

Global E-Commerce Intelligence we report, you grow

# THE ENVIRONMENTAL IMPACT OF E-COMMERCE 2022 PUBLICATION DATE: FEBRUARY 2022

**PREFACE** 

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#### **Secondary Market Research**

- The reports are compiled based on secondary market research. Secondary research is information gathered from previously published sources based on information and data acquired from national and international statistical offices, industry and trade associations, business reports, company databases, journals, company registries, news portals and many other reliable sources. By using various sources we ensure maximum objection reported data. As a result, companies gain a precise and unbiased impression of the market situation.
- Cross referencing of data is conducted in order to ensure validity and reliability.
- The source of information and its release date are provided on every chart. It is possible that the information contained in one chart is derived from several sources. If this is the case, all sources are mentioned on the chart.
- The reports include mainly data from the last 12 months prior to the date of report publication. Exact publication dates are mentioned in every chart.

#### **Definitions**

• The reports take into account a broad definition of B2C E-Commerce, which might include mobile commerce. As definitions may vary among sources, exact definition used by the source (if available) is included at the bottom of the chart.

#### **Chart Types**

• Our reports include text charts, pie charts, bar charts, rankings, line graphs and tables. Every chart contains an Action Title, which summarizes the main idea/finding of the chart and a Subtitle, which provides necessary information about the country, the topic, units or measures of currency, and the applicable time period(s) to which the data refers. With respect to rankings, it is possible that the summation of all categories amounts to more than 100%. In this case, multiple answers were possible, which is noted at the bottom of the chart.

#### **Report Structure**

• Reports are comprised of the following elements, in the following order: Cover page, preface, legal notice, methodology, definitions, table of contents, management summary (summarizing main information contained in each section of report) and report content (divided into sections and chapters). When available, we also include forecasts in our report content. These forecasts are not our own; they are published by reliable sources. Within Global and Regional reports, we include all major developed and emerging markets, ranked in order of importance by using evaluative criteria such as sales figures.

#### **Notes and Currency Values**

- If available, additional information about the data collection, for example the time of survey and number of people surveyed, is provided in the form of a note. In some cases, the note (also) contains additional information needed to fully understand the contents of the respective data.
- When providing information about amounts of money, local currencies are most often used. When referencing currency values in the Action Title, the EUR values are also provided in brackets. The conversions are made using the average currency exchange rate for the respective time period. Should the currency figure be in the future, the average exchange rate of the past 12 months is used.

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#### **Report Coverage**

- This report covers the B2C E-Commerce market and its environmental impact worldwide. A broad definition of retail E-Commerce used by some original establishment of the second second
- The report contains relevant information about international comparisons, market trends, B2C E-Commerce sales and shares, all in the context of environmental impact, as well as returns, special sales, delivery, packaging, payment, travel and players.

#### **Report Structure**

- The report starts with an overview of the B2C E-Commerce market and international comparisons in the context of environmental impact, where the relevant environmental aspects are described in terms of criteria relevant to E-Commerce.
- Afterwards, the "Consumers Attitudes Towards Sustainability' section includes information on different attitudes towards sustainability aspects in E-Commerce and how the COVID-19 pandemics influenced them.
- Next, the "Product Returns and the Effect on the Environment" section includes an overview of market trends in the context of E-Commerce returns, including the frequency of returns in different geographies and reasons for returns.
- The section "Special Sales and Their Environmental Impact" covers the topic of Black Friday, Cyber Monday and Singles Day and discusses their development of retail B2C E-Commerce sales, their environmental impact as well as how different players decided to handle this topic in 2021.
- In the "Delivery and Online Shoppers' Attitudes Towards Environmentally-Friendly Options" section, information about sustainable and ecological delivery options and the attitude of online shoppers towards them is included.
- In the "Sustainable Payments" section examples of measures for clients and payment companies are presented.
- The next section, "Sustainable Travel", covers the sustainability aspects of online services and customer's attitudes towards them.
- Finally, the "Players and Trends" section includes information about the leading E-Commerce companies, including their efforts to address environmental problems using sustainable solutions for reverse logistics, last-mile delivery and packaging.



**DEFINITIONS** 

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The following expressions and definitions are used in this market report\*:

B2C E-COMMERCE

E-COMMERCE SALES

CROSS-BORDER B2C E-COMMERCE

INTERNET USERS

ONLINE SHOPPERS

GROSS MERCHANDISE VALUE

GREENHOUSE GAS

CO<sub>2</sub> EQUIVALENT

CARBON FOOTPRINT

CARBON NEUTRALITY

the sale of products (and services) through electronic transactions via the Internet to consumers (B2C). A broader definition of retail E-Commerce applied by some sources also increase to-consumer (C2C) sales.

the total sales generated either on the E-Commerce market in a certain country or region, or the total sales generated through E-Commerce by a player on the market.

the sale of goods (and services) directly to consumers in other countries, with orders delivered from the country where the foreign shop is based or from a central logistics facility, i.e. across the country's borders. Both B2C and C2C transactions might be included in the definition of retail cross-border E-Commerce.

the total number of inhabitants in a certain country that regularly access the Internet.

the total number of inhabitants in a certain country or region that participate in B2C E-Commerce.

abbreviated as GMV, a total value of successfully completed transactions between buyers and sellers on a marketplace. Depending on the source, might include shipping costs.

greenhouse gases cause the greenhouse gas effect, these include but are not limited to carbon dioxide, methane, nitrous oxide, chlorofluorocarbons and hydrofluorocarbons.

abbreviated as CO<sub>2</sub>e, compares the emissions from various greenhouse gases on the basis of their global-warming potential value, other greenhouse gases are converted to the equivalent amount of carbon dioxide with their global warming potential value.

refers to the amount of carbon dioxide and typically other greenhouse gas emissions expressed as CO<sub>2</sub>-equivalents of all the activities of an individual, company, entity, etc.

also called a net zero carbon footprint, refers to balancing carbon emissions by eliminating carbon emissions and with carbon removal so that net emissions become zero.

Note: \*the definitions used by the original sources might differ from the ones stated on this chart; the exact definition used by each source, where available, is included on the respective charts

## TABLE OF CONTENTS (1 OF

Global E-Commerce Intelligence we report, you grow

OBIECTIVE

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Sample Re

#### 1. Management Summary

#### 2. Overview & Introduction

- B2C E-Commerce Sales Value, in USD trillion, and Share, in % of Total Retail Sales, 2019 2025f
- Top 10 Countries by Retail E-Commerce Sales Value, incl. China, Germany, UK, USA, in USD billion, 2020 & 2021e
- Share of Online Grocery Shopping in E-Commerce Sales, in %, 2019 & 2020
- Parcel Volumes, in billions, 2014-2020 & 2026f
- Share of Traffic Expressed in Vehicle Kilometers Generated In Urban Areas, by E-Commerce and Physical Shops, in %, December 2020
- Top 4 Countries Purchased From in the Latest Cross-Border Online Purchase, in % of Cross-Border Online Shoppers, 2019 & 2020
- Breakdown of Time Needed for Cross-Border Delivery, in % of Cross-Border Online Shoppers, October 2020
- E-Commerce's Impact on the Environment Overview, December 2021
- Comparison of carbon footprint of a national online purchase and average in-store purchase for the same non-food item with consumers driving to store, in Gram of CO2-equivalent per item, December 2020
- Comparison of carbon footprint of a national online purchase and average in-store purchase for the same non-food item with average transportation patterns, in Gram of CO2-equivalent per item, December 2020
- Comparison of carbon footprint of a national online purchase and average in-store store purchase for the same non-food item with average transportation patterns, in Gram of CO2-equivalent per item, December 2020

#### 3. Consumer Attitudes Towards Sustainability

- Attitudes Towards Shopping Online, incl. Buying from Retailers Who Offer Efficient Delivery or Collection, Buying Eco-Friendly and Sustainable Products, in % of Respondents, September 2021
- Respondents Reviewing Their Individual Purpose due to the COVID-19 Pandemic, in %, and Being Attracted To Environmentally-friendly Brands, in % of Respondents Who Agree or Disagree that the Pandemic Made them Review Their Life Purpose, in %, February 2021
- Consumers Considering Fairly or Very Important Retailers Taking Into Account the Environmental Impact and Sustainability Of Their Operations, in % of Respondents, by Age Group, and by Gender, 2021
- Attitude Towards Online Stores Taking Into Account The Environmental Impact of Their Actions, in % of Adult Respondents, June 2021
- Top Nine Fashion Purchasing Choices, incl. "Value for Money" and "Sustainable Production", in % of Respondents, 2021
- Consumers Who Consider Buying Second-Hand Clothes Important, in % of Respondents Consumers Who Purchase Second-Hand Clothes Regularly, in % of Respondents, 2021
- Attitude Towards Online Shopping Being More Sustainable Than Brick-and-Mortar Retail, in % of Respondents, April 2021
- Attitude Towards Using The Same Packaging For Returns, in % of Respondents, April 2021

TABLE OF CONTENTS (2 OF

Global E-Commerce Intelligence we report, you grow

OBJECTIVE

₩ 20%

Sample Report

#### 4. Product Returns and the Effect on the Environment

- Volume of Packages Returned to Online Shops per UPS, in Millions per Week, Week 1 January 2020 & Week 1 January
- Value of Returns, in USD billion, Holiday Season 2019 & Holiday Season 2020
- Number of Returned Parcels in E-Commerce, in Million, and Returns Rate, in %, 2019 & 2020e
- Breakdown of Reasons for Returning an Item, in % Online Shoppers, 2020
- Share of Returns, by Australia, China, Cyprus, India and the USA, in % of Cross-Border Online Shoppers, October 2020

#### 5. Special Sales and Their Environmental Impact

- Sustainable Trends in the Singles Day in China, November 2021
- Alibaba's Gross Merchandise Value Through Singles Day Sales, in USD billion and in Year-on-Year Change, in %, 2020 & 2021
- Retail E-Commerce Sales from November 1st to 29th 2021, in USD billion and in Year-on-Year Change, in %, 2020 & 2021

#### 6. Delivery and Online Shoppers' Attitudes Towards Environmentally-Friendly Options

- Share of E-Commerce in Air Cargo, in %, 2021 & 2022f
- Consumers Attitudes To Large Retailers Sustainable Delivery Options, in % of Respondents, by Age Group, and Average, January 2021
- Willingness to Pay Extra for Ecological Transportation of Online Purchases, in % of Respondents Aged 18-24, June 2021
- Breakdown of Attitudes Towards Carbon-Neutral Delivery, in % of Cross-Border Online Shoppers, October 2020

#### 7. Sustainable Payments

• Payment and Sustainability - Players Overview, December 2021

#### 8. Sustainable Travel

- Carbon Dioxide Emissions From Jet Kerosene Combustion, in Tons, 2018-2020
- Attitude Towards Travelling More Sustainably In The Future As A Result of The Pandemic, in % of Adult Respondents, March 2021
- Attitudes Towards Sustainable Travel, in % of Adult Respondents, March 2021

#### 9. Players and Current Developments

• E-Commerce and Sustainability - Players and Current Developments, December 2021

1.

2.

3.

4.

5.

## **TABLE OF CONTENTS**

**Management Summary** 

**Overview & Introduction** 

**Consumer Attitudes Towards Sustainability** 

Product Returns and the Effect on the Environment

**Special Sales and Their Environmental Impact** 

	Teport.	
	9 – 1	
	13 – 24	
	25 – 33	
	34 – 39	
	40 – 43	
ly-Friendly Options	44 – 48	

6. **Delivery and Online Shoppers' Attitudes Towards Environmental** 7.

**Sustainable Payments** 49 - 50

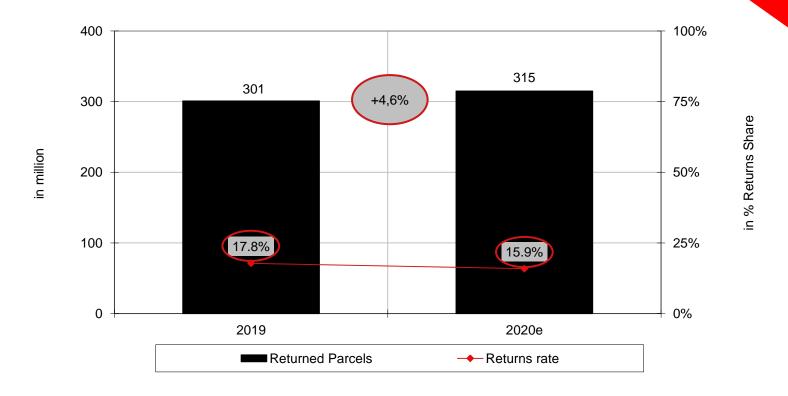
Sustainable Travel 8. 51 - 54

9. **Players and Current Developments** 55 - 59



# The share of returned parcels in Germany declined in the share of parcel returns great by almost 2 p.p., while the number of parcel returns great the share of parcels in Germany declined in the share of parcels in th

Germany: Number of Returned Parcels in E-Commerce, in Million, and Returns Rate, in %,



Survey: Source: based on a survey of leading E-Commerce retailers conducted in September to October 2020 about their observations in returns management during the first six months of the COVID-19 pandemic, i.e. March to August 2020; the surveyed retailers represent 16.6% of German E-Commerce sales; a total of 103 questionnaires was analyzed Retourenforschung, December 2020

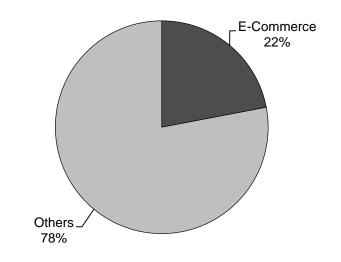


# E-Commerce's share in air cargo worldwide reached and is forecast to rise to 22% by 2022.

Global: Share of E-Commerce in Air Cargo, in %, 2021 & 2022f

E-Commerce 18%

2022f



82%

