Pathways to Circular Fashion in Vietnam

A REPORT ON THE VIETNAMESE FASHION SECTOR AND ITS POTENTIAL TO TRANSITION TOWARDS CIRCULARITY

A REPORT BY

Pathways to Circular Fashion

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ABOUT THIS REPORT

The Ida C. & Morris Falk Foundation (ICM Falk Foundation) is a private, 501c3 family foundation that supports innovation, entrepreneurship, and leadership that drives positive, equitable, and sustained impact for the world’s communities and ecosystems. Building on the global commitment to the Circular Economy, the Foundation is focused on the design and development of innovative solutions that contribute to the reduction of waste and pollution within Asia.

This report has been completed in collaboration with the Royal Melbourne Institute of Technology Vietnam (RMIT Vietnam) and their School of Design and Communications in 2022:

- Primary research conducted with industry-stakeholders interviews by RMIT Vietnam from July to September 2022 with transcription and analysis completed by October 2022 (see Appendix 1 for more information)
- Secondary research done by RMIT Vietnam for online artifacts analysis and literature reviews from June to July 2022
- Secondary research done by the ICM Falk Foundation team for broader desktop, market research in December 2022
- Writing, compilation of data and design by the ICM Falk Foundation team

The Fashion industry and its environmental impact

As international fast fashion brands expand into fast-growing markets such as Vietnam, their production shows no sign of slowing down and “will likely triple by 2050”. Globally, fashion production entails the production of approximately 60 million tons of plastic thanks to its reliance on synthetic fibers made from petrochemicals while simultaneously polluting waterways. These synthetic materials then contribute directly to the estimated amount of 14 million tons of accumulated microplastics released into the ocean and other waterways, including half a million tons per year coming from the simple daily task of washing our clothes. Adding to the microplastic pollution are the overproduction and under-recycling of these produced garments - an estimated truck worth of clothes is being dumped in landfills or burned in incinerators every second. The evidence is clear - fashion production and consumption are heavily contributing to the current waste and pollution crisis. This will likely not stop until a systemic change within the sector is implemented quickly and broadly.

With more international regulations governing the circular economy of plastics and sustainable fashion production, Vietnamese firms will not be exempt from complying with such regulation when participating within the global trade for textiles, and more particularly synthetic fibers. In parallel, consumer misconceptions due to greenwashing practices are still permeating the sector, both within international and local markets alike. Limited research has been conducted in Vietnam to audit Fashion’s waste streams and their treatment, to understand consumer behavior change and to uncover upstream innovation opportunities to effectively tackle fashion waste at the source.
This report aims to provide an overview of the state of play in Vietnam’s fashion sector, and the opportunities and challenges that lie ahead as it transitions to a circular economy. Based on the findings, several recommendations as to how Vietnam-based businesses can transition toward circular fashion will be presented.

In addition to this is the first report promoting dialogue and collaboration between industry stakeholders for Vietnam’s circular fashion economy, further research and market reports should be conducted in the following areas in order to grasp the full picture of the state of play: a textile-focused waste audit, in-depth research into secondhand clothing imports, life-cycle assessments for new fibers and fabric alternatives made in Vietnam, deeper financial research into breakeven price points for products and services, as well as research/mapping for funding opportunities and mechanisms for the sector.

ABBREVIATION

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CMT</td>
<td>Cut-Make-Trim</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EOL</td>
<td>End-of-life</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<td>LE</td>
<td>Large enterprise</td>
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<tr>
<td>MNC</td>
<td>Multiple National Company</td>
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<tr>
<td>P2P</td>
<td>Peer-to-peer</td>
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<tr>
<td>OBM</td>
<td>Original Brand Manufacturer</td>
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<tr>
<td>ODM</td>
<td>Original Design Manufacturer</td>
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<tr>
<td>OEM</td>
<td>Original Equipment Manufacturer</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>SME</td>
<td>Small and medium-sized enterprise</td>
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<tr>
<td>T&amp;G</td>
<td>Textile and Garment</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States of America</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>VND</td>
<td>Vietnam Dong</td>
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<td>VITAS</td>
<td>Vietnam Textile &amp; Apparel Association</td>
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DEFINITIONS

**Buy-back:** Buy-back refers to the practice of fashion companies buying their own products from consumers at a lower cost in order to resell them at a more advantageous price. In fashion, buy-back programs are usually part of a resale strategy from fashion brands to add revenue.

**Circular fashion:** Circular fashion refers to the practice of keeping fashion products in circulation as long as possible through various tactics: resale, rental, repair, remaking, recycling.

**Consignment:** Consignment models in fashion involve a third party (online platforms and/or brick-and-mortar shops) receiving and managing products from buyers and selling those products for a certain price with service fees to buyers.

**Doi Moi:** Series of economic reforms starting from 1986 aiming to shift the Vietnamese economy towards a "socialist-oriented market economy".

**End-of-life (EOL):** EOL refers to the last stage of a product’s life-cycle. For fashion products, it refers to their disposal once they cannot meet their expected usability level. In a circular economy, EOL options would also include recycling.

**Ethical fashion:** Ethical fashion refers to a set of practices within the fashion industry that focus on respecting workers’ rights to eliminate abusive practices (sweatshops, illegal labor, etc.).

**Fabric:** Fabric refers to a type of textile used to produce a piece of garment.

**Fast fashion:** Fast fashion refers to a set of practices by fashion companies to create, produce and sell a high volume of fashion goods per year with new collections every season or even month. Fast fashion goods are usually referred to as “mass” or “mainstream” fashion with trends replicating the latest fashion in higher segments of the industry.

**Fashion:** Fashion is a global industry devoted to the making and selling of clothes, encompassing both “high fashion” and “mass fashion” with related industries ranging from design, manufacturing, distribution, marketing, retailing, and promotion of all types of apparel.

**Feedstock:** Feedstock refers to the main inputs necessary for a manufacturing process to function.

**Fiber:** Fiber refers to threads from natural or synthetic origins that can be woven into textiles and fabrics. The most common synthetic fiber, polyester, comes from petroleum.

**Greenwashing:** Greenwashing “refers to the practice of falsely promoting an organization’s environmental efforts or spending more resources to promote the organization as green than are spent to actually engage in environmentally sound practices.”

**Garment:** A piece of clothing.

**Gen Z:** The global population born from 1997 & 2012.

**Large enterprise (LE):** In Vietnam, a large enterprise (LE) is an enterprise with a charter capital of more than VND 100 billion ($4.4 million USD) or with a number of employees over 300.

**Life-cycle:** Life-cycle refers to the duration of a product going from conception to disposal.

**Manufacturing:** Manufacturing refers to the production of goods using various tools and processes.

**Millennial:** The global population born from 1984 & 1996.

**Multinational corporation (MNC):** An MNC is a company that has business operations in at least one country other than the country of origin.

**Peer-to-peer (P2P):** P2P business models in fashion refer to individuals directly exchanging to reselling and renting their fashion products to each other through community groups or dedicated platforms.
Recycling: The process of collecting materials at their end of life and converting them back to their simplest material form in order to create new products at equal or similar economic value.

Remaking: The process of assembling various existing products into a new product/object for an extended usage.

Repair: The process of returning a broken or faulty product/object to its original level of purpose.

Reuse: The process of reutilizing a product/object multiple times over a long duration at the same level of usability

Slow fashion: Practices in fashion promoting better production and consumption that will not harm the planet and people, while ensuring a just profit distribution.

Small and medium-sized enterprise (SME): In Vietnam, a SME is an organization with no more than 100 people and a total annual turnover of not more than VND 300 billion or a year’s total capital not exceeding VND 100 billion.

Start-up: Startups are companies in their early stages, usually founded to develop a unique and/or disruptive product or service for the market.

Sustainable fashion: Sustainable fashion refers to a set of practices within the fashion industry that would extract resources and produce fashion goods and services while respecting the environment, workers and a viable bottom line in order to tackle various issues such as waste, pollution and workers rights.

Textile: Textile encompasses various types of materials used in the fashion industry and can be made from various sources of fibers, yarns and fabrics.

Value chain: A value chain refers to various activities involved in producing a finished product, from the design stage to the delivery to consumers.

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This report is the first of its kind discussion on the circular transition and business innovation of Fashion in Vietnam. This report highlights the most pressing issues that Vietnam faces in its journey towards circular fashion, as well as the subsequent circularity opportunities for fashion manufacturers, retailers and entrepreneurs in Vietnam.

**Vietnam is a dynamic and complex market where opportunities exist at both ends of the value chain to produce and consume fashion more responsibly.**

65% of Vietnam’s fashion exports are at the CMT phase whereas higher value-add products and services (notably product design) are still underrepresented due to a lack of both internal capacities and the latest green textile technologies. Domestically, since 2016, international fast fashion brands have started penetrating the Vietnamese market. However, thanks to Vietnam’s e-commerce boom, there is a growing, competitive market of local and independent brands amongst whom a few standout slow fashion ethos-based brands exist (ie., utilizing responsible materials sourcing and traditional craftsmanship techniques).

However, stakeholders across this value chain experience (1) **high price sensitivity** both from international buyers and local consumers who are more aware of alternatives to fast fashion but reticent to pay for sustainability premiums, and (2) **higher requirements for equipment**,
Overall, circular innovation will allow the local fashion sector to tap into a fast-growing global market.

Digitalization and legal compliance; furthering the gap between smaller and larger companies.

Vietnam is the ideal testing ground for circular solutions to close loops across the value chain and to build its own, vertically integrated market share, from production to consumption, as the country progresses towards higher living standards, better socioeconomic conditions and more sophisticated manufacturing practices.

Circular innovation will become a necessary framework for the Vietnamese fashion sector to reach its climate goals and grow sustainably.

Upstream innovation and circularity will become crucial for the fashion sector in Vietnam as water pollution and textile wastage will become a more prominent issue, in parallel with population growth. Within the current linear model, a fashion product will most likely end up in a landfill or be incinerated. Very few recycling or remaking options exist within the country for garments, despite continued growth of clothing consumption and requisite production.

Pre- to post-consumer stakeholders in the fashion value chain can all benefit from removing (or minimizing) waste from the early design stages and keeping products in circulation for a longer period of time. By collaborating with each other and fostering more interest with local universities and with the startup sector, the Vietnamese fashion industry stands to benefit from (1) increased technology imports for manufacturing and recycling with upskilled or adequately-trained personnel and (2) new locally-sourced/produced materials that will reduce the reliance on imported materials. Moreover, technology-driven and enabled circular services such as consumer facing resale and rental business models will become the new frontier for generating new revenue streams while keeping products in continued circulation.

Overall, circular innovation will allow the local fashion sector to tap into a fast-growing global market. The expected value of the global circular fashion market is predicted to represent over US$700 billion by the end of this decade. Sustainable fabrics will also represent a US$69.5 billion opportunity - ranging from recycled textile to regenerative crops. Investing in sustainability and circularity in particular not only promises environmental benefits, but also provides financial and economic returns to firms, large and small.

Textile Factory, Canva.com, accessed January 22, 2023
The unsustainable linearity of fashion

Clothes, and textiles for the creation of other products, are being produced at increasingly greater volumes than ever before. Given the extremely diverse and complicated supply chain associated with their production, whereby 85% of final products are eventually deposited into global landfills post-use, the fashion industry is now considered one of the world’s biggest polluting sectors.

The industry, inherently driven by the rapidly changing nature of fashion, thrives off of “newness”. This, coupled with consistently increasing levels of consumption and growth, further drives the fashion industry’s excessive use of water, energy, and carbon dioxide output. The fashion industry is expected to produce 148 million tons of global waste in 2030, equating to a 61% increase from its current levels. Of this waste, only 13% is recycled globally, and only 2% within developing countries like Vietnam – the world’s third largest apparel exporter. In contrast to its production growth rate, profit margins within the US$1.5 trillion industry have been shrinking significantly - a 90% decline under the impact of Covid-19, showcasing the industry’s vulnerabilities to negative externalities.

It is increasingly evident that the traditional linearity of the fashion industry (take-make-waste) has substantial downsides that are further exacerbating our social and environmental challenges. With no remediation plan in sight, the biggest players in the industry are expected to overwhelm the market with underused, overproduced fashion items. Striking examples from recent years still remain relevant - US$4.3 billion worth of unsold inventories from a major fast fashion brand went to incineration plants in Sweden and over 3.1 metric tons of secondhand garments remain unsold at charity shops in the United States.

Amid growing concerns over fashion’s sustainability, the concept of circular fashion has emerged as the most promising solution to the industry’s waste problems whilst addressing its financial woes.

Upstream innovation and Circular fashion as a path forward

Aligned with the principles of a circular economy, Circular fashion goes beyond simply recycling, to solve the waste problem before it ever happens. Defined as the slowing down or extension of fashion product life cycles, circular fashion aims to transform existing production and consumption practices so that fashion products stay in the fashion loop for longer.

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1 Global textiles production almost doubled between 2000 and 2015, and the consumption of clothing and footwear is expected to increase by 63% by 2030. Source: European Commission (2022). EU Strategy for Sustainable and Circular Textiles. Link

2 A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Source: Ellen MacArthur Foundation. What is the circular economy? Link
In a circular economy, upstream innovation is about tracing a problem back to its root cause and tackling it there. It means that rather than working out how to deal with a pile of waste, we prevent it from being created in the first place.

– Ellen MacArthur Foundation

A framework for the future of circular fashion with an upstream approach has been proposed with 3 focus areas and respective circular business strategies as follows:

**Inputs** - Safe and renewable inputs (from fibers to packaging): eliminating substances of concern and microfiber releases by switching to sound renewables.

**Remaking** - Turning used clothing into new (remaking, recycling, redesigning products and processes so that materials are ready to be made again)

**New business models** - Maximizing clothing use (resale - also known as secondhand/re-commerce, rental, repair), innovating how businesses work by detaching revenue from production and resource use.

**Source:** Ellen MacArthur Foundation
By adopting circular models, Vietnam’s fashion businesses can create added value from the design stage to the product’s end of life.

Unlocking billion dollars opportunities with Circular fashion

Embracing “models of circularity” allows fashion businesses to uncover huge growth potentials while avoiding negative socio-environmental impacts. It is estimated that the global economic value of circular fashion business models will grow to US$700 billion by 2030 – equating to 23% of the fashion market. Simultaneously, the bioplastic market for textiles is expected to reach US$1.8 billion globally by 2031.

It is evident that the global momentum for circular fashion is underway as governments and industries are making commitments to secure the economic and environmental benefits of greening the fashion industry. However, it is estimated that only 8.6% of existing materials and products are cycled within the global economy, leaving a massive gap towards full circularity. More tangible efforts are therefore required to turn the tide and cut fashion’s annual emissions in half to around 1.1 billion metric tons in 2030 and achieve the collective vision of an entirely circular fashion industry by 2050.

Greenwashing holding the industry back

Despite positive efforts, there have been growing concerns over the use of “circularity” or “sustainability” in marketing and communications strategies to mislead buyers about the environmental benefits of their products. Prominent fashion brands frequently claim to use less virgin materials and more recycled/sustainable textiles, failing to address key issues such as processing these materials at their end-of-life, identifying the nature/origin of their materials, or the carbon footprint of their recycled textile sourcing practices. This practice of greenwashing hence emerges as a major hindrance toward a more authentic, trusted, standardized and sustained level of awareness and adoption of circularity around the world.

While regulators are working on legal frameworks and standards to curb false sustainability claims, industry stakeholders around the globe are investing into much-needed new technologies and data to report their sustainability and circularity claims. Traceability of complex supply chains such as that of the fashion industry, is not an easy feat and requires considerable effort from each stakeholder to assess their own part of the value chain. However, the key first step is to foster the right attitude in communicating a company’s goals and establishing industry wide standards in order to build the necessary trust for consumers to adopt new fashion products and services.

Circular fashion: The case for Vietnam

The Southeast Asia region – as a significant contributor to the global fashion value chain (from design to point-of-sale) is gearing up for a circular revolution in fashion.  

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1 A bioplastic can be defined as a polymer that is manufactured into a commercial product from a natural source or renewable resource. Source: Alfred Rudin, Philip Choi. The Elements of Polymer Science & Engineering (Third Edition). 2013. [Link](#)

6 The “EU Strategy for Sustainable and Circular Textiles” issued by the European Commission presents its commitments to a circular fashion industry, which will result in a positive impact on other non-EU producing countries’ practices. Source: European Sustainable Business Federation (2020). Circular Fashion and Textile Producing Countries. [Link](#)


8 Carbon footprint refers to the amount of greenhouse gases emitted during an activity or process. Source: The Nature Conservancy. What is your carbon footprint? [Link](#)

9 “[In 2022], regulators in the U.S., Britain, Norway, and the Netherlands have collected millions of dollars from companies found to be making false environmental claims — greenwashing.” Source: Greenbiz (2022). What to know about Europe’s new anti-greenwashing laws. [Link](#)
For Vietnam, fashion is the second-largest export turnover and a key contributor to its economic growth. To ensure sustainable growth and remain competitive in global markets, the government is drafting new frameworks to institutionalize the transition to a circular economy and achieve net-zero carbon emissions by 2050. The Vietnam’s Textile and Apparel Association\(^{10}\) has also established ambitious goals with regards to green fashion production including reducing its energy consumption by 15% and its water consumption by 20% by 2023.

In adopting circular models, Vietnam’s fashion businesses can create added value from the design stage to the product’s end of life while meeting the rapidly changing demands and expectations of local and global consumers, including sustainability. The Vietnamese sustainable apparel share is expected to experience a 25% increase from 2022 to 2025, representing huge market opportunities for entrepreneurship with circularity. Recognizing global trends and local demands, several local fashion enterprises in Vietnam have adopted circular models, and their results offer examples of scalable solutions.

These circular pioneers are, however, facing several key challenges to embracing circularity and attaining the required scale to achieve a tipping point for scaled adoption. These constraints range from raising consumer awareness and changing consumer behavior to securing adequate financing along with requisite technical and technological support. Further inhibiting adoption is greenwashing, which remains a considerable challenge for circular businesses, as this practice has resulted in a lack of confidence in legitimate green claims from local consumers.

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\(^{10}\) The Vietnam’s Textile and Apparel Association (VITAS) is a socio-professional organization established since 1999 with 1000 participating parties. It has been working closely with enterprises and the Government in making strategies and development programs for the whole industry. Learn more [here](#).
Fashion has significantly contributed to Vietnam’s socio economic development since Doi Moi, accounting for over 15% of the country’s total GDP, and has contributed a turnover of over US$40 billion annually. As a labor-intensive industry, Vietnam’s fashion sector employs approximately 3 million people, accounting for more than 10% of the industrial workforce.

Despite enjoying notable economic benefits, numerous Vietnamese communities have been dealing with serious environmental and health threats as a result of manufacturing and consumption of fashion products. Without adequate and effective law enforcement and innovative solutions, these threats directly impact the quality of life of local populations and hinder progress towards Vietnam’s sustainability objectives within the United Nations 2030 Agenda. A deeper understanding of the current conditions within the fashion sector in Vietnam and its value chain, provides the clear case for the country’s transition towards circular fashion business models, their supply chains and other associated stakeholders.

The Vietnamese Fashion value chain and key trends

Fashion plays a sizable part in the development of Vietnam’s growing market. It is greatly influenced by globalization with a complicated flow of materials and products which involves a diverse set of cross-sectoral, transborder stakeholders. A summary of the stakeholder map and value chain is illustrated as follows:

Figure 1: Value chain and key stakeholders of Vietnam’s fashion sector

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1 The Vietnamese government launched a National Action Plan in 2017 to achieve the 17 Sustainable Development Goals from the 2030 agenda set out by the United Nations, ranging from hunger alleviation to environmental protection goals (Source).
Reliance on raw material imports and finished products

For Vietnam, the fashion value chain leans towards the model of an industrial/production sector rather than a design/creative one. With very modest participation in the design stage, 65% of Vietnam’s total fashion apparel exports are cut-make-&-trim-based (CMT)\(^2\) – the lowest added value process throughout the value chain. Yet despite being among the top global fashion exporters, Vietnam has to import most of its raw materials (fibers, fabrics, and auxiliary materials) to fuel manufacturing, which sets its localization rate at only around 50%. Limited domestic capacity in materials production and sourcing has resulted in increased production costs, hence reducing the competitiveness of Vietnam-made apparel products within global markets.

In addition, only a small fraction of what is manufactured in Vietnam is retained and sold for domestic markets. To meet growing local consumption demands, Vietnam has to re-import both branded and unbranded clothing via international brands or traders. In 2020, Vietnam’s total textiles and clothing imports was valued at US$54 million, 10 times higher than its regional counterpart – the Philippines, and 5 times higher than Thailand.

Booming domestic retail market

Amidst the explosive era of internet and social media, the way fashion has thrived has drastically changed. Vietnam’s middle class is growing, and young consumers such as Gen Z, with growing disposable income, are eager to shop, spurring demand for greater choices in product and brand categories. Increased purchasing power across the country’s landscape has resulted in the growing popularity of fast fashion – a new consumption trend that thrives on newness and quick turnaround, oftentimes compromising quality and socioeconomic impact for price point.

Simultaneously, the rise of e-commerce has become a boost for domestic apparel consumption, with 61% of respondents in a Nielsen survey reporting being familiar with fashion e-commerce. In Asia, the online share of total fashion retail sales reached 40% in 2022 – the largest market in the world, and is projected to continue growing significantly, offering huge market opportunities for fashion entrepreneurs to tap into.

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\(^2\) CMT represents the lowest added value stage in the entire value chain: CMT (1%-2%), OEM - Original Equipment Manufacturer (4%-10%), ODM - Original Design Manufacturer (25-30%), OBM - Original Brand Manufacturer (100% value chain). Source: Vietnam General Confederation of Labour (2019).

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Emerging market for eco-conscious fashion brands

Despite fast fashion trends with both international and local brands looking to ride the wave of the growing fashion market, Vietnamese consumers are becoming savvier in their consumption habits. Sustainable and even circular brands are gaining more prominence in Vietnamese mainstream media outlets - ranging from innovative new materials to new business models such as vintage clothing shopping leveraging celebrity culture.

However, these brands and companies still need to overcome perceptions of their luxury image and the cost of their sustainability premium. With items having to reach acceptable price points for mass adoption, alternative supplies too scarce to access and, the lack of appropriate technologies to scale, the Vietnamese sustainable and circular fashion field remains a considerably niche market with untapped potential.

Swelling pollution – or wasted opportunities?

The fashion industry relies mostly on non-renewable resources and releases immense carbon footprints at all phases, with 70% of its emissions rooting from upstream activities (materials production, preparation and processing) and with the remaining 30% coming from downstream retail operations. Following a linear value chain, Vietnam’s fashion sector contributes significantly to both industrial and consumer waste by sending finite resources directly into the landfill after use while turning large amounts of water, chemicals and byproducts into waste along the process.

For instance, cotton - Vietnam’s major import for fashion production - is among the most water-intensive agricultural crops. Yet, one-quarter of manufacturer-purchased materials worldwide still go to waste every year as by-products which could have either been repurposed or recycled. Additionally, treating 12–20 tons of...
textiles can release roughly 1,000–3,000 m³ of hazardous wastewater, constituting a serious risk to the environment and human health through air evaporation. This provides a challenge for local manufacturers and brands to re-think their approach to production in order to maximize resource use and eliminate waste while creating higher added value to the consumer.

Another important facet of Vietnamese fashion's waste issues lies in discarded clothing. The continuous change in fast fashion has intensified the consumption of short-lived garments, and with it, the tendency to waste and underutilize clothing without appropriate recycling facilities (especially for mixed fibers). Surveys show that about 4 out of 10 Vietnamese people (43%) admitted to giving or throwing away a clothing item immediately after its first use. Globally, US$500 billion is lost every year due to clothing being barely worn and rarely recycled.

Additionally, excessive use of packaging in retail and transportation is also challenging the country’s waste management capacity, which in itself is considered ineffective - with up to 80% of recyclable plastics waste in Vietnam going to local landfills.

Combining both pre and post-consumer waste, the current fashion industry in Vietnam and around the globe is operating at unsustainable levels to responsibly manage its projected growth.

Going circular – the sustainable way forward

It is evident that the current fashion industry has not been designed for longevity. After years of participating in the global value chain, Vietnam’s fashion industry still depends heavily on processing for export, with relatively low added value.

A design-led revolution for a circular fashion industry involving all stakeholders provides the next stage of evolution for the Vietnamese fashion sector.

With a compound annual growth rate of 9.1%, the global ethical/sustainable fashion market is projected to reach US$7.57 billion in 2022, suggesting that consumer demands and expectations of fashion enterprises are changing rapidly – internationally and locally.

Tackling the growing consumer market consumption (and waste) with circular models as well as integrating export outputs domestically will provide exponential financial benefits to the Vietnamese market. Given rising concerns over sustainability, adopting circular tactics is also a must for Vietnamese manufacturers and retailers to continue to remain competitive in the global value chain where major global fashion markets like the European Union
are increasingly requiring their trade partners to comply with sustainability and circular economy principles from sourcing and manufacturing (recycled content, resources and energy efficiency, etc) to quality control (reusability, reparability, ease of maintenance and refurbishment, etc).16

Going circular means Vietnam needs to move further upstream and vertically integrate into the early stages of the value chain and production stream - towards higher value-added production modalities of OEM, ODM & OBM. This can be achieved by improving its capacity to engage in the design and sourcing stages to drive the development of Vietnamese clothing brands. To increase its competitiveness in the global market, Vietnam also needs to "be a pioneer in making green products, recycled products and orienting towards circular products."– Chairman of the Board of Directors of Vietnam National Textile and Garment Group.

Several local startups have been quick in adapting to these new market dynamics and have begun providing circular solutions to capture the shift toward e-commerce and Vietnam branded products. Responsibility lies in the hands of manufacturers, entrepreneurs, and governments to educate consumers and to shift their consumption patterns towards circularity. Philanthropic organizations and NGOs can also become strong allies for the sector to educate the public. However, consumers can also play a key role in creating demand for circular products and services while benefiting directly from supporting innovative and circular models such as rental, or re-commerce to meet the demand for on-trend, high-quality clothing at a much lower cost.

Ultimately, embracing innovative models of circularity not only benefits the environment but also manufacturers, entrepreneurs, and consumers.
Pathways to Circular Fashion in Vietnam

As a fast-growing market, Vietnam is at a unique position within the global supply chain for textiles and garments. With growing consumer demand from its middle-class and an established manufacturing stronghold since the Doi Moi period, Vietnam has established a solid foundation for the sector to thrive. Manufacturers and retailers co-exist within a dynamic labor, consumer and export/import market where these stakeholders need to answer to both international and local markets. Major industry-focused media outlets and local brands are also stepping up and joining the sustainable fashion discussion. However, given an expected apparel market size of US$6 billion in 2023, the number of major fast fashion brands already present within the market, and relative overconsumption on the rise, what efforts are necessary for circularity to be sustainably adopted at scale?

**Vietnam’s vision to achieve the 2030 SDGs for the textile industry**

With over 16 free trade agreements between Vietnam and its international trade partners, Vietnam-based manufacturers are faced with global market demand for more responsible production processes, stricter socio-environmental compliance and competitive pricing. Within the Vietnamese market, consumers are also becoming savvier to the necessity of responsible production, as well as new models for fashion consumption such as secondhand clothing and rental models.

Fashion industry stakeholders from the EU, UK, USA, and Australia are requiring sourcing companies or material suppliers to increase their compliance with sustainability and circular economy requirements. As such, to retain consumers from lucrative global markets, Vietnamese businesses are required to review their current practices of production and their supply chains for possible transformation.

New policies on circular transition for Vietnam and multiple legal decrees on waste treatment are signaling a push toward Vietnam’s competitive positioning in the global scene. Current legislation is focusing on “greening up” production and logistical practices (by-products from the manufacturing processes such as toxins and water treatment), more transparency via audits and certifications and in creating a unique competitive advantage for the Vietnamese macro-market in view of the 20230 National Action Plan.

### STATE OF CIRCULARITY IN VIETNAM’S FASHION INDUSTRY

<table>
<thead>
<tr>
<th>Area of application</th>
<th>General application</th>
<th>Efficient energy usage</th>
<th>Water extraction, use and management</th>
<th>Management and use of chemicals</th>
<th>Waste management</th>
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<td>5</td>
<td>3</td>
<td>4</td>
</tr>
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<td>Examples</td>
<td>Law on Environmental Protection no. 55/2014/QH13</td>
<td>Decision 280/QD-TTg</td>
<td>Decree 20/2013/ND-CP detailing the implementation of select articles from the Law on Water Resources</td>
<td>Law on Chemicals no. 06/2007/QH</td>
<td>Decree 38/2015/ND-CP on waste and scrap management</td>
</tr>
<tr>
<td>Impact on businesses</td>
<td>Requirements and objectives for investors and manufacturers to implement a green production chain</td>
<td>Requirements and objectives for new energy consumption levels in factories</td>
<td>Requirements and objectives for water conservation, especially groundwater and water conservation in factories</td>
<td>Requirements on treatment of toxic chemicals into the environment and safety guarantees</td>
<td>Requirements and instructions for manufacturers on all byproducts’ treatment (textile, water)</td>
</tr>
</tbody>
</table>

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8 4 out of 10 Vietnamese people (43%) admitted to giving or throwing away a clothing item immediately after its first use. **Source:** Tấn N. T. (2022). Awareness of fast fashion impacts on the environment (Nhận thức về ảnh hưởng của thời trang nhanh tới môi trường). Link

9 By 2030, Vietnam’s textile and garment industry will become the number one destination for customers who want to find a sustainable supply of textile products that do not have harmful effects on the environment and people. The industry will operate in a circular, efficient and sustainable manner in terms of water and energy use, adopting responsible wastewater and waste management practices. **Source:** WWF (2020). Guidelines for Greening the Textile Industry in Vietnam (Hướng dẫn Xanh hóa ngành Dệt May ở Việt Nam).
Turning ambitions into actionable business practices

Moving towards a more valuable, upstream positioning of the global supply chain also requires a look into more innovative practices, ranging from circular business models to improved talent in design capabilities. For Vietnam, businesses are faced with the impediment of innovating and transforming their practices quickly in order to catch up with the international markets’ requirements for circular product design and clean production processes. Simultaneously, industry stakeholders are also burdened with justifying the sustainability premiums\(^{20}\) in their products’ price to their consumers as costs are still highly affected by the following challenges\(^{21}\):

1. **Technology and talent support**
   Local manufacturing firms struggle to innovate their production chain, as well as equip their staff with upskilling opportunities, causing a loss of competitiveness when it comes to higher-value export items (noticeably within products considered sustainable). Moving towards cutting-edge equipment and machinery is necessary for Vietnamese manufacturing firms to stay competitive and compliant in a fast-moving sector. Complementing the effort should be vocational training and general development of tertiary education to create an adequate talent pool which can help firms transition and operate with new world-class methodologies and technologies.

2. **Consumer and general public awareness**
   Global and local demands are hindered by greenwashing practices due to low awareness from both buyers and sellers. However, the younger generation and rising middle class with more disposable income are becoming savvier consumers who can access information easily and make better consumption decisions. Vietnamese firms can focus on more responsible marketing campaigns that aim to educate consumers in an honest and transparent manner, while also promoting profitable business models.

3. **Financial support to transition and grow**
   Similar to the Missing Middle scenario, identified as a hindrance to impact innovators, both new and established textile and garment companies are also faced with difficulties tapping into international development aid programs or traditional financing as their scale and capabilities are still not aligned with funders’ expectations. Innovative, flexible funding or collaborative models are necessary tools for a circular transition in Vietnam.

Coupled with industry-specific challenges are specific issues inherent to the adoption of a circular product and service:

- **Tipping point for mass market adoption**
  The above mentioned challenges expressed by industry stakeholders are inherently linked with their ability to buy and sell sustainable supplies/products at scale. Hence, mass adoption mostly relies on an acceptable sell/buy price point in order to attract more customers and consumers.

- **Inter-sectoral collaboration for innovation adoption**
  Go-to market support for innovative fashion products and services, along with open innovation programs from universities and fashion LE/MNCs are also key to bolstering more sustainable and circular initiatives in the Vietnamese fashion sector. These initiatives will help open up new revenue streams, offer new product piloting grounds and most importantly, visibility to a new way of producing and consuming fashion.

\(^{20}\) Sustainability premiums are the additional costs of choosing an environmentally-conscious product that respects the planet, workers and bottom lines equitably that consumers are willing to pay.\(^{\text{Research}}\)

\(^{21}\) Based on 13 interviews conducted by the RMIT School of Design & Communication team in 2022 – see Appendix I for more details.
Technology and talent support

In order to catch up with increasing consumer awareness, demand for recycled and natural fibers has skyrocketed, equating to a capital investment need of US$10 billion by 2025.

As of today, the Vietnamese garment sector is heavily dependent on raw materials imports for fibers, yarns and more importantly fabrics as locally-produced textiles are still not up-to-par for export quality. Vietnamese apparel producers import a large quantity of fabrics (more than 70% of the total volume of fabrics used) and trims (2/3 of total consumption) from non-CPTPP country members such as China, Korea and Taiwan.

Investment into new technologies, such as carbon dioxide dyeing, digital printing and ozone technologies, improves quality, productivity and energy efficiency in alignment with international standards. However, Vietnamese fashion SMEs expressed their struggles to move away from current obsolete technologies producing both lower-quality and low-value materials.

According to interviewed SMEs, the challenges stem from a lack of funding schemes for SMEs to capitalize costly machinery as well as in managing an extremely small pool of qualified talent, to guide them in installing these new technologies.

Consumer and general public awareness

Attitudes towards sustainable fashion are still heavily influenced by greeningwashing practices, general overconsumption and a low understanding of end-of-life opportunities for (under)used garments. However, global demand to steer towards affordable and/or slow consumption of fashion is also on the rise. The case is not much different for Vietnam - current perceptions by brands and entrepreneurs are mixed regarding the Vietnamese customer base.

On the one hand, Vietnamese customers lack awareness about fashion sustainability in general and circularity in particular, hence additional efforts from retail brands and other stakeholders such as the government, NGOs, philanthropy, etc. are required to educate their customer base via online campaigns.

For example, according to local fashion entrepreneurs and industry professionals, attitudes towards second hand clothing remain lukewarm with middle-aged demographics completely disregarding the option, due to the cultural stigma of “old clothing”. Younger generations are more likely to embrace these options as a viable path for self-expression and individualism, but still consider sustainability as a luxury.
On the other hand, Millennial and Gen Z customers, making up over half of the population in Vietnam, are considered the future of responsible and sustainable consumption. More Vietnam-based brands are preferred by these consumers thanks to positively perceived sustainable practices such as locally-sourcing materials (silk, organic cotton and hemp), traditional textile processing methods (indigo and yam dyes) and ethical employment methods (minority and disadvantaged communities)\textsuperscript{26}. However, the sustainability premiums for these fashion garments, which are perceived as higher-end products\textsuperscript{27}, still represent a hurdle for brands to further penetrate this demographic.

Alternatives do exist where circular services such as secondhand resales or rentals can offer price-competitive clothing. However, according to interviewed industry stakeholders, these younger consumers often lack the willingness to adopt these services, due to the lack of an acceptable price point and minimal availability of style and materials.

Overall, Vietnam-based circular entrepreneurs and brands still need to bear a double burden to drive adoption - becoming price-competitive compared to both sustainable and mainstream fashion brands while maintaining an edge in their branding to attract and retain these new consumers.

### Financial support to transition and grow

Going green does not come cheap. According to a McKinsey insight in 2022, “spending on the physical assets needed to reach net zero will amount to [...] US$3.5 trillion of new spend per year to 2050”.

For Vietnam-based textile and garment companies, the financial transition has been translated into various funding programs from foreign aid and international development agencies in collaboration with local banks providing green loans and bonds in Vietnam. LE and their MNC counterparts are also heavily involved in new investments for their suppliers’ factories in terms of green energy transition through solar panel installation, capacity-building programs for their staff and certification support for their supply chains.

However, these programs are still not adapted for small-and-medium manufacturing enterprises and local Vietnam-based fashion firms who are not as well integrated into these international programs. Clear needs have been expressed for better funding opportunities\textsuperscript{28} via credits and loans in order to (1) invest in technological improvements creating better products in alignment with international demands, (2) train and upskill their workforce and (3) educate their consumers with better marketing campaigns.

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\textsuperscript{26} Artefact research and analysis provided by the RMIT School of Design & Communication team in 2022

\textsuperscript{27} A local slow fashion brand retails t-shirts and tops between VND 1,500,00 and 2,000,000 whereas a similar alternative sold by a mainstream brand retails from VND 290,000 to 500,000 (as of December 2022).

\textsuperscript{28} Based on 13 interviews conducted by the RMIT School of Design & Communication team in 2022 - see Appendix 1 for more details.
Opportunities for circular solutions in Vietnam

Vietnam, being fully integrated in the global supply chain and representing a thriving consumer market, can be at the forefront of the circular transition with existing circular practices found in the country. However, those practices still remain unleveraged to their full extent:

- International markets represent a growing demand for sustainable and ethically produced fashion, including recycled textiles and increased socio-environmental compliance;
- With the upcoming 2023 global manufacturing slump, the ability to offer more diverse supplies - from recycled materials to originally-designed products - will become a unique selling point for the country in order to maintain Vietnam’s competitiveness;
- The local market, with a changing attitude towards consumption led by the Gen Z consumers, represents an opportunity to move beyond the simple slow fashion and upcycling movements and into a more holistic understanding of “closing the loop” in fashion consumption, both in terms of end-of-life treatment and alternative consumption;
- With a global secondhand market expected to grow 3x faster than global apparel retail by 2026, Vietnam-based fashion companies - both consumer-facing and manufacturing - can leverage market opportunities to explore new models representing untapped revenue streams, such as re-design, rental and resale.

THE TARGET VALUE CHAIN FOR VIETNAMESE FASHION

Figure 7: The target value chain for the Vietnamese fashion sector following circular economy principles to close various waste streams
PRE-CONSUMER OPPORTUNITIES
IMPROVED MATERIALS SOURCING AND MANAGEMENT

Applicable for both retailers (both brands and entrepreneurs) and to manufacturing firms, improving current materials sourcing practices, as well as recycling methods are the necessary next stage of business innovation to better manage production independence, socio-environmental compliance and global supply chain disruption risks.

Opportunity #1
Cross-sectoral collaboration for R&D in new alternative materials

As Vietnam still maintains a high reliance on imported sources for raw and processed materials for its garment manufacturing industry, the country is also facing an excessive amount of plastic and microplastic pollution stemming from synthetic fibers and single-use plastic packaging. Industry stakeholders expressed growing needs for new locally-available sources that are both regenerative and recyclable. Vietnam has over 156.8 million tons of untapped potential in agricultural byproducts, equivalent to a profit of up to US$5 billion per year. However, the actual use of agricultural by-products is merely about US$275 million.

Opportunities have been explored by university-based researchers in Vietnam-based natural fibers and more particularly from agricultural byproducts such as pineapple leaves, coconut husk, bamboo and lotus. However, significant hurdles remain in the technological scale-up and transfer of these materials from their respective laboratory settings to more industrial settings. Low inter and intra-sectoral collaborations have been expressed as a root cause for this lack of technological advancement.

Following examples from outside of Vietnam, grassroots researchers, local entrepreneurs and manufacturing firms can collaborate to ideate, prototype and test new materials solutions that are (1) market-driven with a clear financial competitiveness compared to imported materials, and (2) locally suitable in terms of feedstock (ideally agricultural by-products or regenerative crops that are not overtaking limited lands from food crops), in order to become self-reliant in the global trade and competitive in the circular transition.

Example:

**Tomtex**, an alternative to synthetic leather made from shrimp shell waste from the seafood industry, is a circular, Vietnamese-founded startup which received innovation and entrepreneurship awards (LVMH Innovation Award’s finalist), fundraised US$17 million in pre-seed funding, and has now partnered with a New York-based fashion designer to use their materials as an early adopter.

**Stella McCartney**’s latest catwalk show in Paris showcased innovative materials from other startups such as grape leather and mycelium chain straps, as well as a showcase for regenerative cotton from a pilot project led by the brand.
In line with collaboration for innovative materials from and made within Vietnam, another opportunity for the fashion sector is to rethink the sourcing of sustainable materials. Current hindrances lie in the inability of SMEs and startups to match the required minimum-order quantity (MOQ) for new sustainable materials (from fibers to packaging) or to pay a premium for those materials.

Collective sourcing and product management could be the next frontier for traditional textile and garment traders in Vietnam. By offering a smaller MOQ to match current needs with a reasonable margin, SMEs and startups operating as consumer-facing firms can tap into a more abundant supply and better offer products at lower prices. Moreover, larger firms can also leverage their manufacturing stronghold and their inevitable offcuts to create new revenue streams by selling their waste streams to local and smaller stakeholders to drive their remake-focused or recycling business models.

Cross-sectoral and intra-industry collaboration will become further relevant within the context of the global supply chain disruption (ie., since the Covid pandemic and 2023 global demand slump). Firms should grasp the opportunity to create new revenue streams while also benefiting their peers (ie., all boats rising approach) in order to stay ahead of the innovation curve for circular transition.

**Example:**

European SMEs such as Nona Source, Beglierian Fabric or The Fabric Sales specialize in online-selling excess supplies and fabric deadstocks from high-end manufacturers (usually suppliers to luxury houses) to tertiary buyers ranging from international SMEs to budding entrepreneurs.

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Based on 13 interviews conducted by the RMIT School of Design & Communication team in 2022 - see Appendix 1 for more details.
Vertical integration coupled with hyperlocal collaboration will help increase the attractiveness of Vietnam both as a manufacturing hub and a thriving consumer market.
**Opportunity #1**  
**Vertical integration with improved technologies**

As explained within the technological challenges faced by Vietnam-based manufacturers, moving upstream in the value chain is necessary to ensure financial sustainability, competitiveness and to drive environmental benefits.

A key opportunity is adopting vertical integration where companies can control all steps of their value chain, from fiber production and recycling to distribution with consolidated digital tools. Different types of stakeholders (e.g., yarn manufacturers, fabric manufacturers and garment producers) can now operate under one umbrella, with minimal disruption risks, efficient operational management and improved margin rates.

For fashion companies in particular, owning the value chain can create opportunities for re-collection/recycling of used garments and by-products, new resales and distribution channels within their own systems. By 2027, recycled textiles are expected to generate US$7.6 billion. Hence, by managing a consolidated value chain with imported technologies, Vietnamese manufacturers can offer improved management of both production waste and consumer waste to increase recycling rates, as waste streams can be more easily identified, collected and processed. Avoiding landfilling practices and burning fashion waste at the end-of-life represents a significant economic opportunity for manufacturers.

**Opportunity #2**  
**Hyperlocal supply chain collaboration for improved collection rates**

Currently, Vietnamese manufacturing firms with recycling capacity can only process offcut fabrics into lower-value items such as rags and mats. Their recycling rates still remain low due to unsorted and low-quality feedstock. Garments’ value at their end-of-life is also not being fully leveraged by the recycling industry as technology is lacking globally and would need considerable piloting time and higher-quality local feedstock. Given lagging recycling rates in Vietnam, while global technologies are still being developed, a few solutions can still be explored to improve feedstock quality for offcut recycling and reuse rates of clothing.

For instance, as larger fashion companies have already launched deposit schemes to collect their customers’ used garments in their global retail locations, deploying a similar scheme and opening up the deposit facilities to their smaller local counterparts in Vietnam can have multiple benefits. Using the example of daily waste materials recovery facilities (MRF), various sector stakeholders (most noticeably recycling SMEs or reuse startups) can tap into the deposit scheme to improve their own feedstock quality, the management of the collection operations and ensure a steady stream of potential additional revenues for the MRF’s owners.

Overall, vertical integration coupled with hyperlocal collaboration will help increase the attractiveness of Vietnam both as a manufacturing hub and a thriving consumer market. Vietnamese product quality would improve thanks to better feedstock quality (either from recycled or new material sources), and product life-cycles would be prolonged with new, well-managed reused and remade garment streams. A holistic transformation of how the sector collaborates, produces and manages its own materials streams will become necessary with the current global, regional and local market demands.

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34 Multiple MRF has been set up in major Vietnamese cities with no offering for textile or garment collection as of 2022. **Source:** Evergreen Labs (2022), Domestic waste management in Vietnam: Sorting guide for households. [Link](#)
POST-CONSUMER OPPORTUNITIES
IMPROVED CONSUMPTION USING INNOVATIVE BUSINESS MODELS AND TECHNOLOGICAL ENABLEMENT

More than just a manufacturing country, Vietnam is also a consumer market with approximately half of its population categorized as middle-class and an additional 21 million inhabitants reaching middle-class status by 2030. In other words, fashion brands and companies need to look more closely into local consumer opportunities in parallel with Vietnam’s own environmental goals.

New business models that maximize clothing use

With affordable repairing pricing, the Vietnamese market is traditionally devoid of ‘unrepairable’ garments and footwear. However, as more clothing and accessories are becoming available, more circular solutions should be deployed in order to tackle clothing waste in the Vietnamese Fashion sector.

Opportunity #1
Increase the influx of local secondhand clothing back into the local market

Resale model of secondhand clothing has existed in various forms (brick-and-mortar shops, wholesale markets, etc.) in Vietnam with a new generation transforming the business and opening up new sales channels for budding entrepreneurs, all thanks to social media channels such as Facebook groups, Instagram profiles, etc.

However, supplies usually come from neighboring countries such as Thailand and even further markets such as Japan and the US. Localizing the supplies of secondhand clothing with peer-to-peer (P2P), consignment, and buy-back models, coupled with efficient used-clothing deposit schemes and enhanced logistics and ancillary retail services in Vietnam, can help increase the circulation of existing garments in the country and improve the end-of-life treatment of unwanted garments in the current state of recycling infrastructure.

Example:
Large fashion brands known for their sustainability initiatives such as Patagonia or Eileen Fischer have deployed repair and buy-back programs that can handle second to third life cycles (repair to reuse, then upcycle or recycle). These programs are operated with a reverse logistics and operations partner within the US markets only.

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35 “In Vietnam, 50 percent of the population would be listed as ‘middle class’ with income of $5,000-35,000 a year.” Source: VietNamNet (2016), Most Vietnamese think they belong to the ‘middle class’ [link].
36 Simple repairs start from US$1 to US$10 for more complex maneuvers.
Following the digitalization push by the Vietnamese government\(^1\), larger local firms can follow the examples of these circular startups in order to create new revenue streams for their existing businesses. By adding technological support for resale or rental of their portfolio, firms can create a new service offering to their existing customers while ensuring that their produced garments can both stay away from landfills and incinerators and create value to the firm for a longer period of time.

**Opportunity #2**

**Technology as an ally for existing circular models**

New resale and rental business models with a focus on a tech-enabled model (online platforms, automated processes, etc.) are becoming increasingly popular with Vietnamese startups such as Piktina, Passii, and Drobebox.

Following the digitalization push by the Vietnamese government\(^1\), larger local firms can follow the examples of these circular startups in order to create new revenue streams for their existing businesses. By adding technological support for resale or rental of their portfolio, firms can create a new service offering to their existing customers while ensuring that their produced garments can both stay away from landfills and incinerators and create value to the firm for a longer period of time.

**Example:**

The **Queen of Raw** platform tackles an age-old problem of the industry - unused fabric - and optimizes the solution with a modular online platform that helps fabric suppliers manage their excess fabric by reselling the deadstock efficiently to an existing customer base from the platform.

Luxury brands in Western markets prefer resale collaborations through resale pure players (offering P2P and/or consignment schemes on top of these collaborations) such as Vestiaire Collective or the RealReal as an alternative to absorbing the resale operations in-house, while maintaining their branding and digital advantage.

\(^1\) The Fourth Industrial Revolution has the potential to bolster Vietnam’s economic output by a further 28.5-62.1 billion USD, equivalent to a GDP growth of 7-16 percent by 2030. *Source: Vietnam Bond Market (2018)*
CONCLUSION

Pre and post-consumer waste in the Vietnamese fashion sector will become a growing concern as the country continues to grow its local consumer market, develop its middle class and position itself as a competitive player in the global trade scene. Both industrial and consumer stakeholders are better understanding sustainability and circularity thanks to enabling policies, positive media coverage and early-stage innovation.

However, the sector and its customer base still have a long way to go in order to tackle the growing waste concern in a responsible manner. Industry stakeholders ranging from supply traders to retailers and fashion entrepreneurs need to undertake a more collaborative approach in order to push the circular transition in fashion further, utilizing:

1. Support research & development of new alternative materials used in fashion such as regenerative crop pilots and new fiber sources to replace plastic packaging replacement.

2. Expanding innovation capacities between larger and smaller players within the sector for new revenue stream opportunities such as:
   a. Technological improvement and verticalization of their supply chain with optimization for byproducts or used garments’ collection and recycling;
   b. Add-on products and services (reused, remade or recycled) for their existing retail customer base;
   c. Digital platforms enhancing existing operations and eventually driving down costs.

3. Proactive roles in educating their customer base in partnership with non-profit organizations (philanthropic organizations and NGOs) regarding the lifecycle of their products beyond slow fashion and ethical approaches, noticeably the recyclability of their garments and their various end-of-life options.

4. Leverage of entrepreneurial and innovation support schemes from governments, philanthropic funders, financial institutions and other developmental organizations to ideate and test new products, services and even business models38.

Collaboration between entrepreneurs, LE, funders, universities, and non-profit organizations remains the key to the circular transition with local innovation, talent and resources still remaining untapped and unleveraged.

38The ICM Falk Foundation offers a free database to find funding programs for innovative solutions in various sectors, including Fashion.
If all ecosystem players lean into the circular opportunities at hand in Vietnam, this Fashion sector could become a leading force for economic growth and long-term impact within the region.
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<td>Tạp chí Công Thương (2022). Vietnam's textile and garment industry and challenges of the 4.0 industrial revolution (Thực trạng ngành Đặt May Việt Nam hiện nay và những thách thức trước cuộc cách mạng công nghiệp 4.0).</td>
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<td>Tạp Chí Tài Chính (2022). Auxiliary industries: Textile and garment industry facing fierce competition (Công nghiệp hỗ trợ: Ngành dệt may đang bị cạnh tranh gay gắt).</td>
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<td>44</td>
<td>The Ellen MacArthur Foundation (2022). Fashion and the circular economy.</td>
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<td>The New York Times (2022). Will We Ever Be Able to Recycle Our Clothes Like an Aluminum Can?</td>
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<td>55</td>
<td>Vietnam Investment Review (2021). Around 21 million Vietnamese will join the middle class by 2030.</td>
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66 World Economic Forum (2020). These facts show how unsustainable the fashion industry is.


APPENDIX 1
RESEARCH DETAILS FROM 2022 RMIT RESEARCH

The research was carried out by the School of Communications and Design of RMIT Vietnam:

Associate Professor Rajkishore Nayak, Associate Professor Donna Cleveland, Dr Long Nguyen, Nathalie Broun, Giang Tran

Methodology

Data were collected from 13 different industry stakeholders located at various stages of the fashion value chain in Vietnam and publicly-expressed interest in sustainability and/or circularity (online platforms such as websites or social media channels).

Out of these industries, 03 were MNCs, 04 were SMEs and 06 start-up businesses. These stakeholders have been operating for at least 02 years in Vietnam and deal with local and global brands.

Nine of the interviews were carried out by using Microsoft Teams, which lasted for approximately 45 minutes and the remaining were done face-to-face in public places such as a cafeteria.

The views expressed by the interviewees were either recorded or noted down by 02 of the research team members during the interview. Subsequently, the data were transcribed, analyzed and provided for the writing of this report.
**Interviewed stakeholders**

Interviewees’ information has been anonymized by the RMIT team.

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<td>SME</td>
<td>Vietnamese fashion brand</td>
<td>Founder</td>
</tr>
<tr>
<td>2</td>
<td>Start-up</td>
<td>Resale of clothing</td>
<td>Founder</td>
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<td>3</td>
<td>Start-up</td>
<td>Vietnamese fashion brand</td>
<td>Founder</td>
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<td>SME</td>
<td>Garment manufacturer</td>
<td>Chief Operating Officer</td>
</tr>
<tr>
<td>5</td>
<td>Start-up</td>
<td>Rental platform</td>
<td>Founder</td>
</tr>
<tr>
<td>6</td>
<td>MNC</td>
<td>Textile &amp; garment manufacturer</td>
<td>Former General Manager</td>
</tr>
<tr>
<td>7</td>
<td>SME</td>
<td>Garment manufacturer</td>
<td>Head of Global Operations</td>
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<td>8</td>
<td>Start-up</td>
<td>Vietnamese fashion brand</td>
<td>Brand Manager</td>
</tr>
<tr>
<td>9</td>
<td>MNC</td>
<td>Textile &amp; garment manufacturer</td>
<td>Director of Garment Manufacturing</td>
</tr>
<tr>
<td>10</td>
<td>SME</td>
<td>Footwear manufacturer</td>
<td>Responsibility Director</td>
</tr>
<tr>
<td>11</td>
<td>Start-up</td>
<td>Vietnamese fashion brand</td>
<td>Founder</td>
</tr>
<tr>
<td>12</td>
<td>Start-up</td>
<td>Southeast Asia fashion brand</td>
<td>President</td>
</tr>
<tr>
<td>13</td>
<td>MNC</td>
<td>Garment manufacturer</td>
<td>Head of Material &amp; Sustainability</td>
</tr>
</tbody>
</table>
Reach out to us for inquiries about this report at contact@icmfalkfoundation.org