture, forest conservation, and carbon removal technologies. Pooling resources with other brands spreads costs, reduces individual risk, and enables impact at a scale that would be difficult to achieve alone. Ensure transparent governance and reporting to build trust and credibility.
- **Link contributions to corporate purpose and disclose impact**: Clearly connect your contributions to your company's climate strategy and purpose. Report transparently on the outcomes and impact of these contributions, including environmental and social benefits. While suppliers may not be directly involved in these interventions, they can benefit from improved ecosystem resilience and long-term supply chain stability.
- **Advocate for recognition in disclosure frameworks:** Engage with initiatives such as the VCMI and SBTi to ensure that contributions beyond the value chain are visible and valued in corporate reporting. Stay informed about evolving standards and frameworks (e.g. Ongoing Emissions Responsibility) that may enhance the visibility and strategic value of these contributions.

Carbon removals

- **Assess the need for removals:** Quantify residual emissions, those that remain after all feasible value chain reductions, to determine how much removal the organisation will need to achieve net zero. This assessment should be grounded in science-based targets and mitigation hierarchy.
- **Engage with credible providers or removal credits**: Identify and evaluate removal credit providers, whether nature-based (e.g. afforestation, soil carbon) or engineered (e.g. DAC, mineralisation). Prioritise projects and suppliers that offer third-party certification, robust MRV, and clear evidence of permanence and additionality. Conduct due diligence to ensure quality and alignment with your climate strategy.
- **Consider advance purchase agreements or joining coalitions**: Aggregate demand and create predictable revenue streams for early-stage carbon removal technologies by entering into multi-year purchase agreements or joining coalitions. This accelerates innovation and, upon scaling, can secure access to high-integrity removal credits. Clearly communicate the long-term nature and cost implications of these investments to internal stakeholders.
- **Diversify removals portfolio and manage risk**: Invest in a mix of nature-based and engineered removals, across geographies and methodologies, to manage delivery, permanence, and reputational risks. Consider the trade-offs between cost, scalability, and long-term storage.
- **Frame removals as complementary to value chain decarbonisation**: Use removals only to address residual emissions after all feasible reductions have been achieved. Clearly communicate in disclosures and claims that removals are not a substitute for deep value chain action, but a necessary complement for net zero alignment.
- **Report transparently and collaborate:** Disclose the cost implications, project types, and integrity measures associated with your carbon removals strategy. Participate in industry working groups and knowledge-sharing initiatives to reduce risk, build collective capacity, and stay informed about evolving standards and best practices.

Carbon pricing in Southeast Asia: Signals and market opportunities



Carbon pricing imposes a cost on carbon emissions to incentivise their reduction. Carbon pricing instruments are designed to internalise the socio-economic cost of emissions and provide flexibility through market-based mechanisms to achieve cost-effective emissions reductions. Around the world, national and regional governments use a mix of carbon pricing instruments, principally emissions trading systems (ETS) and carbon taxes, with adoption and design varying by jurisdiction. In 2024, carbon pricing covers ~28% of global GHG emissions and mobilised over $100bn for public budgets.[9]

As shown in Figure 3, most major economies globally, including large middle-income economies, have implemented or are advancing the adoption of carbon pricing, with countries in Asia playing an increasingly significant role. This has implications for the fashion industry, as suppliers will increasingly be exposed to carbon pricing and therefore will need to rapidly decarbonise their activities, to avoid increasing costs.

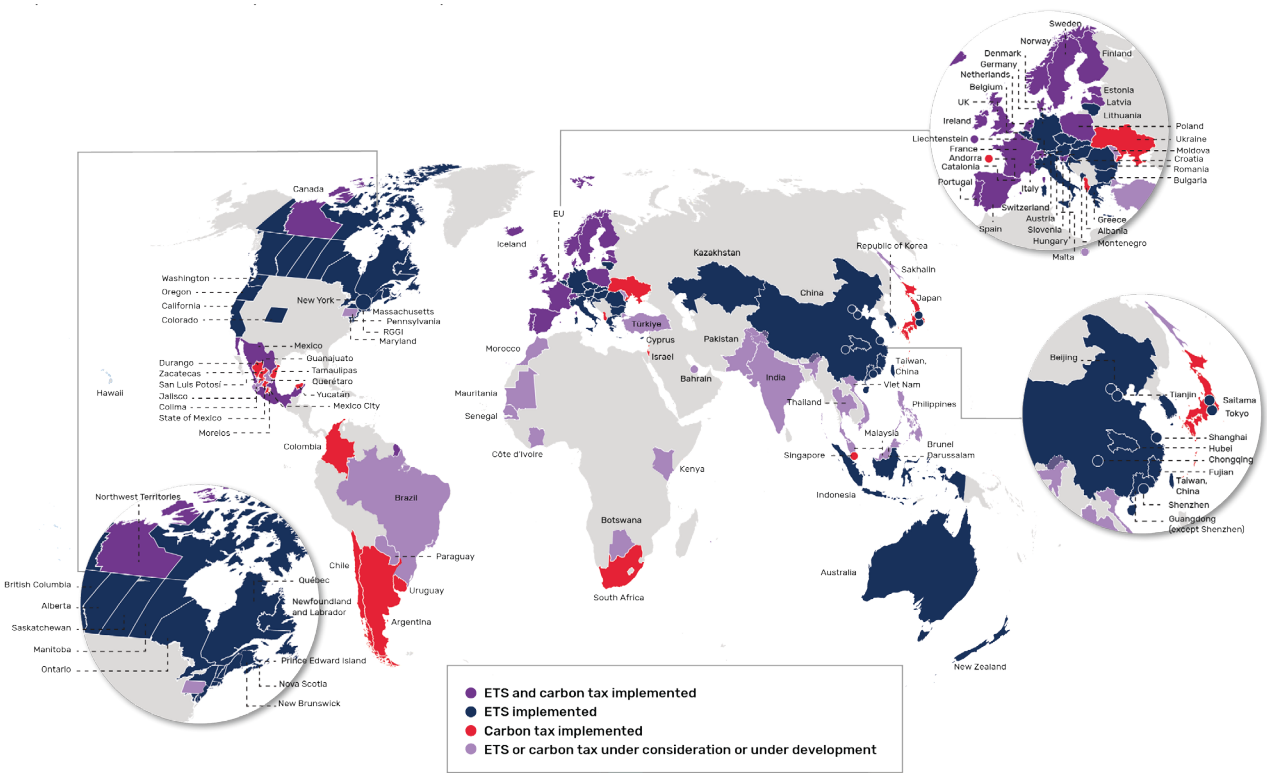
Emissions Trading System (ETS)

An ETS, often called “cap and trade”, is a market-based approach to controlling pollution. Under this system, a government sets a limit (the “cap”) on the total amount of GHGs that can be emitted and issues or sells allowances for those emissions. Companies that emit less than their allowance can sell surplus permits, while those exceeding their cap must purchase additional allowances, creating a financial incentive to reduce emissions and establish a carbon price.

Carbon Tax

A Carbon Tax applies a fixed charge per tonne of CO_2e emitted, internalising environmental costs of business activities. Both mechanisms act as top-down drivers for decarbonisation by ensuring that the true costs of business activities are accurately reflected and directly influence decisions from the board room to the marketplace, thereby, encouraging operational efficiency.

FIG 3. Global map of ETS and carbon taxes implemented, under development, or under consideration



Source: World Bank State and Trends of Carbon Pricing 2025

REGIONAL CARBON MARKET LANDSCAPE DEVELOPMENTS

Historically, fashion and apparel supply chains in Southeast Asia operated in environments with limited carbon pricing, but with governments now introducing ETS, carbon taxes, and frameworks that incorporate voluntary carbon credits, the landscape in which suppliers operate is rapidly evolving. New policies are advancing for both ETS and carbon taxes: Thailand's cabinet approved a carbon tax; Malaysia announced its intention to fast-track the introduction of a carbon tax for energy, iron and steel industries by 2026; and the Philippines' House of Representatives proposed a bill that would establish an ETS.[9]

These changes have direct implications for fashion as they influence the cost structure of upstream manufacturing and create new opportunities for supplier-level decarbonisation. Understanding these developments is relevant for companies seeking to anticipate compliance risks, leverage emerging crediting mechanisms, and align sourcing strategies with evolving policy landscapes.

Key national and regional initiatives shaping carbon pricing in Southeast Asia are outlined below:

Table 3. Key Carbon Market Developments in Southeast Asia

Country	Carbon market development	Implications for fashion value chain
Singapore	Carbon tax for large emitters in manufacturing, power, water and waste; up to 5% taxable emissions can be offset with high-quality international carbon credits aligned with Article 6.[19] Also hosts carbon exchanges, Climate Impact X (CIX) and AirCarbon Exchange (ACX).	Direct impact on large textile mills; indirect energy cost increases for others.
Indonesia	IDXCarbon cap-and-trade for coal/gas power plants (expanding to all fossil power by 2027). The platform accommodates both compliance allowances and voluntary credits verified under standards such as Verra[20] and Gold Standard[21].	Textile suppliers not directly covered, but rising electricity costs will affect mills.
Malaysia	Bursa Carbon Exchange (BCX) is a VCM for nature-based credits and renewable energy certificates. Expected to play a role in Malaysia's compliance regime as the country introduces a carbon tax in 2026 and transitions toward an ETS. Carbon tax will cover iron, steel, and energy sectors first, expanding to cement, aluminium, fertilisers, hydrogen. Policymakers and Bursa Malaysia have indicated that domestic credits traded on BCX could eventually be recognised for compliance purposes.[22]	Textile suppliers not directly covered initially but will face higher energy/material costs as upstream sectors are regulated.
Viet Nam	ETS pilot (2025–2028) covers power, steel, cement; up to 30% of obligations can be offset with credits, including those from Article 6 mechanisms.[23]	Textile mills reliant on grid power will see higher costs as power sector is regulated.
Thailand	Climate Change Act (2026) will establish ETS and carbon tax for high-emission sectors (energy, industry, products); sectors to be defined in secondary legislation. [24]	Textile mills and dyeing/finishing facilities in industrial zones may be covered as high-emission sectors.
Philippines	Advancing legislation to enable carbon trading and incentivise low-carbon technologies, with plans to link domestic systems to Article 6 frameworks.[25]	Energy sector is the initial focus, so textile suppliers will see rising electricity costs.

19 Climate Impact X, (2025) Carbon Tax Compliance Framework
20 Verra, (2025) Verra and Indonesia Sign Milestone Agreement to Advance Carbon Markets
21 Gold Standard, (2025) Gold Standard Signs Mutual Recognition Agreement with Indonesian Government
22 Business Today, (2025) Malaysia's Carbon Tax in 2026
23 International Carbon Action Partnership, (2025) Vietnam
24 Sustainability Directory, (2025) Thailand Finalises First National Law, Mandates Carbon Pricing and Border Tax
25 Lo, (2025) Philippines charts carbon credit framework to link with Article 6 of Paris Agreement

While most compliance mechanisms in Southeast Asia currently focus on high-emitting sectors such as power, steel, and cement, fashion value chain actors will be indirectly affected through rising energy costs and potential inclusion in future phases. Textile mills and garment manufacturers, which rely on fossil-heavy grids and thermal systems, are likely to face cost pressures as carbon pricing expands.

Carbon price levels and impacts differ by country and sector due to design choices, local energy mixes, and income levels. Governments often use compensation or targeted support to address distributional impacts and competitiveness, while keeping long-term abatement signals intact. These considerations explain geographic variation in prices and help ensure just transitions as carbon pricing expands. Beyond national systems, regional initiatives such as the ASEAN Common Carbon Framework (ACCF) aim to harmonise standards, enable cross-border trading, and strengthen MRV infrastructure. Japan's Joint Crediting Mechanism (JCM) and Article 6 of the Paris Agreement provide additional pathways for interoperability, allowing credits generated in Southeast Asia to be recognised internationally. These developments are relevant for all fashion value chain actors because they create opportunities to integrate supply chain decarbonisation into compliance frameworks and leverage emerging financial instruments, such as compliance-eligible carbon credits, Article 6-linked financed, and carbon exchanges, to improve supplier access to finance.

What is Article 6 and its role in carbon markets?

Article 6 of the Paris Agreement sets rules for international cooperation on climate goals, allowing countries and companies to trade emissions reductions and removals under strict safeguards to avoid double counting. For fashion supply chains, it could create pathways for credits from emerging markets, such as Southeast Asia, to be recognised globally, attracting finance and linking voluntary actions to compliance frameworks.

CARBON CREDITS AND SUPPLIER ACCESS TO CARBON FINANCE

A defining feature of Southeast Asia's emerging compliance markets is the integration of carbon credits within regulated frameworks.

Compliance systems that allow carbon credits create a potential pathway for suppliers to finance decarbonisation projects, such as renewable energy deployment, thermal system upgrades, and energy efficiency. They create a demand for local credits that suppliers could generate by applying high-integrity approved methodologies to their emissions reductions or removals projects. Brands can play an enabling role by advocating for inclusive crediting rules, co-financing projects, and supporting supplier capacity for MRV. These actions can help position interventions to be eligible and claimable under both compliance and voluntary frameworks.

Recent mutual recognition agreements (MRAs) between leading standards and national authorities are accelerating convergence between voluntary and compliance markets. In 2025, Verra signed an MRA with Indonesia, enabling projects under its Verified Carbon Standard to be mirrored in the national registry, strengthening oversight and supporting potential Article 6 use. Similarly, Gold Standard established an MRA with Indonesia, aligning its methodologies with the country's compliance framework and creating interoperability between registries.

HOW TO ENGAGE

Emerging compliance frameworks in Southeast Asia present opportunities for all fashion value chain actors, including brands, suppliers, and manufacturers, to unlock finance for decarbonisation. Moving beyond observation, the sector should act early to shape eligibility rules, build readiness, and demonstrate proof points under Article 6 and other compliance mechanisms. The following actions provide a roadmap for proactive, industry-wide engagement:

- **Map sourcing geographies against emerging compliance markets:** Identify where carbon pricing will impact supplier and manufacturer economics, anticipate cost exposure, and enable proactive sourcing and risk management. This may include using supplier data, and energy mix analysis to understand direct and indirect impacts.
- **Engage in policy development:** Brands, suppliers, and manufacturers should work directly with national policymakers, regulators, and industry associations to ensure high-cost interventions (e.g., renewable energy deployment, thermal system upgrades) are recognized within national crediting frameworks.
- **Build capacity for compliance:** Equip suppliers and manufacturers (especially SMEs) with MRV and carbon accounting skills, and support them in navigating compliance registration, reporting, and audit processes. This will help ensure readiness and access to carbon finance as compliance frameworks evolve.
- **Co-develop collaborative pilots for compliance eligibility:** Brands, suppliers, and manufacturers can jointly launch projects under national schemes or Article 6 frameworks using pooled finance models to share risk and scale impact. Focus on interventions most relevant for compliance, such as renewable energy, energy efficiency, and thermal system upgrades.
- **Participate in regional and international initiatives:** Actively engage in consultations, working groups, and standard-setting processes for initiatives such as the ASEAN Common Carbon Framework, Joint Crediting Mechanism, and Article 6. Advocate for supplier-inclusive crediting rules and align MRV systems with regional standards.
- **Articulate the business case for early engagement:** Highlight the benefits of proactive compliance engagement for the entire industry, including mitigating future cost exposure, accessing new finance streams, and strengthening supply chain resilience.

Conclusion

Conclusion
Financing decarbonisation through carbon markets

Fashion supply chains remain among the most complex and emissions-intensive globally. While many fashion and apparel companies have set net zero and science-based targets, progress is constrained by structural barriers: fragmented supplier networks, short-term contracting, and limited access to affordable finance. Traditional approaches alone cannot deliver the scale and speed required.

Carbon markets and market-based mechanisms offer a potential lever to bridge this gap. When integrated into science-aligned pathways and supported by robust integrity frameworks, these mechanisms have the potential to mobilise capital, incentivise supplier-level decarbonisation, and embed climate action into core business strategies. They also create opportunities to future-proof sourcing strategies as Southeast Asia's compliance frameworks evolve, enabling companies to mitigate cost exposure and access finance through Article 6 (PACM and Article 6.2) and regional carbon market interoperability initiatives.

This paper explored four key approaches: internal carbon pricing, insetting, contributions beyond the value chain, and carbon removals, alongside emerging compliance frameworks in Southeast Asia. Each presents opportunities and limitations, but collectively they signal a shift toward financing models that promote scaling of value chain decarbonisation.

Strategic priorities for the fashion industry

1 **Link climate action to business value and risk management**

Connect carbon market mechanisms and carbon projects to measurable business benefits, including avoided compliance costs, supply chain resilience and brand differentiation. Demonstrate ROI to strengthen internal buy-in and position climate investments as strategic rather than discretionary.

2 **Evolve from an offsetting to mitigation contribution approach**

Alongside corporate net zero strategy implementation, support greenhouse gas mitigation that advances global net zero goals and enables benefit-sharing with countries hosting climate mitigation projects and climate-vulnerable developing countries (e.g. via the Paris Agreement Crediting Mechanism). Prioritising mitigation contributions in supplier countries can also help address broader climate risks while directing climate investment where it is needed most.

3 **Invest in supplier capacity and enabling capital**

Build technical capacity among suppliers, especially SMEs, for credible participation in carbon markets. Training on MRV, carbon accounting, and credit generation can support suppliers to access carbon finance, alongside the provision of upfront capital to enable capital investment. Decarbonisation measures must be aligned with factories' requirements for brands' quality standards to ensure a robust business case.

4 **Prioritise integrity and transparency**

For the supply of credits, it is paramount to align with the requirements and high-integrity standards established under the Article 6.4 mechanism, the Paris Agreement Crediting Mechanism (PACM), which serves as the global benchmark. For demand-side claims, alignment with Voluntary Carbon Markets Integrity Initiative (VCMI) guidance is recommended. The Integrity Council for the Voluntary Carbon Market (ICVCM) Core Carbon Principles can also be used to ensure consistency with high-integrity pathways.

5 **Collaborate beyond finance**

Move beyond pooled funding to shared governance and verification systems. Collaborative MRV platforms harmonise standards reduce verification costs and accelerate adoption of credible interventions across fragmented supply chains. This approach lowers transaction costs for multi-brand projects.

Beyond compliance and risk management, supply chain decarbonisation creates tangible business value. Companies that invest in decarbonisation can strengthen supply chain resilience, reduce long-term costs, enhance brand reputation, and meet growing investor and consumer expectations for climate leadership. Carbon market mechanisms and carbon projects can help unlock these benefits by providing new sources of finance and supporting collaborative action across the industry.

The coming years will require fashion sector stakeholders to turn commitments into measurable progress. Success will depend on integrating climate action into core business strategies, collaborating across shared supply chains, and building supplier capacity to access emerging finance opportunities. Acting now is essential, not only to meet climate targets – but to manage cost risks, prepare for regulatory change, and maintain competitiveness in a net zero economy.

Glossary of terms

Additionality
A principle requiring that emissions reductions or removals would not have occurred without the project or intervention.

Advance Market Commitment (AMC)
A financing model where buyers pledge to purchase a set amount of carbon removals in the future at a guaranteed price, creating predictable demand for early-stage technologies.

Article 6
A provision of the Paris Agreement enabling countries and companies to trade emissions reductions and removals internationally under strict safeguards to avoid double counting.

Carbon Credit
A tradable certificate representing the reduction or removal of one tonne of CO_2e from the atmosphere, generated by verified projects.

Carbon Dioxide Removal (CDR)
The process of extracting CO_2 from the atmosphere and storing it durably in geological, terrestrial, or ocean reservoirs, or in products.

Carbon Removals
Activities or technologies that remove carbon dioxide from the atmosphere and store it permanently, including nature-based and engineered solutions.

Compliance Market
A regulated carbon market where entities must meet legally binding emissions reduction obligations through allowances or credits.

Direct Air Capture (DAC)
An engineered technology that removes CO_2 directly from ambient air for permanent storage.

EACs (Environmental Attribute Certificates)
Certificates that represent environmental benefits, such as emissions reductions, generated by specific projects and used for attribution in carbon accounting.

ETS (Emissions Trading System)
A market-based approach to controlling pollution by setting a cap on emissions and allowing trading of allowances.

GHG Protocol
The leading global standard for measuring and reporting greenhouse gas emissions across Scopes 1, 2, and 3.

ICVCM (Integrity Council for the Voluntary Carbon Market)
A governance body that sets Core Carbon Principles to ensure high-quality carbon credits.

Insetting
Implementing emissions reduction projects within a company's own value chain, such as regenerative agriculture or renewable energy deployment.

Internal Carbon Pricing (ICP)
A voluntary mechanism where companies assign a monetary value to their emissions to guide business decisions and fund decarbonisation initiatives.

Monitoring, Reporting and Verification (MRV)
Processes that ensure emissions reductions or removals are accurately measured, reported, and independently verified.

Offsetting
The practice of compensating for emissions by purchasing carbon credits from projects that reduce or remove greenhouse gases outside the buyer's value chain.

Paris Agreement Crediting Mechanism (PACM)
The new mechanism established under the Paris Agreement by countries to deliver high quality credits aligned with the Paris principles.

Residuals
Emissions that remain after a company has implemented all feasible reduction measures within its own operations and value chain.

SBTi (Science Based Targets initiative)
An organisation that defines and promotes best practices for setting science-based emissions reduction targets.

Scope 1, 2, and 3 Emissions
Categories of greenhouse gas emissions: Scope 1: Direct emissions from owned or controlled sources; Scope 2: Indirect emissions from purchased energy; Scope 3: All other indirect emissions across the value chain.

Supply Shed
A geographically defined group of suppliers providing similar goods or services within a company's value chain, used to aggregate interventions when full traceability is impractical.

VCMI (Voluntary Carbon Markets Integrity Initiative)
An initiative providing guidance for credible claims and integrity in voluntary carbon markets.

Voluntary Carbon Market (VCM)
A market where companies and individuals purchase carbon credits voluntarily to support climate action beyond regulatory requirements.

Fashion for Climate