SURFACE SUSTAINABILITY

MAPPING CLIMATE CHIC ECO-AESTHETICS ON DIGITAL-ONLY FASHION PLATFORM DRESSX

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Abstract

This article explores the digital-only fashion platform DRESSX and its prominent role in shaping the narrative of sustainable innovation within the fashion industry. It investigates how DRESSX constructs and communicates its sustainability claims through aesthetic, discursive, and platform-mediated strategies. While digital fashion is often celebrated as an inherently sustainable alternative to physical garment production, this article questions the cultural and ideological assumptions underpinning such claims. Rather than treating DRESSX merely as a digital marketplace, the article approaches it as a curatorial and commercial ecosystem that performs sustainability through its interface and branding practices. It asks how sustainability is imagined, aestheticised, and commodified in a dematerialised, platform-based digital fashion economy.

Drawing from fashion media studies, critical platform theory, and innovation studies, this article maps the ways DRESSX blends commerce, curation, and affective visuality to promote "green" values tied to the digitalisation and so-believed dematerialisation of fashion. Through a mixed-methods approach combining platform analysis, interface reading, and discourse analysis, it reveals how sustainability operates more as a surface strategy than a systemic solution. The study ultimately questions whether the dematerialisation of fashion via digital platforms leads to a more ethical industry or simply a digitally displaced version of fast fashion.

Keywords: *Dematerialisation; E-commerce; Fashion ecosystem; Platform capitalism; Post-physical*

INTRODUCTION

Digital fashion has recently grown into a field of (digital) innovation in the fashion industry, promising reduced environmental impact by decreasing and sometimes eliminating physical materials (Baek et al., 2022; Periyasamy & Periyasami, 2023; Schauman et al., 2023). Central to this ecological narrative is *dematerialisation*: the shift from physical garments to data-driven designs, framed as a sustainable alternative to traditionally physical production and consumption. This shift reflects the increasing integration of immersive digital spaces into fashion systems, from AR/VR applications to gamified and metaverse environments where garments are visualised, worn, and circulated in non-physical forms (Boughlala & Smelik, 2024). As Periyasamy and Periyasami (2023, p. 3) argue, "the utilization of the metaverse in the digital fashion economy provides designers with the essential means to establish a brand that is environmentally sustainable and to support suppliers that adhere to sustainable practices." Digital fashion platforms such as *DRESSX* position themselves at the forefront of this shift, presenting digital fashion as both technologically progressive and ethically responsible.

In this article, I investigate how sustainability is imagined, aestheticised, and commodified through digital fashion by focusing on DRESSX as a case study. Rather than measuring the platform's material impact, I

critically explore how sustainability is performed through DRESSX's interface, branding discourse, and commercial strategies (Fairclough, 1992; Galloway, 2012). Describing itself as "the largest digital fashion platform globally," DRESSX operates fundamentally as a *fashion-tech* company deeply embedded in platform capitalism and data-driven design. Its operations extend beyond garment creation to the infrastructure through which digital fashion is consumed, circulated, and monetised. Drawing from fashion media studies, critical platform theory, and innovation scholarship, I approach DRESSX not merely as a retail interface, but as a techno-cultural ecosystem that encodes ecological ethics into its commercial and ideological narrative (Srnicek & De Sutter, 2016; Van Dijck et al., 2018).

DRESSX offers digital garments for social media, gaming, and AR environments, and provides AI-powered tools for styling, virtual try-ons, and personalised garment visualisation. Its consumer ecosystem includes an AR fashion app, AI fashion game, virtual wardrobes, and avatar integrations across platforms such as *Roblox*, *Bitmoji*, *Meta*, and *Zepeto*. It also offers blockchain-based NFTs via its on-chain marketplace, positioning virtual garments as collectible and tradeable assets. On the business side, DRESSX develops AI styling tools, virtual try-on mirrors, branded wearables, digital trend reports, and platform utilities.

Products and services are accompanied by so-called *eco-metrics*: quantitative indicators of carbon savings and material reduction that position DRESSX as not only a pioneer in virtual aesthetics but also a leader in sustainable innovation. However, these metrics reflect a deliberate strategy to frame digital fashion as both technologically advanced and environmentally responsible (Creangă, 2019; Niessen, 2020). This raises questions about the robustness of such sustainability claims and their function within a broader entanglement of digital fashion, ecological ethics, and platform-driven innovation.

The leading question for this article is: how does DRESSX perform sustainability through its platform design, commercial discourse, and interface aesthetics? By critically mapping the visual, rhetorical, and infrastructural logics of the platform, I argue that sustainability here operates less as systemic intervention than as a branded, promotable surface that is visually polished, affective, and platformised. This argument centres on what I call *surface sustainability*: the performative deployment of green values that remain aesthetic and affective, rather than systemic or structural.

While this article focuses on DRESSX, the platform operates within a broader ecosystem of digital-only fashion initiatives, including platforms such as *XR Couture*, *Zero10*, and *Digitalax*. DRESSX is selected because its scale, commercial reach, and explicit sustainability branding make visible the dominant logics through which digital fashion platforms currently aestheticise and commodify environmental responsibility. Furthermore, DRESSX is not a single brand but a platform-based ecosystem that hosts multiple designers, collections, and technological services. The focus on DRESSX is therefore not aimed at generalising empirically across platforms, but to critically interrogate a paradigmatic case through which broader discursive and platform-mediated tendencies in digital fashion can be understood.

METHODOLOGY

To explore how DRESSX constructs and performs sustainability, I apply a mixed-methods approach combining platform and interface analysis with critical discourse analysis. Rather than assessing the platform's material environmental impact, I examine how sustainability is imagined, aestheticised, and commodified through visual design, discursive framing, and platform infrastructure. This includes platform ethics and data practices, which are increasingly recognised as integral to sustainability claims (Vänskä et al., 2024).

The methodological framework draws from media and platform studies to approach DRESSX not as a neutral digital marketplace but as a curated and commercial ecosystem (Riemens, 2025; Srnicek & De Sutter, 2016). Following Alexander Galloway's (2012) conception of the interface as a cultural effect, the platform interface is read as an ideological site that encodes sustainability through affective design, image curation, and user navigation. Building on Nanna Verhoeff's (2012) spatial and navigational reading of mobile screens, the interface analysis considers how the aesthetic organisation of sustainability guides perception and participation through product categorisation, imagery, and interactivity.

To complement this visual-infrastructural lens, I conduct a critical discourse analysis of

DRESSX's textual and visual messaging across its official communication channels, including the website, press releases, social media campaigns, mission statements, newsletters, blog posts, and collection announcements. Inspired by Michel Foucault's (1972) notion of discourse as a system of knowledge production, and Norman Fairclough's (1992) attention to institutional language, the analysis focuses on how sustainability is framed within broader narratives of innovation, digital dematerialisation, and ethical consumption targeted towards consumers (B2C) and businesses (B2B).

This approach is further informed by Rianne Riemens' (2024, 2025) model of tech-on-climate discourse, which foregrounds the strategic use of discursive coupling and decoupling to legitimise technological solutions to environmental crises. Her concept of "Platform Earth" frames digital platforms as actors in a green capitalist economy, where techno-optimism, planetary control, and immateriality obscure extractive practices and material entanglements (Riemens, 2025). Analysing DRESSX's sustainability rhetoric through this lens, I will examine how green values are encoded not only in language but also in platform architecture, functioning as both aesthetic strategy and ideological mythmaking device.

FRAMING SUSTAINABILITY IN THE DIGITAL FASHION ECONOMY

Before turning to the case analysis, I review and conceptualise dominant framings of sustainability within the digital fashion economy, focusing on their construction in both industry discourse and scholarly research. While recent research highlights the potential of digital innovation such as artificial intelligence to enhance sustainability in supply chain optimisation, defect detection, and consumer personalisation (Periyasamy & Periyasami, 2023; Ramos et al., 2023; Xin et al., 2025), there remains limited critical engagement with how sustainability is performed, aestheticised, and commodified by digital fashion platforms. The dominant framing tends to reproduce conventional narratives of technological solutionism, positioning innovation as inherently ethical. This uncritical alignment risks concealing the environmental and ethical implications of platform infrastructures and may ultimately reinforce unsustainable practices driven by the demands and dynamics of the digital economy.

Traditionally, sustainability in fashion is understood through material interventions: eco-fabrics, water reduction, circularity, and waste minimisation (Fletcher, 2014; Niessen, 2020). In contrast, digital fashion appears to circumvent these concerns altogether by eliminating physical production. Within popular media and marketing, dematerialisation is often framed as intrinsically sustainable. However, this framing overlooks the material realities of digital infrastructures: energy-intensive rendering processes, cloud computing, and the environmental toll of blockchain and NFTs (Schauman et al., 2023; Xin et al., 2025).

This is not to suggest that digital fashion is inherently unsustainable. When applied thoughtfully, it offers meaningful potential for environmental impact reduction. For example, 3D design supports zero-waste patternmaking and low-impact sampling (Rissanen & McQuillan, 2023). Virtual try-ons and digital showrooms can lower the carbon footprint of retail, shipping, and overproduction by encouraging more informed purchases. In such contexts, digital fashion may serve as a preventative tool for making less wasteful decisions. Still, its overall sustainability ultimately hinges on its integration into larger systems of production, consumption, and technological infrastructure.

Platforms like DRESSX have capitalised on the digital turn in fashion, a shift accelerated and brought to a peak by the COVID-19 pandemic (Boughlala & Smelik, 2024). Their branding draws on the language of sustainability, innovation, and empowerment, presenting digital fashion as a guilt-free alternative to fast fashion. In my view, this narrative masks a different kind of excess: not material, but visual, experiential, and digital. Consumers purchase digital garments to enhance online personas, clothe avatars, or post on social media (Choufan, 2022; Park & Chun, 2023). The value of these items is not in their utility but in their symbolic and affective appeal, often intended for ephemeral, single-use visibility in posts or games (Zhang, 2022). I therefore argue that digital fashion replicates the logic of disposability in dematerialised form, circulating within the same cycles of novelty, aesthetic trend, and obsolescence that drive fast fashion.

Importantly, DRESSX operates as a platform within the broader system of platform capitalism. Its sustainability discourse is not just

an ethical claim, but it is a commercial strategy, a form of platform-native greenwashing. Carbon offset metrics, "eco-conscious" collections, and digital-only fashion drops, are framed as ethical innovations, yet they often serve more as affective signals than as structural interventions. Following Srnicek and De Sutter (2016), this can be understood as the commodification of ethical discourse within digital infrastructures: green values are encoded into user experiences (UX), algorithms, and marketing, not to reduce systemic harm but to differentiate the platform in a competitive digital economy.

While digital fashion may lower some material impacts, its sustainability is frequently aestheticised and commodified within platform logics. The literature discussed in this section suggests that green values are mobilised to enhance visibility, engagement, and competitive positioning within the digital economy, rather than to drive structural change. Ultimately, sustainability in this context is less a matter of material reduction than of narrative construction, where ethical claims serve brand identity and consumer affect, as much as environmental responsibility.

VISUAL AND COMMERCIAL LOGICS OF SUSTAINABILITY

Analysing the DRESSX interface reveals how it plays a central role in communicating sustainability to users. Through product labelling, navigation design, and curated categories such as the "Eco-conscious" collection, the platform fosters an image of ethical consumption. This collection presents garments as environmentally aligned, though the criteria for inclusion are rarely transparent. As I will show in this section, the interface, across both desktop and mobile versions, curates not only a browsing experience but an entire visual and ideological experience; one in which sustainability is rendered intuitive, immersive, and technologically progressive.

Let me show how the interface presents sustainability as an aesthetic and affective experience. At first encounter, green hues appear across the site's visual design and in the logo. This strategic use of green, long associated with ecological responsibility, reinforces the perception that users are engaging in environmentally conscious consumption. Garments often feature shiny textures with ethereal and glowing effects that gesture toward a post-material, utopian future. (Fig. 01)[1]

Items like DRESSX's "Blue Marble 2007"—dresses and shirts digitally wrapped in NASA satellite imagery of Earth—or Scotomalab's "Save-Our-Planet" capsule collection exemplify how sustainability is visualised through direct symbolic references to environmental iconography. Beyond these explicit references, my analysis shows that the aesthetics of immateriality—metallic sheens, floating garments, dreamlike virtual environments—reinforce the perception that these clothes are clean, weightless, and guilt-free. This visual language distances users from the material realities of garment production while reinforcing a sense of participation in innovation and progress (Evans, 2013; Galloway, 2012). The promise of sustainability is conveyed not through material transparency, but through a speculative visual culture where dematerialisation becomes synonymous with ethical action.

The site foregrounds ethical action by presenting sustainability as a curated lifestyle choice. Categories such as "Eco-conscious" and "No More Plastic" are seamlessly integrated into the interface's top-level menu, appearing alongside style-driven or occasion-based groupings. These remain accessible across devices through expandable menus, maintaining visibility regardless of screen size. Their strategic placement puts ecological awareness on equal footing with aesthetic taste under the header "shop now," suggesting sustainability is no longer a niche concern but an integral part of contemporary fashion culture. Moreover, these sections are often accompanied by bold, motivational statements—e.g., "Eliminate your carbon footprint with every outfit" or "Communicate your sustainable goals through your new digital looks"—guiding users not just toward a product, but toward a desirable ethical identity.

Pushing the analysis further, this ethical identity is constructed through the procedural dimensions of the interface. Unlike e-commerce platforms of physical items, DRESSX does not

1 The design pictured in this image is accompanied with an artist and garment description. In this case, Lena Semenenko—Ukraine's first digital designer to present at Ukrainian Fashion Week (2020)—imagines a speculative future in her DRESSX collection READY FOR FUTURE? Her designs envision smart, sustainable cities shaped by collaboration between designers, scientists, and bio-designers, using materials that "do not exist in reality" to propose new urban and ecological paradigms.

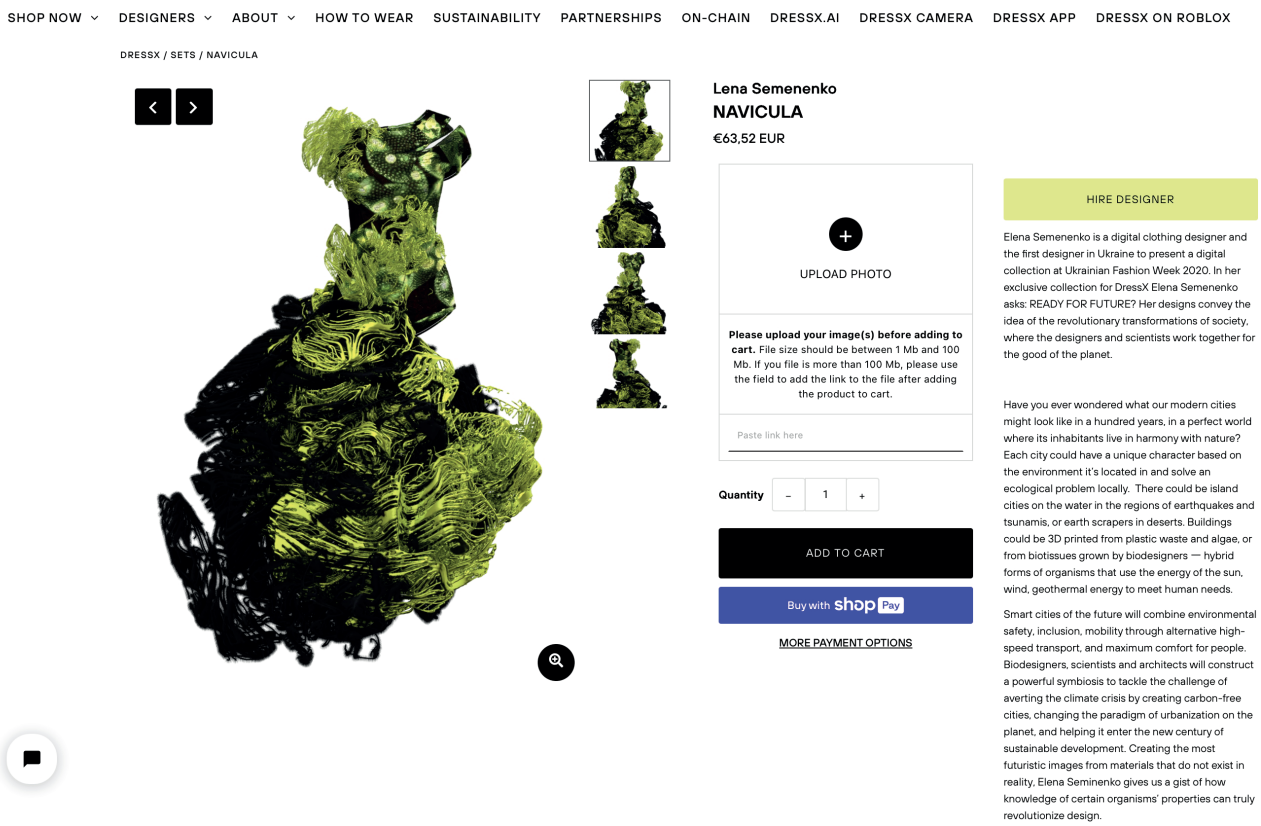

Fig. 01

ask users to select a garment size or shipping address. Instead, users are prompted to upload a photograph or try garments in Augmented Reality, built on the premise that "digital clothes fit all sizes." This shift symbolically reconfigures the act of consumption: the absence of shipping options or fabric descriptions is not a flaw but a feature; it is a visual and experiential cue that these clothes generate no physical waste. In fact, the "upload" button becomes an interface artifact of sustainability, replacing logistical friction with virtual immediacy—a form of "instant fashion" (Rocamora, 2013, p. 74)—ideologically aligning technological ease with ecological virtue.

As my analysis further reveals, this dematerialised ethos is reinforced by the absence of traditional material indicators: no fabric swatches, no garment tags, no sourcing notes. Though there are some tongue-in-cheek references to fictitious materials like "digital leather." Instead of actual material references, the interface prominently features bold infographics, claiming quantifiable environmental benefits such as kilograms of CO_2 saved or litres of water preserved. These figures are often paired with digestible comparisons (e.g., "equal to 968 days of phone charging"), anchoring abstract ecological metrics in everyday actions (Fig. 02). Visually, these statistics appear in stylised blocks, with icons like water droplets or CO_2 clouds, integrating the language of sustainability into the interface's design vocabulary.

For a discourse analysis, it is crucial not only to consider what is present, but also what is absent. While these eco-metrics suggest scientific legitimacy, they are presented without links to underlying data, independent verification, or lifecycle assessment. They operate less as rigorous environmental accounting than as performative markers of green intent, designed to reassure users immediately. In this context, eco-metrics serve as aesthetic cues rather than empirical tools, allowing sustainability to act as a commercial asset. Their presence blurs the boundary between ethical information and marketing strategy, reinforcing the idea that digital fashion consumption can be not only guilt-free but 'measurably' virtuous.

The broader aesthetic of the site supports this alignment of sustainable innovation. The layout privileges full-width imagery, smooth

Fig. 02

animations, and dynamic interactions, enhancing the immersive experience of digital consumption. A clean, minimal colour scheme (white or black with neon highlights) evokes a technological clarity and futuristic optimism. There is a deliberate absence of fashion's usual environmental signifiers: no factories, no fibres, no supply chains. Instead, users encounter a streamlined interface where consumption is abstracted from material labour, and sustainability becomes a visual default.

This analysis shows that the DRESSX interface communicates sustainability not as ecological urgency or systemic critique, but as a desirable and rewarding lifestyle aesthetic. Users are not asked to reconsider consumption, but to redirect it; to "shop smarter" by moving from physical to digital wardrobes. Digital fashion is presented as ethical indulgence: a way to enjoy fashion's pleasures without planetary costs. The act of uploading a selfie, swiping through glowing garments, or dressing an avatar becomes imbued with moral and affective value.

"POST-PHYSICAL" BRANDING NARRATIVE OF DIGITAL FASHION

Moving the analysis beyond the interface, I argue that DRESSX constructs its sustainable identity through a broader discursive strategy rooted in aspirational sustainability, digital innovation, and personal empowerment. Across official communications, the platform consistently aligns itself with climate responsibility and technological transformation. Slogans such as "saving the planet one digital garment at a time" or "post-physical fashion" position digital fashion not merely as trend, but as cultural and moral imperative. These statements do more than market a product: they articulate a worldview in which fashion consumption becomes ethically regenerative, technologically advanced, and aesthetically liberating, in clear contrast to fast fashion's moral and environmental failings.

A key theme in DRESSX's sustainability discourse is dematerialisation as ecological salvation. The company foregrounds that digital garments "produce 97% less CO_2 and use 3,300 litres less water than physical clothing." These claims recur across their "Sustainability"

microsite, which includes subpages on "People," "Planet," "Prosperity," and "Partnership."[2] Modelled on the United Nations Sustainable Development Goals (SDGs), this framework suggests accountability, but its application remains largely rhetorical. The platform's "Raw data & methodology" page references internal calculations and external estimates to quantify environmental savings. However, these figures are presented as infographics and simplified analogies ("equal to 968 days of phone charging") with no third-party verification or detailed lifecycle assessment. DRESSX thus *performs* transparency while affirming a pre-established belief in digital fashion's eco-virtue.

This emphasis on quantifiable impact legitimises ecological credibility while displacing the more complex realities of energy use, data storage, and platform infrastructure. Climate action is translated into user-friendly metrics, rendering sustainability legible as a lifestyle upgrade rather than a structural critique. Users are invited to participate in planetary care through consumption, marking an affective shift from guilt to empowerment. Slogans like "Don't shop less, shop digital fashion" invert the logic of sustainable restraint, reframing minimalism as abundance and sacrifice as indulgence. Here, digital fashion is not a reduction of fashion consumption, but a redirection into a supposedly immaterial domain.

This aspirational tone is reinforced by future-oriented language: "cutting-edge technology," "AR try-ons," and "Web3 solutions" are promoted as tools for climate-positive fashion. This language is ideological, inviting users to identify as responsible, early adopters of a new mode of ethical consumption. It encourages pride and momentum in aligning with digital change, cultivating what I term *climate chic*: a stylised, optimistic, and shareable form of ecological awareness.

DRESSX also mobilises identity politics in its branding narrative. They describe Gen Z, their largest consumer base, as digital natives driven by "climate anxiety" and a desire for "sustainable and expressive alternatives." This rhetoric positions digital fashion as both stylistic tool and political medium. Statements like "build your infinite wardrobe" or "explore trends guilt-free" invoke green consumer citizenship, where ethics are enacted through marketplace behaviour. Notably, the "People" page juxtaposes grim statistics on labour exploitation in the global fashion industry with celebratory descriptions of DRESSX's own remote workforce, complete with "delicious snacks" and co-working hubs. These contrasts produce a discursive split between analogue suffering and digital freedom, positioning DRESSX as a clean, ethical break from fashion's material past/present.

Strategic collaborations and curated collections further embed DRESSX's messaging in climate branding. Partnerships with initiatives like the *No More Plastic Foundation* and *Earth Month* campaigns anchor digital garments in environmental discourse. Collection names such as "Mass-Extinction Tee" or "Save the Ocean" stress symbolic value, while AR-enhanced campaigns promise seamless scalability. The refrain "no fabric, no pollution, no compromise" captures the techno-solutionist ethos at play: an imaginary in which innovation, rather than regulation or degrowth, becomes the preferred path to sustainability.

DRESSX's sustainability pages amplify this narrative, layering SDG references with broad claims like "all our activities have positive environmental and social impact." However, the engagement with these goals is largely symbolic. While the site references SDG 12 ("Responsible Consumption and Production") and SDG 13 ("Climate Action"), it offers no measurable progress or concrete targets. Sustainability functions here as a visual and discursive aesthetic, anchored in iconised metrics, elevated by slogans, and enacted through design. Features like the "upload" button, as mentioned before, or AR try-on are not merely functional but ideological: they embody the promise of ethical consumption without waste, labour, or delay.

My analysis shows that DRESSX's discursive strategy does not challenge structures of overconsumption but enables its continuation in digitised, aestheticised, and moralised form. Sustainability becomes an affective state: a stylish, intuitive experience that aligns consumption with virtue. By framing digital fashion as both technologically inevitable and ethically redemptive, DRESSX does not merely promote a product—it constructs a post-physical imaginary in which users dress themselves into a better future. In this framing, sustainability is less a goal to be achieved than an experience to be performed.

2 https://dressx.com/pages/sustainability

DISCUSSION: COMMERCIAL PERSISTENCE OF FAST FASHION

Bringing together the analyses, I argue that DRESSX reproduces many core logics of fast fashion: rapid turnover, trend-centric aesthetics, and a relentless emphasis on novelty. While its garments are virtual, the platform remains tethered to the fashion industry's accelerationist dynamics. New collections appear frequently, often tied to temporal events, celebrity collaborations, or digital "drops," echoing the micro-trend cycles of brands like *Shein* or *Zara* (albeit without the physical inventory). What distinguishes DRESSX is not a break from fast fashion's economic model, but its rebranding under the guise of digital dematerialisation. The earlier-mentioned slogan "Don't shop less, shop digital fashion" is telling: consumption is no longer constrained by storage, shipping, or wearability. Instead, users are encouraged to build "infinite meta-closets" filled with ephemeral looks for ever-changing platforms. This post-physical abundance sustains fast fashion's appetite for visual novelty while dressing it in a rhetoric of sustainability.

Yet, and this is paramount to my argument, dematerialisation does not equal impact-free. Emerging research shows the environmental cost of digital infrastructures is far from negligible (Che et al., 2024). Core processes such as 3D rendering, cloud storage, AR/VR, and blockchain minting consume significant energy. Even "lightweight" digital garments require GPU-intensive rendering, server capacity, and constant user engagement. As Xin et al. (2025, p. 5) put it, "the technological energy consumption of the production process of digital fashion products is invisible to the brand." In this light, DRESSX's claims of decarbonisation may obscure the redistribution of environmental harm from the sweatshop to the server farm.

These tensions reveal a central contradiction in the branding of ethical immaterialism. DRESSX's sustainability discourse promotes minimalist values like waste reduction, no shipping, carbon neutrality, yet invites users to accumulate maximalist digital wardrobes, often filled with garments intended for one-time use. This mirrors what Niessen (2020) calls fashion's "sacrifice zones": immaterial spaces that enable continued consumption while concealing its extractive conditions. In the case of DRESSX, I extend this to *digital sacrifice zones*: digital environments that enable continued hyper-consumption while masking their infrastructural, energetic, and ideological costs. Here, digital fashion functions as both absolution and incentive: a promise that users can consume more, more often, and more publicly, so long as they do so digitally, without cloth or carbon.

While DRESSX offers one of the most developed eco-metric interfaces, similar sustainability framings can be observed from other major digital-only platforms such as The Fabricant, Institute of Digital Fashion, and more. These likewise emphasise immateriality, reduced (or zero) waste, and ethical innovation without fully or explicitly accounting for infrastructural energy use or platform-driven consumption dynamics. This suggests that surface sustainability is not unique to DRESSX, but operates as a broader discursive and commercial strategy within the digital fashion economy.

CONCLUSION

I have shown that DRESSX does not break from fast fashion's logic, but it digitises and intensifies it. The platform transforms sustainability from a material practice into a marketing aesthetic, revealing the complexities and contradictions of consuming ethically in an immaterial economy. Far from being a neutral space of innovation, the analysis of DRESSX reveals how sustainability in digital fashion is constructed, curated, and commodified. I have mapped the visual, discursive, and commercial strategies through which the platform constructs its sustainability narrative. Rather than a systemic response to fashion's ecological crises, sustainability emerges as a surface strategy—polished, promotable, and platformised—embedded in the visual, affective, and commercial logics of the digital fashion economy.

By engaging critically with digital fashion as both a media interface and a commercial actor, we can better understand the layered nature of sustainability discourse in emerging fashion ecosystems. Rather than take claims at face value, it is essential to assess how platforms like DRESSX aestheticise, monetise, and algorithmically reinforce sustainability not as an end goal, but as a branded surface. This tension lies at the heart of digital fashion's promise and its paradox. If digital fashion is to contribute meaningfully to sustainable futures, it must move beyond surface claims and participate in this reinvention socially, ecologically, and structurally.

CAPTIONS

[Fig. 01] NAVICULA dress by Lena Semenenko, DRESSX website, screenshot by author.

[Fig. 02] Eco-metrics of Scotomalab's SAVE-OUR-PLANET digital T-shirt, screenshot by author.

REFERENCES

Baek, E., Haines, S., Fares, O. H., Huang, Z., Hong, Y., & Lee, S. H. M. (2022). Defining digital fashion: Reshaping the field via a systematic review. *Computers in Human Behavior*, *137*, 107407. https://doi.org/10.1016/j.chb.2022.107407.

Boughlala, A., & Smelik, A. (2024). Tracing the History of Digital Fashion. *Clothing and Textiles Research Journal*. https://doi.org/10.1177/0887302X241283504.

Che, S., Wen, L., & Wang, J. (2024). Global insights on the impact of digital infrastructure on carbon emissions: A multidimensional analysis. *Journal of Environmental Management*, *368*, 122144. https://doi.org/10.1016/j.jenvman.2024.122144.

Choufan, L. (2022). Fashion You Do Not Own, Fashion You Cannot Feel:x Toward a New Paradigm of Sharing Fashion in the Digital Age. *Fashion Theory*, *26*(3), 307–328. https://doi.org/10.1080/1362704X.2021.1912954.

Creangă, R. (2019). Fashion Sustainability in the Digital Realm. In N. Kalbaska, T. Sádaba, F. Cominelli, & L. Cantoni (Eds.), *Fashion Communication in the Digital Age* (pp. 198–208). Springer International Publishing. https://doi.org/10.1007/978-3-030-15436-3_18.

Evans, C. (2013). *The mechanical smile: Modernism and the first fashion shows in France and America 1900-1929*. Yale University Press.

Fairclough, N. (1992). *Discourse and Social Change*. Polity.

Fletcher, K. (2014). *Sustainable fashion and textiles: Design journeys* (Second edition). Routledge.

Foucault, M. (1972). *The Archeology of Knowledge* (A. M. Sheridan Smith, Trans.). Tavistock Publications.

Galloway, A. R. (2012). *The interface effect*. Polity Press.

Niessen, S. (2020). Fashion, its Sacrifice Zone, and Sustainability. *Fashion Theory*, *24*(6), 859–877. https://doi.org/10.1080/1362704X.2020.1800984.

Park, J., & Chun, J. (2023). Evolution of Fashion as Play in the Digital Space. *Fashion Practice*, *15*(2), 256–278. https://doi.org/10.1080/17569370.2022.2149837.

Periyasamy, A. P., & Periyasami, S. (2023). Rise of digital fashion and metaverse: Influence on sustainability. *Digital Economy and Sustainable Development*, *1*(1), 16. https://doi.org/10.1007/s44265-023-00016-z.

Ramos, L., Rivas-Echeverría, F., Pérez, A. G., & Casas, E. (2023). Artificial intelligence and sustainability in the fashion industry: A review from 2010 to 2022. *SN Applied Sciences*, *5*(12), 387. https://doi.org/10.1007/s42452-023-05587-2.

Riemens, R. (2024). Fixing the earth: Whole-systems thinking in Silicon Valley's environmental ideology. *Internet Histories*, *8*(4), 294–311. https://doi.org/10.1080/24701475.2024.2416295.

Riemens, R. (2025). *Platform Earth: Ecomodernism in Tech-on-Climate Discourse* [Doctoral Dissertation]. Radboud University.

Rissanen, T., & McQuillan, H. (2023). *Zero Waste Fashion Design*. British Film Institute. https://doi.org/10.5040/9781350241862.

Rocamora, A. (2013). New Fashion Times: Fashion and Digital Media. In S. Black, A. de la Haye, J. Entwistle, A. Rocamora, R. A. Root, & H. Thomas (Eds.), *The Handbook of Fashion Studies* (pp. 61–77). Bloomsbury.

Schauman, S., Greene, S., & Korkman, O. (2023). Sufficiency and the dematerialization of fashion: How digital substitutes are creating new market opportunities. *Business Horizons*, *66*(6), 741–751. https://doi.org/10.1016/j.bushor.2023.03.003.

Srnicek, N., & De Sutter, L. (2016). *Platform capitalism*. Polity.

Van Dijck, J., Poell, T., & De Waal, M. (2018). *The Platform Society* (1st ed.). Oxford University Press. https://doi.org/10.1093/oso/9780190889760.001.0001.

Vänskä, A., Rauti, S., Heino, T., Carlsson, R., Mickelsson, S., & Särmäkari, N. (2024). Fair Data is the New Black: Online Shopping, Data Leaks, and Broadening the Understanding of Sustainable Fashion. *Fashion Theory*, *28*(3), 305–333. https://doi.org/10.1080/1362704X.2024.2339251.

Verhoeff, N. (2012). *Mobile screens: The visual regime of navigation*. Amsterdam University Press.

Xin, B., Song, Y., Tan, H., & Peng, W. (2025). Sustainable digital fashion in a metaverse ecosystem. *Journal of Retailing and Consumer Services*, *82*, 104099. https://doi.org/10.1016/j.jretconser.2024.104099.

Zhang, Y. (2022). Clothes with no emperors: The materiality of digital fashion. *AN-ICON. Studies in Environmental Images*, *1*(2). https://doi.org/10.54103/ai/17124.