

Press release – Digital payments demonstrated to have a lower environmental impact than cash

EDPIA announces the publication of a study commissioned to Oxford Economics on the environmental footprints of cash and digital transactions in three EU countries.

Brussels, 13 June 2024

The European Digital Payments Industry Alliance (EDPIA) is pleased to announce the publication of the Oxford Economics white paper *The environmental impact of digital over cash payments in Europe*.

With the study, **EDPIA wants to contribute to and engage in the public debate on how the payment value chain can take actively part in achieving a low carbon economy and showcase which areas are likely to deliver the best decarbonization potentials.**

Oxford Economics has based the white paper on two Life Cycle Assessments (LCAs) to measure the environmental impact of both cash and digital payments at point of sale in 2022 in three Eurozone countries that each have a different digital payment maturity level – Finland, Germany, and Italy.

Overall, **the authors have found that**, in 17 out of 18 impact categories subject to the analysis, **digital payment has a lower environmental impact than cash**: a cash payment emits as much CO₂ as 2.1 digital payments in Italy, 5.9 in Germany, and 23.5 in Finland. This means that if an average consumer chose to only pay via digital payment, in one year they would save the equivalent in CO₂ of 37 single-use plastic bags in Italy, 49 in Germany, and 74 in Finland.

The impact varies according to the country's development of the digital payment infrastructure. Finland, for example, is the most advanced among the three countries, with the lowest usage of cash, which leads to a low usage of the overall cash system, the existence of a very few ATMs, with a longer distance to travel to find one.

Oxford Economics has employed the International Organization for Standardization (ISO) guidelines for a comparative cradle-to-grave LCA. The study has been peer-reviewed by a panel of experts before its final publication today, respecting the highest scientific and technical standards.

Johanna Neuhoff, Associate Director for Economic Consulting Continental Europe at Oxford Economics, co-author of the study said: *"We have been very vigilant in the analyses that have led to the conclusions of the study not to underestimate the elements that compose either a digital payment or cash payment"*.

"We have been pleased to contribute to the LCAs and have with great interest read the results that we are launching today. We are proud to assess the positive contribution of digital payments to the environment, and at the same time we know that the industry can strive to do even better environmentally, and we look forward to continuing our efforts and engaging with the payment value chain to share knowledge and build partnerships for a sustainable future." commented Piero Crivellaro, Chair of the EDPIA Working Group and Corporate Group Head Public Affairs at Nexi.

You can find links to the complete study on the EDPIA website [here](#).

Based on the findings, EDPIA members Aircash, Nexi, Teya, Viva Wallet, and Worldline, have worked on a roadmap of initial recommendations for policymakers and industry with the aim of significantly reducing the carbon footprint of the payment's sector.

“Paying digitally is a climate action. The quantitative evidence of today underlines the potential of digital payments to bolster the advancement of the twin transition. The EU needs to set forth ambitious new objectives for the widespread adoption of digital payments across European society, delivering tangible benefits to both society and the environment. As we move forward to a new legislative term, we remain committed to leveraging these insights and collaborating with policymakers and industry partners to drive positive environmental outcomes in the payment space.” added Emőke Péter, Chair of the ESG Task Force of EDPIA and Head of European Public and Regulatory Affairs of Worldline.

You can find the recommendations [here](#).

About EDPIA

The European Digital Payments Industry Alliance (EDPIA) represents the interests of European independent Payment Services Providers. Its purpose is to contribute to EU policy debates that define the business environment for electronic payments, and to strengthen the visibility and understanding of the European payments industry amongst policy makers and society as a whole. EDPIA’s broader objective is to support the EU’s objective to create a Digital Single Market, fuelled by digital payments. It is in favour of a strong, stable and properly enforced European regulatory framework that enables intense competition between transparent and market-based solutions, allowing them to compete for the trust of their European and global clients.

Website: <https://www.edpia.eu>

About Oxford Economics

Oxford Economics was founded in 1981 as a commercial venture with Oxford University’s business college. Since then, we have become one of the world’s foremost independent global advisory firms. We employ 600 staff, including more than 350 professional economists, industry experts, and business editors—one of the largest teams of economists and thought leadership specialists. Our global team is highly skilled in a full range of research technique from econometric modelling, scenario framing, and economic impact analysis to market surveys, case studies, expert panels, and life-cycle analysis.

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