

E-commerce in a world of environmental crisis

"Our consumption practices are putting tremendous pressure on the planet, driving climate change, stoking pollution and pushing species towards extinction," says David Jensen, Digital Transformation Coordinator with the United Nations Environment Programme (UNEP)."

Introduction

Today's world faces an environmental crisis that has so far never been known. This crisis affects the planet to a point of no return. This concern still needs to be heard, to be faced, and extremely quickly solved. However, e-commerce makes easier access to human needs. It knows an international affluence and propel to over consumption. AMAZON, WALMART, ALIBABA are particularly responsible of world's consumption of goods and are partly responsible of global environmental crisis.

Keywords

GHG: These are a group of gases in our atmosphere that trap heat from the sun, preventing it from escaping into space.

UNEP's mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

B2C/B2C: The e-commerce B to B concerns the commercial transactions carried out between companies or between professionals on Internet. On the other hand, the B to C e-commerce concerns the commercial exchanges between your company and the final consumers on Internet

Overconsumption: Overconsumption worsens climate breakdown and increases air pollution. It exhausts the planet's life support systems like the ones that provide us with fresh water, and leaves us short of materials critical to our health and quality of life.

Key issues

I INSTANT DELIVERIES

instant deliveries are major factors of e commerce. Today it represents the majority of the issue over e commerce. Indeed, people use it to buy goods on internet and require them in the day. However this constant demand leads to trucks leaving the warehouse with their boots unfilled.

II TRANSPORTS EMISSIONS

their delivery trucks and other vehicles (e.g. planes) can still emit large amounts of harmful pollutants. Additionally, the location of the customer to the distribution center can make a large impact as well. For example, Amazon's emissions are higher than Portugal ones

III PACKAGING

the online shipping boom is [creating a massive cardboard footprint](#) from all of the materials used to ship. This can result in excessive padding techniques using styrofoam packing peanuts or additional paper. Also people are used to buy stuff one article by one. This trend tends to increase the amount of packing by thousands. Even if it looks like a small amount, the impact is way higher worldwide.

General overview

In June 2020, global retail e-commerce traffic reached a record [22 billion monthly visits](#).

FACTS

PROS

A [2013 study from MIT](#) suggests that online shopping is far more eco-friendly than shopping in brick-and-mortar stores.

In fact, the study concluded shoppers who completed the entire buying process online had a carbon footprint almost two times smaller than a traditional shopper.

CONS

Singles' Day, Black Friday, and Cyber Monday are just a few examples of the initiatives that push consumers to buy more and more goods.

there are three key differentiators that consumers seek when buying online: price, speed, and convenience. In 2020, the shipping and return of products accounted for [37% of the total GHG emissions](#).

The major problem can be attributed, once again, to the consumers' appetite for convenience. In 2020, there were [256 million digital buyers in the United States](#) alone

Previous solutions

- 2011 International Conference on Environmental Science and Engineering study mentioned above, it is stated that “although the potentials of the Internet to save material and energy cannot be denied, it is too early to conclude that e-commerce has only positive impacts on the environment. Each potential positive impact is coupled with a potentially overwhelming negative impact as well.”

- Amazon launches in september, 19th a campaign that is expected to achieve the climate commitments of the paris agreement ten years early

Major actors

Asia is set to account for 50% of the world’s total online retail sales, most of which take place in [China](#), currently the world’s leading country by retail e-commerce sales.

The United States only by its delivering services is responsible for the equivalent of the pollution made all the cars used by the leaders in this sector (FedEx Amazon UPS and USPS)

The European Union also represents a important amount of the pollution produced by the e commerce. In fact the exportation of their garbage to other countries such as Malaysia Vietnam or other countries way less developed with no ways to recycle it causes an other form of harmfulness for the environment

Possible solutions

- Decrease energy waste

- focus on sustainable packaging and shipping (on bicycle or use of renewable packages)

- A majority of the waste is caused by over-packaged goods and the curious belief that already packed products need to be repacked once again for shipment. However, sustainable packaging solutions are available for the

eCommerce industry. Popular materials include biodegradable plastic packaging, plant fibers, and air pillows

- Improving fair taxation, consumer protection, and competition between different forms of commerce is the priority. The possibility for digital giants to largely escape taxation must be corrected by adopting a more appropriate tax system. The introduction of carbon taxes at the EU's borders will also help to internalise the environmental impact in prices
- ethical alternatives
- a more local consumption by the customers to avoid the pollution it caused
- opting for slower shipping times and try to consolidate our orders

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How can e-commerce save the planet?

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