European Parliament

E-commerce and the EU Green Deal

Analysis of the environmental footprint of online sales in the context of the circular economy

The original full study[1] presents information on the role of e-commerce in implementing the European Green Deal. In particular, the report analyses how companies can uphold high consumer protection standards with online sales in the internal market using digitalisation; explore the potential of new sustainability standards in the context of the upcoming revision of the packaging directive; investigate the environmental footprint of e-commerce including how it is calculated, and how the footprint can be reduced assess the role e-commerce plays, or could play, in implementing the EU Green Deal's goals; and analyse the link between e-commerce and the single market's circular economy.

Check out the original full study by scanning this QR code!

Background

Over the last ten years, e-commerce has consistently exhibited significant growth rates. The e-commerce share of the turnover of all EU-27 enterprises (except financial) increased from 13% in 2010 to 18% in 2019 before jumping to 20% in 2020 and 2021. As part of this rise, cross-border transactions also increased. Furthermore, in 2020, 22% of consumers made a purchase from sellers in a non-EU country. This evolution accelerated with the covid-19 pandemic as a lot of EU retail shifted from physical stores to online.

Key findings

The increasing importance of e-commerce has highlighted the importance of information provision regarding the environmental footprint of consumer choices, including: what information is made available to consumers; the personalisation of offers to consumers; and how information is presented to consumers.

With rising interest in the climate crisis, consumers have become more interested in sustainable consumption choices. While **some traders have responded to this trend by offering more eco-friendly choices, there are concerns about misleading claims being used as an advertising strategy (i.e., greenwashing).** This has also involved some companies using interface design to steer consumers towards potentially harmful choices.

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There is no single approach that fully captures the environmental footprint of e-commerce. The study finds that the three main approaches (comparing the footprint of different retail channels, i.e. traditional vs online or hybrids, official frameworks such as ESG reporting, and issue-specific approaches such as sustainability certifications) are insufficiently sound scientifically.

As regards opportunities and threats, the environmental footprint of e-commerce presents risks from logistics, over-packaging, destruction after return and electricity demand.

On the other hand, innovation in transport technology and alternative business models (such as providing pick-up points) present environmental opportunities. The widespread use of the internet allows consumers to identify more eco-friendly companies to shop from. At the same time, e-commerce has allowed for the growth of the circular economy and for extending product life.

From a legislative perspective, **there is no overarching, integrated EU policy instrument covering the sustainable production and consumption of all products nor the availability and reliability of information on these products to consumers**.

Considering these issues, the study puts forward the following recommendations:

Product life cycle stages covered by an LCA

Source: Golsteijn L., 2022, Life Cycle Assessment (LCA) explained, Available at: https://pre-sustainability.com/articles/life-cycle-assessment-lca-basics/.

Note: Life-Cycle Assessment (LCA) is a scientific methodology to calculate the environmental footprints of the entire life cycle of either a product or the function of a product in multiple impact categories, depending on the method used.

- Ensure that existing legislation is complied with in the digital space: this would entail supporting national authorities in enforcing existing legislation, monitoring online practices with digital tools and providing support to businesses to comply with existing rules.
- Improve information provision and transparency of offers to consumers to enable them to make better decisions: in particular, harness digital innovation to make it easier for the consumer to access information on the sustainability of their purchase while ensuring consumer protection.
- Incentivise consumers and businesses to be more sustainable, including by supporting e-commerce's role in fostering repair and reuse over replacement and fostering the emergence of independent repairer's network.
- Ensure information on sustainability impacts is reliable: by harmonising methodologies for assessing the environmental footprint of e-commerce and making sure that they are communicated to consumers in a transparent and easy way.
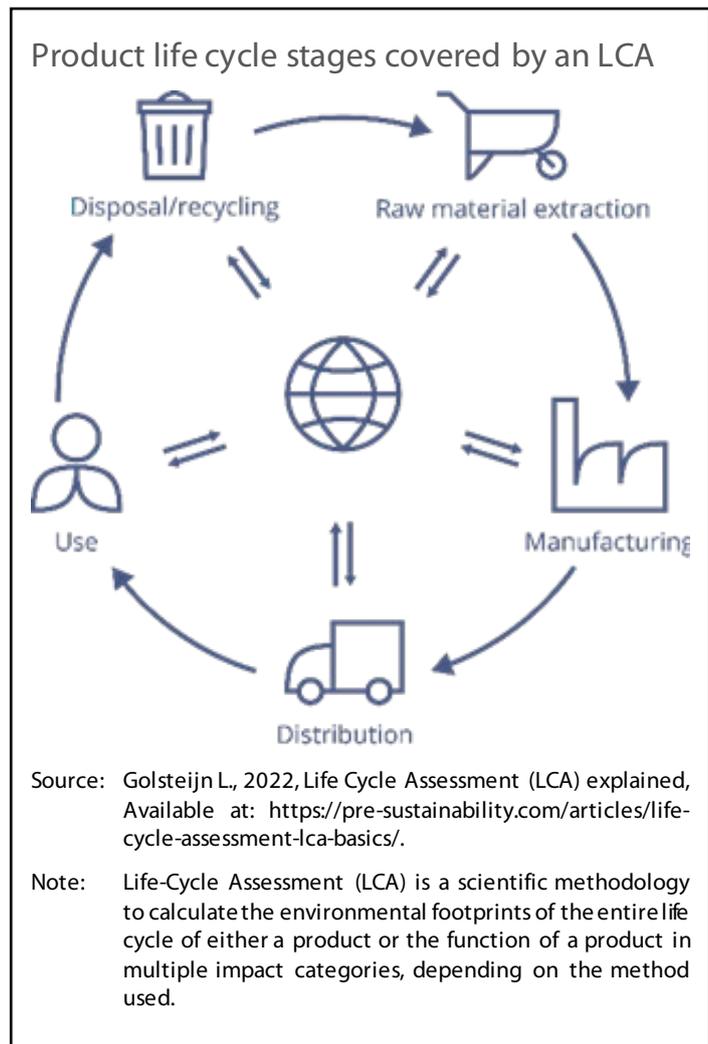
[1] Collini, L., Hausemer, P., et al., 2022, *E-commerce and the EU Green Deal*, Publication for the committee on Internal Market and Consumer Protection (IMCO), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg. Available at: E-commerce and the EU Green Deal (europa.eu).