Home Delivery Sustainability: Consumers Expect More!

Descartes’ 2nd Annual Home Delivery Sustainability Study
Introduction

Two of the top consumer trends, home delivery and sustainability, are seemingly at odds, yet both are fully embedded in the behavior of most consumers and increasing in importance. How are consumers reconciling the two in their minds and what should retailers do to meet their expectations? Descartes’ second annual home delivery sustainability study of 8,000 consumers in nine countries in Europe and two in North America shows that consumers’ expectation for retailers to provide sustainable delivery options are up significantly compared to 2022. Consumer perception of retailer efforts in home delivery sustainability is improving (43%, up 5% from 2022) but plenty of room for improvement remains. In addition, more consumers (59%) than retailers may imagine are willing to act if they are not satisfied with retailers’ sustainability efforts. There is a silver lining, however, as more consumers (60%) are quite/very interested in sustainable home delivery services—many of which are lower cost than traditional delivery alternatives—and are willing to buy more from retailers who are noted for their sustainability efforts. Now is the time for retailers to embrace consumers’ desire for more eco-friendly home delivery, educate them on sustainable delivery possibilities and benefit all parties and the planet.

Top Level Findings

Below are high-level, at-a-glance takeaways from the research

- More than half of respondents (55%) buy online and get deliveries to their home
- 41% regularly make purchasing decisions based upon the product or company’s environmental impact
- 38% believed that convenience and environmental impact are equally important
- 60% are quite/very interested in using more environmentally friendly delivery methods
- 27% have stopped shopping at a company before in response to poor environmental delivery practices

Source: Descartes / SAPIO Research
The sustainable consumer

The shift by consumers to be more environmentally conscientious continues as more than half (52%) of respondents indicated that helping the environment is quite/very important to them, up 7% from the 2022 study. A significant number of respondents (41%) indicated that they regularly/always make purchasing decisions based upon product or company environmental impact, also up (2%) from 2022. There is a significant and surprising difference by country with U.S. respondents being the most committed to making environmentally friendly purchasing decisions (see Figure 1). Results by gender were similarly surprising with male respondents (47%) more focused on environmentally friendly purchasing than female respondents (35%).

Figure 1

Respondents by country indicating they regularly or always make purchasing decisions based upon product or company environmental impact.

United States 48%  France 47%  Germany 45%  Canada 38%
Belgium 38%  The Netherlands 38%  United Kingdom 31%  Nordics 29%

Overall, evaluating products for their environmental impact was up, as respondents not concerned about environmental impact declined from 18% in 2022 to 13% in 2023. The top purchases of concern—groceries (37%) and clothing and footwear (34%)—increased 2% and 4%, respectively. For grocery, German respondents were the most concerned about grocery at 51% and The Netherlands the least concerned at 29%. The top three consumer considerations when evaluating products for their environmental impact were:

- Specific environmentally friendly product characteristics at 52%, up 5% from 2022
- Word of mouth from friends/family at 39%, up 2% from 2022
- Company commitment to having a positive environmental impact at 38%, up 5% from 2022
To get a sense of how strongly consumers felt about the environmental impact of different purchases, we asked if they were willing to buy online at a slightly higher price and pick goods up versus buying at a lower price and having goods delivered if they thought it would help the environment. Groceries were at the top of the list for higher price purchase and pickup with 58% indicating they would regularly/always do it followed by clothing and footwear at 51% (both up 6% from 2022).

Consumers are also willing to buy more from companies that measurably demonstrate their supply chain is more sustainable than the competition. The top two purchase categories saw increases in this area, with clothing and footwear increasing by 5% to 44% and groceries by 2% to 42% compared to 2022. U.S. respondents again showed the greatest interest in buying more (48%) from grocers who have superior sustainable performance while Belgium had the least interest (34%). The number of respondents who said they weren’t interested at all in the sustainability performance of companies dropped 4% to 9% in 2023 versus 2022.

When asked if delivery convenience or the environmental impact of a delivery was more important, convenience won out with 40% indicating convenience was slightly to most important versus 23% indicating environmental impact was slightly to most important. However, a significant percentage of respondents (38%) say both are equally important, with a wide range of responses based upon geography (see Figure 2).

**Figure 2** Respondents by country who said convenience and sustainability are equally important

- Germany: 50%
- France: 42%
- The Netherlands: 40%
- Canada: 39%
- Nordics: 39%
- United Kingdom: 37%
- Belgium: 37%
- United States: 30%

Source: Descartes / SAPIO Research

Consumers are also willing to buy more from companies that measurably demonstrate their supply chain is more sustainable than the competition.
Delivery preferences

According to Descartes’ 2023 ecommerce home delivery study, consumers intend to buy more online and have orders delivered to their homes with convenience cited as the top reason for the increase. Unsurprisingly, delivery to home was the top choice for online buying at 55%, up 2% from 2022 with in-store pickup second at 25%, down 4% from 2022 and locker-based pickup third at 20%, up 2%. There was a significant spread—almost 2X (see Figure 3)—between the country with the highest percentage of respondents who buy online and have it delivered, Canada (67%), and the lowest, the Nordics (35%). The Nordics are the greatest user of locker-based delivery (35%).

Consumers intend to buy more online and have orders delivered to their homes with convenience cited as the top reason for the increase.

Source: Descartes / SAPIO Research
Consumers are very interested in receiving deliveries using more environmentally friendly delivery methods. A new delivery option for the 2023 survey—100% carbon neutral delivery services—was the top choice at 60% quite/very interested, followed closely by combining orders and delivering them at the end of the week (59%) and having the seller recommend the most environmentally friendly delivery option (56%). All options presented in the 2022 and 2023 surveys were up substantially (see Figure 4). The good news is that most of the options drive delivery density and improve delivery efficiency, reducing delivery costs for retailers.

Figure 4  Respondents quite/very interested in receiving deliveries using more environmentally friendly delivery methods such as the following:

- Using 100% carbon neutral delivery services: 60% (2022), N/A (2023)
- Combining all my orders over a period into a single delivery at the end of the week: 59% (2022), 50% (2023)
- Having the seller recommend the most environmentally friendly delivery option (e.g., green delivery slots): 56% (2022), 49% (2023)
- Combining all my orders over a period into a single delivery when there are multiple deliveries in my area: 55% (2022), 47% (2023)
- Picking up my order at a store: 53% (2022), 48% (2023)
- Using a drop box facility at a central location: 49% (2022), 40% (2023)
- Having the seller rate the environmental impact of all delivery options: 47% (2022), 42% (2023)
- Slowing down deliveries to make them more environmentally friendly (e.g., deliver next week as opposed to this week): 46% (2022), 38% (2023)
- Pay higher price for product/delivery: 26% (2022), N/A (2023)

Source: Descartes / SAPIO Research
In addition, consumers increasingly expect that retailers will be able to publish the carbon footprint of individual deliveries (see Figure 5). Today, 33% of respondents expect a published carbon footprint for deliveries, which is even higher than anticipated in last year’s study (in 2022, one-year anticipation was 30%).

**Figure 5**  
Respondent’s expectations that retailers publish the carbon footprint of individual deliveries

- **Today**: 33% expected, 23% published.  
- **A year from now**: 39% expected, 30% published.  
- **2 years from now**: 49% expected, 43% published.  
- **5 years from now**: 59% expected, 51% published.

Source: Descartes / SAPI Research

Consumers increasingly expect that retailers will be able to publish the carbon footprint of individual deliveries.
When it comes to the potential environmental impact of home delivery, perception is reality for consumers. Almost half (46%) of respondents believe that buy online and pickup in store is more environmentally friendly, followed by buy online and deliver to home (35%) and, lastly, buy online and pick up at locker (19%). How did respondents come to their conclusions? Perceptions are largely not fact-based and vary widely by geography (see Figure 6). There are instances where home delivery is more environmentally friendly, but this is not well understood by consumers. For example, if a consumer had to drive 3 miles to the grocery store, their round-trip travel would be 6 miles, but if a delivery van averaged 2 miles per delivery and consumed 50% more fuel per mile travelled, then the van would be the eco-friendlier option. This lack of understanding represents an opportunity for retailers and home delivery logistics companies to demonstrate that they can be more eco-friendly and educate the public.

Figure 6 | How consumers conclude which delivery option is more environmentally friendly

- 23% Read research on the subject
- 23% Heard from a friend
- 18% Saw something in my preferred news source
- 14% Saw something on social media
- 22% Other

Source: Descartes / SAPIO Research

United States 31% Germany 15%
United States 28% Germany 21%
Germany 25% The Netherlands 12%
Germany 17% UK / NL 13%
UK / Nordics 29% Germany 15%
Since many retailers use third parties to deliver their goods, the role of the delivery agent in sustainability is becoming more important. Overall, 41% of respondents indicated it is quite/very important for delivery agents to offer environmentally friendly delivery services and only 4% indicated it was not important. Results by country also varied dramatically (see Figure 8).

One way consumers expect to see retailers provide more environmentally friendly delivery options is through the use of electric vehicles. Again, consumers’ expectations are rising quickly here (see Figure 7) and are optimistic given the constrained availability of electric delivery vehicles. Also, the trend is likely to be that electrification of delivery vehicles will start with smaller vans, which favors parcel deliveries as opposed to large format 2-person delivery items.
Consumer satisfaction and action

If consumer expectations for sustainable home delivery are up, how are retailers performing? Much better than 2022—up 5% to 43%—but the majority of consumers (57%) believe retailers still have a long way to go (see Figure 9).

While the previous results point to cautious optimism, a large number of consumers (59%) are taking some form of action that is averse to retailers when they perceive the retailer to have poor environmental home delivery practices. ‘Stopped shopping at that company’ was the top response at 27%, followed closely by ‘told family and friends to avoid the company’ at 25%. ‘Posted a negative review’ (17%) and ‘posted about negative experience on social media’ (16%) may seem like low numbers, but the reach of social posts and their impact can go well beyond telling friends and family.
Evaluating consumer actions by demographics shows a clear difference in willingness to act and severity of the action. Retailers selling to younger consumers must be acutely aware that this age group is much more cognizant of retailers’ home delivery environmental performance and equally much more willing (80% of respondents 18–34 years) to act in ways that can cause retailers monetary and reputational damage (see Figure 10).

A large number of consumers (59%) are taking some form of action that is averse to retailers when they perceive the retailer to have poor environmental home delivery practices.
The results of the study show that consumers are not only interested in retailers’ environmental performance in home delivery but they are also making buying decisions based upon it and acting adversely when retailers do not do a good job at it. More than half of the respondents indicated they would take eco-friendly delivery options, which makes sustainability a powerful delivery persona (to learn more about delivery personas go here). The study also shows that sustainability is an even more powerful delivery persona for young generations.

The notion of sustainability’s influence as a delivery persona was also corroborated in two university studies. The first one conducted by researchers at Erasmus University in The Netherlands was called “Going green: the effect of green labels on delivery time slot choices.” Researchers examined how the presentation of eco-friendly delivery windows during the booking process had a significant impact on consumers’ delivery choices. The work was based upon analyzing retailers who have employed delivery persona concepts and then created simulations to test their hypothesis. The Dutch study said, “Our simulation findings suggest that green slots, compared to price incentives or no incentives, offer providers a way to effectively steer consumer time slot choices to yield shorter routes, fewer delivery vehicles used, and more per-customer revenue.” The second study “Leveraging sustainable supply chain information to alter last-mile delivery consumption: A social exchange perspective”, jointly conducted by the University of Arkansas and Miami University, also pointed to the powerful influence that sustainable delivery options had on consumers’ delivery choices.

Conclusion

Compared to findings in 2022, the degree to which consumer awareness increased in 2023 with respect to retailers’ sustainability efforts, the importance of retailers’ sustainability performance in making purchasing decisions and the interest in sustainable home delivery options is compelling. Considering that, for many consumers, 2023 is a tougher year economically than 2022, respondents didn’t put sustainability desires aside. This should be a strong indicator to retailers that consumers are quite serious about sustainability, and more willing to buy from retailers that demonstrate it in their home delivery operations. Most of the eco-friendly home delivery options that consumers seek reduce delivery costs and create greater consumer loyalty. For retailers, the 2023 results further reinforce that home delivery sustainability is not a challenge, it’s an opportunity.

More than half of the respondents indicated they would take eco-friendly delivery options, which makes sustainability a powerful delivery persona.
About Descartes Systems Group

Descartes (Nasdaq:DSGX) (TSX:DSG) is the global leader in providing on-demand, software-as-a-service solutions focused on improving the productivity, security and sustainability of logistics-intensive businesses. Customers use our modular, software-as-a-service solutions to route, track and help improve the safety, performance and compliance of delivery resources; plan, allocate and execute shipments; rate, audit and pay transportation invoices; access global trade data; file customs and security documents for imports and exports; and complete numerous other logistics processes by participating in the world's largest, collaborative multimodal logistics community. Our headquarters are in Waterloo, Ontario, Canada and we have offices and partners around the world.

Learn more at www.descartes.com and connect with us on LinkedIn and Twitter.