

**Hyper-Personalized E-commerce post COVID-19: Etsy's Corporate Sustainability Quality
Evaluation**

Ru Stone

Introduction

Etsy.com (hereafter referred to as Etsy) saw incredible growth during 2020 as a result of the COVID-19 pandemic and the resulting market and consumer shifts. In an absence of sufficient availability of commercially produced masks, people turned to individual Etsy sellers to fill the demand for cloth masks. At the same time, several key consumer trends created an opportunity for Etsy's growth.

First, online shopping saw explosive growth as people were not able to go out to traditional stores and in some cases had extra discretionary spending money that would usually be spent outside of the home on products, services, and entertainment. E-commerce has grown remarkably in the last couple of decades. Since the proliferation of the internet, online shopping has been on the rise, threatening brick-and-mortar store models. This trend was accelerated during the COVID-19 pandemic because people were not able to go to stores. In 2019, e-commerce made up 13.6% of total global retail sales, but in 2020, e-commerce grew to 18% of total global retail sales (International Trade Administration, 2024). Almost all businesses have some form of e-commerce element to their business, and many small businesses have also adopted digital platforms (Parker et al., 2023). Even after the worst of the pandemic-related economic shutdowns, businesses have not gone back to their traditional models, and e-commerce has continued to grow with 21.8% of all total global retail sales coming from e-commerce in 2024 (International Trade Administration, 2024). New e-commerce business models such as online shopping for groceries arose, and e-commerce as a category quickly developed with many brands investing heavily in delivery infrastructure. Now, people expect the convenience of getting a product delivered in two days or less and having groceries gathered for them and nicely delivered to the back of their car— or even to their doorstep.

Second, during the heaviest periods of lockdown, people were not driving as much which led to a significant reduction in emissions measured in the atmosphere in certain areas. Overall, global road travel decreased by 50%, and air travel decreased by 60%, leading to a 50% drop in the concentration of ultrafine particles (Mueller et al, 2022; McKoy, 2022). Those in major cities like Seoul (Regan, 2020); Sacramento (California Air Resource Board, 2022); and New Delhi (Wright, 2020) saw significant drops in smog and air pollution (often measured using Particle Matter that is smaller than 2.5 micrometers (μm) or $\text{PM}_{2.5}$). Those who live in these areas noticed a significant improvement in environmental quality. These observations reminded people of the value of nature and the impact that human actions have on the quality of nature.

People began to reconnect with the environment since lockdowns prevented people from going to typical indoor activities and people were seeking safe ways to relieve cabin fever. As people were forced to stay home and away from others, they adopted new hobbies like exercising outdoors or going on walks (Part et al., 2022). In the first wave of pandemic-related shutdowns in 2020, one study in May 2020 in the UK found that 36% of respondents reported spending more time outside than before. This number rose to 46% when the survey was repeated in July 2020 (Office for National Statistics, 2021). Engaging with nature allowed people to reduce pandemic-driven stress and slow down. People were reminded of the value of a clean environment and the positive effects being in nature had on their mental health, leading people to, at least temporarily, make environmental preservation a higher priority (Hancock, 2022). As a result, people were more conscious of their consumption and wanted to make more environmentally friendly purchases.

For e-commerce brand Etsy—a platform that allows individuals to make and sell their goods—these consumer and social trends led to a multi-billion dollar increase in revenue in the

years since 2020 (see Figure 1; Macro Trends, 2024). Notably, the nature of Etsy's business model as an e-commerce business means it has a limited physical presence in the market and very little control over the production of the products sold on its platform. But unlike many other e-commerce platforms, Etsy has positioned itself as a sustainability-oriented brand. Even in e-commerce spaces, consumers' environmental concerns impacted their purchasing decisions (Rao et al., 2021; Morris, 2022). It published its first environmental impact report in 2017. The most recent report was released in 2023 and presents details on the brand's sustainability-oriented environmental, social, and economic activities from the 2022 fiscal year. It also includes updates on specific programs and initiatives that contribute to one of the three major sustainability pillars. The data presented is compiled by a third-party sustainability consulting firm and includes reporting on key metrics.

As with any online enterprise, Etsy as a website and e-commerce platform requires enormous amounts of energy to maintain data centers. Etsy uses carbon emissions as the primary metric to set goals, understand its impact, and evaluate the performance of its initiatives. Overall, Etsy's 2030 goal is to reduce its absolute scope 1 and 2 greenhouse gas emissions (GHGE) by 50% and reduce scope 3 GHGE by 52% per dollar of gross profit using 2020 as the base year. As a peer-to-peer e-commerce business, the majority of scope 3 emissions come from transportation of goods, and most energy used is to power the data centers that store the digital data. But since 2019, Etsy has been able to offset 100% of all emissions by supporting third-party emissions-reduction strategies. Like many massive online e-commerce sites, its sustainability reports give the impression of a socially conscientious business.

Table 1

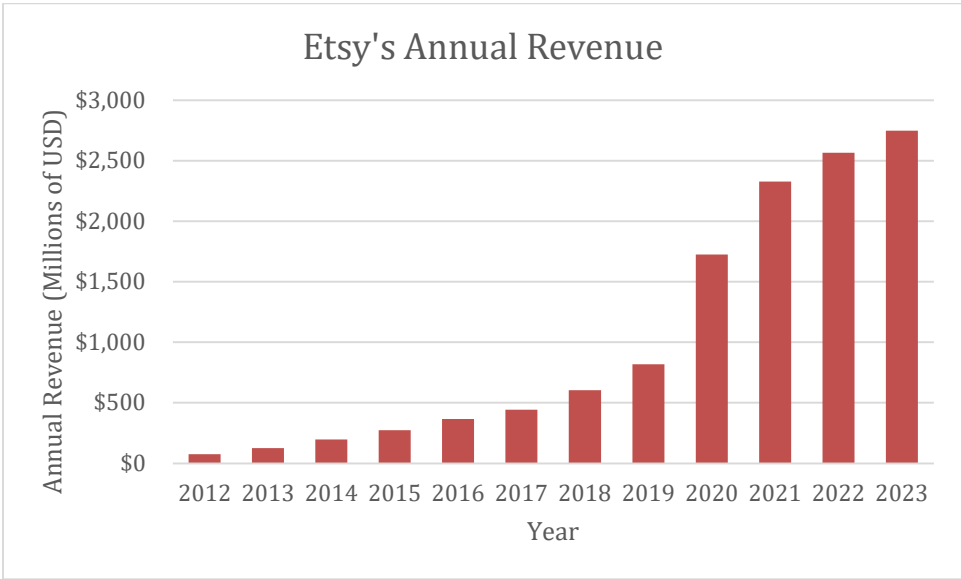
Etsy's Emissions from 2017 to 2022

	2017	2018	2019	2020	2021	2022
Scope 1	467	372	371	294	350	371
Scope 2 – Market	2,209	1,213	652	4	0	0
Scope 2 – Location	3,162	2,923	1,859	914	420	542
Scope 3	119,444	137,042	155,967	438,731	548,900	531,638

Note. See Appendix A for a further breakdown of Scope 3 emissions

Figure 1.

Etsy's Annual Revenue



However, Etsy is still a multi-billion-dollar international e-commerce platform and thus is likely to face the same sustainability challenges as other companies of similar size and scale. The most famous e-commerce platforms like Amazon.com, Alibaba.com, Walmart.com, and Temu.com face heavy criticism for being especially unsustainable for their business practices such as excessive packaging, product waste, questionable labor sourcing, high emission from transportation, and greenwashing marketing campaigns (Greenpeace East Asia, 2023; Oceana, 2021; U.S. Department of Labor 2023; Sainato, 2023; Tarasov, 2022; Prasso, 2023). Public opinion against these practices has prompted some brands to alter their business practices to

adopt more sustainable behaviors to varying degrees. But these changes have not convinced the public of the sustainability of these companies (Coppola, 2022); at best, it has assuaged the consumers who see the low price of goods as a reasonable tradeoff for unsustainable practices. Etsy seems to represent the values and vision of sustainability change-makers but its inherent nature as a goliath e-commerce platform brings the same sustainability challenges as its peers. For these reasons, further investigation of Etsy's business model should be done to verify whether its sustainable business strategies live up to its sustainability branding as well as identify opportunities for future directions the company could take to further its sustainability.

Literature Review

E-commerce sustainability

Generally, the main elements for e-commerce emissions are computing and data center energy use to maintain the web data and traffic, and shipping emissions between seller and recipient (Edwards et al., 2010). E-commerce is facilitated by technology and allows access to products over a wider geography including more rural areas and less developed countries. E-commerce is just as diverse as traditional business models, especially given the potential for globalization. For example, e-commerce platforms like Uber and TaskRabbit sell intangible services whereas Amazon or Etsy rely on consumerism. Some e-commerce brands started online and have never had retail spaces meant for the general public such as Amazon. But there are also traditional brands such as Target, Walmart, Kohls that have embraced the digital age by moving into the e-commerce space. Micro-enterprises, or businesses that usually have less than 10 employees, have found success creating e-commerce-only businesses because the startup cost is relatively low.¹ E-commerce businesses could be business-to-business (e.g. Sysco), business-to-

¹ Social media as a marketing tool has been essential for these new e-commerce businesses to reach millions of potential customers far beyond what their traditional geographic reach could have been.

consumer (e.g. Walmart), direct-to-consumer (e.g. Dollar Shave Club), or consumer-to-consumer (e.g. Ebay; also referred to as peer-to-peer). Prior literature attempts to define and subcategorize e-commerce (Zarra et al., 2019; Kilhoffer et al., 2017), however, there have been many overlapping terms that are used interchangeably (e.g. sharing economy, collaborative economy, on-demand economy, and gig economy). This struggle to classify types of e-commerce means that different companies' strategic approaches to developing sustainable practices will be vastly different and that corporate sustainability research findings for e-commerce may be too broad or have patchwork applicability.

RQ2: In what ways do the sustainability strategies in Etsy's Integrated Impact Reports lead to sustainable value creation?

RQ3: Do Etsy's sustainability strategies contribute to strong sustainability?

Peer to peer business and supply chains

Etsy has been described as a peer-to-peer business as compared to businesses to consumer brands in which a disproportionately large company is selling goods or services to an individual. In P2P businesses, products are sold from one individual to another. P2P businesses are characterized by “enhanced resilience through polycentric governance, distributed diversity, and improved socio-ecological wellbeing” (Dartnell & Kish, 2021, p. 2166). Other e-commerce platforms that fall under this classification would be craigslist and eBay. Both seller and buyer have a more equal distribution of power and the seller would fall under the classification of a small business which means that there are fewer than 100 employees or a microbusiness which has ten or fewer employees. Having so many small-scale businesses operating on one e-commerce platform presents a unique challenge to addressing sustainability at all levels.

Another challenge is the degree of variance in Etsy sellers. Etsy is made up of sellers all over the world selling all kinds of products. Some sellers are one-person micro-enterprises selling anything from jewelry to furniture to digital-only design files for crocheting while others are larger companies (either small businesses or medium sized businesses) that are using Etsy as a single channel to sell on in addition to other platforms. These companies may be selling raw materials such as fabric or leather rather than finished products. These products deviate from the outward facing perspective that Etsy is a P2P e-commerce platform.

One problem that some studies found was the last mile issue in which so much energy and resources was used in moving products from distribution centers or store centers to the consumer's home on the proverbial "last mile" of the supply chain (Rai et al., 2023; Escursell et al., 2021). Because many identified e-commerce brands were part of a larger supply chain from only one brand, the supply chains from these brands are well established up to the last mile. There is some debate in the literature on whether e-commerce transportation produces more emissions than traditional retail. Jusoh & Ling (2012) found that e-commerce have lower emissions overall regardless of shipping emissions than traditional stores, and Himanshu (2016) suggested that delivery vehicles that cover the last mile do dozens of deliveries at a time resulted in fewer miles traveled than if all the individual consumers covered the last time from their homes (E-commerce can become more sustainable than in-store shopping when production and sale are local (Rai et al., 2023). But for Etsy's business model which consists of thousands of individual sellers who are creating individual brands for a wide variety of product lines, there is no ability to bulk manufacture and sell in the same way as other e-commerce companies. The supply chain is heavily dependent on different companies as transportation such as FedEx, USPS, and non-commercial mail. Thus, depending on the average distance a product has to

travel for Etsy sales, Etsy as an e-commerce platform may be less sustainable than shopping at an in-person big box retailer.

Being composed of so many brands under one larger platform means that there is a high volume of products being sold and shipped, but there is no central supply chain. This means that rarely can items be shipped in bulk, which would conventionally reduce the amount of packaging needed. Each seller would need to order their own packaging and shipping supplies and constantly use non-commercial shipping channels. Essentially, the entire supply chain for most Etsy sellers is likely to only be across the “last mile” transportation infrastructure.

Packaging

Packaging also tends to be a significant contributor to emissions. For most Etsy stores, the packaging is purchased by the store owners and customized for the branding of that specific shop. Often, these brands are so specialized that consumers expect a highly personalized experience (Hu, 2013; Dartnell & Kish, 2021). Packaging is broken up into three categories, primary, secondary, and tertiary. Escursell et al. (2021) explains that primary packaging is what is found around the item itself and is consumer-facing. Secondary packaging refers to the boxes in which the products in their primary packaging can be shipped. Tertiary packaging includes pallets and protective plastic wrapping which allows everything to be shipped. For e-commerce, packaging contributes significantly to the waste produced for these products (Rao et al., 2021; Chueamuangphan et al., 2020; Escursell et al., 2021). To meet the consumers’ expectations for a highly personalized, yet more expensive long-tail product (Church & Oakley, 2018), Etsy advises sellers to create branded packaging such as custom stationery, brand information or business cards, product care information, decorative boxes, decorative internal wrapping, logo stickers, custom envelopes, etc (Svehuag, n.d.). An individual seller may choose to purchase all

of these packaging-related products or only a few. This means that across all Etsy stores, there is no consistency of packaging meaning that there is no top-down ability to control the sourcing of packaging and sustainability of that packaging.

RQ1: Do Etsy's various programs and initiatives provide a comprehensive system that uphold sustainability principles?

Method

As reported in their annual Integrated Reports, Etsy has many programs and initiatives to build sustainability in its business practices. To get a more comprehensive understanding of the quality of those practices, a series of frameworks will be used to analyze their existing efforts as well as identify areas for further development.

A set of Etsy's sustainability strategies was derived from Etsy's Annual Integrated Reports from 2018 to 2022. These five reports produced N=106 strategies: N=15 strategies in 2018, N=16 strategies in 2019, N=23 strategies in 2020, N=25 strategies in 2021, and N=27 strategies in 2022. A strategy was deemed to be a program, goal, or action that attempts to contribute to environmental, social, or economic well-being. Often, a strategy would start rhetorically with a strong action verb (e.g. Sourced 100% of electricity from renewable sources, Diverted 90% of waste) Notably, verification and ongoing reporting actions (such as "continued to ensure fair pay practices") were not considered strategies and were left out of the evaluation. See the full set of strategies by year in Appendix B through Appendix F.

Once the data was collected, an evaluation of the nature and quality of sustainability from these efforts was done by using three sustainability frameworks as a guide. Hart & Milstein's (2003, p. 60) sustainability value creation framework was used to determine which direction Etsy is oriented and what value Etsy primarily creates for its business. A second framework by Gliedt

& Larson's (2018) will be used to evaluate whether Etsy's strategies are contributing to strong or weak sustainability paths. Finally, Gibson's (2006) set of sustainability principles will be used to evaluate how well six of Etsy's programs provide long-term sustainability for society.

Results

Framework 1: Sustainability value creation framework

To answer RQ2, Etsy's sustainability value creation strategies were evaluated based on a modified version of Hart & Milstein's (2003, p. 60.) sustainability value creation framework. This framework defines four types of strategies depending on whether the strategy is externally oriented or internally oriented and whether it is something to be done immediately or in the future (see Figure 1). Within the framework, the main drivers for this strategy, the corporate payoff, and a short description are identified for each category. Ideally, there should be a mix of strategies from all four categories to give a competitive advantage. However, these details mainly address the economic and environmental aspects of sustainability. Thus, the details of each category were expanded to incorporate strategies that address human well-being while keeping the same dimensional axes. Additionally, the "clean technology" strategy was relabeled "development of novel sustainable competencies" and "pollution prevention" was changed to "mitigate waste and emissions." After identifying all of Etsy's current sustainability strategies from the Environmental Social Governance section of Etsy's Integrated Report (2023), each strategy was categorized into one of the four categories.

Figure 2*Sustainability Value Creation Framework*

This analysis found that across all five years with available data (2018-2022), most sustainability strategies fell into the category of waste and emissions mitigation with a total of N=40 strategies. Strategies aiming to build a Sustainable Vision (N=28) and Product Stewardship (N=29) had similar quantities and saw the most growth, but the category of strategies intending to develop new sustainability competencies had the lowest number of strategies at N=10 across the five years. Overall, each category saw some growth meaning that Etsy expanded actions that contributed to each category of sustainability value development by relatively the same amount.

Figure 3

Sustainable Value Development Categories for Etsy's Strategies

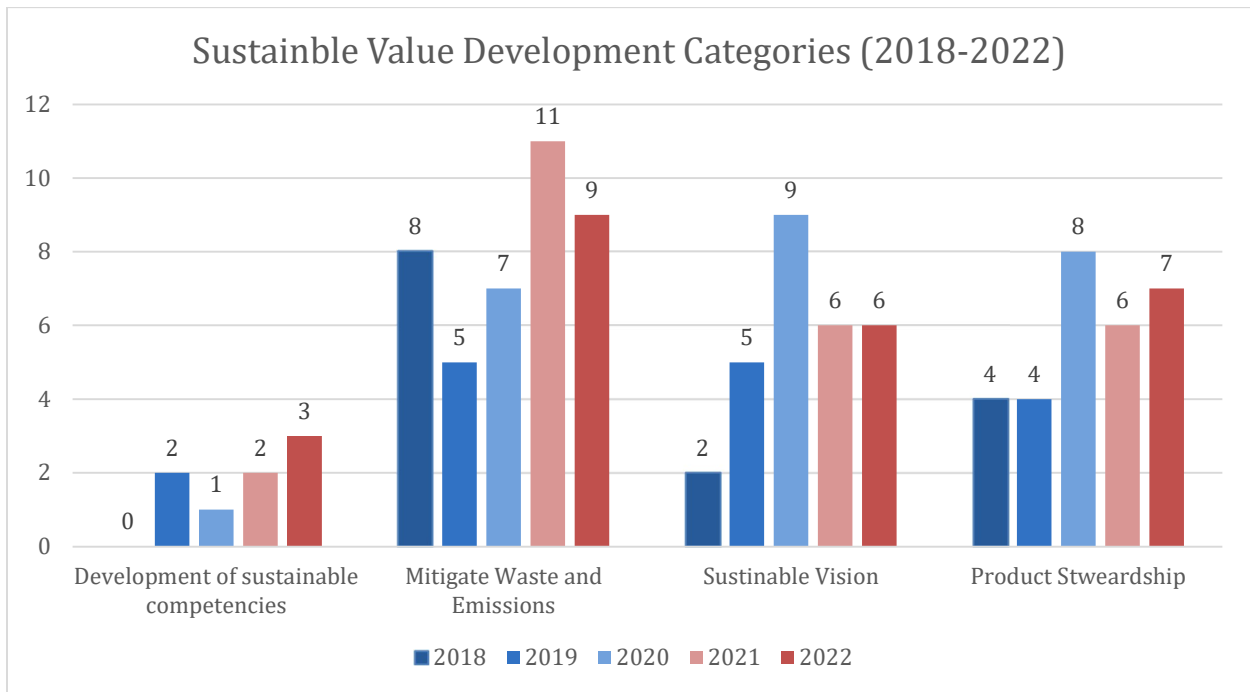
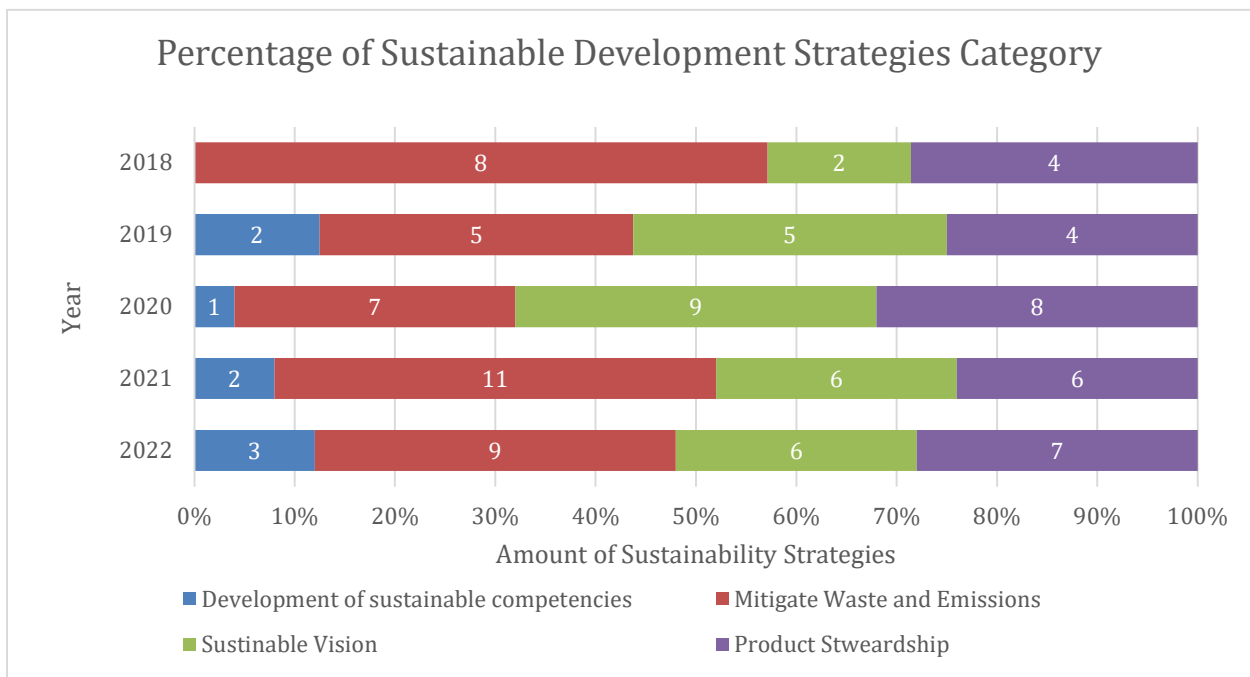


Figure 4

Percentage of Sustainable Development Strategies Category



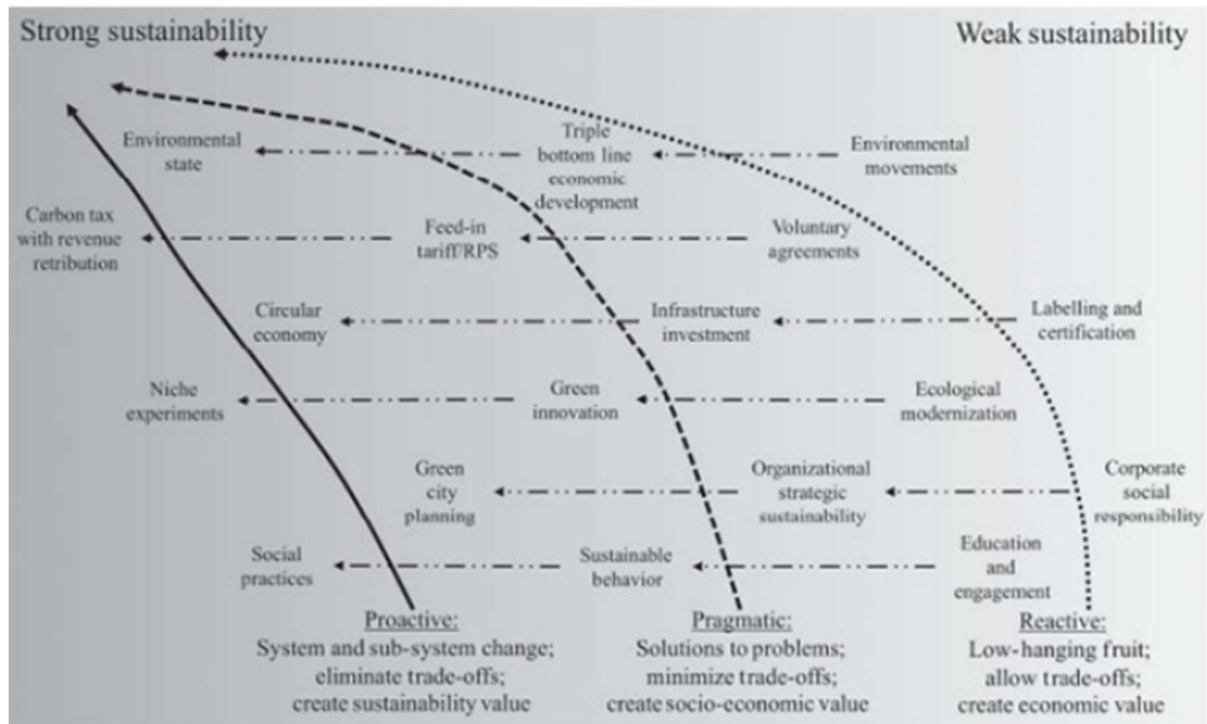
Framework 2: Pathways to Strong Sustainability

While understanding the ways in which Etsy's sustainability strategies are meant to improve their company and area of influence demonstrates the value being added for whom, there remains a question on the efficacy of these strategies in progressing sustainability for society. Understanding whether these strategies are simply low-hanging fruit that primarily creates economic value through social or environmental trade-offs will put Etsy's sustainability actions into a greater context of sustainability transition. Gliedt & Larson's (2018) framework was adopted to evaluate the strategies. This framework outlines the sustainability transition from weak sustainability on the right to strong sustainability on the left. The three paths outlined—reactive, pragmatic, and proactive—demonstrate where on the scale from weak to strong sustainability a society starts and includes examples of strategies that act as acceleration points to move from a weaker sustainability transition trajectory to a stronger sustainability trajectory.

Using an adapted version of Gliedt & Larson's (2018) framework, the data set of Etsy's sustainability strategies between 2018 and 2022 was evaluated with each strategy categorized as a "reactive" strategy, a "pragmatic" strategy, or a "proactive" strategy. Gliedt & Larson's (2018) model included acceleration points primarily for environmental and economic domains, which were used as examples to guide the categorization of Etsy's strategies. However, many of Etsy's sustainability strategies most clearly addressed inequalities in the social domain; in that case, the strategy was evaluated based on how well it fit the descriptions listed under the major pathways.

Figure 5

Pathways to strong sustainability: strategies, instruments, and acceleration points



Overall, there were only N=3 strategies that fit a proactive sustainability pathway: one strategy in 2020 and two strategies in 2022. In comparison, many more strategies would fall under the pragmatic path (N=38), with the greatest number of strategies adhering to the reactive path (N=65). Etsy implemented N=5 pragmatic strategies in 2018, but this quantity steadily grew each year until in 2022, they reported implementing N=11 pragmatic strategies. Similarly, Etsy grew the number of reactive strategies from N=10 in 2018 to N=14 in 2022, however, there was a spike in 2020 and 2021 which had N=15 and N=16 reactive strategies in those years respectively. Overall, Etsy's sustainability strategies adhered best to pragmatic and reactive paths to strong sustainability.

Figure 6

Strength of Etsy's Sustainability Strategies (2018-2022)

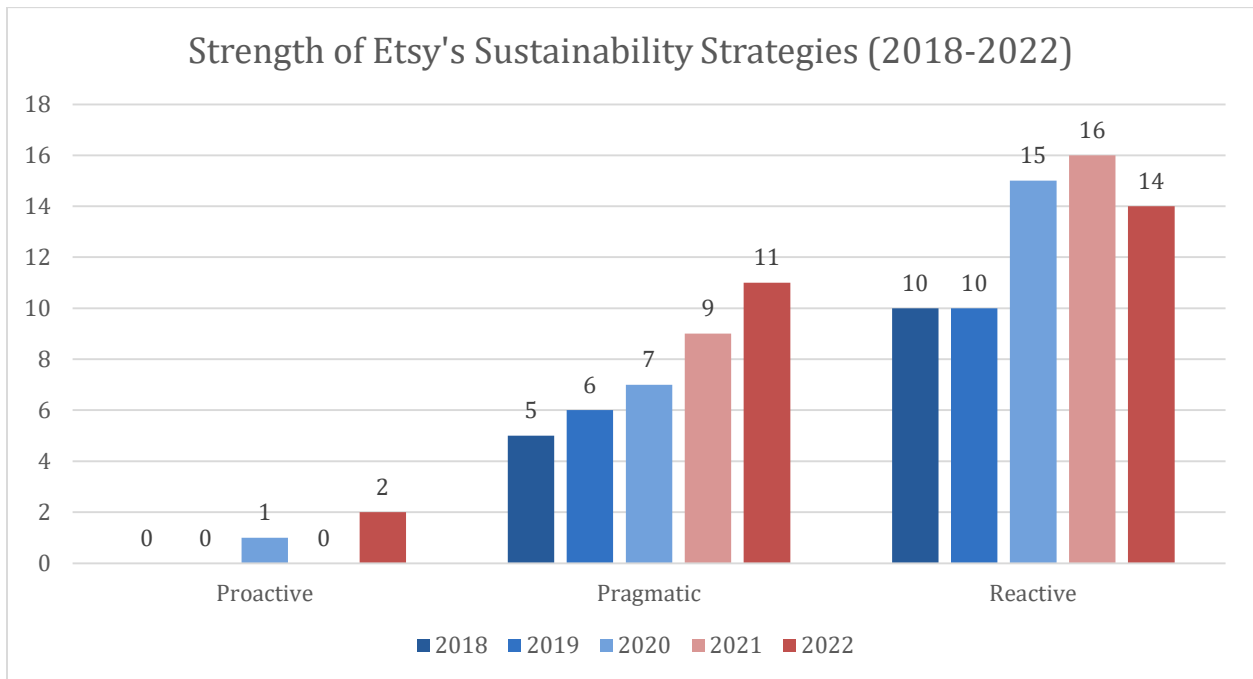
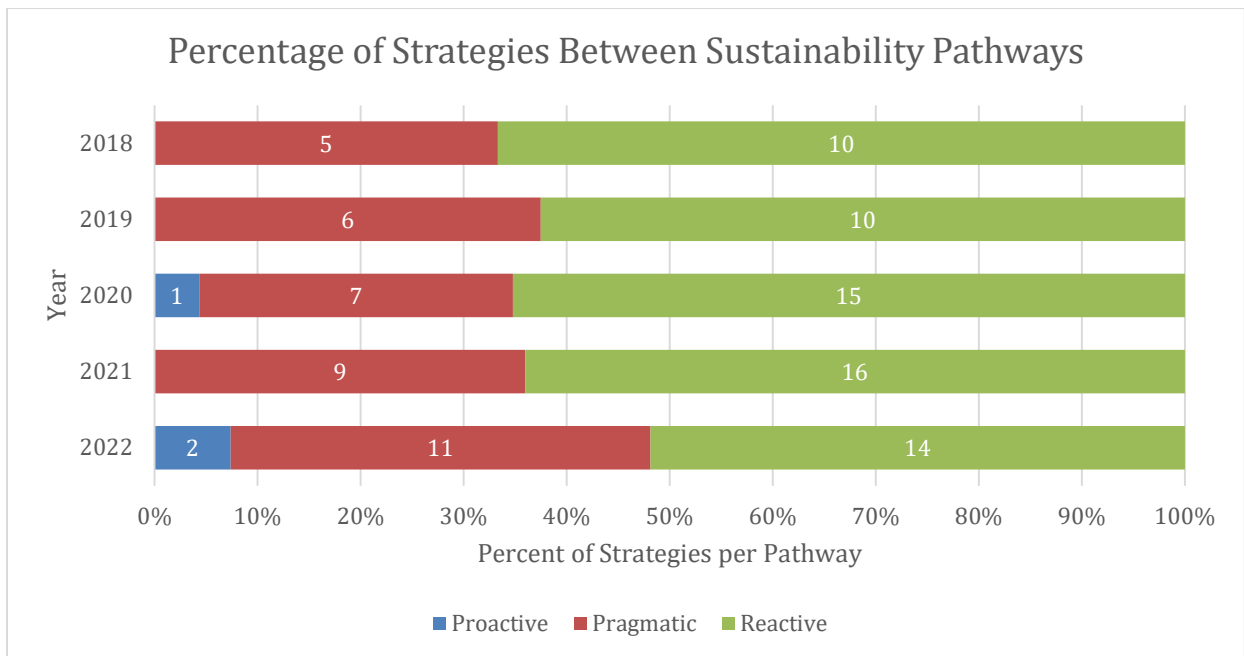


Figure 7

Percentage of Strategies Between Sustainability Pathways



Framework 3: Sustainability Principles in Special Programs

Gibson (2006) established a set of eight sustainability principles that programs should have to make progress toward sustainability overall. These principles were intentionally left open-ended so that there is no limiting definition for what is sustainable. Etsy itself has started internal initiatives that are meant to appeal to sustainability-oriented consumers and create value for programs that bolster equality and human well-being. Assessment using these principles will evaluate how Etsy's various initiatives work together in significant ways that may be left out through more qualitative evaluation. Examining the sustainability-related programs reported in Etsy's integrated report (2022) will indicate which of Etsy's programs follow these principles.

Handmade

Etsy implemented a "handmade" policy that allows sellers to add a "handmade item" product attribute visible on a listing's page which likely appeals to people's growing desire to buy personalized items from small sellers. Although Etsy is likely unable to monitor the integrity of the use of this label, the Handmade Policy (n.d.) specifies that this attribute can be used only if "everything listed as handmade... [was] made and/or designed by you, the seller." This policy allows flexibility between types of products such as those that are traditionally "handmade" using raw materials and human craftsmanship and design work which is an original piece of work but may have been physically produced by a third-party service such as printers, apparel printing, engraving, cutting, or finishing. Regardless of the product, Etsy emphasizes transparency and requires the disclosure of production partners' and services' names, locations, the nature of the partnership, and a description of their work for the seller ("Handmade Policy," n.d.).

Table 2*Evaluation of Six Etsy Sustainability-Related Programs*

	Handmade Attributes	Local Seller	EcoEnclose partnership	Sustainability Attribute tags	Diversity Programs	Supplier Code of Conduct
Socio-ecological system integrity	-	✓	✓	-	-	-
Livelihood sufficiency and opportunity	-	✓	-	-	✓	-
Intra-generational equity	-	-	-	-	✓	-
Inter-generational equity	-	✓	✓	✓	✓	-
Resource maintenance and efficiency	-	-	✓	-	-	✓
Civility and democratic governance	-	✓	✓	-	✓	✓
Precaution and adaptation	-	-	-	-	-	-
Immediate and long-term interconnectivity from local to global scales	-	-	-	-	✓	-

Local Seller

In 2021, Etsy announced a “Shop Local” signal which would tell a potential buyer whether the product was in the same ship-from region (Etsy, 2020). While the 2021 Integrated report stated that the conversion rate for products with the local signal went up, the specific reporting on emissions savings is not listed. However, in community forums, several people mention inconsistent application of the shop's local signal such as products that were 800 km away (th0rsb3ar, 2023). Some also note that drop-shipped products have been able to take on this

label (Meloncholic-Cicada, 2023). This label overall seems to have varying accuracy with almost no oversight, and the main objective seems to be capitalizing on people's desire for local products.

EcoEnclose Packaging Partnership

In 2021, Etsy has made an effort to bring some of the packaging waste and energy expenditures under their purview by creating its own packaging program. Etsy's partnership with EcoEnclose offers sellers the ability to buy packaging made from 100% recycled materials or certified responsibly sourced paper (Etsy Staff, 2021). Etsy reaches out to its sellers to give information about why sellers should buy this packaging and explain the logistics of who can buy it and from where. This content is primarily informative and is hosted within the "sellers handbook" section of its website. However, this packaging is primarily brown with limited customization options (EcoEnclose, n.d.). A seller can upload their logo and choose between six ink colors. The ink is either water-based or algae-based. There is clearly a desire for customizable packaging, but the buyer is limited in design customization. While this may be unimportant for some brands, sellers who rely on packaging to create a unique experience for a buyer may feel that the brown earthy aesthetic deviates too far from their branding and make a tradeoff between environmental considerations and economic success.

Figure 8*EcoEnclose free sample kit**Sustainability Product Listing Attributes*

Similarly, Etsy has implemented “sustainability” tags on product listings which indicate and sometimes explain a quality of a product that is more sustainable than other listings. As of 2022, 4.7% of active listings had sustainability attributes (Etsy, 2021). In 2022, Etsy launched a sustainability attributes feature for product listings and created a blog post targeted towards sellers that gave definitions for key terms like “recycled content”, “upcycled”, “reusable”, “organic cotton”, “vegan”, “Leaping Bunny Certified”, and more (Etsy Staff, 2022). It also answered frequently asked questions and guidance for sellers which is intended to help sellers make good-faith decisions about whether their products had sustainability attributes. However, none of these attributes are monitored or validated by Etsy. Although Etsy is working on an internal review process to verify the accuracy of claims, there is currently no barrier preventing

sellers from greenwashing their products to appeal to the growing desire for sustainable products that consumers can feel good about buying. While these programs are used to demonstrate Etsy's commitment to sustainability, there remains a question of the accuracy of these labels in practice.

Diversity Programs

As a platform, Etsy is a global marketplace that allows traditionally marginalized groups of people to sell items that may have cultural significance but are threatened in a globalized traditional marketplace. In 2022, Etsy provides 3.4 million jobs in the independent worker economy, many who are people of color, women, people in non-western countries, or living in rural areas. and are financially independent because selling on Etsy gives them access to a global marketplace on which to sell traditional or handmade goods. Women especially can benefit from reaching a global market, especially if they can sell products to a wealthier market while living in an area with a much lower cost of living. Etsy also considers the diversity of its suppliers. The goal for 2022 was to have 50% of small and medium sized suppliers be owned by women, unrepresented racial communities, or veterans, however at the end of 2022, 44.1% of small and medium-sized suppliers were owned by someone with those identities (Etsy, 2021). Ideally, these goals create opportunities for entrepreneurship, especially for traditionally marginalized identities.

Supplier Code of Conduct

Etsy's supplier code of conduct is meant to establish a set of expectations for any companies that Etsy does business with and their employees or agents and can act as a way to influence other companies to follow Etsy's ethical values which include sustainability values. The code of conduct includes subsections on Legal and Regulatory Compliance, Business Practices and ethics, Labor practices, environmental protection, and Protection of data and

intellectual property (“Supplier Code of Conduct,” 2023). While many of the subpoints in these categories demand adherence to relevant federal laws (e.g. comply with applicable important and export laws, abide by applicable parental leave laws, abide by all applicable laws for hazardous materials management and disposal, etc.; “Supplier Code of Conduct,” 2023) some subpoints offer more abstract goals like “conduct business in an environmentally responsible and sustainable manner.”

Discussion

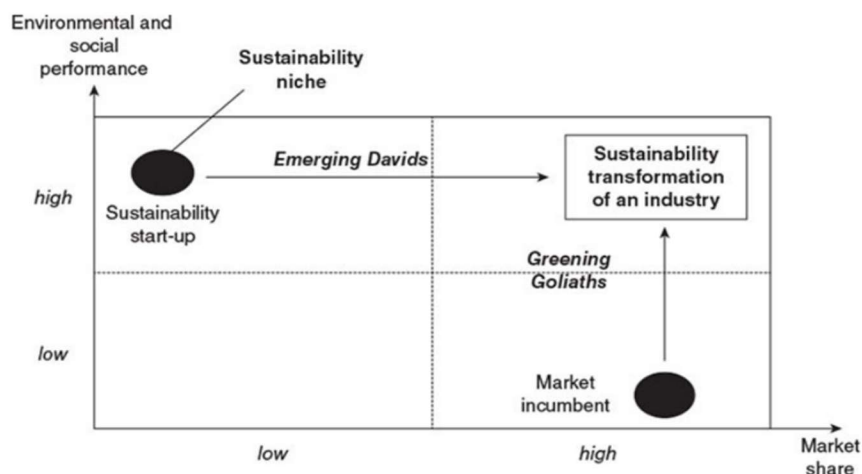
Etsy has been developing its reputation as a sustainability-oriented brand since 2017 with most of the strategy implementation occurring since 2018. As a brand, Etsy emphasizes its commitment to sustainable values as part of its unique value proposition to shoppers. But when the individual strategies, as reported by Etsy on the Environmental Social Governance sections in its annual Integrated Reports, are isolated and evaluated using modified versions of existing sustainability frameworks, the strength of those strategies comes into question.

Overall, Etsy had very few strategies for developing new sustainability competencies. One explanation could be that their business model is not conducive to developing new technologies or strategies. Hockerts and Wustenhagen (2010, p. 488) propose a model of co-evolution for sustainability transition in an industry (Fig. They explain that market incumbents such as Etsy hold a high market share but have low environmental and social performance while sustainability start-ups have lower market share but high environmental and social performance. Over time, the incumbents’ environmental and social performance improve (turning the incumbents into “green goliaths”) and the sustainability start-ups’ market share grows (turning the startups into “emerging Davids”). These two changes result in the sustainability transformation of an industry where both organizations have high market share and high

environmental and social performance. Under this model, Etsy's role should be to make itself greener by improving environmental and social performance which necessitates the execution of strong sustainability strategies.

Figure 9

Hockerts and Wustenhagen's model of co-evolution for sustainability transition in an industry



However, at this point, it does not seem that Etsy is engaging in many strong sustainability strategies. Notably, there was a spike in reactive strategies in 2020 which can be attributed to necessary reactive responses to COVID-19-related shutdowns and logistical changes. This disruption, as well as social justice disruptions that happened around the same time such as the rise of the Black Lives Matter movement, prompted many brands to rapidly adopt social justice stances as part of the public's demand for corporate social responsibility initiatives. These actions most often fell under the Product Stewardship category on the reactive pathway to strong sustainability. These trends may be exemplary of how disruptive events in the market can prompt weaker sustainability initiatives as companies are forced to catch up to public opinion. Once the public begins to engage in activism, they are more likely to be expressing anger at what

is perceived as an extreme failing in existing systems. In an environmental context, most activist movements have historically risen out of dissatisfaction with pollution. Starting in the early 20th century and taking off after WWII, the environmentalism movement first rose in response to urban pollution (Forrest et al., 2008). In Japan, grassroots pollution movements demanded regulations from the government and at its height, delayed many major development projects to preserve the environment. People notice how pollution is impacting their everyday experience and connect their quality of life with obvious signs of environmental degradation. This pattern seems to have repeated itself in 2020 when less pollution was generated because of economic slowdowns and people, who spent more time outdoors because of going to fewer indoor places where infectious diseases could spread more easily, took notice of the reduced levels of pollution (McKoy, 2022). Although waste and emissions mitigation strategies are exemplary of weak sustainability, the short-term rewards can create contentment among the general population. But, for those who are more focused on long-term outcomes, spikes of reactive weak sustainability strategies do not reflect positively on a company's commitment to a strong sustainability transition.

For Etsy, there are likely not many disincentives for sustainable efforts because Etsy's revenue model is based on people making product postings. They have no loss of profit depending on whether people are posting sustainable product listings or unsustainable product listings because Etsy is not responsible or at all involved in the manufacturing process. Etsy has motivations to become more sustainable because that is the unique value proposition they are offering users. They would want people to make as many listings as possible and hopefully want people to make as many sustainable listings as possible because people are going to Etsy. After all, they value sustainability, small business, original items, creativity, and homemade items.

They are targeting people who want to buy from smaller sellers, perhaps to directly oppose mass manufacturing that is known to be wildly unsustainable to maximize economic efficiency.

Conclusion

Even before the outbreak of the Coronavirus Pandemic that inspired millions of people across the globe to be more environmentally conscious, Etsy has built a brand around sustainability in multiple categories. One of the brand's most well-publicized points of pride is its ability to offset 100% of its scope 1, 2, and 3 emissions. Beyond that, the company has invested in renewable energy projects and funds that support long-term diversity and representation. Etsy's business model itself breaks away from its e-commerce peers by depending on small businesses to provide stock rather than appealing to scale for wholesale and drop shipper companies. However, when this sustainability image comes under scrutiny, a more nuanced understanding emerges.

Using Hart & Milstein's (2003) framework for sustainability value creation, Etsy's strategies listed within the last five Annual Integrated Reports seemed to balance strategies for today and tomorrow relatively evenly, although the waste mitigation strategies made up the majority of strategies that Etsy was pursuing. This was the first hint that Etsy may not be promoting strong sustainability and instead is motivated to do weaker sustainability to appeal to the growing number of consumers looking for sustainable shopping options. This seemed to be further proven correct by evaluating the same set of strategies using Gliedt & Larson's (2018) framework to determine which path—reactive, pragmatic, or proactive—Etsy seemed to be following. Most strategies were reactive, however, during 2020 and 2021, the Coronavirus pandemic and Black Lives Matter movement were significant interrupters that forced most brands to adopt defensive strategies. Finally, when analyzing six of Etsy's programs and

initiatives to address specific sustainability challenges, only half the programs managed to fulfil half of the principles for developing strong sustainability. The other three programs did not even address half of the principles. The combined effort of all these programs—which themselves seem to have questionable accuracy and little official oversight—managed to address seven out of eight of Gibson’s (2006) principles.

Considering the results from these three evaluation processes, it seems that Etsy still have significant room to grow in terms of how effective their programs and strategies are at developing strong sustainability in the future. Etsy is still in a place of reaction and trade-offs, albeit to minimize tradeoffs and promote social well-being, yet it also seems to be the most sustainable platform among its peers of multi-billion-dollar e-commerce sales platforms. While this analysis of Etsy’s sustainability strategies indicates significant opportunities for growth for Etsy, the evaluation process merits further validation. The categorization and evaluation process, guided by existing sustainability assessment frameworks, was done by an independent individual and thus is at the highest risk for bias, unequal application of framework definitions, and subjectivity. These findings can be further validated by having many sustainability professionals repeat the evaluation process independently. Additionally, all strategies were weighted equally though some strategies would clearly have a larger impact (e.g. donating over \$4.6 million in philanthropic donations to organizations) than others (e.g. creating internal diversity ERGs). Finally, this study only looked at Etsy as a case study meaning that the generalizability of the implications for e-commerce as a category is limited. To get a more holistic view of the state of sustainability in the e-commerce category, more businesses’ sustainability strategy plans should be evaluated and compared against Etsy’s. Doing so would also allow Etsy to understand how it relates to its peers and competitors.

References

- California Air Resources Board (2022, October 26). *2020 saw steepest drop in carbon pollution due to the pandemic*. California Air Resources Board. <https://ww2.arb.ca.gov/news/2020-saw-steepest-drop-carbon-pollution-due-pandemic/printable/print>
- Chueamuangphan, K.; Kashyap, P.; Visvanathan, C. Packaging Waste from E-Commerce: Consumers' Awareness and Concern. *Sustainable Waste Management: Policies and Case Studies*; Springer: Singapore, 2020; pp. 27-41.
- Church, E. M., & Oakley, R. L. (2018). Etsy and the long-tail: how microenterprises use hyper-differentiation in online handicraft marketplaces. *Electronic Commerce Research*, 18(4), 883–898. <https://doi.org/10.1007/s10660-018-9300-4>
- Coppola, D. (2022, June 23). *Amazon shoppers' opinion on sustainability in the UK, U.S., and Canada 2020*. Statista. <https://www.statista.com/statistics/1243917/amazon-customers-opinion-on-sustainability/>
- Dartnell, L. R. & Kish, K. (2021). Do responses to the COVID-19 pandemic anticipate a long-lasting shift towards peer-to-peer production or degrowth? *Sustainable Production and Consumption*, 27, 2165-2177. <https://doi.org/10.1016/j.spc.2021.05.018>
- Edwards, J. B., McKinnon, A. C., & Cullinane, S. L. (2010). Comparative analysis of the carbon footprints of conventional and online retailing: A “last mile” perspective. *International Journal of Physical Distribution & Logistics Management*, 40(1/2), 103–123. <https://doi.org/10.1108/09600031011018055>
- Escursell, S., Llorach-Massana, P., Roncero, M. B. (2021). Sustainability in e-commerce packaging: A review. *Journal of Cleaner Production*, 280. <https://doi.org/10.1016/j.jclepro.2020.124314>

EcoEnclose (n.d.). Etsy Planet-Friendly Packaging. EcoEnclose.

<https://www.ecoenclose.com/planet-friendly-packaging>

Escursell, S.; Llorach-Massana, P.; Roncero, M.B. Sustainability in E-Commerce Packaging: A Review. *J. Clean. Prod.*; 2021; 280, 124314. [DOI:

<https://dx.doi.org/10.1016/j.jclepro.2020.124314>]

Etsy (2019). 2018 *Integrated Annual Report*. Etsy.

[https://s22.q4cdn.com/941741262/files/cr/2018-Annual-Report-\(1\)-\(1\).pdf](https://s22.q4cdn.com/941741262/files/cr/2018-Annual-Report-(1)-(1).pdf)

Etsy (2020). 2019 *Integrated Annual Report*. Etsy.

https://s22.q4cdn.com/941741262/files/doc_financials/annual/2019/Etsy-Annual-Report.pdf

Etsy (2021). 2020 *Integrated Annual Report*. Etsy.

https://s22.q4cdn.com/941741262/files/doc_financials/2020/ar/2020-Integrated-Annual-Report_final.pdf

Etsy (2022). 2021 *Integrated Annual Report*. Etsy.

https://s22.q4cdn.com/941741262/files/doc_financials/2021/ETSY-12.31.2021-10K.pdf

Etsy (2023). 2022 *Integrated Annual Report*. Etsy.

https://s22.q4cdn.com/941741262/files/doc_financials/2022/ar/2022-etsy-annual-report.pdf

Etsy Staff (2021, September 2022). Introducing: Planet-Friendly Packaging. Etsy.

<https://www.etsy.com/seller-handbook/article/1050457286615>

Etsy Staff (2022, September 23). Introducing New Sustainability Attributes for Listings. Etsy.

<https://www.etsy.com/seller-handbook/article/1101070151405>

- Forrest, R., Schreurs, M., Penrod, R., & Gilbreath, D. (2008). A Comparative History of U.S. and Japanese Environmental Movements. In P. P. Karan & U. Suganuma (Eds.), *Local Environmental Movements* (pp. 13–38). University Press of Kentucky.
<http://www.jstor.org/stable/j.ctt2jctk6.6>
- Gibson, R. (2006). Beyond the pillars: Sustainability assessment as a framework for effective integration of social, economic and ecological considerations in significant decision-making. *Journal of Environmental Assessment and Policy Management*, 8(3), 259–280.
- Gliedt, T. & Larson, K. (2018). *Sustainability in Transition: Principle for Developing Solutions*. Routledge.
- Morris, T. (2022, April 19). *The rise of green consumerism: what do brands need to know?* Global Web Index. <https://blog.globalwebindex.com/chart-of-the-week/greenconsumerism/>
- Hancock, E. (2022, September 2). *COVID Rekindled an Appreciation of Nature for Many*. UConn Today. <https://today.uconn.edu/2022/09/covid-rekindled-an-appreciation-of-nature-for-many/>
- Handmade Policy*, (n.d.). Etsy. Accessed May 7, 2024, <https://www.etsy.com/legal/handmade>
- Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *The Academy of Management Executive*, 17(2), 56–67.
- Himanshu. (2016, February 14). *How e-commerce is impacting our carbon footprint?* Medium. <https://medium.com/@tyagi83/how-e-commerce-is-impacting-our-carbon-footprintffe1f9950b65>

- Hockerts, K., & Wüstenhagen, R. (2010). Greening Goliaths versus emerging Davids: Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *Journal of Business Venturing*, 25(5), 481–492.
- Hu, S. J. (2013). Evolving Paradigms of Manufacturing: From Mass Production to Mass Customization and Personalization. *Procedia CIRP*, 7, 3–8.
<https://doi.org/10.1016/j.procir.2013.05.002>
- International Trade Administration (2024). *Impact of COVID Pandemic on eCommerce*. International Trade Administration. Accessed May 7, 2024,
<https://www.trade.gov/impact-covid-pandemic-ecommerce>
- Jusoh, Z. M., & Ling, G. H. (2012). Factors influencing consumers' attitude towards e-commerce purchases through online shopping. *International Journal of Humanities and Social Science*, 2(4), 223–230.
- Kilhoffer, Z., Lenaerts, K. and M. Beblavý (2017), “The Platform Economy and Industrial Relations: Applying the Old Framework to the New Reality”, CEPS Policy Insights, CEPS, Brussels.
- MacroTrends (2024). *Etsy's Revenue 2013-2024* | Etsy. MacroTrends. Accessed May 6, 2024,
<https://www.macrotrends.net/stocks/charts/ETSY/etsy/revenue>
- Meloncholic-Cicada (2023). *How does Etsy's "local seller" tag determined? Are there requirements or is it just address based?* Reddit.
https://www.reddit.com/r/Etsy/comments/18pagn0/how_does_etsys_local_seller_tag_determined_are/
- Mokoy, J (2020, September 29). *When Air and Road Travel Decreased during COVID, So Did Pollution Levels*. BU School of Public Health.

<https://www.bu.edu/sph/news/articles/2022/when-air-and-road-travel-decreased-during-covid-so-did-pollution-levels/>

- Mueller, S. C., Hudda, N., Levy, J. I., Durant, J. L., Patil, P., Lee, N. F., ... Lane, K. (2022). Changes in Ultrafine Particle Concentrations near a Major Airport Following Reduced Transportation Activity during the COVID-19 Pandemic. *Environmental Science & Technology Letters*, 9(9), 706–711. <https://doi.org/10.1021/acs.estlett.2c00322>
- Oceana (202, December 15). *Exposed: Amazon's enormous and rapidly growing plastic pollution problem*. Oceana. <https://oceana.org/reports/amazon-report-2021/>
- Office for National Statistics (2021, April 26). *How has lockdown changed our relationship with nature?* Office for National Statistics. <https://www.ons.gov.uk/economy/environmentalaccounts/articles/howhaslockdownchangedourrelationshipwithnature/2021-04-26>
- Parker, C., Bingley, S., & Burgess, S. (2023). The nature of small business digital responses during crises. *Information and Organization*, 33(4). <https://doi.org/10.1016/j.infoandorg.2023.100487>
- Prasso, S. (2023, June 15). *Most-downloaded app in App Store sells products linked to forced labor in China, analysis shows*. Los Angeles Times. <https://www.latimes.com/business/story/2023-06-15/temu-sells-products-linked-to-forced-labor-in-china>
- Rai, H. B., Touami, S., Dablan, L. (2023). Not All E-commerce Emits Equally: Systematic Quantitative Review of Online and Store Purchases' Carbon Footprint. *Environmental Science & Technology*, 57, 708-718. <https://doi.org/10.1021/acs.est.2c00299>

- Rao, P., Balasubramanian, S., Vihari, N., Jabeen, S., & Shukla, V. (2021). The e-commerce supply chain and environmental sustainability: An empirical investigation on the online retail sector. *Cogent Business & Management*, 8(1), 1–29.
<https://doi.org/10.1080/23311975.2021.1938377>
- Regan, H. (2020, April 23). *Air pollution falls by unprecedented levels in major global cities during coronavirus lockdowns*. CNN World. <https://www.cnn.com/2020/04/22/world/air-pollution-reduction-cities-coronavirus-intl-hnk/index.html>
- Sainato, M. (2023, March 2). *‘They’re more concerned about profit’: Osha, DoJ take on Amazon’s grueling working conditions*. The Guardian.
<https://www.theguardian.com/technology/2023/mar/02/amazon-safety-citations-osha-department-of-justice>
- Svehuag, K. (n.d.). *Branded Packaging Basics*. Etsy. Accessed May 7, 2024,
<https://www.etsy.com/seller-handbook/article/22813971347>
- Tarasov, K. (2022, January 28). *What Really Happens to Amazon Returns*. CNBC.
<https://www.cnbc.com/2022/01/28/amazon-returns-what-really-happens-to-them.html>
- th0rsb3ar (2023). I keep getting “local sellers” that are 800+km away — not very local tbh. [Comment on the online forum post *How does Etsy's "local seller" tag determined? Are there requirements or is it just address based?*]. Reddit.
https://www.reddit.com/r/Etsy/comments/18pagn0/comment/ken2xyx/?utm_source=share&utm_medium=web3x&utm_name=web3xcss&utm_term=1&utm_content=share_button
- U.S. Department of Labor (2023, February 1). *US Department of Labor Finds Amazon Exposed Workers to Unsafe Conditions, Ergonomic Hazards at Three More Warehouses in*

Colorado, Idaho, New York. U.S. Department of Labor.

<https://www.dol.gov/newsroom/releases/osha/osha20230201-0>

Wright, R. (2020, April 1). *The world's largest coronavirus lockdown is having a dramatic impact on pollution in India.* CNN. <https://www.cnn.com/2020/03/31/asia/coronavirus-lockdown-impact-pollution-india-intl-hnk/index.html>

Appendix A

Greenhouse Gas Emissions Summary (tCO₂e) (2017-2022)

		2017	2018	2019	2020	2021	2022
Scope 1		467	372	371	294	350	371
Scope 2 – Market		2,209	1,213	652	4	0	0
Scope 2 – Location		3,162	2,923	1,859	914	420	542
Scope 3		119,444	137,042	155,967	438,731	548,900	531,638
Scope 3 Emissions Breakdown by Category	Purchased Goods & Services (excluding Computing)	-	-	-	76,451	97,302	106,434
	Cloud Computing - Google Cloud (Etsy Only)	-	-	-	-	13,623	12,054
	Other Computing	663	544	510	488	466	1,836
	Fuel & Energy Related Activities Not Included in Scope 1 or Scope 2	-	-	-	-	2,711	3,429
	Waste	7	6	13	3	3	5
	Water	4	3	6	9	4	4
	Air Travel	550	943	1,217	153	67	1,067
	Other Business Travel	-	-	-	10	9	163
	Commuting	-	-	-	111	83	1,042
	Remote Workers	64	87	114	672	1,066	1,401

Cloud Computing - Market (Etsy Only)	-	-	29	0	-	-
Shipping	118,153	135,459	154,078	303,218	363,361	339,395
Packaging	-	-	-	53,489	63,645	57,911
End User Energy Use	-	-	-	4,127	6,560	6,897

Appendix B

Etsy Sustainability Strategies (2022)			
	Strategy Description	Sustainable Value Development Strategy Evaluation	Sustainability strategy evaluation
Marketplace Integration	Reformed efforts to provide the U.S. postal service with the funds needed to provide accessible affordable shipping options for sellers;	Sustainable Vision	Pragmatic
	Enhanced access to affordable childcare and caregiving leaves for micro-businesses	Sustainable Vision	Pragmatic
	Protected sellers' privacy rights by advocating for strong privacy protections in consumer protection bills; and	Product Stewardship	Reactive
	Advocated against new rules that would impose heavy burdens on small and microbusinesses.	Sustainable Vision	Reactive
Values Aligned investment	Set up a \$30 million Impact investment fund that is being held at a large, Black-led Minority Deposit institution in the United States.	Product Stewardship	Reactive
	Etsy, Reverb, and Depop invested over \$4.6 million in philanthropic donations to organizations driving equitable access to opportunity as well as disaster relief and direct support for local community-based organizations.	Product Stewardship	Reactive
	Donated over 4,300 hours of paid volunteer time off in their communities through Etsy's Impact Hours program.	Product Stewardship	Reactive
	Canceled approximately \$4.6 million owed to Etsy by all sellers in Ukraine in the first quarter of 2022, which included listing fees, transaction fees, advertising fees, and more.	Product Stewardship	Reactive
	Updated our Disaster Response Framework to guide how and when we proactively support sellers in times of crisis.	Development of sustainable competencies	Pragmatic
	Etsy has a Supplier Code of Conduct designed to ensure that our suppliers are committed to our standards.	Mitigate Waste and Emissions	Proactive
Transportation	Supported the climate provisions in the Inflation Reduction Act at the national level	Sustainable Vision	Reactive
	Advocated for the Advanced Clean Trucks and Advanced Clean Fleets legislation at the state level.	Sustainable Vision	Pragmatic

Emissions	Invested in 532,009 verified emissions reductions (VERs) that protect forests, sponsor wind and solar farms, and help develop greener methods for producing auto parts.	Product Stewardship	Pragmatic
	Using Google Cloud computing for Etsy’s computing energy use decreased energy usage per site visit (kWh/visit) by 69% since 2016	Mitigate Waste and Emissions	Pragmatic
Renewable Electricity	Sourced 100% of electricity from renewable sources through a virtual power purchase agreement (“VPPA”), international renewable energy credits (iRECs), and onsite solar arrays at select offices.	Mitigate Waste and Emissions	Pragmatic
Purchased good and services	Reduced corporate procurement emissions by 6% on an intensity basis relative to 2021.	Mitigate Waste and Emissions	Reactive
Zero Waste	Diverted over 90% of waste from landfill at our Brooklyn and Dublin offices	Mitigate Waste and Emissions	Reactive
	Expanded a partnership with EcoEnclose to include both Etsy.com and Depop sellers in the United States The program now also supports sellers who reuse existing packaging, through a reused packaging sticker option.	Mitigate Waste and Emissions	Reactive
Item Sustainability	Piloted new optional sustainability listing attributes that allow sellers to indicate if their items are made from environmentally conscious materials or are designed to be reusable or to reduce waste.	Mitigate Waste and Emissions	Reactive
Circularity	Set a new strategy to inspire and enable people to participate in the circular economy. Communities are participating in circular systems, from the creative materials they use, to the items they sell, to the packaging they use to ship.	Product Stewardship	Proactive
Inclusion/ DEI	Added a resource group dedicated to Accessibility & Disability, created a series of roundtables where the ERGs held dialogs with executive leaders, and hosted a robust program of ERG-produced events focused on advocacy and equity	Mitigate Waste and Emissions	Pragmatic
	launched identity-based peer cohorts, called ‘dens’ internally, for Black, Latinx, Native American and Asian identifying employees.	Mitigate Waste and Emissions	Pragmatic
	Uplift initiative created two cohorts engaging a growing number of heritage artisan communities to build pathways to economic independence by bringing their products online.	Sustainable Vision	Pragmatic
	Built a comprehensive disability inclusion roadmap based on findings from Disability:IN and Disability Equality Index	Development of sustainable competencies	Reactive

Supplier Diversity	Laying plans for a “house of brands” supplier diversity program. Improved end-to-end supplier management infrastructure	Development of sustainable competencies	Pragmatic
--------------------	---	---	-----------

Appendix C

Etsy Sustainability Strategies (2021)			
	Strategy Description	Sustainable Value Development Strategy Evaluation	Sustainability strategy evaluation
Net Zero	launched a new partnership with EcoEnclose, through which U.S. sellers can access and buy affordable, paper-based packaging made from certified responsibly sourced and 100% recycled materials that buyers can also recycle easily at home.	Mitigate Waste and Emissions	Pragmatic
	plan to leverage our negotiating power in our supply chain to contribute to our efforts to meet our Net Zero goal.	Sustainable Vision	Pragmatic
	support policy solutions intended to affect systemic change that will help to drive carbon reduction in the long term.	Sustainable Vision	Reactive
	invested in 549,250 verified emissions reductions (“VERs”), protecting forests, sponsoring wind and solar farms, and developing greener methods for producing auto parts.	Product Stewardship	Pragmatic
	Expanded our inventory in 2021 to account for the greenhouse gas impacts from our fuel and energy related emissions from activities not included in Scope 1 and Scope 2.	Mitigate Waste and Emissions	Reactive
	Updated our methodology for Purchased Goods and Services by adding in Cloud Computing activities and incorporating more supplier data into our calculations	Development of sustainable competencies	Pragmatic
	Sustainable Operations	sourced 100% of our electricity for 2021 from renewable energy	Mitigate Waste and Emissions
diverted 93% of waste generated from office and data center operations from landfill.		Mitigate Waste and Emissions	Reactive
Responsible Shopping	tested and built a number of product features that can serve as a foundation for work on Responsible Shopping	Development of sustainable competencies	Reactive
	introduced an updated “Shop Local” signal which indicates when the buyer is in the same ship-from region as the item	Sustainable Vision	Reactive

	We launched an Impact Tracker that creates a personalized digest of the positive outcomes from a buyer’s lifetime activities. The Impact Tracker summarizes how many small businesses a buyer has supported, how much emissions were offset from shipping and packaging for their purchases, and how much the buyer has contributed to Etsy’s Uplift Fund.	Product Stewardship	Reactive
Prioritizing People	retained our expanded paid family leave policies that were established in 2020, as well as periodic company-wide “rest and recharge” days to supplement Etsy’s generous paid time off policies.	Mitigate Waste and Emissions	Reactive
Diversity, Equity, and Inclusion	grew the number of staff members dedicated to DEI and added roles in areas that collaborate closely with the DEI team	Mitigate Waste and Emissions	Reactive
	made several shifts in our shared diversity language. We are now referring to underrepresented racial groups as “communities” rather than “minorities,” and being more mindful in our descriptions of gender categories by using the term “marginalized genders” rather than “other.”	Mitigate Waste and Emissions	Reactive
	continued with our mentorship programs and our employee resource group (“ERG”) program	Mitigate Waste and Emissions	Reactive
	partnered with Praxis Labs to roll out virtual reality-based DEI training for all employees	Mitigate Waste and Emissions	Reactive
	ensured closed captioning is available for all virtual meetings and in all new hire orientation videos	Mitigate Waste and Emissions	Reactive
	ensure we have diverse representation across our supply chain	Product Stewardship	Pragmatic
	provided pay continuity, hazard pay, and health insurance for essential and in-person office building contractors	Mitigate Waste and Emissions	Reactive

	Established a set of aspirational guidelines that we strive to make progress towards when engaging vendor partners to support our operations	Product Stewardship	Pragmatic
	created and shared images in our Etsy.com marketplace that were representative of the communities in which we live by committing to a policy to include at least 30% representation of black or brown skin tones in marketing assets.	Product Stewardship	Reactive
	featured and celebrated Black, Latinx, and AAPI owned shops	Product Stewardship	Pragmatic
Social Innovation	expanded Etsy's investments to increase pathways to creative entrepreneurship, especially for those from economically disenfranchised communities	Sustainable Vision	Reactive
	Established the Uplift Fund to support creative entrepreneurs, which has since received over 6.8 million contributions from U.S. buyers on the Etsy marketplace who have elected to round-up their order price and donate their change.	Sustainable Vision	Reactive
	Launched the Uplift Makers program to help create opportunities for economic independence for heritage artisans by bringing their products online.	Sustainable Vision	Pragmatic

Appendix D

Etsy Sustainability Strategies (2020)			
	Strategy Description	Sustainable Value Development Strategy Evaluation	Sustainability strategy evaluation
Economic Impact	Invested over 2.6 million in charitable gifts, which supported community organizations and programs to enable creative entrepreneurship, to advance racial justice, to help those impacted by the pandemic, and to provide natural disaster relief to Etsy sellers.	Sustainable Vision	Reactive
	Donated over 2,000 hours of volunteer time in their communities through Etsy’s Impact Hours program	Sustainable Vision	Reactive
	Continued advocacy for public policies that enable creative entrepreneurs to start and grow their businesses, including COVID-19 relief for the self-employed and sole proprietors, support for the United States Postal Service, portable benefits, and sensible platform regulation.	Sustainable Vision	Pragmatic
	Generated over 333,000 messages to lawmakers on behalf of our community	Sustainable Vision	Reactive
Social Impact	Expanded our robust Diversity, Equity, and Inclusion program while pivoting all of our hiring, engagement, mentorship, sponsorship, and Employee Resource Group (“ERG”) program activities to a remote environment.	Mitigate Waste and Emissions	Reactive
	Deepened our work to recruit underrepresented minority (“URM”) candidates and amplified our employer brand awareness efforts	Sustainable Vision	Reactive
	Launched the second cohort of our Mentorship Circle Program	Development of sustainable competencies	Reactive
	Launched a Company-wide DEI learning platform called Blue Ocean Brain, held community-wide vigils for Black Lives Matter, created grief circles and extra mental health benefits for struggling employees	Mitigate Waste and Emissions	Reactive
	Donated \$1 million to support Black-led organizations that support racial justice, voting rights, and criminal justice reform	Sustainable Vision	Reactive
	Created a COVID-19 economic relief fund for our suppliers and distributed \$100,000 in grant funding to these suppliers, with prioritization going to women-, minority-, and veteran-owned businesses.	Product Stewardship	Reactive

	Added purchased goods and services to our greenhouse gas inventory this year.	Mitigate Waste and Emissions	Reactive
	Influenced our suppliers through purchase power to address pressing social, economic, and environmental challenges	Sustainable Vision	Pragmatic
	Created and shared images that were representative of the communities in which we live	Product Stewardship	Reactive
	Featured and celebrated Black and Latinx owned shops.	Product Stewardship	Reactive
	created a Black-owned Business Etsy Community where sellers can opt-in, build community, and support one another	Product Stewardship	Reactive
Ecological Impact	Sourced 100% of our electricity from renewable energy by 2020	Mitigate Waste and Emissions	Pragmatic
	Developed an estimation methodology to account for our Google Cloud computing footprint	Development of sustainable competencies	Pragmatic
	Achieved zero waste operations for the third year in a row by diverting over 90% of waste from landfill.	Mitigate Waste and Emissions	Reactive
	Invested in 404,737 verified emissions reductions (“VERs”).	Product Stewardship	Pragmatic
	Prioritized advocating for ambitious regional policies that have the potential to accelerate the decarbonization of the transportation sector	Mitigate Waste and Emissions	Reactive
	Expanded our inventory to account for the greenhouse gas impacts from: (1) the packaging our sellers use to ship products to buyers, (2) the energy use of our platforms on consumer devices, and (3) our supply chain.	Sustainable Vision	Pragmatic
	Collaborated with peers, vendors, and NGOs on industry-wide efforts to drive efficiency and resilience in the shipping and logistics sector.	Sustainable Vision	Proactive
	Added a “local seller” signal to listing pages when the buyer is in the same ship-from region as the item.	Sustainable Vision	Reactive

Appendix E

Etsy Sustainability Strategies (2019)			
	Strategy Description	Sustainable Value Development Strategy Evaluation	Sustainability strategy evaluation
Economic Impact	Invested over \$580 thousand in programs and initiatives that enable creative entrepreneurship, including our Maker Cities, Craft Entrepreneurship, and Etsy Disaster Relief programs that support Etsy sellers	Sustainable Vision	Reactive
	donated over 3,400 hours of volunteer time in their communities through Etsy's Volunteer Time Off program.	Product Stewardship	Reactive
	advocating for public policies that enable creative entrepreneurs to start and grow their businesses, including net neutrality protections, portable benefits, tax simplification, sensible platform regulation, and reduction of barriers to cross-border trade.	Sustainable Vision	Reactive
	advocated on the above issues in Washington, D.C., Brussels, and Paris, testified before the U.S. Senate Finance Committee, and generated over 12,000 messages to lawmakers on behalf of our community.	Sustainable Vision	Reactive
Social Impact	Established a robust Diversity & Inclusion infrastructure, with dedicated staffing, resources and support, inclusive of focused learning and development programs, internal and external events and marketing support, and dedicated recruiting support.	Mitigate Waste and Emissions	Reactive
	Exceeded our 2019 underrepresented minorities (URM) hiring goal by focusing on targeted recruitment of underrepresented minorities (URM), and renewed employer brand awareness efforts,	Product Stewardship	Pragmatic
	Launched targeted, URM-focused retention and leadership development initiatives like the Etsy Employee Resource Group initiative and Mentorship program	Development of sustainable competencies	Pragmatic

	Collected impact data from 45% of Etsy’s suppliers, representing 84% of Etsy’s supplier spend in 2019, and developed a comprehensive baseline of our supply chain impact across key indicators.	Product Stewardship	Pragmatic
	Set a short-term goal to ensure that by 2022, at least 50% of Etsy’s small- and medium-sized enterprise suppliers are owned by women, minorities, or veterans	Sustainable Vision	Pragmatic
	Increased the number of Black and Latinx models and diverse product imagery within marketing materials for the Etsy marketplace during the peak holiday season.	Product Stewardship	Reactive
Ecological Impact	Procured 76% of our electricity from renewable sources, up from 58% in 2018	Mitigate Waste and Emissions	Reactive
	Developed an estimation methodology to account for our GCP computing footprint, which has been reviewed by industry experts. We plan to share our estimation methodology publicly later this year. By making this methodology public, we hope to make it easier for peers to use and build on this approach, and to drive transparency, accountability and progress in efficient computing.	Development of sustainable competencies	Pragmatic
	announced immediate action to balance our footprint by offsetting 100% of our emissions generated from Etsy.com shipping through investment in verified emissions reductions (VERs).	Mitigate Waste and Emissions	Pragmatic
	Advocated at the federal and state level for comprehensive climate and carbon reduction policies, and collaborated with peers on industry-wide efforts to drive efficiency and resilience in the shipping and logistics sector.	Sustainable Vision	Reactive
	diverted 93% of waste generated from office and data center operations from landfill, and diverted 84% of waste generated across all global operations	Mitigate Waste and Emissions	Reactive
	Completed certification of all of Etsy’s core offices as TRUE Zero Waste Facilities through the U.S. Green Building Council’s certification program.	Mitigate Waste and Emissions	Reactive

Appendix F

Etsy Sustainability Strategies (2018)

	Strategy Description	Sustainable Value Development Strategy Evaluation	Sustainability strategy evaluation
Economic Impact	Invested \$280K in programs and initiatives that enable creative entrepreneurship, and support Etsy sellers on their paths to economic security and personal empowerment.	Sustainable Vision	Reactive
	donated over 2,700 hours of volunteer time in their communities through Etsy's Volunteer Time Off program.	Product Stewardship	Reactive
	Generated over 140,000 messages to policymakers on issues like net neutrality and internet sales tax policy	Sustainable Vision	Reactive
Social Impact	Increased our targeted recruiting efforts, created hiring guidelines to ensure that all candidates are evaluated fairly and with objective criteria, and implemented a more formal company-wide performance management process to support consistent and fair evaluations. As a result, female engineers now make up 33.2% of our engineering workforce at Etsy, up 4% from the prior year.	Mitigate Waste and Emissions	Reactive
	Ramped up our targeted recruitment efforts by focusing on growing our employer brand awareness and maximizing our presence at industry conferences and events.	Product Stewardship	Reactive
	Focused on growing our strategic and data-driven recruiting efforts, launching employee mentorship and sponsorship programs, tracking our diversity & inclusion efforts through recruiting, hiring, survey, and exit interview data.	Product Stewardship	Reactive
	Updated Etsy's supplier code of conduct to highlight the importance of progressive social, environmental, and economic business practices.	Mitigate Waste and Emissions	Reactive
	Incorporated priority questions into our vendor compliance screening tool in order to develop a comprehensive baseline of our supply chain impact.	Mitigate Waste and Emissions	Reactive
	Undertook research to understand and address barriers and activate opportunities for underrepresented populations within the Etsy seller community.	Product Stewardship	Reactive
Ecological Impact	Procured 58% of our electricity from renewable sources, up from 30% in 2017.	Mitigate Waste and Emissions	Pragmatic
	Entered into a virtual power purchase agreement for solar energy to help us meet our goal of powering our operations with 100% renewable electricity by 2020.	Mitigate Waste and Emissions	Pragmatic

	Began transition to cloud computing to help reduce our energy consumption and selected Google Cloud Platform, a partner that shares our commitment to 100% renewable electricity.	Mitigate Waste and Emissions	Pragmatic
	In February 2019, we announced that we will offset 100% of our emissions from shipping through investment in verified emissions reductions.	Mitigate Waste and Emissions	Pragmatic
	We plan to activate levers of change that will help to drive carbon reduction in the long term, including policy advocacy, vendor negotiation and peer collaboration.	Product Stewardship	Pragmatic
	Diverted 95% of waste from global operations from landfill or incineration	Mitigate Waste and Emissions	Reactive