

Executive Summary

The apparel and footwear industry produces between 1.8% and 8% of the world's GHG emissions, and although the supply chain is beginning to move towards reductions, carbon savings to date have been minimal. One reason for the slow progress is that the industry has suffered from misaligned incentives to decarbonize. While there has long been recognition that brands, producers, financial institutions, governments, and NGOs all have a part to play in carbon reduction, the brunt of the burden for the actual expenses has fallen disproportionately on producers. Without the proper incentives for suppliers to finance these often costly on-site decarbonization investments, the entire industry is at an impasse. Many companies await regulatory mandates, while a few are proactively adopting leadership positions in sustainability.

Debt financing for factory improvements is available, but given the historically transactional nature of the relationship between producers and their customers – apparel brands and retailers – it is often risky for producers to take out significant loans for these projects. Although the primary motivation for producers to decarbonize in years past has been the threat of losing their customers if they don't meet brand sustainability requirements, it is clear that this negative reinforcement alone is not sufficient to catalyze change. This threat has not been strictly enforced, and the prevailing emphasis on low pricing continues to outweigh any criteria for environmental improvements or low-impact practices.

A stalemate also exists for financial institutions. Banks are interested in investing in these "green" projects, but they have little motivation to offer terms that the average textile producer is interested in or able to take advantage of. They want brands to show more commitment and willingness to take on risk, but brands are hesitant to do so without more reliable data than is currently available. Without proper incentives for costly on-site investments, the industry is at an impasse.

This is why apparel brands and retailers play a vital and singular role in financing the transition by derisking debt, subsidizing projects directly, and providing real incentives to producers that make investments in decarbonization. Although brands have been supporting decarbonization for years, traditional methods like subsidizing technical assistance should now be seen as table stakes. Brands and retailers must seize a leadership role and commit to using their own capital in creative ways.

In regions where textiles are produced, the industry contributes significantly to the GDP - it's a major source of employment and economic development. As such, apparel brands have an opportunity to influence change and show the way for other sectors. With stronger profit margins and creditworthiness than most producers, and the power to eventually change the very nature of supply chain relationships, brands are key to overcoming the current standoff. True systems change will take time, and some of the most impactful financial tools available to brands to aid in decarbonization may meet significant internal resistance. Apparel Impact Institute (Aii) is committed to unlocking \$2B in capital for decarbonization and will engage with 2,000 suppliers across key production regions between now and 2030. This ambitious effort will showcase successful facility-level decarbonization and recognize a significant pool of low-carbon suppliers, driving industry-wide transformation toward sustainability. In addition to continuing to provide technical assistance and access to the best available technologies, we are creating and supporting financial vehicles that are innovative and realistic for our stakeholders. While there is a long way to go to achieve a shift in business practices, there are many other ways that brands can use their funds to unlock projects for producers.

This playbook is intended to be a guide to those options. It is a map of twelve plays, or financial tools, by which brands make a contribution to support or incentivize a producer to undertake a decarbonization investment. It is intentionally being presented with simple financial terminology to educate brand sustainability and sourcing professionals, and therefore to serve as a bridge between those teams and brand finance. Those teams must resolve their internal tensions to start the flywheel of change, and being aligned on the options available is a crucial first step. Every brand and retailer may have a different strategy for investing in decarbonization for Scope 3 emissions, and this playbook outlines various catalytic positions they could adopt.

Likely, this playbook will also be useful to suppliers and financial institutions; however, it is important to note that the playbook specifically assesses the landscape from a brand perspective. The playbook notes the risks and benefits of each play and rates them using consistent criteria. Likewise, each play is described as financing the same two hypothetical factory improvement projects, for the sake of isolating the pros and cons of the financial play itself rather than the projects.

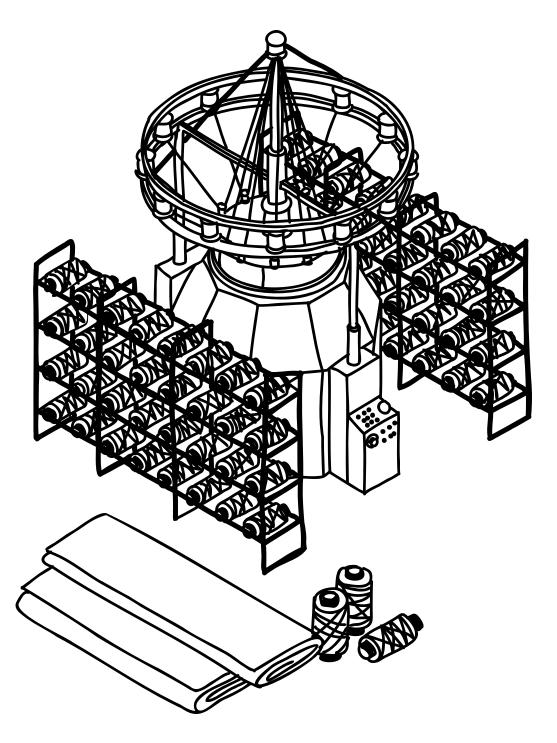
While each of the plays is useful and valid in certain scenarios, the playbook begins with the plays that are most likely to catalyze impact by closing the producer incentive gap. Even though brand sustainability and sourcing professionals are the primary audiences for this report, that criterion should be at the forefront of the conversation. Although certain plays may be appealing because of ROI or public relations, if producers can't or won't take advantage, the impact is zero.

"Although certain plays may be appealing because of ROI or public relations, if producers can't or won't take advantage, the impact is zero."

Introduction

The textile, apparel, and footwear industry is a resource-intensive and environmentally impactful manufacturing sector. Aii's "Taking Stock of Progress Against the Roadmap to Net Zero 2024" report estimates that the industry's share comprises 1.6% (1.025 gigatonnes CO_2 eq) of annual global greenhouse gas (GHG) emissions, with the most impact taking place in the raw material and material production steps of the supply chain. These estimates are conservatively based on the industry's best collective datasets from the Higg Index and Textile Exchange. It is important to note that other estimates made by Quantis have reported up to 8% of global emissions. Regardless, we know that apparel brands' Scope 3 emissions alone are a major contributor to climate change, and therefore must be addressed.

"Taking Stock of Progress Against the Roadmap to Net Zero 2024" estimated that total apparel sector GHG emissions dropped 1.17 percent in 2022, driven primarily by an improvement in the raw material GHG intensity for polyester and nylon. To limit global warming to below 2 degrees Celsius above pre-industrial levels, as outlined in the Paris Agreement, significant continued reductions in carbon emissions will be necessary. Achieving this goal will require close collaboration between apparel brands, producers, financial institutions, technical experts and solution providers, and the NGO and policy community. Between now and 2030, it's critical to correct the currently misaligned incentives to ensure that those responsible for making changes to production methods – largely, textile producers – are adequately supported in doing so.



Decarbonization Focus Areas

To drive meaningful change, apparel production decarbonization demands a strategic focus on specific areas where solutions stand to reduce the most significant amount of GHG emissions. These focus areas encompass the range of solutions designed to reduce energy consumption, minimize waste, and eliminate emissions throughout the production process.

It is worth noting that these focus areas overlap with and further define the six "levers" identified in Aii's 2021 "Roadmap to Net Zero" report. These levers represent an academic approach to calculating where the sector should focus to reduce emissions. For this report and broader public communications, we have focused the attention on these five key areas:

REDUCE PROCESS DEMAND FOR ENERGY:

This can be achieved by implementing measures such as reducing temperature set points of machines used in production, minimizing hot water and air usage, and optimizing electricity consumption. By adopting more efficient practices, producers can decrease their energy requirements, thereby lowering their overall carbon footprint.

REDUCE ENERGY LOSSES:

Another critical aspect of decarbonization involves mitigating energy losses within production facilities. Strategies such as insulation improvements and addressing leaks in equipment and infrastructure can help minimize wasted energy. By sealing gaps and enhancing insulation, producers can retain heat more effectively, reducing the need for additional energy inputs and decreasing emissions associated with energy production.

REDUCE/ELIMINATE GHG EMISSIONS FROM HEAT AND ENERGY SOURCES:

Transitioning to renewable energy sources, such as solar and wind power, represents a significant opportunity to decarbonize production processes. Additionally, upgrading boilers and generators to more efficient models can enhance energy performance and reduce emissions. Furthermore, implementing heat capture and reuse systems enables producers to maximize resource efficiency and minimize GHG emissions associated with energy production.

MINIMIZE WASTE IN PRODUCTION PROCESSES:

Beyond energy considerations. minimizing waste at every stage of production is integral to decarbonization efforts. Adopting practices to increase "rightfirst-time" dyeing and implementing automated error detection systems can optimize production efficiency and reduce material waste. Additionally, implementing better planning processes can help streamline production workflows, minimizing inefficiencies and waste generation.

REDUCE EMISSIONS FROM GROWTH AND PRODUCTION OF FIBERS:

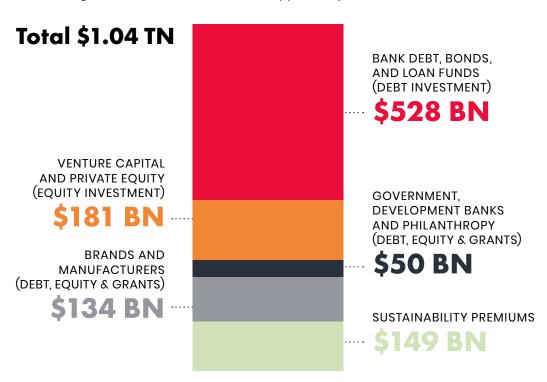
Exploring alternative fiber sources and embracing regenerative agricultural practices - like maximizing crop diversity, minimizing soil disturbance. and maximizing soil cover - can mitigate emissions. By sourcing more sustainable raw materials and investing in technologies that reduce emissions during cultivation and processing, producers can minimize carbon emissions in their supply chains.

The Cost of Decarbonization

Despite the clear imperative for decarbonization, one of the primary barriers hindering progress is the financial cost associated with implementing these reduction measures. Aii's 2021 report "Unlocking the Trillion–Dollar Fashion Decarbonisation Opportunity," authored alongside Fashion for Good, mapped the necessary solutions with the financing and funders needed to drive the industry to net zero. The total investment required amounts to just over \$1 trillion. The report breaks down the funding sources that will play a role in financing the \$1 trillion opportunity. Even though the majority will come from financial institutions, apparel brands and retailers play an important role in unlocking that larger investment.

Types of Funders

This report has identified five different funder types that will each play a role in financing the \$1 trillion decarbonisation opportunity:



BANK DEBT includes loans from local, regional, and international banks. BONDS are primarily publicly traded instruments issued by banks, brands, or manufacturers. LOAN FUNDS are private investment funds that make loans directly to companies and projects. Debt capital typically invests in lower-risk projects with a high degree of certainty.

VENTURE CAPITAL AND PRIVATE EQUITY make equity investments directly into companies and low-carbon projects. This type of capital is seeking higher return investment opportunities and consequently accepting higher risk.

BRAND AND MANUFACTURER CAPITAL represent corporate treasury dollars or support that come from within a company's budget directly. Many projects include brand and manufacturer funding to assess feasibility or co-invest alongside financial capital.

GOVERNMENT, DEVELOPMENT BANK, AND

PHILANTHROPY investments seek to promote a sustainability goal for society. Investments may consist of direct equity investments, grants, interest-free/subsidized loans, loan guarantees, or other economic incentives (e.g., feed-in tariffs). This type of capital is important for de-risking early-stage technologies and helping them reach scale.

A **SUSTAINABILITY PREMIUM** is an increase in cost resulting from the implementation of sustainable materials or services that may be either temporary (e.g., because new materials or processes are not yet at scale) or structural (e.g., paying higher wages in the supply chain). This additional cost must be funded by a stakeholder in the value chain (customer, brand, government, etc.), otherwise the project will not move forward.

Figure 16. Types of Funders. Source: Aii and FFG analysis (2021).

Shared Responsibility for Decarbonization

Despite increased innovation in production technology and availability of financing over the last decade, the industry finds itself at something of a stalemate when it comes to the shared responsibility of financing the transition.

Because most brands' and retailers' Scope 3 emissions are occurring in their producers' facilities, textile producers are expected to take on significant investment for reducing emissions. Many small- and mediumsized suppliers will not generate the level of capital they need from their operations; therefore, they will require external sources of funding. According to the 2024 report "From Catwalk to Carbon Neutral: Mobilising Funding for a Net Zero Fashion Industry," the transactional nature of most retailer-producer relationships, combined with the ongoing pressure to reduce prices, make it exceptionally challenging for producers to bear this burden. Beyond financial barriers, producers face challenges with access to local experts and knowledge; consistent brand priorities; access to technology and data; and transparent and aligned accountability.

Financial institutions are increasingly interested in investing in sustainability projects in the apparel, footwear, and textile sectors. As a result, commercial capital is readily available, but even large producers often have insignificant creditworthiness to be eligible for attractive financing. This problem is further compounded among small and medium businesses, which are often earlier in their decarbonization journey and most in need of support and funding for sustainability projects.

"Aii and its brand partners have a critical role to play in the decarbonization of the apparel supply chain. Brands' investments with Aii are essential to pool resources and unlock the significant financing available from other sources (i.e., development and commercial banks, philanthropic, dedicated funds, others) and avail the necessary blended finance for their supply chains. This playbook is an essential tool for decarbonization discussions inside the brands among sustainability, finance, sourcing, operations, and public affairs practitioners."

EMILIO BUNGE, PRESIDENT AND CEO, DEVELOPMENT FINANCE INTERNATIONAL INC. ® (DFI)

Over time, a fundamental transition in the way business is done will be needed for the industry to reach net zero. In the short term, apparel brands and retailers can find creative ways to share a more substantial portion of the risk and cost.

In the pages that follow, we will delve deeper into the financial barriers and funding gaps that impede progress toward achieving decarbonization targets for the apparel, footwear, and textile industry. By examining the root causes of these challenges and proposing innovative solutions, we aim to catalyze action and unlock the financial resources necessary to realize a more sustainable future for fashion.

What's at Stake for Brands

It's critical to recognize what is at stake for brands in committing financial resources to decarbonization, beyond the ethical imperative. There are considerable benefits (and conversely, risks of not acting) for a brand's supply chain resilience, reputation, and bottom line.

- 1. GETTING AHEAD OF REGULATION Firstly, investment in decarbonization projects helps brands and retailers proactively address potential future legislation and regulatory issues around carbon emissions. By investing now, brands can adapt to evolving standards, avoiding costly penalties and disruptions to operations down the line.
- 2. ENSURING STRONGER GOODWILL/REPUTATION There is also a reputational boon; brands taking a more significant role in financing the transition appeal not only to investors but also to consumers. Although consumers aren't necessarily making purchasing decisions based on sustainability right now, this type of behavior is expected to increase. In the meantime, there is a public relations opportunity that comes with committing financial support. Likewise, customer sentiment can only be impacted positively by brands meeting or exceeding public commitments like science-based targets.
- **3. REAPING FINANCIAL BENEFITS** Lastly, there are significant financial benefits to be realized. Brands have benefited over the last five years from the increased availability and attractiveness of green bonds. This allows brands to borrow money from investors at below-market rates, and to use those funds to achieve sustainability objectives. Historically, these funds have not necessarily been used to fund supply chain improvements, but green bonds represent a powerful opportunity for brands to help finance the transition of their supply chain. Similarly, there is a link between environmental performance and shareholder value.

According to the 2021 article "ESG Importance for Long-Term Shareholder Value Creation: Literature vs. Practice," "higher sustainability companies show lower stock market volatility as well as reduced credit and business risk, which allows investors to attribute higher valuation to the company based on the risk-return trade-off." More recent research specifies that, in order to positively impact

shareholder opinion, ESG initiatives need to be "material," or related to the company's core business. A paper published by Northeastern University's D'Amore-McKim School of Business in 2023, "When Non-Materiality is Material: Impact of ESG Emphasis on Firm Value ESG," states that for every 1% increase in emphasis on material ESG factors, such as GHG emissions to an apparel brand, company value increases by .14%.

There is also an opportunity for return. It's a common misconception that facility improvement projects lack a sufficient return on investment, particularly in the case of debt financing. However, this is not the case in practice: it's possible to achieve an attractive return on investment by creating a portfolio of projects. For example, an energy efficiency project may have a 30% ROI, whereas a coal boiler replacement could result in 0% or -5%. But by bundling these and examining the aggregated ROI, you can find a suitable financial return that is attractive for debt financing and has maximum carbon reduction. This balances the desires of the brands and the producers to have high carbon reduction with a moderate return.

4. SUPPLY CHAIN RESILIENCE AND RISK MITIGATION - The job of a finance professional is to constantly balance return and risk. As such, it's impossible to discuss the financial benefits of decarbonization without also discussing the risks. By investing seriously in supply chain projects, a brand is minimizing risks of disruption, which can have significant financial consequences. For example, by building more durable, long-lasting relationships with key producers, brands can bolster the likelihood that those producers stay in business and prioritize that brand as a customer. There may even be direct financial benefits (i.e., discounts) for brands who commit to long-term purchase agreements. Finally, in extreme cases, the environmental effects of climate change are already disproportionately impacting textile-producing regions. As these impacts worsen, so do the risks of disruption from natural disasters.

Preparing to Make Investments in Decarbonization

Recognizing that brands have a larger role to play in financing decarbonization is the first step in what can be a long and challenging journey for brand sustainability teams. Conversation and collaboration with brand finance teams should occur early and often. Here is a simplified timeline of activities as you make a plan for decarbonization investment:

- **0. SET YOUR (BRAND/RETAILER) CARBON TARGETS.** This includes assessing your Scope 1, 2, and 3 emissions. We consider this Step 0 as it lays the absolute critical groundwork.
- 1. CREATE YOUR DECARBONIZATION STRATEGY. Start with setting an internal carbon price, and consider the current challenges around carbon accounting and emissions double-counting. Your strategy should lay out which types of projects you are going to focus on. As mentioned above, Aii recommends concentrating on shifting production processes to consume less energy, reducing energy loss, transitioning to renewable heat sources, minimizing waste, and regenerative agriculture practices and alternative fibers. Read below how PVH has crafted its decarbonization strategy.
- 2. START ENGAGING YOUR FINANCE TEAM. It's never too early in the process to start the conversation with finance colleagues about the benefits, risks, and size of investment that will be needed. C-level involvement is also key; if the CFO does not have a strategy for how to resource climate work, there essentially cannot be a climate strategy. Learn more below about how H&M Group quantifies impact in financial terms.
- **3. ENGAGE WITH YOUR SUPPLY CHAIN.** Discuss your plans with your key suppliers and ensure alignment on the feasibility of your approach.
- **4. SET A BUDGET**, along with your finance team, for decarbonization investments.
- 5. SELECT THE PLAYS (INVESTMENTS OR OTHERWISE) THAT WILL RESULT IN YOU ACHIEVING YOUR REDUCTION TARGETS.

The importance and difficulty of Steps 2 and 3 often go unstated. It is an inescapable fact that brands will need to spend significant funds to meet their decarbonization goals. This playbook provides several concrete approaches that brands can take to support the transition in their supply chain, and all of these plays come at a cost (or the potential for a cost). Incentives and goals for sustainability, finance, and sourcing teams are not necessarily aligned, and alignment is necessary in order to achieve impact. However, alignment can be achieved when the business case for decarbonization is clearly presented and understood.

FEATURE:

TRADE FINANCE, INNOVATION, AND SUSTAINABLE MATERIALS AT PVH

PVH Corp. is committed to advancing climate action with the goal of reaching net zero. Collaboration and funding are critical to driving solutions that address the fashion industry's contributions to climate change. To make progress, PVH Corp.'s strategy focuses on supporting supply chain improvements, including transitioning to renewable electricity, improving energy efficiency, eliminating coal in manufacturing, scaling sustainable materials and practices, and accelerating next-generation materials. PVH Corp. is focused on utilizing sustainable financing tools to advance progress in three key areas:

1. INCENTIVIZING SUPPLIER PERFORMANCE:

The PVH Sustainable Supply Chain Finance Program focuses on providing sustainable trade finance solutions to support suppliers that exceed PVH's Human Rights and Environmental Supply Chain standards. By offering favorable trade finance options, the program incentivizes and rewards suppliers for their commitment to sustainability.

In addition to sustainable trade financing, PVH actively collaborates with suppliers to develop and implement decarbonization action plans. These plans involve specific investments in sustainable practices and technologies, tailored to each supplier's unique operations. To facilitate these efforts, PVH plans to enable access to sustainable financing tools that allow suppliers to make meaningful changes. By supporting partners in this way, PVH ensures a cohesive and effective approach to reducing emissions throughout the supply chain.

2. INVESTING IN INNOVATION AND INFRASTRUCTURE

The industry requires significant investments in innovation and infrastructure to identify and scale credible decarbonization solutions. Through the Fashion Climate Fund, the PVH Foundation provided funding to channel resources into cutting-edge technologies and projects that drive sustainability across the fashion industry. This fund enables PVH to pioneer advancements that reduce its carbon footprint and enhance overall environmental performance.

3. TRANSITIONING TO SUSTAINABLE MATERIALS

A core element of PVH's decarbonization strategy is the transition to sustainable materials. Leveraging the PVH Green Financing Framework, PVH finances initiatives that promote the use of ecofriendly and renewable materials in products. This framework supports projects that are pivotal to reducing the dependency on nonrenewable resources.

By focusing on these key areas, PVH Corp. is committed to driving substantial progress in sustainability efforts, ensuring a positive impact on the environment and the entire fashion industry.

FEATURE:

HOW H&M GROUP THINKS ABOUT DECARBONIZATION INVESTMENTS

H&M Group is committed to achieving its ambitious sustainability targets and acknowledges that there are challenges for producers that require active involvement and financial support. Here are some of the ways that H&M Group justifies financial outlay to enable supply chain decarbonization:

- H&M Group's Green Investment team manages a separate budget, where the return is measured in terms of impact towards sustainability targets instead of traditional financial metrics. This is key to help bridge the gap between business ambitions, climate ambitions, and short-termism in financial markets.
- When evaluating investments, H&M Group measures cost (calculated using cost of capital) per impact unit (such as avoided tCO2e or M3 freshwater consumption) for each investment. This cost is then compared to alternative costs and the perceived future business value. The acceptable cost per tCO2e varies depending on factors such as the type of investment (e.g., renewable energy is generally more expensive than energy efficiency), the maturity of the technology (e.g., innovative technologies often imply more risk and therefore a higher cost per tCO2e), the country, and other relevant considerations.
- Having all relevant internal stakeholders involved is key to success. The Green Investment team works closely with Group Treasury, Sustainability, Procurement, Accounting, Tax and Transfer Pricing, and Legal to ensure all relevant aspects are addressed promptly.

Examples of how H&M Group is leveraging financing to lock in Scope 3 reductions:

H&M Group's Green Fashion Initiative (GFI) provides direct funding to supplier factories to invest in technologies and processes that reduce energy demand and replace fossil fuels. US Apparel, a Pakistani denim manufacturer supported by GFI, successfully phased out a 10-tonne coal boiler. This resulted in an annual CO2e emissions reduction of 14,000 metric tonnes. Previously reliant on two 10-tonne coal boilers, US Apparel's Lahore factory continues to significantly improve energy efficiency and reduce its environmental impact, including through on-site solar generation.

Since the program's launch in January 2022, GFI has financed 17 projects focusing on several aspects of decarbonization, including solar installation, energy efficiency, coal phase-outs, and electrification. These initiatives have the potential to reduce approximately 50 kilotonnes of CO2e annually within H&M Group's supply chain, with an additional reduction of approximately 120 kilotonnes beyond their supply chain.

H&M Group has, in partnership with Guidehouse, DBS Bank, The Fashion Pact and Apparel Impact Institute, developed the Future Supplier Initiative – a collective financing program for supply chain decarbonization.



Meet the Players

To illustrate the potential real-world application of these tools and allow for easier comparison, we've concocted fictional stakeholders, who we'll refer to through the playbook.



THE PRODUCER:

Textura is located in Coimbatore, India, and they produce high-quality knitted cotton fabrics for several well-known global brands. They also offer fabric treatments such as dyeing, printing, and finishing. Their annual revenue is \$11 million USD, and they employ 150 people.

Textura is a well-established producer in the early stages of its sustainability journey. They source a small percentage of their cotton from organic and fair trade producers. Recently, due to new requirements from two of their largest apparel customers, Textura has decided to undergo some improvements at their facility. They are considering the purchase of a \$1,000,000 USD electric boiler to replace their 12-year-old coal boiler which provides steam onsite (15TPH). They are also considering a rooftop solar project, which will cost \$900.000 USD.



THE BRAND:

Acadia Clothing, Inc. is

headquartered in New York City, with smaller offices in London and Sydney. They have an annual revenue of \$400 million and employ over 2,500 people. They have stores in 28 cities worldwide and a strong online presence. They specialize in denim and elevated casual apparel for both men and women, and are known for their high-quality, classic pieces. Acadia set science-based targets in 2019, the same year they hired their first chief sustainability officer. They are increasing their sustainability efforts, including supply chain mapping and management, tracking and reducing carbon emissions, and promoting water reduction and clean chemistry. Acadia has worked with Textura reliably for six years, securing roughly 10% of the finished knitted material production volume each year.



THE COMMERCIAL BANK:

EuroLink Bank is a large multinational bank (over a trillion dollars in assets) operating across three continents with over 200,000 employees globally. They are based in London with offices in New York, Hong Kong, and Mumbai. Among their clients are several global apparel brands, and they have also provided green loans directly to textile producers.



THE DEVELOPMENT BANK:

Global Growth Alliance (GGA)

is a major development institution focusing on sustainable growth in emerging markets. It is headquartered in Geneva, with assets of over \$100 billion and more than 5,000 employees. The bank finances projects enhancing infrastructure, renewable energy, and social development, benefiting governments, multinationals, and SMEs.

Our Approach

The format of this guide is inspired by the playbooks used by sports teams. A playbook is a list of actionable strategies that teams use to drive toward victory. From the playbook, coaches choose and combine plays to design a custom, winning strategy. In the same way, we have selected plays that, when used appropriately, can drive brands toward their decarbonization goals.

We recognize that there are myriad ways that brands can support their producers' decarbonization efforts, including recruiting them to projects, directly providing technical assistance and education, creating standardized scorecards, and more. However, given the urgency of our timeline and the very existential nature of our work, those important contributions must now be considered the minimum. It is time to both maintain those proven systems and move into financial contributions to unlock the amount of funding that will be needed for real impact. As such, all the plays in this playbook are financial; they all require budget, either immediate cash outlay or the potential for it. The plays are also focused on directly incentivizing producers to undertake decarbonization projects utilizing commercially viable equipment and technologies. As such, the playbook is comprehensive but not exhaustive; there are financial vehicles and approaches that exist that will not be represented here. At the end of the playbook, we'll describe some other common methods of support, but only mechanisms that meet these three criteria are considered "plays":

CRITERIA FOR INCLUSION



Requires cash outlay or potential for it



Involves financial support or incentives for a producer to undertake a decarbonization investment



Commercially viable technologies vs. new innovations

We opted to include compelling plays at all stages of development, from ones that are proven in the apparel industry, to ones not yet applied in this sector, to ones that – to our knowledge– have yet to be deployed in the way we've described. We believe all of them to be worth considering as you build your investment strategy.

The Plays

This map shows a wide view of all the plays and summarizes our perspective on the risk, impact, and cash outlay required. The plays have been grouped into four categories that share similar attributes on these scales, and we have ordered the groups (and, for the most part, the plays within the groups) based on the likelihood of incentivizing producer impact: the plays that we believe are most likely to motivate producers to take on decarbonization projects are listed first.

Alongside the Play Map is a key to assist in the interpretation of the scales and ratings, and we have marked which are subjective and which are based on calculation. Subjective ratings are based on the Aii team's years of conversations with hundreds of producers, brands, and financial professionals; representatives from those three categories have also reviewed the ratings. It's important to note that the ratings are also relative to the other plays in this playbook. For example, a play rated "High Risk" is compared to the other 11 plays, not to all possible investments.

Where possible, we have also provided a real-world example of how this play has been applied, inside or outside the apparel industry. If a play does not include an example, it was not possible to find specific examples of the play in action at the time of writing.

	CRITERIA DEFINITIONS						
	Likelihood of Incentivizing Producer (Impact Benefit)	Amount of Capital for Brand	Difficulty of Execution	Financial Risk for Brand	Financial Benefit for Brand		
	The report uses the same two example projects, with the exact same carbon reduction, for all plays. This metric evaluates the appeal of each play from a producer perspective and the likelihood of the producer implementing the project and acheiving the potential impact.	The amount of upfront money that is required to be invested by the brand. Ratings are relative to the other plays.	Refers to the complexity and internal resources required by the brand in order to implement the play. Note that some plays may be complex overall, but require limited participation by the brand.	Measures the degree and likelihood of the brand losing money on capital investment. Note that Opex plays, such as "Green Incentive" on Products are rated low since the cost is known and there is no risk of additional loss.	Based specifically on the direct financial benefits for the brand from the investment itself (ie. return on investment in the form of interest income / dividends). Ratings are relative to the other plays in this playbook, not the universe of all possible brand investments.		
	KEY TO RATINGS						
	Likelihood of Incentivizing Producer (Impact Benefit)	Amount of Capital for Brand	Difficulty of Execution	Financial Risk for Brand	Financial Benefit for Brand		
LOW	Creates market rate loan to producer	0-10% of total cost	Subjective assessment based on complexity of the tool, number of parties involved, etc.	Total brand cost is known upfront	Expense with no return of capital		
MEDIUM	Creates below-market rate loan to producer	10-50% of total cost		Brand takes on some risk, but is unlikely to lose full investment	Investment with below market-rate return		
HIGH	Non-debt incentive	50%+ of total cost		Brand takes on risk of losing full investment	Investmenet with market-rate return		

Play	Description Likelihood of Incentivizing of Capital Producer (Impact Benefit) Amount of Capital for Brand		Difficulty of Execution	Financial Risk for Brand	Financial Benefit for Brand			
PRODUCER INCENTIVE								
Long-Term Purchasing Agreement	Brand commits to purchase a volume, the Producer's credit goes up, and they can get a loan. Producer is incentivized to make facility improvements on their own- no need for loans.	•••	•	•••	••			
Producer Sustainability Compensation	Reward Producers by paying them outright for reducing their carbon output.	•••	•	•••	•			
"Green Incentive" on Products	Pay more per item if less carbon is used for that item.	•••	•	•••	•	•		
PROJECT ASSISTANCE								
Project Co-Funding	Grant \$\$ to a facility for factory improvement.	•••	••	••	•	•		
VPPA Guarantee	VPPA Guarantee Brand promises to pay an energy developer for the remainder of a purchase agreement if the Producer can't. Can also arrange another Producer to buy out the contract. Could technically also apply to a ESCO (ESCO buys the boiler and the Producer buys energy as they use it).		•	•••	••	•		
Management Fee/ Interest Subsidy			•	••	•	•		
Full Guarantee	Bank gives the Producer a loan and brand promises to pay the bank if the Producer defaults.	••	••	••	•••			
Guarantee Fee	Pay the bank a % of the loan amount (~1% per year for 5 years) as insurance. There is a middleman (a second financial institution).	••	•	•••	•	•		
DEBT								
Junior Debt Loan	Bank contributes to part of a loan to a Producer at the "junior" level. This level is the highest risk in the loan stack and is the first to lose their investment if the loan is not repaid. This makes the other contributors, typically development and commercial banks, comfortable giving attractive interest rates to Producers.	••	••	••	•••	••		
Direct Loan to Producer - Market Rate	Brand provides a loan with normal commercial terms directly to the Producer for the project.	•	•••	•••	•••	•••		
Direct Loan to Producer - Concessionary Rate	Brand provides a loan with discounted terms directly to the Producer for the project.	••	•••	•••	•••	••		
EQUITY INVESTMENT								
Equity Investment in Renewable Project	Brand invests in a renewable project and may recruit Producers to offtake.	•	••	•	••	•••		

Producer Incentives

Although producers will still need to take on debt for large equipment purchases, these plays are highly motivating for producers as they provide direct cash compensation or assistance. Compared to the other plays in this report, these also require a relatively low cash output from the brand and are low-risk. financially.

PLAY 1

Long-Term Purchasing Agreement (Offtake Agreement)

DESCRIPTION:

With a long-term purchasing agreement, a brand commits to purchase a certain volume from a producer in the future, beyond the current purchasing cycle. As a result, the producer's credit improves, and they're incentivized to make facility improvements without additional financial assistance. As a result of the purchasing commitments, their credit improves, which makes it easier for them to obtain attractive financing for loans. This type of long-term commitment has additional benefits to the producer that the other plays represented in this playbook do not provide. Long-term commitments allow the producer to better plan for staffing, expansion, and sourcing, and could even result in lower pricing for the brand.

One powerful aspect of this play is that it addresses the cause of the issue rather than just the symptoms. If producers can obtain long-term

purchase commitments from their customers, then all the other plays become unnecessary. Historically, long-term purchasing agreements have been offered to innovative facilities that are already advanced in their sustainability work. It will be critical over the coming years to broaden the scope of these agreements beyond those early adopters.

We are opting to refer to this play as a long-term purchase agreement for these forward-looking commitments as the term "offtake" typically refers to a commitment to take off volume that has already been produced.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand

DEPART LONG-TERM PURCHASE AGREEMENT PRODUCER

OFFICIAL PRODUCER

OFFIC

Long-Term Purchasing Agreement (Offtake Agreement)

HYPOTHETICAL APPLICATION:

Textura has been supplying denim to Acadia for six years, and the team at Acadia has been satisfied with the product and the relationship. Acadia's denim line is successful, and long-term planning at the organization has indicated that they plan to expand this area of their business. Acadia needs Textura to reduce its emissions to meet Acadia's own Scope 3 reduction goals.

Textura has applied for a loan for their \$1,000,000 USD boiler replacement, but the interest rate currently offered by EuroLink is too high for them to agree to. If Textura can show proof of a certain volume of future orders, Eurolink will lower the interest rate to under 10%.

REAL-WORLD EXAMPLE:

In 2021, Patagonia signed a multiyear sales agreement with Infinited Fiber Company, committing to purchase a regenerated textile fiber that is created out of textile waste. The deal guarantees Patagonia access to the fiber and also secures future income for the producer as they grow their operations and ramp up production. That same year, Infinited Fiber Company announced plans to build a new flagship factory, an example of the type of expansion and risk that a producer can take on when they secure long-term agreements.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- If asked, most producers would indicate that this play would be their top choice.
- The brand can avoid cost fluctuation and thus be able to plan more effectively. Producers might offer pricing benefits for long-term commitments.
- It's difficult to make the case to sourcing teams (as fashion changes inherently) and finance teams that may not want to give up the optionality and flexibility of having the funds entirely untethered.

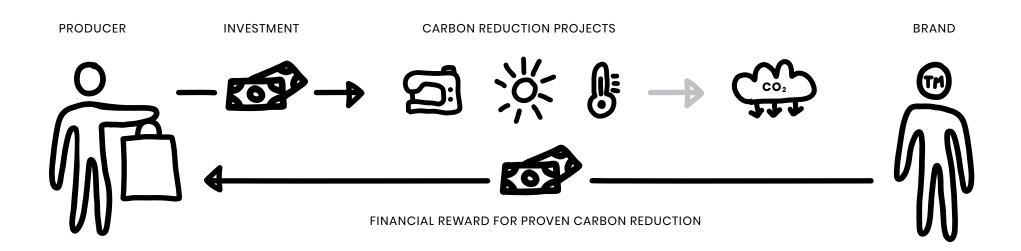
Producer Sustainability Compensation

DESCRIPTION:

The brand rewards producers by paying them directly for reducing their carbon output. As a result, the producer's credit improves, and they're incentivized to make facility improvements without additional financial assistance. This stronger financial standing also makes it easier for them to obtain attractive financing for loans. Stipends could easily be co-funded with other brands that share producers, magnifying the impact. However, there's not yet a clear model for how to set the carbon price for reduction or completed projects. For instance, if the brand opts to pay per tonne reduced, the financial impact could be unknown/unpredictable.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand
	•••	•••		



Producer Sustainability Compensation

HYPOTHETICAL APPLICATION:

Acadia has established emission reduction targets and monitoring to assess how well their producers are meeting Acadia's various ESG goals. Acadia sets up an incentive program where they will compensate producers for improving their performance in certain areas. For every 10,000 tonnes of carbon that a producer reduces from their output year over year, Acadia compensates their producer \$20,000 USD. After their second year of completing the scorecard, Texture has reduced their output by 22,000 tonnes and thus receives \$40,000 from Acadia, which they can use for additional sustainability initiatives.

REAL-WORLD EXAMPLE:

Truterra, LLC, an agricultural sustainability business, manages a "Carbon Program" that compensates farmers for sequestered carbon. Farmers are encouraged to adopt more sustainable agricultural practices - like planting cover crops, reducing tillage, improving nutrient efficiency, and reducing soil compaction - to help soil absorb more organic matter and store more carbon. In 2022, Truterra paid over \$5.1 million to farmers for approximately 262,000 metric tons of carbon stored. In the first two years of the program, Truterra has paid more than \$9 million to farmers for over 462,000 metric tons of carbon. Unlike other similar programs, farmers have stronger earnings potential with Truterra since they are paid based on actual carbon stored rather than a set payment by acre.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- This is a good fit if a brand is just getting started with incentivizing projects this would be considered an "entry-level" play.
- This play has a high probability of delivering carbon reduction. The brand is only paying for results; there is no risk of spending money on something that does not reduce carbon.
- If a market-based mechanism for carbon accounting becomes adopted, this would be an attractive, cost-effective play toward meeting the brand's targets.
- The "free rider problem" is particularly cogent here: One (or a few) brands are paying for the full reduction of the project, and other brands will benefit from the outcomes.

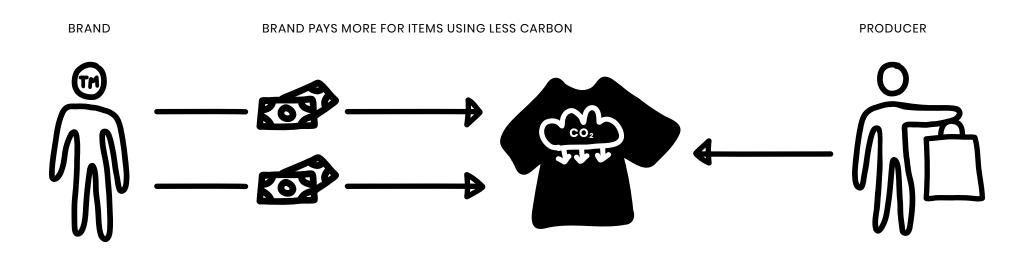
"Green Incentive" on Products

DESCRIPTION:

Many brands are already calculating the carbon footprint of certain specific products. In this play, the producer produces the promised product in a way that lowers its carbon footprint, and the brand agrees to pay a premium for the decarbonized version. With current carbon accounting methods, the brand can claim all the reductions that result from this play; if the brand makes up a small percent of production at all of the brand's facilities, this is a unique opportunity to claim a full reduction. This play does shift the focus away from low-performing facilities, which means assistance is going towards the producers that don't necessarily "need" brand assistance.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand
		•••		



"Green Incentive" on Products

HYPOTHETICAL APPLICATION:

Acadia works with a cut-and-sew facility called Premium Apparel that sources much of its fabric from Textura. Premium has purchased a large quantity of cotton jersey from Textura which has been dyed using a powdered dye product, saving thermal energy and resulting in a lower carbon footprint for this product. Acadia previously purchased a similar t-shirt style from Premium at \$7.45 USD per unit; it was cut from the same pattern but used a traditional dye process. Acadia agrees to pay \$7.50 USD per unit for this new shirt, given the GHG savings. Acadia is experimenting with displaying carbon usage and savings on their apparel tags, and they believe they can pass on part of this increased cost to customers if the marketing is effective.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- This works best if the brand's customers care about sustainability and will pay a premium for low-carbon products.
- This is the type of play that addresses the root of the decarbonization problem and could influence real systemic change. It starts the cycle by incentivizing producers to implement sustainable practices and rewards them for it. Ideally, this influences other producers to do so, slowly moving the baseline for carbon output.
- It rewards producers who are already doing the hard work of decarbonizing, whereas a lot of time and attention is often spent on facilities that are low-performers.
- For it to be worth a producer's effort, it would need to be a significant amount of product, which means it's likely to need brand collaboration.
- If brands are working together to agree to pay for improvements, there could be antitrust concerns.

Project Assistance

The plays in this group are focused on lowering the interest rate (and thus overall cost) of a capital expenditure for a producer. In order to offer more attractive financing, banks look to brands to show that they have "skin in the game," and that they're willing to stand behind their producers in the case of financial difficulty. There are different types of loan quarantees: Brands can make a binding promise to take over loan payments if necessary. In other plays in this group, the brand makes an actual fee payment or subsidy to lower the interest rate or principal total for producers.

These plays are generally moderately likely to incentivize producers to invest, and they are relatively low in both risk and financial reward for brands. Note that because this report uses the same two hypothetical investments (a boiler upgrade and renewables implementation), the carbon reduction of all plays is equal. In this way, other characteristics of the plays can be compared.

PLAY 4

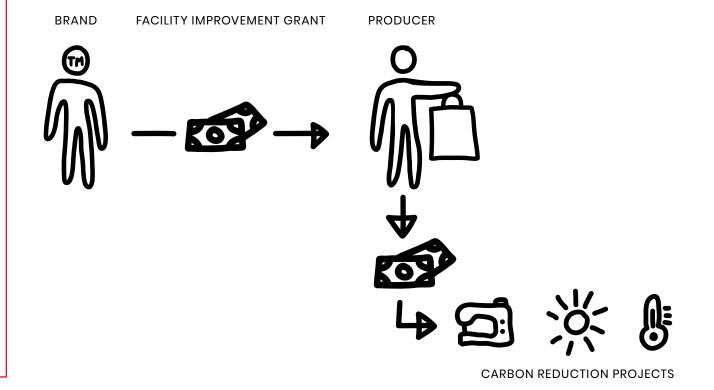
Project Co-Funding

DESCRIPTION:

Most decarbonization projects require financial outlay from the producer. Brands can subsidize these expenses by giving a grant directly to a producer to help them pay for factory improvements.

SUMMARY:

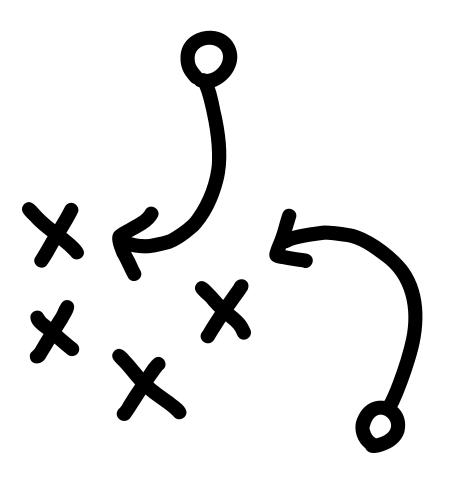
Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand



Project Co-Funding

HYPOTHETICAL APPLICATION:

Acadia grants \$110,000 to Textura to partially pay for their new electric boiler.



CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- Granting to producers might not be permitted if the brand is incorporated in certain countries (i.e., Sweden).
- The cost is variable; the brand would need to analyze the case for each of these projects.

VPPA Guarantee

DESCRIPTION:

A VPPA (Virtual Power Purchase Agreement) is a complex concept to understand. It's useful to first define a PPA (Power Purchase Agreement), which is a very common way for apparel producers to finance improvements.

With a traditional PPA, an apparel producer signs a long-term contract, promising to purchase electricity generated from a renewables project, either onsite at the producer's facility or offsite. This energy will be used directly by the apparel producer.

In the case of a VPPA, an apparel producer is not actually looking to source renewable energy for their facility because they are unable or unwilling to for financial, policy, or availability reasons. However, that producer can still show reductions to their own Scope 2 emissions by entering into a VPPA with an energy developer, supporting large-scale offsite projects that otherwise might not be viable. The producer is ensuring that new projects get built and that additional clean energy is added to the grid.

A VPPA is strictly a financial arrangement. The apparel producer agrees to pay the developer a fixed price for the energy produced by the project, which guarantees that the developer will always receive a minimum price for the energy. In return for this guarantee, the apparel producer will receive credits that they can use against their emissions. The producer still needs to continue to pay for their electricity.

Throughout the life of the agreement, the apparel producer and developer will periodically settle a balance based on the market price of energy. If the price has gone down, the developer will owe the apparel producer back some money. If the price has gone up, the apparel producer will owe the developer additional money.

By themselves, neither a PPA nor VPPA would be considered a "play" in this playbook since they are financing arrangements directly between an apparel producer and a third party and don't entail financial assistance from a brand. However, a brand can help provide a guarantee, promising to pay an energy developer for the remainder of a purchase agreement if the apparel producer is not able to. This commitment de-risks the project for the developer, who otherwise would not be comfortable breaking ground on the project.

In the case that the apparel producer can no longer make their payments on the contract, the brand would take over the payments. One benefit to this model is that, in this case, the brand might also opt to arrange to sell the remainder of the contract to another apparel producer in the region, perhaps another producer affiliated with the brand. If the brand has a high concentration of producers in a single region, it's likely the brand will be able to find a purchaser for the contract if need be.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand

VPPA Guarantee

HYPOTHETICAL APPLICATION:

Textura is interested in transitioning a large portion of its power from grid to solar. They have been working with a developer, Solaria Renewables, who is willing to take on the project, but they require additional assurance.

Acadia agrees to provide a guarantee for the project, committing to take over Textura's VPPA if they are unable to continue making payments. Acadia has several other key producers in the area, and they are confident that if Textura were to default (which is unlikely given Acadia's plans to do more business with them), they could find a buyer for the contract.

REAL-WORLD EXAMPLE:

In 2023, McDonald's finalized a Virtual Power Purchase Agreement (VPPA) deal with the aim of reducing Scope 3 emissions. The deal, totaling 189 megawatts (MW), involved McDonald's partnering with its five logistics suppliers: Armada, Earp Distribution, Martin Brower, Mile Hi Foods, and The Anderson-DuBose Company. McDonald's served as the anchor buyer for this aggregation deal, streamlining the process for its suppliers and shouldering much of the legal and contracting aspects. Once complete, McDonald's and its suppliers' combined electricity purchase is expected to average more than 470,000 MWh of renewable energy each year.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- This play is useful if the brand has a high concentration of producers in a specific region.
- The guarantee requires no immediate capital outlay, and with the flexibility to sell the energy in the case of default, this play likely requires no cash.
- Implementation of new renewable projects may not be possible in every market because of regulations. For example, in some regions, you can't sell electricity into the open grid. Regulations can also change, for better or worse.

Management Fee/Interest Subsidy

DESCRIPTION:

If it's not possible or appealing for a brand to contribute directly to the loan itself, it's possible to subsidize the project in other ways to make the financing more attractive for producers.

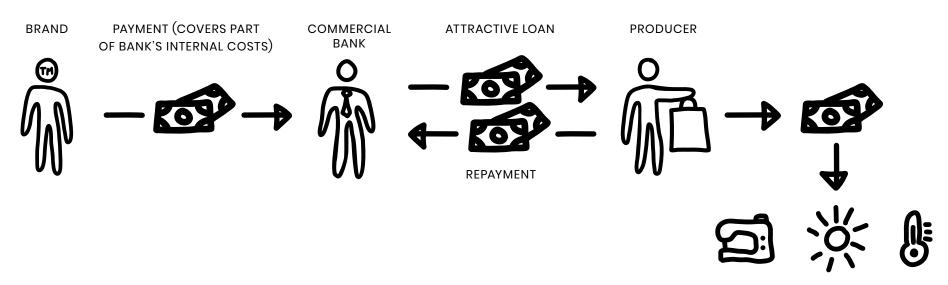
An interest rate for a loan is determined by both funding costs and management costs. The funding cost is the profit the bank makes in return for lending the money. Management costs are the operational costs that a bank incurs for making and maintaining the loan, such as due diligence, accounting, legal costs, and sometimes technical assistance to and education for the loan recipients.

If a brand agrees to cover the management costs of a loan (which we'll call paying a "management fee"), the bank can, in turn, lower the interest

rate significantly, as they only need to account for the funding cost. In a variation of this play, the brand can also agree to take on a portion of the interest payment itself; this could be seen as being more helpful to producers.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand



CARBON REDUCTION PROJECTS

Management Fee/Interest Subsidy

HYPOTHETICAL APPLICATION:

Textura is seeking financing for their boiler replacement, which will cost \$1,000,000 USD. They have been offered a 5-year loan with 15% interest by EuroLink Bank, which is, unfortunately, too high for Textura to take on the project.

Acadia agrees to pay a 2% management fee of \$20,000 USD per year during the 5-year loan period to help offset EuroLink's management costs for the loan. This fee will be paid directly to Textile Decarbonisation Fund, a third-party fund manager. As a result, EuroLink has agreed to lower the interest rate to 11.75%, saving Textura \$100,000 over the life of the loan.¹

REAL-WORLD EXAMPLE:

Aii and industry partners are creating a supplier debt fund focused on investments that reduce producers' greenhouse gas (GHG) emissions and water use. The fund will have a tranched capital stack, dividing the pool of capital into layers with varying degrees of risks, rewards, and maturities to appeal to investors:

- **Junior Tranche:** \$50 million junior equity/sub-debt loans (Aii, apparel brands, philanthropy)
- **Mezzanine Tranche:** \$75 million mezzanine notes (IFC, apparel brands, development institutions)
- **Senior Tranche:** \$125 million senior notes (development institutions, corporate banks)

In addition to contributing to the junior or mezzanine tranche of the fund, brands can provide coverage of the fund's management fee, which further lowers the interest rate charged to borrowers.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- This is best suited for a large commitment spanning a portfolio of projects.
- If the brand joins a pooled fund that is financing many projects, it's harder to handpick projects and facilities that meet the brand's own emission reduction goals.
- This play requires governance and oversight on the brand's part to make sure the benefit is being passed through. For example, the brand is paying a fund manager a significant amount to ostensibly lower the interest rate for the loan. However, because that specific project probably did not go through due diligence in the absence of the management fee subsidy, there is no baseline interest rate for comparison.

¹ The interest rate decrease is more than 2% because of amortization of the principal amount over the life of the loan.

Guarantee Fee

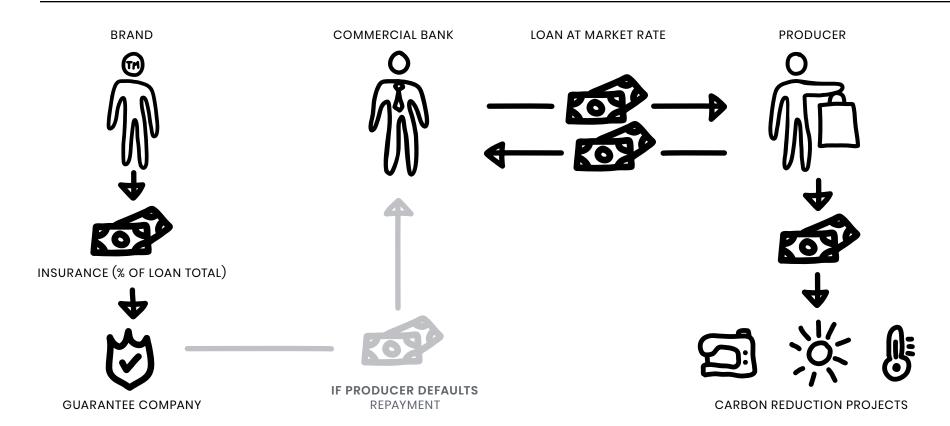
DESCRIPTION:

When producers are securing a loan for facility improvements, an attractive interest rate is key. One of the ways that brands can lower the interest rate for producers is by providing a guarantee fee, which is essentially insurance on the loan. Just like a person would insure their home or car through a third party, there are guarantee companies that handle these arrangements. The brand would pay the guarantee company a percentage of the loan amount, and if the producer defaults, the guarantee company is responsible for paying the loan back to the

bank. This play has the added benefit of making the loan attractive to global banks (as opposed to smaller local banks) that might not otherwise have been interested in the project. The guarantee fee can provide a significant improvement on loan terms for facilities, and the play is flexible; the brand can choose the number of deals, the region(s), the deal sizes, and which third parties to involve.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand



Guarantee Fee



HYPOTHETICAL APPLICATION:

Textura is seeking financing for their boiler replacement, which will cost \$1,000,000 USD. They have been offered a loan with 15% interest by their regional bank, but they are only able to undertake the project if they can secure financing under 10%. Acadia agrees to pay Green Guarantee Company 2% of the loan (\$13,000 USD) each year for 5 years. With that guarantee fee, EuroLink Bank is willing to take on the project and will give Textura a 9% interest rate on that same loan. In the case that Textura defaults and is no longer able to make payments, Green Guarantee Company will pay EuroLink for the remainder of the loan.

REAL-WORLD EXAMPLE:

Future Supplier Initiative Loan Guarantee Program

Aii is collaborating with The Fashion Pact, Development Bank of Singapore (DBS), a development bank, and fashion brands to support suppliers in implementing decarbonization projects. These projects include energy efficiency improvements, rooftop solar installations, and the replacement of coal boilers, facilitated through technical support and attractive financing terms, such as lower interest rates and longer-term loans. As part of the financing mechanisms within the program, a development bank will provide a loan guarantee in exchange for a fee, which will be paid by brands that source from the facility. These brands will, in turn, benefit from the recognized carbon reduction efforts of the project. The Fashion Pact will play a key role in recruiting brands for this initiative. For more details on the Future Supplier Initiative, visit futuresupplier initiative.com.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- In this play, the brand can choose to fund the projects that net the highest Scope 3 reductions. This gives the brand a high confidence in the level of impact under current carbon accounting.
- This is an established structure; there's precedent for this play outside the apparel industry.

Full Guarantee

DESCRIPTION:

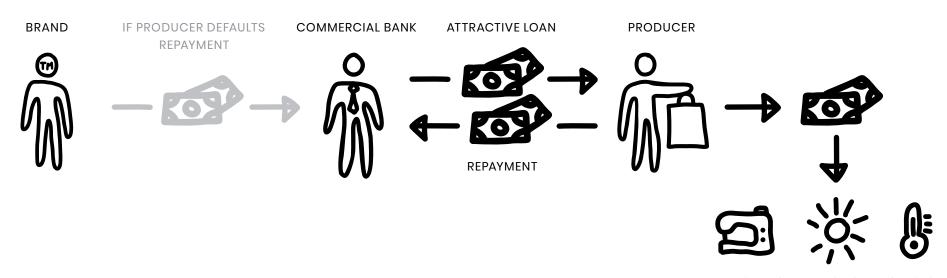
A guarantee is a backstop; it's a promise to a financial institution that the brand will repay the financial institution for the remainder of the loan if the producer defaults. It does not require the brand to put any capital forward, but some or all of the amount is still represented as a liability on the brand's balance sheet.

Although we refer to this play as a "full" guarantee, it's unlikely it would account for 100% of the loan. For the bank to maintain a small amount of risk, and therefore the motivation to complete underwriting, the guarantee would leave a minimal amount (for example, 10%) of the loan "un-covered." The bank would not recoup that amount in the event of a default.

This guarantee of repayment greatly reduces the bank's risk and therefore results in significantly lower interest rates for the loan. In some cases, the brand could even agree to put the full amount of the guarantee in an escrow account, which would make the deal even more attractive to the bank and further improve the financing.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand
		••		



CARBON REDUCTION PROJECTS

Full Guarantee

HYPOTHETICAL APPLICATION:

For Textura's \$1,000,000 USD boiler replacement loan, Acadia has agreed to provide a 90% guarantee. If Textura defaults on the loan, Acadia will pay up to 90% of the original loan amount back to EuroLink. Acadia's finance department has decided to estimate their risk and the most likely payout scenario and represent that liability on their books.

Because EuroLink is only responsible for 10% of the loan in the event of default, they feel much more comfortable with the level of risk and have offered 8% loan terms, whereas similar projects typically have an interest rate of around 15%.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- Depending on how the brand's finance department decides to represent the liability in its books, the brand can use some of the capital in the meantime. This is not the case if the brand opts to put the guarantee amount in escrow.
- It can be a tricky balance to find the right percentage of the loan to guarantee. The more of the loan that the brand covers, the better the interest rate. However, the more of the loan the brand covers, the less incentive the bank has to underwrite carefully. This issue is called "moral hazard."

Debt

Brands can also directly join the pool of investors who loan producers money for facility improvements. One option is that brands can join the junior debt (highest risk) layer of the debt stack that makes up a loan. Alternatively, brands can loan the full or almost full amount of the project directly to the producer. These plays are the highest in both risk and potential financial benefit for the brand compared to the others in this report. And once again, for this report, carbon savings should be considered the same as the other plays.

PLAY 9

Junior Debt Loan

DESCRIPTION:

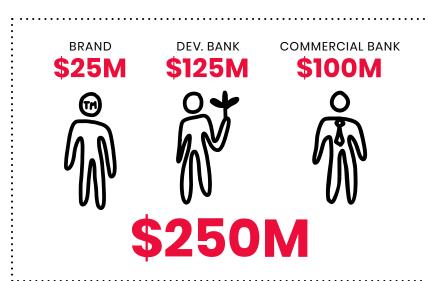
One proven way to lower the interest rate on a loan is to divide the loan into levels or "tranches," where investors in the bottom (junior) level take on the most substantial risk and are the first to lose their investment if the loan is not repaid. The middle level, called a "mezzanine," would be next in line, followed by a senior level of debt. The investor at the senior level has their risk substantially mitigated by the other levels of investors, and therefore that level – typically a development bank

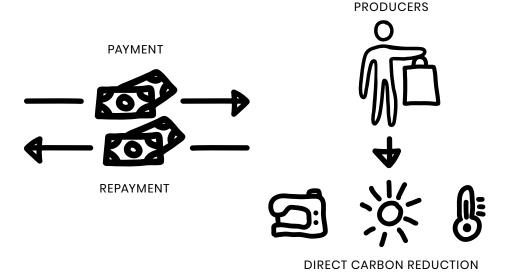
or commercial bank – can comfortably provide attractive financing to the loan recipient.

By a brand agreeing to be a part of the junior debt (bottom level) of a loan stack, they show "skin in the game" and derisk the investment for the bank.

SUMMARY:

Amount of Capital for Brand	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Benefit
	••		





Junior Debt Loan

HYPOTHETICAL APPLICATION:

Global Growth Alliance (GGA) is developing a loan targeted at facility improvements in the textile industry. Their goal is to create a loan stack that results in an attractive interest rate for producers.

GGA is committing \$100M to the mezzanine tranche of the loan stack, and EuroLink has agreed to contribute \$250M to the senior tranche if GGA can get \$50M in commitments for a junior tranche, which would absorb the first losses. Acadia, along with several other brands, agree to put up the \$50M of junior debt to close out this financial tool and start issuing loans. Textura will get a loan at an 8.5% interest rate using this instrument for their boiler replacement.

REAL-WORLD EXAMPLE:

The Good Fashion Fund was created to drive systemic change in the textile and apparel industry by making loans to finance the implementation of highly impactful and disruptive production technologies in Asia.

The fund has been active since the end of 2019, has a target size of \$60M, and its typical investments are between \$1M and 5M. It finances apparel manufacturers in India, Bangladesh, and Vietnam for the adoption and implementation of impactful technologies. This kind of long-term financing is rarely available for manufacturers that are keen to become more sustainable but do not have their own funds or bank loans available to finance this. Because the structure of the fund includes junior debt, contributed by Laudes Foundation, the commercial bank (Rabobank) can offer discounted interest rates for producers.

The first deal of the fund was a \$4.5M loan to support Pratibha Syntex's planned capital expenditures for the replacement of machinery and expansion of sustainable equipment in their spinning, processing, and garmenting divisions. The company supplies textiles and garments to popular brands including C&A, H&M Group, Patagonia, and Zara. Although the fund itself is too small to enable systemic change, it hopes to demonstrate that investing in the sustainability investments of smaller manufacturers leads to healthy financial returns, and therefore can be done at scale by existing financial institutions.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- This play results in a significant multiplier of brand capital (e.g., 10:1 or 5:1) and makes the brand's dollars go much further. The brand can leverage a comparatively small amount to unlock a huge amount of financing.
- There's solid potential for a partial return of capital; the ROI isn't going to be significant, but the brand is likely to recoup the investment and may see small returns.

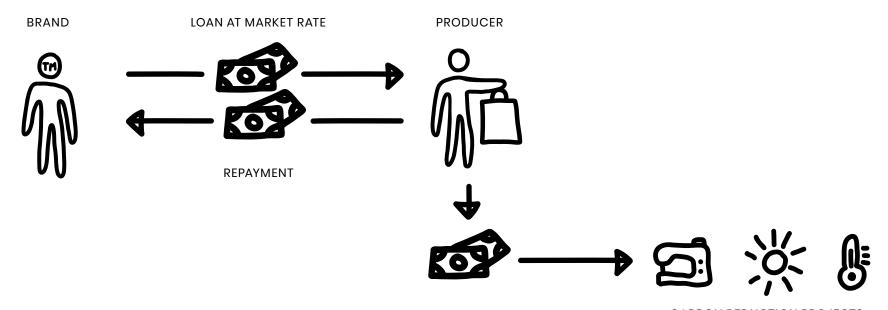
Direct Loan to Producers - Market Rate

DESCRIPTION:

A brand may decide to offer a loan to a producer at market rate, which means the same interest rate that the producer would be offered by a bank. This offers no additional financial benefit to the producer – and there is limited additionality – but does signal a strong commitment to the producer, which in turn helps them with their planning and operations. This play is likely to be appealing to brand financial teams, as it offers a strong return on investment and will typically unlock treasury funds that would otherwise be unavailable for sustainability projects.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand

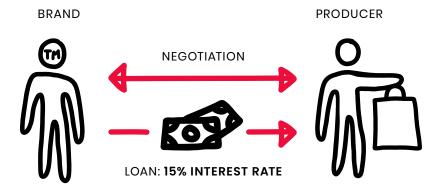


CARBON REDUCTION PROJECTS

Direct Loan to Producers - Market Rate

HYPOTHETICAL APPLICATION:

Rather than work with a bank, Acadia decides to lend the \$1,000,000 directly to Textura for their boiler replacement. Acadia's finance team determines that they could offer a 15% interest rate, which matches what EuroLink would offer for the same loan. Acadia and Textura negotiate the loan terms directly.



REAL-WORLD EXAMPLE:

Apple recently announced that they will provide Globalstar with a \$252 million loan to help cover upfront costs for its low Earth orbit (LEO) constellation. This loan allows the network to upgrade satellite services for the latest iPhone, enabling emergency services outside cellular coverage. Globalstar plans to launch 17 satellites by 2025, with an option for nine more. Apple's prepayment removes the need for Globalstar to raise third-party financing. In return, 85% of the constellation's capacity will be allocated to Apple, with the remaining 15% for legacy services. There is no concessionary financing involved, which means that Apple will enjoy a market-rate return on this investment.

CONSIDER THIS SOLUTION IF... you're optimizing a pro-producer approach to incentivize project implementation. you're optimizing for the lowest cost per tonne of carbon on brand investment. you're optimizing for simplicity and a limited number of players. you have a large budget for positive ROI projects. you have a large sustainability/unrestricted budget. your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments. you have a strong balance sheet and can afford to add liabilities and/or take on financial risk. you have strategic producers you're willing to commit to long-term. you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure. **Additional considerations:** • Giving a loan directly requires fewer players, which gives you more control. • It's flexible; you pick the projects and facilities. • There could be a conflict of interest for a brand if a producer is behind on payment, but the brand considers them a strategic producer. • Brands aren't resourced to play the role of the bank (i.e., underwriting).

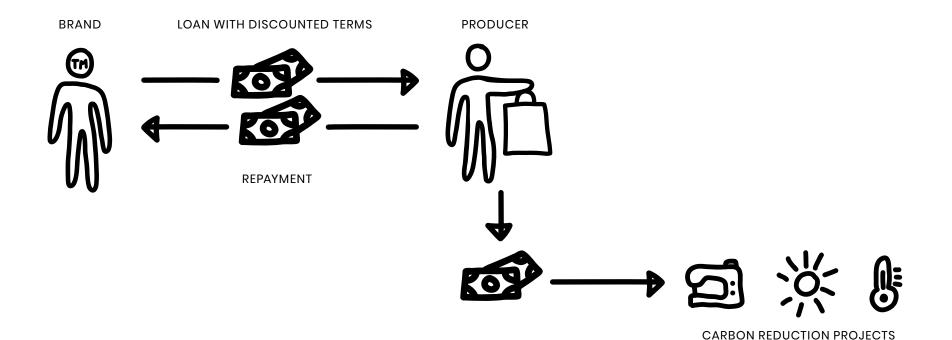
Direct Loan to Producers - Concessionary Rate

DESCRIPTION:

Alternatively, a brand could offer a loan at a concessionary rate, which means the financing is discounted beyond what the producer could expect from a bank. This is naturally more appealing to the producer but would be more difficult to make the case internally, as the return on investment would be minimized.

SUMMARY:

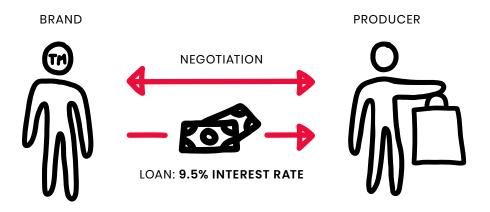
Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Financial Risk for Brand	Financial Benefit for Brand



Direct Loan to Producers - Concessionary Rate

HYPOTHETICAL APPLICATION:

Acadia's finance team calculates that they can offer a concessionary loan to Textura for their boiler replacement at 9.5%, which is significantly more affordable than the market rate. Acadia and Textura negotiate the loan terms directly.



REAL-WORLD EXAMPLE:

Under H&M Group's Green Loan program, H&M Group suppliers are eligible for technical support and financing for factory improvement projects. For example, Rudong Knitit, a knitting factory in China, is using one of the loans to pilot a thermal heat storage solution for the factory's steam needs.

CONSIDER THIS SOLUTION IF...

- you're optimizing a pro-producer approach to incentivize project implementation.
- you're optimizing for the lowest cost per tonne of carbon on brand investment.
- you're optimizing for simplicity and a limited number of players.
- you have a large budget for positive ROI projects.
- you have a large sustainability/unrestricted budget.
- your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments.
- you have a strong balance sheet and can afford to add liabilities and/or take on financial risk.
- you have strategic producers you're willing to commit to long-term.
- you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure.

- Giving a loan directly requires fewer players, giving you more control.
- It's flexible; you pick the projects and facilities.
- Funds would likely need to undergo more stringent budget approval because the investment does not meet a market rate return.
- Brands aren't resourced to play the role of the bank (i.e., underwriting).
- There could be a conflict of interest for a brand if a facility is behind on payment, but the brand considers them a strategic producer.

Equity Investment

This play is unique and can't be neatly grouped in any of the other three categories. However, it does meet the criteria for inclusion in the playbook and has the potential for high ROI for the brand. Given that it's more focused on producing new energy opportunities for a specific region, it is unlikely to incentivize any one producer to invest in decarbonization.

PLAY 12

Equity Investment in Renewables Project

DESCRIPTION:

In some key apparel production regions, there are not sufficient new developments for wind and solar power. Brands can fill this gap by investing directly in renewables projects, which provides assurance to the project developer. Brands commit a certain amount of capital upfront and can expect an annual return from the project's profits.

Equity investment typically makes up 15-25% of the project total and represents the riskiest tranche or level. This means that the commercial debt will get paid back first and the brand will absorb the losses if the project is not successful.

Depending on whether the brand focuses on recruiting their own producers to offtake from these projects, this play may not result in significant Scope 3 reductions from the brands. Likewise, additionality is low; these types of investors already exist in many regions. Therefore, brand investment is useful, but only in specific regions and circumstances. When these projects are deployed in regions that are not already saturated with renewables, this type of investment can potentially be a catalyst for systems change. Additionally, the energy from these new projects can be sold into the grid in the region, so all stakeholders in the region will benefit, albeit in a small way.

SUMMARY:

Amount of Capital for Brand	Difficulty of Execution	Likelihood of Incentivizing Producer (Impact Benefit)	Risk	Financial Benefit for Brand

BRAND INVESTMENT RENEWABLE ENERGY PROJECT PURCHASE PRODUCER

ANNUAL PROJECT PROFIT RETURN

RENEWABLE ENERGY PROJECT
PURCHASE

PURCHASE

PRODUCER

ANNUAL PROJECT PROFIT RETURN

Equity Investment in Renewables Project

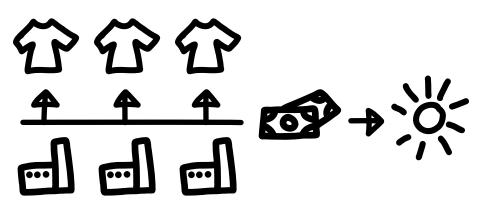
HYPOTHETICAL APPLICATION:

Acadia sources most of its t-shirts from multiple facilities in Pakistan. Because Acadia and several other large brands make up a significant portion of the regional economy, they have influence on the policy landscape and have been able to negotiate, along with a solar developer called Solana Innovations, a first-of-its-kind, large-scale solar project. This project will produce significant renewable energy for the region. Acadia and two other apparel brands agree to invest, making up 20% of the project. Acadia plans to recruit some of their strategic producers to offtake energy from the project.

REAL-WORLD EXAMPLE:

In 2023, Copenhagen Infrastructure Partners (CIP), a global renewable energy developer, announced a new wind venture in Bangladesh, estimated to cut emissions by around 725,000 tonnes per year. Fashion brands BESTSELLER and H&M Group have committed to investing in the project, with Global Fashion Agenda committed to recruiting other brands to participate.

Should the development progress as planned, operations are slated to commence in 2028. With an anticipated capacity of approximately 500MW, this initiative establishes the first utility-scale offshore wind farm in Bangladesh, supporting the nation's objective to generate 40% of its power from renewable sources by 2041.



CONSIDER THIS SOLUTION IF... you're optimizing a pro-producer approach to incentivize project implementation. you're optimizing for the lowest cost per tonne of carbon on brand investment. you're optimizing for simplicity and a limited number of players. you have a large budget for positive ROI projects. you have a large sustainability/unrestricted budget. your finance team prefers one-time-cost (operating expense) solutions as opposed to making investments. you have a strong balance sheet and can afford to add liabilities and/or take on financial risk. you have strategic producers you're willing to commit to long-term. you're able to incorporate sustainability into your sourcing decisions, and that's supported by your current process and organizational structure. **Additional considerations:** • This optimizes for impact across the industry rather than a brand's direct supply chain. It also provides a benefit to the entire region, not just specific producers, by creating renewables projects that might otherwise not exist, creating a flywheel for projects. • There is a multiplier effect; the equity investment unlocks commercial debt. • The local policy environment, including incentives and legislation, could help or hinder these types of projects.

ADVANCED PLAYS:

Combining Two or More

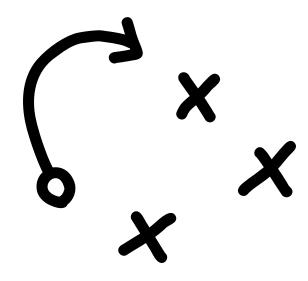
These plays listed above do not necessarily need to be treated distinctly. They can be mixed and combined to best fit the brand. producer, and project. This adds a level of flexibility but also complexity. We've provided some examples here of how these plays can work together, but there are dozens of permutations.

Brand-Supplied Debt + Long-term Purchase Agreements

Transformers Foundation's 2024 report "From Catwalk to Carbon Neutral" references a play where large brands and retailers give direct loans to producers with the expectation that the debt is repaid via discounts on future orders. This provides the twin benefits to suppliers of potentially affordable financing and assurance of long-term commitment from their brand customers. And, perhaps most significantly, the amount that the producer owes the brand is variable based on order volume. Therefore, if a brand decides to scale back on purchasing in a particular year, the producer can weather that downturn. Because of the risk to the brand or retailer, this is most likely to be offered to larger supply chain partners who are already credit-worthy, making it a less certain fit for SMEs.

Technical Assistance + VPPA Guarantee

Technical assistance is a critical building block for many of these plays; in fact, it should rarely be used on its own, as it's often not enough to sufficiently incentivize producer project investment. Combined with additional financial incentive, however, technical assistance and education can be powerful. Brae, a British strategy consultancy, manages Project Sycamore, which allows qualified producers to join a PPA Buying Cohort to solicit and contract on one or more aggregated renewable energy PPAs. Several large pharmaceutical companies have joined together to sponsor this initiative on behalf of their producers. The pharmaceutical companies pay Brae's fees for coordination and significant producer education.



Other Ways to Contribute

As mentioned in the introduction, these plays are far from the only ways that a brand can support its producers in their decarbonization efforts. These will certainly continue to play a part in the transition but should not represent a brand's full effort.

Technical Assistance Subsidy, Education & Program Fees

One common way for brands to subsidize the decarbonization journey is by paying for technical assistance and expert advice that producers often need before even embarking on factory improvements. Some technical assistance programs lead to projects that have excellent payback periods and a proven track record. Therefore, even though the eventual capital expenditures for improvements can be moderate to high, they can be excellent investments for the producer. There are many government schemes and financial tools available to producers for decarbonization projects, and brands can fill that gap by sponsoring the education and recruitment of facilities to these programs. However, as the producer is required to finance the recommended improvements, this play does not unlock more attractive financing than is traditionally available.

Many of the plays mentioned also require technical assistance subsidies. For example, in the case of the Guarantee Fee, the brand is responsible for paying a project management fee to fund the management of the matchmaking between financing and projects and to provide education to the facilities. As such, technical assistance subsidies can be thought of as a minimum or entry-level play: it's an important building block or first step rather than a complete strategy.

Venture Capital

Innovation is a key pillar for industry decarbonization, as the technology we currently have available will not be enough for the industry to reach its goals. Brands may opt to invest directly with innovators, helping bring exciting new technologies to market and potentially enjoying returns. For example, Zurich-based VC platform Collateral Good manages a €100 million VC fund called the Collateral Good Sustainable Fashion Fund, backed by Hugo Boss. It is investing €1 to 3 million into 20 to 25 startups in textile recycling, upcycling, novel dyeing processes, and supply chain transparency.

Scorecards and Common Standards

One of the common challenges that producers often recount is that meeting brands' sustainability requirements is a moving target: priorities are many and change frequently, they may not be communicated clearly, and producers need to meet the standards of many different brands. It can be helpful for brands to develop common scorecards, clarifying expectations as well as benefits for producers that excel. This is even more useful when brands collaborate and agree on measures that producers can work towards that meet the requirements of multiple customers.

Trade Finance

Producers often take on short-term loans at attractive interest rates to finance their working capital so they can deliver on an order for a brand. This is called "trade finance." Banks are often open to giving a small incentive on the financing to producers that meet certain brand requirements on scorecards. This is a way to reward producers that are adopting sustainable practices and also encourages producers to participate in reporting. The banks rely on the brand to educate their producers on these benefits and encourage them to complete the scorecards, so the brand plays a key role in matchmaking when it comes to trade finance.

For example, Levi Strauss & Co. works with IFC's Global Trade Supplier Finance (GTSF) program to provide low-cost capital and early payments on completed orders to suppliers that meet Levis' environmental and social standards. This allows suppliers to gain more liquidity at lower rates.

Producer and Bank Recruitment

There are myriad programs available to provide support for producers, from education to grants to equipment financing. Oftentimes, the program providers struggle to recruit producers for these programs. Brands can be instrumental in playing the middleman and helping with the recruitment effort to educate and enroll their producers in these programs. For example, many large equipment manufacturers offer leasing arrangements, under which producers can upgrade their equipment without making large investments upfront. However, producers often aren't aware that these programs are available to them.

Offsets

It's not possible to have a conversation about brand funds being used for sustainability without mentioning offsets. In contrast to directly lowering Scope 3 emissions, offsets represent projects that lower emissions elsewhere in the world, outside of the offsetter's own supply chain. Aii's perspective is that offsets do not replace the need to reduce Scope 3 emissions directly.

Shared Initiatives

In addition to creating common standards and scorecards, brands can collaborate on financing initiatives. Many of the plays in this playbook are more powerful when done by multiple brands together. Continued convening and collaboration between brands with shared producers is a key component to unlocking impact.

Even if a brand only sources a portion of the producer's volume, that brand would still need to guarantee the full purchase agreement or find another brand to partner with. Developers would not accept a partial backup for the contract.

Innovator Grant

It's widely recognized that there are not enough solutions on the market for the industry to reach net zero. Many of the solutions that are on the market will fail without additional support and funding to get to scale. The goal of continued innovation is to decrease the cost per tonne of carbon, maximizing the carbon-saving potential of all initiatives.

Brands can give grants to innovators to either create or scale a solution. Innovations can span all four tiers of the supply chain, from dry processing to next-gen materials. As a grant, the brand does not receive a return on its investment. Brands can give grants directly to innovators or give grants to a non-profit that then deploys grants.

Technical Performance Guarantee

When producers are considering the purchase of new equipment, a chief concern is that the equipment will be less efficient than their current setup and reduce their output. This is particularly relevant when the equipment is a new innovation, and the producer is considering being part of a pilot program. It's critical that new innovations are rolled out and tested, as some nascent equipment innovations will eventually result in massive carbon savings. However, it's understandably unappealing for producers to test out new equipment and risk their productivity.

In order to derisk a new equipment purchase, the brand can provide a technical performance guarantee. In the case that the new equipment fails to produce as efficiently as the old equipment, the brand will make up the difference, typically in the form of a cash payment for the loss in business. Likely, the equipment producer will also provide a guarantee of some kind to back up their efficiency claims, and so the brand is acting as a backstop in the case that the equipment producer can't or won't fulfill their obligations to the producer.

Conclusion

The apparel and footwear industry stands at a pivot point when action needs to accelerate to meet industry targets for 2030 and 2050. In addition to setting targets and creating action plans, brands and retailers must share the burden of financing supply chain decarbonization efforts, shifting the incentive dynamic that has stood in the way of meaningful progress.

Even within a brand organization, there are significant obstacles to successfully allocating additional brand dollars for project finance. Sustainability and finance professionals are facing their own misaligned incentives, often resulting in internal gridlock. Although knowledge alone cannot unlock funding, this playbook can serve to educate these teams on the opportunities available and provide a common language with which to discuss.

Although the amount of options can seem overwhelming, it also means that there is a play or combination of plays that meets the needs of every brand and project. Depending on the priorities, organizational setup, and risk tolerance of each particular brand or retailer, there are ways to leverage either philanthropic or treasury funds to make a significant impact on producers' ability to finance facility improvements.

As noted, not all plays are created equally. The most important criterion to factor in when creating a funding strategy is how appealing the play is to producers. If the brand funding is not going to result in projects, the exercise is pointless. Similarly, Aii recommends that brands focus on plays where the funding unlocks a larger pool of capital: one of the most powerful benefits of brand investment is the opportunity to act as a multiplier, as it's not scalable for brands to fully finance the transition.

In conclusion, apparel brands have a unique opportunity and responsibility to catalyze systemic change within the supply chains and become a model for other industries. By committing financial resources towards decarbonization projects, brands can not only mitigate their own Scope 3 emissions but also create a new market standard. It is imperative that brands move beyond traditional roles, like subsidizing technical assistance, and instead take bolder steps, like derisking debt and directly subsidizing investments in low-carbon technologies. By leveraging their financial stability and influence, brands can incentivize producers to prioritize sustainability without compromising their economic viability. Brands will need the support and cooperation of financial institutions, NGOs, and governments, but it is the brands that must lead the way.

About Aii's Sustainable Finance Work

To realize the ambitious target of enabling the reduction of 100 million tonnes of CO_2 e emissions by 2030, Apparel Impact Institute is calling for industry leaders to pool \$250 million in catalytic capital to unlock a total of \$2B in supply chain investment. This capital is strategically allocated across four key areas:

Providing Supplier Support: Directly empowering suppliers with essential technical assistance. This includes carbon technology assessments and efficiency programs such as Clean By Design, and developing thermal energy roadmaps. Our approach ensures suppliers are not only compliant, but also leaders in carbon reduction.

Identifying Proven Solutions: Through our rigorous request for proposal (RFP) and grantmaking processes, we focus on developing a Climate Solutions Portfolio dedicated to identifying and scaling proven decarbonization programs, solutions, and technologies that specifically target Scope 3 emissions, the most significant source of GHG emissions carbon in the apparel industry.

Driving Ecosystem Leadership: We are committed to catalyzing the industry's evolution by funding key activities such as the development of cutting-edge research, comprehensive reports, and program development. These initiatives are designed to unlock substantial reductions in carbon emissions, fostering a more sustainable industry ecosystem.

Leveraging Blended Capital Finance: Given that market-rate loans are often unaffordable for textile producers, the Fashion Climate Fund works with major financial institutions to derisk debt, resulting in more appealing financing. We provide critical financial mechanisms such as first-loss provisions, loan guarantees, and other support necessary for securing sustainable finance, paving the way for substantial industry-wide impact.

To make this vision a reality, over the next six years, Aii will engage with 2,000 suppliers across key production regions. We will provide comprehensive support, including technical assistance, sustainable finance options, and access to the best available technologies. Through these efforts, we aim to empower suppliers to implement effective climate solutions and drive tangible emissions reductions.

Credits

AUTHORS

Kay Bloomberg Chief of Staff Apparel Impact Institute

Ryan Gaines Chief Financial Officer Apparel Impact Institute

THANK YOU TO THE FOLLOWING REVIEWERS AND CONTRIBUTORS:

Amina Razvi

Bryant LaPres, Apparel Impact Institute

Emilio Bunge, Development Finance International

Eric Fisch, HSBC

Laxmikant Jawale, Apparel Impact Institute

Lewis Perkins, Apparel Impact Institute

Lisa Spetz, H&M Group

Lisa Wu, PVH Corp

Mallory McConnell, PVH Corp

Melissa Fifield, BMO Financial Corporation

Nakia Granberg, Apparel Impact Institute

Sanjay Sadarangani

Ulrika Leverenz, H&M Group

Vasilka Shishkova, HSBC

ACKNOWLEDGEMENTS



This report was supported by a philanthropic grant from HSBC to Apparel Impact Institute. The views and opinions expressed in this report are only those of authors, reviewers, and contributors, and do not reflect the views and opinions of HSBC.

HSBC is one of the largest banking and financial services organisations in the world. Its global businesses serve around 42 million customers worldwide through a network that covers 62 countries and territories.