

# Exploring Sustainability in Ukrainian Eco-Fashion Startups: Visualizing Challenges and Opportunities in Green Business Models

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## Abstract

The United Nations Sustainable Development Goals, and in particular SDG 12 (Responsible Consumption and Production) underline the pressing urgency to shift global production systems towards sustainability. Achieving sustainable industrial production is a central policy priority of every nation. This qualitative study examines the challenges and opportunities faced by eco-fashion startups in Ukraine, demonstrating how visualizations can effectively clarify complex qualitative evidence for diverse stakeholders. Study conducted semi-structured interviews with founders operating diverse green business models (e.g., recycled/biodegradable materials, upcycling and circular design). Using thematic analysis, this work identified four recurrent barriers: high costs of sustainable inputs, limited access to finance, consumer skepticism, and weak policy support and four opportunity domains: growth of eco-conscious market segments, technological innovation, NGO/community partnerships, and export/niche positioning. To enhance transparency and interpretability, this study integrate visual data representations throughout the paper: a contextual map of Ukrainian eco-fashion hubs (Kyiv, Lviv) and infrastructural constraints to frame the setting; a theme map that links challenges, opportunities, and contextual factors; a word cloud of salient concepts; a bar chart showing frequencies of reported challenges across participants; and a comparison table aligning Ukraine-specific findings with global literature. This study includes a recommendation infographic offering guidance for startups, policymakers, and consumers. It demonstrates how economic instability, weak infrastructure (e.g., recycling systems), and shifting cultural attitudes influence the development of green business models in Ukraine. The research adds to sustainability entrepreneurship literature in emerging markets by combining qualitative evidence with visual analytics to enhance clarity and use. Practical implications involve tailored financial incentives, stronger recycling and certification systems, and consumer education that build trust and demand.

Keywords: Eco-fashion; Green Business Models; Sustainable Entrepreneurship; Circular Economy; Ukraine; Emerging Markets; Qualitative Research; Data Visualization.

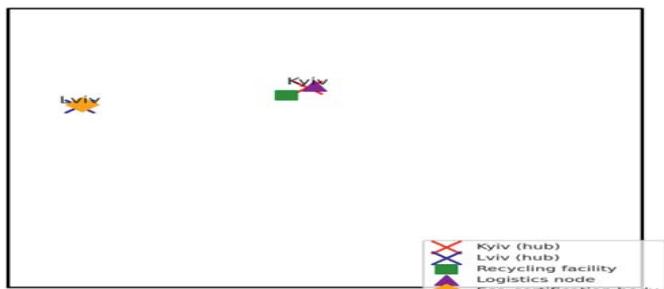
**JEL Classification:** L26, M14, Q56, O14, D23.

## Introduction

The UN Sustainable Development Goal on Responsible Consumption and Production stresses the need for sustainable practices (Liu et al., 2024). Industrial production, particularly in textiles, plays a significant role due to its substantial environmental impact. Unsustainable methods drive waste and pollution, fueling global demand for circular and inclusive production models (Xiaohong et al., 2024; Li et al., 2025). The fashion sector alone accounts for about 10% of global carbon emissions and nearly 20% of wastewater, drawing growing concern (UNFCCC, 2018). In response, eco-fashion startups are emerging to replace the traditional linear model with approaches based on organic inputs, fair labor, circular design, and waste reduction (Chan et al., 2024; Min et al., 2024). Their role is increasingly vital in tackling textile waste and the carbon-intensive fashion supply chain.

To make the contextual specifics of eco-fashion activity in Ukraine immediately accessible, this study incorporates a contextual map of eco-fashion activity in Ukraine. Figure 1 highlights key hubs (Kyiv, Lviv) and infrastructural constraints relevant to green business models, like the availability of textile recycling facilities, eco-certification bodies and logistics nodes. This visual frame situates the study and clarifies spatial factors that condition startup strategies.

**Figure 1: Contextual Map of Ukrainian Eco-fashion Hubs and Sustainability-relevant Infrastructure.**



Source: Author's own elaboration based on secondary data on Ukrainian eco-fashion hubs and infrastructure

Sustainable or green models of business are a way to move towards decoupling economic growth from environmental degradation (Lai et al., 2025). Further conceptual models include circularity, product durability and resource efficiency, as well as responsible production (Tiwari et al., 2025). Yet, amid the growth of the eco-fashion business in the developed world and the presence of green-funding instruments, legal regulations, and consumer knowledge about the industry, the situation within the developing world is relatively less researched. Countries in transition, such as the under-researched case of Ukraine, a context that appears to be of particular interest but has not been extensively studied, are notable examples of countries in transition.

Within Ukraine, attention to environmental sustainability has been raised as an issue due to increasing global climate awareness, EU integration, and domestic environmental disasters (Hook & Marcantonio, 2023). Public concern for environmental sustainability in Ukraine has been steadily rising, driven by heightened global climate awareness, EU integration efforts, and local ecological challenges. A recent national survey reveals that 74.2% of Ukrainians consider climate change a serious issue, while 61.4% support implementing carbon taxation as a mitigation measure (DiXi Group, 2024). At the same time, Ukraine's fashion industry is strongly influenced by low purchasing power of the population, expensive production and economic instability (Kulakova et al., 2021). Such obstacles form a fragile but potentially revolutionary backdrop for eco-fashion start-ups - and one that is best described with a more nuanced appreciation of both barriers and facilitators. In addition to addressing this empirical gap, the study explicitly adopts visual analytic elements to communicate qualitative insights transparently. Visualizations (map, theme map, word cloud, bar chart, comparison table) are used to clarify patterns and improve stakeholder uptake of the findings.

Although sustainable fashion has garnered international attention for several years and there have been eco-fashion startups, there is very little research conducted on the strategies used by such firms in overcoming the economic and infrastructure limitations, more so in developing

country settings. The majority of extant research has been conducted in Western economies where there are often well-developed institutions, eco-fashion consumer awareness, and access to clean materials and technologies at hand (Boulocher-Passet et al., 2024). On the contrary In Ukraine, eco-fashion seems to be a very new trend that is facing very specific challenges including access to green capital, poor regulatory compliance and early-stage consumer trust of sustainability claims.

There are quite few empirical studies that have explored the emergence, start-up and development of eco-fashion startups in Ukraine, or how these businesses understand and work with green business model elements in lieu of the specific challenges associated with a transitional economy. For instance, Fletcher and Fitzpatrick (2024) illustrate that principles of sustainable fashion can be applied globally, but do so without taking into consideration the effects of local economic volatility or political instability and infrastructural underdevelopment on new venture sustainability. In this sense, the paper fills in this gap by focusing on eco-fashion entrepreneurs in Ukraine and examining the micro-processes regarding their entrepreneurship of innovation and survival in the limited, but dynamic, eco-system of Ukraine. It offers empirically grounded insights into their practices and living experiences, and makes a contribution to the growing literature on sustainability transitions in the fashion sector in non-western contexts.

The aim of this research is to investigate the challenges and opportunities encountered by eco-fashion startups in Ukraine in developing and implementing green business models. The following research questions are formulated in the current study:

- What are the key challenges faced by eco-fashion startups in Ukraine in adopting green business models?
- What opportunities do these startups identify in pursuing sustainable practices?
- How do contextual factors (e.g., economic, cultural and infrastructural) in Ukraine influence the development of green business models in eco-fashion startups?

This qualitative inquiry will allow for an in-depth understanding of the complicated processes through which startups navigate the dual imperatives of environmental sustainability and business viability. The study aims to inform both academic debates and practical policymaking on sustainable entrepreneurship in transitional economies. The eco-fashion sector in Ukraine is an interesting case. As a developing economy, the nation has been endeavoring to bring their environmental regulations in line with those of the European Union, particularly as a result of the Association Agreement between Ukraine and the European Union and broad-based efforts to align the regulatory environment.

However, this transformation is hampered by multiple systemic constraints. First, funding mechanisms for sustainable startups remain weak. Unlike in the EU, where green venture capital and public grants are accessible, Ukrainian entrepreneurs often rely on self-financing or sporadic donor support (Forkun, 2024). Second, recycling and production infrastructure is inadequate. The country lacks nationwide systems for textile recycling, and only a few urban centers have access to composting or zero-waste manufacturing facilities (Mihai et al., 2024). Third, consumer behavior poses a barrier. While there is growing interest in environmental values, Ukrainian consumers often prioritize affordability over ethical or ecological considerations due to economic constraints (Mostenska et al., 2022). However, opportunities also exist along with the challenges. Ukraine's tech-savvy young people are taking to the streets and to the field of green activism, and becoming more open to European markets, which creates fertile soil for change. And the recent emphasis on post-war reconstruction has generated interest in sustainable reconstruction-options, among which green entrepreneurship. The dynamics of constraints and enablers of eco-fashion in Ukraine should be clearly considered to promote sustainability of eco-fashion businesses.

## Literature Review

### Green Business Models in the Fashion Industry

The shift from testing to widespread adoption of more sustainable fashion production practices has been increasingly rapid over the past decade fueled by growing interest in environmental impacts such as those created by textile waste and carbon emissions (Fletcher & Maki, 2022). Circular economy, zero waste, and sustainable supply chain management are common components of green business models (GBMs) that are popular in the fashion industry (Islam et al., 2024). Such models are environmentally sound, as raw materials do not go to waste, fewer resources are needed, and ethically performed human labor is valued by all stages of the process (Tabisg et al., 2024). Circular economy business models including take-back systems, reuse and upcycling are being increasingly pursued by both larger brands and smaller startups (Das et al., 2025).

The notion of "sustainable fashion entrepreneurship" is gaining traction, especially among younger generations of entrepreneurs who view eco-conscious innovation as both a moral imperative and a market opportunity (Werner et al., 2025). This paradigm shift is especially significant in the context of startups, which can incorporate sustainable practices into their operations from the outset, rather than retrofitting existing systems.

### Challenges for Eco-Fashion Startups

Sustainable production and waste management practices are promoted in many studies (Shkola, 2023; Haddad et al., 2024). Green business models are promising; however, eco-fashion startups cannot cope with the reality of the ambitious green business model. One of the most artificial barriers is cost. For instance, sustainable forms of fabrics tend to be more expensive than standard fabrics." Technology to lessen environmental impact, which can include both closed-loop systems and biodegradable fabrics, is not always accessible to startups (Ikram, 2022). Also eco-certifications and compliance with criteria of sustainable standards involve administrative and financial costs (Mutambo et al., 2024).

A lack of trust is also a larger challenge, particularly in areas where people are less familiar with sustainable practices. This is not supported by empirical evidence, since consumers appear to be quite suspicious of 'nature'-claims, especially when such claims are not backed by credible or transparent behavior of the organization or 3rd party (Nygaard & Silkoset, 2023). Also the continued attitude-behavior gap observed but not at the same rate (consumers concern for the environment but not necessarily reflecting this in their purchasing behavior) is marked by some researches (Munro et al., 2023).

In logistical terms, obstacles to get over include the breaking up of supply chains and the lack of local or regional access to sustainable infrastructure like local textile recycling or more environmentally friendly means of transport (Spinelli et al., 2025). These issues or problems also become critical in economies with emerging market. The environmental policy systems and market drivers for sustainable entrepreneurship are still underdeveloped in these economies.

### Opportunities for Eco-Fashion Startups

There are hurdles but the opportunities for startups in eco-fashion's space are increasing. Increasing consumer consciousness and preference toward such products and services is a strong market driver especially among millennials and Gen Z (Palomo-Domínguez et al., 2023). There is also innovation at the other end of the value chain; as can be seen the cost of entry for small businesses reduced by technology, digital platforms have facilitated direct to consumer sales, lower overheads and traceability (Mac Clay et al., 2024)

Sharing behaviour, such as peer-to-peer clothing rental/resale services, represents new ways to prolong the usage of goods and to attract eco-conscious consumers (Bajrić, 2025). Furthermore, international bodies and nongovernmental organizations (NGOs) are increasingly providing grants, accelerators and technical help to early-stage sustainable innovation startups. In an international study, Bergmann and Utikal (2021) discovered that social startups with a strong sustainability mission appear to be more appealing to impact investors and social entrepreneurs in transition economies, which shared a

regional economic transition. The infusing of ESG (Environmental, social and governance) metrics into investment requirements, further, reinforces the business case for sustainability in fashion entrepreneurship.

### Eco-Fashion Startups in Emerging Markets

Existing studies have demonstrated that start-ups in emerging markets are likely to function in institutional voids like areas can be typified by poor infrastructure, lack of access to green technology and weak regulatory environment (Amankwah-Amoah et al., 2023). These might be obstacles and may strongly reduce the scalability of green business models.

In the emerging countries like Ukraine, this is on top of economic instability, an underdeveloped body of environmental legislation and nascent trust in public institutions. Despite the growing awareness about the environment issues especially among urban children, between what actually is policy rhetoric and what is a policy (Hook & Marcantonio, 2023) to implement policy is still a huge gap. Furthermore, Ukraine has a low level of processing as well as a low investment in eco-infrastructures as compared to EU's standards (Kryshnal et al., 2024). It's not like the Ukrainian market is hopeless, though. The local fizz Ukrainian Fashion Week has started to weave sustainability into the schedule and sole

operators are doing upcycling and small-batch ethical production.

### Gap Identification

Although sustainable fashion and green business models are well-studied internationally, little qualitative research addresses eco-fashion startups in developing countries. Few works capture founders' experiences in contexts of economic turbulence, weak institutional support, and limited environmental awareness. In Ukraine, scholarship has focused mainly on macro-level policies or consumer behavior, with scant attention to entrepreneurial narratives or startup ecosystems in sustainable fashion. This study fills that gap through a qualitative, context-driven approach, examining the challenges and opportunities facing Ukrainian eco-fashion startups. It also highlights how green business models are interpreted and adapted in the post-Soviet setting, thereby extending theoretical and practical insights on sustainability entrepreneurship. Methodologically, existing studies seldom employ visual tools to synthesize qualitative findings for decision-makers. This research addresses both gaps by combining in-depth interviews with visual summaries (matrices, maps, and charts) that clarify patterns and contextual barriers. Table 1 presents the literature mix relevant to this study.

**Table 1: Literature Matrix on Eco-fashion, Green Business Models and Emerging-Market Contexts**

Study (year)	Context	Focus (GBM / Challenges / Opportunities)	Method	Visualization Used?	Relevance to Ukraine	Gap Highlighted
Fletcher & Maki (2022)	Gulf & UK	GBM concepts in fashion	Conceptual / Review	No	Transfers GBM logic	Lacks transitional-economy nuance
Islam et al. (2024)	Emerging markets	Circular economy in fashion	Review	No	CE mechanisms	Limited post-Soviet application
Das et al. (2025)	Global / Startups	Circular take-back / upcycling	Empirical	Limited	Startup pathways	Institutional constraints underexplored
Shkola (2023); Haddad et al. (2024)	Emerging markets	Sustainable production practices	Empirical	No	Operational barriers	Ukraine-specific data absent
Hook & Marcantonio (2023)	Ukraine / policy	Sustainability & policy context	Policy analysis	No	Directly relevant	Entrepreneurial narratives missing
Kryshnal et al. (2024)	Ukraine / EU ref.	Infrastructure & investment gaps	Empirical / Policy	No	Directly relevant	Startup-level impacts not visualized

## Methodology

### Research Design

This study adopts a qualitative research design, which is particularly suited for investigating complex and context-dependent phenomena such as the experiences of eco-fashion startup founders navigating sustainability in a transitional economy. Specifically, a phenomenological approach is employed to capture the lived experiences and meaning-making processes of entrepreneurs engaged in green business models. This methodology is intended to facilitate a deeper understanding of how these individuals interpret challenges and opportunities within the unique socio-economic scenario of Ukraine (Dey et al., 2025).

### Participants

The study targets 10 founders of Ukrainian eco-fashion startups. Those are actively engaged in implementing sustainable business models like circular economy principles, the use of biodegradable or recycled materials and zero-waste production techniques. Moreover, the participants are selected through purposive sampling. The purpose is to ensure a diverse representation of business models, geographic locations (e.g., Kyiv, Lviv, Kharkiv) and stages of organizational development (e.g., newly established startups vs. more mature enterprises). The criteria for inclusion include a demonstrated commitment to environmental sustainability and active operation for the fashion industry of Ukraine.

### Data Collection

Data of the current work is collected via semi-structured interviews. It is conducted either in person or via digital platforms (e.g., Zoom or Google Meet). This method allows for flexibility while ensuring that key themes like perceived barriers to sustainability, drivers of innovation, and local policy environments—are systematically explored. An interview guide structured the conversations, featuring open-ended relevant questions. Also each interview was lasted approximately 45–60 minutes and was recorded and transcribed verbatim for analysis.

### Data Analysis

Data was analyzed using thematic analysis as outlined by

Braun and Clarke (2006). This process included six phases: (1) familiarization with the data through active reading of transcripts, (2) generating initial codes using NVivo software or manual methods, (3) searching for recurring themes (e.g., "institutional voids," "eco-consumer segmentation"), (4) reviewing and refining themes for internal coherence and distinctiveness, (5) defining and naming the themes, and (6) producing the final analytic narrative in relation to the study's research questions.

Moreover, due to the limited size and visibility of the eco-fashion sector in Ukraine, recruiting participants posed a potential challenge. So this study leveraged existing networks and platforms such as Ukrainian Fashion Week, Sustainable Fashion Pad and environmental NGOs with ties to the fashion industry. Snowball sampling was also used to identify additional eligible participants through referrals.

### Visualization in Analysis

To enhance transparency and interpretability of qualitative patterns, this study incorporated visual analytic outputs alongside the narrative: a theme map (Figure 2) produced after selective coding to depict relationships across Challenges, Opportunities and Contextual Influences; a pie chart (Figure 3) showing distribution of the critical challenges that eco-fashion startup founders in Ukraine are faced with; a word cloud (Figure 4) summarizing salient terms; and a bar chart (Figure 5) showing the frequency of reported challenges across participants. These visuals serve as audience-friendly summaries of the thematic structure and are cross-referenced in results.

Ethical considerations were also duly observed throughout the research process. All participants received an informed consent form detailing the study's purpose, their rights and the voluntary nature of their involvement. Interviews were anonymized to ensure confidentiality and participants could withdraw at any stage without consequence.

Figure 2 shows a theme map produced after selective coding to depict relationships across challenges, opportunities and contextual influences related to current study.

**Figure 2: Theme Map Linking Challenges, Opportunities and Contextual Factors Identified via Thematic Analysis.**

Challenges	Opportunities
<ul style="list-style-type: none"> <li>- High cost of materials</li> <li>- Consumer skepticism</li> <li>- Limited finance</li> <li>- Weak policy/infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>- Eco-conscious consumers</li> <li>- Tech innovation</li> <li>- NGO partnerships</li> <li>- Export niches</li> </ul>
Contextual Factors	
<ul style="list-style-type: none"> <li>- Economic instability</li> <li>- Cultural attitudes</li> <li>- Lack of certification</li> <li>- Emerging ecosystem</li> </ul>	

Source: Author's own elaboration based on thematic analysis of data

## Results

The results are obtained from semi-structured interviews with 10 Ukrainian eco-fashion startup founders. The data were analyzed using thematic analysis having three primary themes: Challenges, Opportunities and Contextual Influences.

### Challenges Faced by Eco-Fashion Startups in Ukraine

Participants highlighted several obstacles impeding the growth and sustainability of eco-fashion startups. First one is the high cost of sustainable materials. Founders reported that sourcing eco-friendly materials, such as organic cotton or recycled fabrics, is financially burdensome due to limited local availability and high import costs. The second challenge identified was the limited consumer awareness and skepticism. A common concern was the general public's limited understanding of sustainable fashion, leading to skepticism about product quality and pricing. Inadequate government and institutional support is found to be another obstacle impeding the growth and sustainability of eco-fashion startups. Participants noted a lack of supportive policies, subsidies, or tax incentives from governmental bodies to promote sustainable business practices. Infrastructure deficiencies are also found as a factor impeding the growth and sustainability of eco-fashion startups. The absence of local facilities for recycling, sustainable production and eco-certification poses significant challenges. The outcomes are given in Table 2.

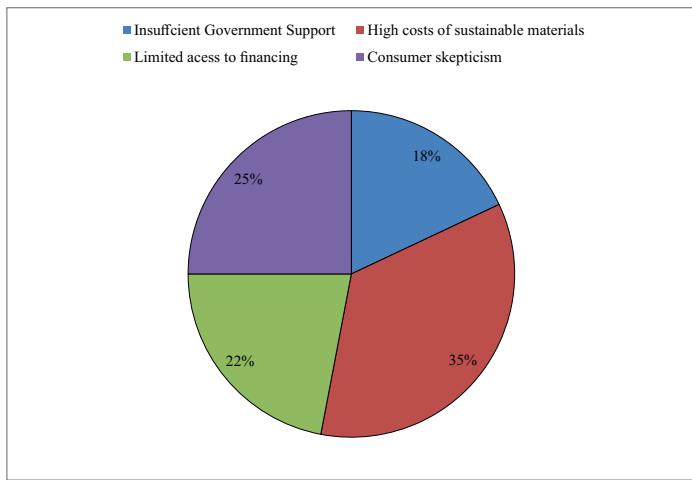
**Table 2: Challenges Faced by Eco-Fashion Startups**

Sub-Theme	Description	Illustrative Quote
High Cost of Sustainable Materials	Difficulty in sourcing affordable eco-friendly materials	“The cost of organic cotton is prohibitive for small startups like ours.” – P3
Limited Consumer Awareness	Public skepticism about sustainable fashion quality and pricing	“People still think sustainable means low quality or overpriced.” – P7
Inadequate Government Support	Lack of policies or incentives for sustainable businesses	“There are no tax breaks or funding options tailored for green startups.” – P5
Infrastructure Deficiencies	Absence of local recycling and sustainable production facilities	“We have to import most of our sustainable packaging due to local unavailability.” – P1

Source: Author's own compilation based on primary interview data (2025)

In Figure 3, it is evident that the distribution of the most critical challenges that eco-fashion startup founders in Ukraine are faced with. The main obstacle mentioned is cost/availability of sustainable raw materials followed by low and a lack of green financing. Other key challenges are a lack of recycling and circularity infrastructure, policy uncertainty and a shortage of skilled labor.

**Figure 3: Key Challenges Faced by Eco-Fashion Startups in Ukraine**



Source: Authors' compilation based on primary interview data with Ukrainian eco-fashion startup founders

As an overview of lexical salience, Figure 4 presents a word cloud of frequently occurring terms in interview transcripts (e.g., "materials," "costs," "recycling," "consumer," "certification," "export").

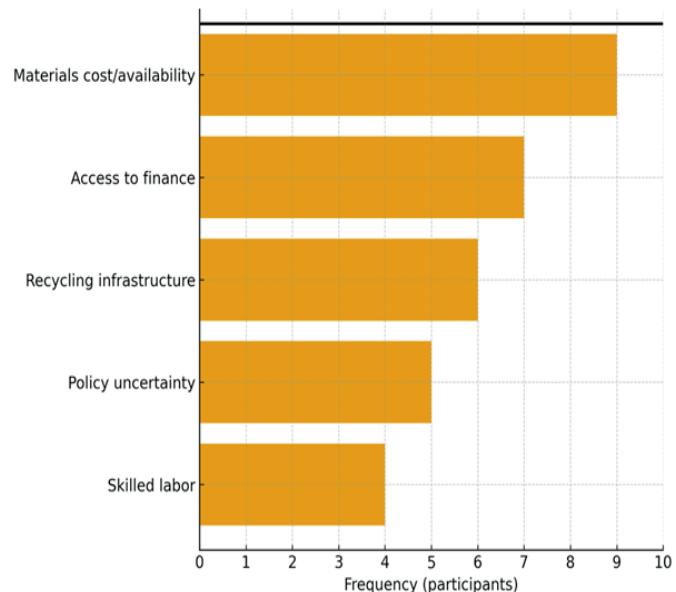
**Figure 4: Word Cloud of Frequently Occurring Terms in Founder Interviews**



Source: Author's own compilation of salient terms from interview transcripts

Figure 5 displays the frequency of reported challenges across participants (materials cost/availability, access to finance, recycling/circularity infrastructure, policy uncertainty, skilled labor). The main obstacle mentioned is cost/availability of sustainable raw materials followed by low and a lack of green financing. Other key challenges are a lack of recycling and circularity infrastructure, policy uncertainty and a shortage of skilled labor.

**Figure 5: Frequency of Reported Challenges across Participants**



Source: Author's own compilation based on frequency of reported challenges from founder interviews

## Opportunities for Growth and Innovation

Despite challenges, the study identified several avenues for growth and innovation within the eco-fashion sector. Emerging eco-conscious consumer base is identified as an opportunity for growth and innovation within the eco-fashion sector. An increasing number of young, urban consumers showed interest in sustainable fashion, presenting a growing market segment. Other opportunity identified is the technological innovation. Adoption of technologies like biodegradable materials and blockchain for supply chain transparency offers competitive advantages. Collaborations with NGOs and community initiatives enhance brand credibility and outreach. Moreover, Export and Niche Markets is found as an opportunity for growth and innovation within the eco-fashion sector. Targeting international markets, especially in Western Europe, provides access to consumers who value ethical fashion. Opportunities for growth and innovation within the eco-fashion sector are given in Table 3.

**Table 3: Opportunities Identified by Startups**

Sub-Theme	Description	Illustrative Quote
Emerging Eco-Conscious Consumer Base	Growing interest among young, urban consumers in sustainable fashion	“Gen Z customers actually look for sustainability labels.” – P2
Technological Innovation	Use of new technologies for sustainable production and transparency	“We’re experimenting with biodegradable dyes and smart labeling.” – P4
NGO and Community Partnerships	Collaborations enhancing credibility and market reach	“NGOs help amplify our story and connect us to eco-aware buyers.” – P6
Export and Niche Markets	Accessing international markets valuing ethical fashion	“Our brand sells better in Germany than locally – they value the ethics.” – P9

*Source: Author's own compilation based on primary interview data*

### **Contextual Influences Specific to Ukraine**

The Ukrainian socio-economic and cultural context uniquely shapes the eco-fashion industry. Economic instability is found to be an influencing factor in this regard. Fluctuating currency values and inflation create financial unpredictability, affecting business operations. Moreover, Cultural attitudes toward sustainability are also identified. Traditional consumer values often prioritize price over environmental considerations, limiting local market growth. Moreover, the absence of national certification

systems is also identified as a key factor. The lack of recognized local eco-certification systems hampers credibility and marketability. Lastly, the emerging ecosystem is identified as a primary factor. Despite challenges, a nascent ecosystem of eco-fashion stakeholders is developing, fostering collaboration and support. Table 4 contains details regarding the Ukrainian socio-economic and cultural context that uniquely shapes the eco-fashion industry.

**Table 4: Contextual Influences in Ukraine**

Sub-Theme	Description	Illustrative Quote
Economic Instability	Financial unpredictability due to currency fluctuations and inflation	“With the war and inflation, it's hard to plan ahead financially.” – P8
Cultural Attitudes Toward Sustainability	Traditional values prioritizing cost over environmental concerns	“My parents don't see why they should pay more for a 'green' shirt.” – P10
Absence of National Certification Systems	Lack of local eco-certification affecting credibility	“There's no place to certify our product as sustainable locally.” – P1
Emerging Ecosystem	Development of collaborative networks among eco-fashion stakeholders	“We're starting to connect more through sustainable fashion events.” – P5

*Source: Author's own compilation based on primary interview data*

Table 5 contains consolidated details regarding the illustrative quotes, which show challenges, opportunities, and context.

**Table 5: Illustrative Participant Quotes by Theme (Consolidated)**

Theme	Sub-Theme	Illustrative Quote (ID)
Challenges	Cost of sustainable inputs	“The cost of organic cotton is prohibitive for small startups like ours.” (P3)
Challenges	Financing access	“There are no tax breaks or funding options tailored for green startups.” (P5)
Challenges	Infrastructure	“We have to import most of our sustainable packaging due to local unavailability.” (P1)
Opportunities	Eco-conscious demand	“Gen Z customers actually look for sustainability labels.” (P2)
Opportunities	Technology/transparency	“We’re experimenting with biodegradable dyes and smart labeling.” (P4)
Context	Economic instability	“With the war and inflation, it’s hard to plan ahead financially.” (P8)

*Source: Author's own compilation based on results*

## Discussion

This study examined eco-fashion entrepreneurship in Ukraine, identifying both common and context-specific factors that shape the sector. Its findings align with existing work on sustainable entrepreneurship in emerging markets, where high costs, weak infrastructure, and consumer skepticism are recurring issues (Nayak & Pillai, 2024). However, it extends the literature by showing how Ukraine's post-war fragility, policy gaps, and cultural attitudes uniquely intensify these challenges. For instance, while costly sustainable inputs are a global concern, Ukrainian entrepreneurs also struggle with currency instability, import dependence, and the lack of domestic green supply chains, leaving them more exposed to market shocks than peers in diversified economies like Brazil or India.

Addressing the first research question, the study identified four recurring barriers faced by eco-fashion startups. Those are high production costs, weak consumer demand, limited access to finance and a lack of policy support. These results align with patterns observed in other transitional economies (Hofmann et al., 2022), yet the Ukrainian context amplifies their significance. Regarding the second research question, which is how institutional and market factors influence eco-fashion development, the findings illustrate how a fragmented policy environment impedes growth in Ukraine. Unlike Western Europe, where sustainability goals are embedded in industrial and environmental strategies, the eco-fashion sector of Ukraine operates with

limited regulatory scaffolding. Although initiatives like Ukrainian Fashion Week or Sustainable Fashion Pad are promising, they remain isolated and poorly integrated into national industrial policy. In response to the third research question, entrepreneurs in this study adopted adaptive strategies that reflect the Ukrainian context. Rather than relying on formal institutional support, many leveraged grassroots networks, social media and influencer collaborations to raise awareness and build trust. This bottom-up approach aligns with findings from resource-scarce settings (e.g., Fischer-Preßler et al., 2023), but it demonstrates a greater emphasis on education and value-based branding in Ukraine, as environmentalism remains peripheral in the public consciousness.

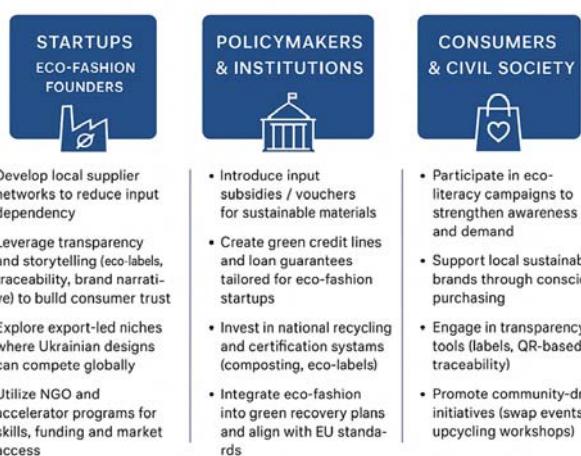
To situate findings within the broader literature, Table 6 contrasts Ukraine-specific patterns with global evidence on eco-fashion entrepreneurship. It explicitly shows where the Ukrainian context mirrors global trends and where it diverges, such as amplified constraints in financing and infrastructure, and distinctive opportunities through NGO partnerships and potential export niches.

Table 6: Comparison of Ukrainian Findings with Global Literature on Eco-Fashion Challenges and Opportunities

Dimension	Global evidence (illustrative)	Ukraine (this study / evidence)	Similarities / Differences
<b>Cost of inputs</b>	Sustainable materials often cost more; technology/scale reduces but does not eliminate cost barriers. (Ikram, 2022; Mutambo et al., 2024)	Amplified in Ukraine due to import reliance, FX volatility, and limited local green suppliers. (Forkun, 2024; Mihai et al., 2024)	Similar challenge globally, but more severe in Ukraine due to structural import dependence and weak supplier base.
<b>Financing &amp; investment</b>	Impact/ESG investors and green funds available in some markets; small/startups still face gaps. (Bergmann & Utikal, 2021)	Constrained green finance; founders rely on self-funding or donor/NGO support. (Forkun, 2024)	Shared global issue of limited startup finance, but Ukraine shows heavier dependence on informal/donor funds.
<b>Infrastructure &amp; circular systems</b>	EU/advanced contexts show growing CE infrastructure (take-back, recycling). (Islam et al., 2024; Das et al., 2025)	Gaps in national recycling, composting and certification; only a few urban centers have facilities. (Kryshnal et al., 2024; Mihai et al., 2024)	Similar global need for scaling, but Ukraine lags significantly behind EU contexts in infrastructure maturity.
<b>Consumer demand &amp; behavior</b>	Growing eco-consumer segments (Gen Z); attitude-behavior gap persists. (Palomo-Domínguez et al., 2023; Munro et al., 2023)	Emerging interest but high price sensitivity and skepticism; civic support uneven. (DiXi Group, 2024; Nygaard & Silkoiset, 2023)	Globally and in Ukraine demand is rising, but Ukraine's affordability gap and skepticism make uptake slower.
<b>Networks, NGOs &amp; market access</b>	Accelerators, NGO programs, and digital platforms help startups access markets and capacity. (Mac Clay et al., 2024; Bergmann & Utikal, 2021)	NGOs and events (Ukrainian Fashion Week, Sustainable Fashion Pad) play critical bridging roles but remain fragmented.	Ukraine mirrors the global reliance on NGOs, but coordination and continuity are weaker than in advanced markets.
<b>Policy &amp; regulatory environment</b>	Embedding sustainability into industrial policy aids GBM scaling in many contexts. (Fletcher & Maki, 2022)	Policy alignment to EU exists on paper but weak implementation and limited startup-oriented incentives hamper action. (Hook & Marcantonio, 2023; Kryshnal et al., 2024)	Global lesson is policy push supports scaling; Ukraine has partial alignment but weak enforcement and incentives.

Source: Author's own compilation

Figure 6: Recommendation Infographic for Startups, Policymakers and Consumers.



Source: Author's own elaboration of recommendations derived from research

The findings have several practical implications. For founders, they underscore the need to actively shape consumer norms through education and storytelling, rather than assuming pre-existing demand. For policymakers, the study highlights urgent areas for intervention, including subsidies for sustainable inputs, recognition of eco-labels, and investment in recycling infrastructure. Theoretically, the study contributes to understanding how green entrepreneurship operates in “institutionally thin” environments, where informal norms, rather than formal regulation, drive innovation. It contributes to emerging scholarship on sustainability transitions in post-socialist contexts, an area that remains underrepresented in the global literature.

Several limitations should be acknowledged. The sample was small and skewed toward founders based in Kyiv and Lviv, potentially omitting perspectives from rural or eastern regions. Additionally, the study relies solely on founder narrative risks, overrepresenting optimistic outlooks or strategic self-presentation. Future research should incorporate broader stakeholder perspectives, including consumers, policymakers, and supply chain actors, as well as longitudinal methods to track the evolution of this nascent sector in the context of ongoing political and economic changes in Ukraine.

## Conclusions

This study examined the challenges, opportunities, and conditions that shape eco-fashion startups in Ukraine. High costs of sustainable materials and limited access to finance emerged as key barriers, alongside consumer skepticism and weak government support. At the same time, growing demand for ethical products, advances in sustainable technologies, and increasing global exposure create important opportunities. Ukraine's economic instability, policy gaps, and cultural context collectively define both the constraints and the prospects for the sector's future growth.

This study makes several important contributions. First, it fills a clear gap by offering one of the few qualitative examinations of eco-fashion startups in a post-Soviet emerging market. Centering on the voices of founders, it provides grounded insights that are often overlooked in quantitative research. The analysis demonstrates how

global forces—such as rising consumer demand and the adoption of circular economy principles—interact with local realities of economic instability and cultural norms. In doing so, it extends theories of green business models to contexts marked by institutional fragility and weak policy frameworks. Finally, the findings enrich global sustainability debates by underscoring the diverse challenges and opportunities faced by eco-fashion startups beyond Western settings.

Based on the findings, startups are advised to prioritize transparency to strengthen consumer trust, build partnerships with local suppliers to cut costs and enhance circularity, and use digital platforms for outreach and brand storytelling. Policymakers should consider introducing targeted financial incentives, enforcing sustainability certification schemes, and fostering green entrepreneurship through incubators and training programs. Consumers, in turn, are encouraged to participate in educational initiatives and support locally produced sustainable fashion, thereby driving demand and stimulating eco-innovation in Ukraine.

Moreover, a distinctive contribution of this study is the integration of visual analytics, contextual mapping, theme mapping, word clouds, bar charts, and a comparative matrix, which clarifies complex qualitative patterns for non-specialist stakeholders. The visual strategy supports knowledge transfer from research to practice in an emerging market.

## Directions for Future Research

Further studies on the theme will also require a broader approach, rather than focusing solely on the founder's perspective, to deal with consumers' perceptions and behavior towards eco-fashion in Ukraine and better understand the dynamics on the local market. Future consumer-focused work should pair surveys, focus groups, or choice experiments with advanced visualization techniques — for example, sentiment mapping of survey/text responses, clustering and heat maps of consumer segments, and conjoint analysis visual summaries — to reveal nuanced attitudinal and willingness-to-pay patterns across demographic groups. A comparative analysis of Ukraine with other transition and new industrial countries could contribute to increasing our understanding of the role different institutional

environments play in sustainable new firm development. Such comparative work would benefit from visual network mapping of policy and institutional linkages, side-by-side comparative theme maps, and cross-country heatmaps that make institutional similarities and differences transparent and easily interpretable. Additionally, longitudinal studies would be essential to report changes in eco-fashion ventures as they participate in and develop over time, alongside changing economic and policy environments, and vice versa. Dynamic visualizations — such as interactive time-series dashboards or animated theme maps — can illustrate how startups evolve under shifting policy/economic conditions, enabling stakeholders to explore trajectories at multiple scales. The size of the sector and its contribution to the economy can also be empirically investigated through quantitative analysis in addition to qualitative evidence. Finally, the question of how being digitalized and media-influenced can foster sustainable consumer behavior in this environment would contribute to the literature. Here, social media trend maps, diffusion visualizations, and network analyses of influencer/NGO activity could clarify channels of influence. Researchers should consider combining these with experimental or quasi-experimental designs to test causal effects. Further research could be conducted to systematically explore the communicative effects of these visualization forms on stakeholder understanding and support for eco-fashion initiatives (for example, through randomized user testing of different visualization types or structured usability studies).

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