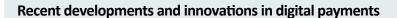


1. Introduction

Countries and regions around the world¹ (including the UK and the EU) have adopted legislation committing to 'net zero' carbon emissions by 2050 amid a growing body of evidence indicating that failure to decarbonise will lock the world into the accelerating and irreversible impacts of climate change.

The transition to net zero will require far-reaching social, economic, regulatory and technological system changes and the payments industry – given its fundamental role in the modern economy and its history in enabling large-scale socio-economic progress (see box) – undoubtedly has a role to play. There remain, however, open questions as to when, where and how.

This report – underpinned by stakeholder interviews and existing research – is the first of its kind to explore the nexus of digital payments and net zero. It explores potential answers to those questions and highlights opportunities offered to the payments industry by the transition.²





Payments tokenisation provides the security for global e-commerce to flourish



Contactless and mobile payments³



Application Programming Interfaces (APIs), Open Banking and the data economy



Direct payments: direct transfer from checking account

2. The opportunity: 'payments for decarbonisation'

Fifteen stakeholder interviews from across the payments ecosystem (including issuing banks, financial technology businesses ('fintechs') and regulators) highlighted enthusiasm for payments networks playing a leading role in decarbonisation. This included leveraging core products and services, as well as alternative assets such as brand trust and data. Many interviewees stressed the importance of taking an 'ecosystem approach', outside the limits of the conventional industry 'four-party' model. Banks in particular – responding to demand from customers and regulators – expected payments companies to be proactive partners.

The following feedback from banks:

"

Each payment network has a choice today: be a leader right now, or become a late follower. If you are going to be a leader in payments for sustainability, and therefore a leader in the financial sector, you are going to have to use the great influence and assets you already have.

"

We're increasingly seeing customers demanding that their banks do something on sustainability, including via their products.

"

[Payments companies] need to team up with others – merchants, banks, and consumers, other payment systems.

However, interviews also revealed a telling gap between payments networks seeking to develop new solutions on the one hand, and stakeholders seeking to drive the net zero transition on the other.

Feedback from the Financial Services Regulator:



It is an important new idea to link payments and sustainability, and so far it is not something which we have really been active in.

3. Exploring the role of payments

To help bridge this 'opportunity gap', we outline a potential common framework for payments networks and relevant stakeholders to co-create the role of payments, including four categories of enabling roles and actions networks can take to enable the transition.

Enabling roles What actions can payments networks take to enable the transition? • Enable net zero services by providing frictionless transactions, incentives, or 1. Empower citizens data-driven insights (for example around carbon flows).4 through product and • Provide consumers with information about their purchasing options and service innovation, as well as consequent sustainability impacts. provision of information and choice architecture • Incentivise, motivate and reward consumers to make sustainable choices. 2. Provision of data-driven • Leverage data-driven innovation in sustainability-focused products and insights services, including for clients outside the four-party model (such as governments). Payments data-driven products • Provide insights to inform client and partner strategies (such as identifying and services and predicting trends, opportunities and efficiency improvements). • Combine payments data with broader data sets to facilitate monitoring and tracking of systems-change impacts. 3. Collaboration and • Bring together a broad range of stakeholders to develop new value partnerships networks through experimentation, co-creation and open innovation. Create enabling platforms (such as infrastructure or digital) and Shaping and creating new intermediary organisations or groups to deliver net zero solutions. services and solutions with others • Join or initiate pre-competitive collaborations to tackle complex shared challenges. • Promote bold, persuasive corporate narrative on systems transition, for 4. Narrative and advocacy example around consumer empowerment or the benefits of data for Corporate influence to shape decarbonisation. the broader landscape for the • Use positive advocacy for 'enabling conditions', such as new regulation, net zero transition infrastructure, standardisation and interoperability.

The evolving role of citizens in sustainability

Research demonstrates that citizens are aware of climate change and want to take action to reduce their carbon impact, with the Covid-19 pandemic having acted as an accelerator of these trends. However, consumers also expect to be provided with convenient, cost-effective means of taking action.

71%

of adults agree that 'in the long term, climate change is as serious a crisis as Covid-19'.5 80%

say we should make as many big lifestyle changes to stop climate change as we are making to stop coronavirus.⁶ 101%

increase in searches for 'ways to reduce carbon footprint' in just 12 months.⁷ 13%

of consumers say making changes is too expensive. 27%

say making changes is too inconvenient, time-consuming or difficult. ⁸

4. Opportunities for payments in the decarbonisation of key systems

The report explores four potential areas of focus for net zero enablement via payments capabilities, as well as several opportunities for each. Some of these are highlighted in the table below, categorised as either 'inside-out' market-taking opportunities, based on current prospects and applying existing payments capabilities, assets and relationships; or 'outside-in', 'market-making' opportunities, where potentially significant carbon impacts in the economy exist by scaling up new net zero solutions and services, enabled by payments networks.

Low carbon urban mobility

Size and nature of the opportunity: The global market for transit and ground passenger transport could grow from \$412.97 billion in 2020 to c.\$630 billion in 2025; 60 per cent of urban greenhouse gas emissions come from motorised road vehicles, resulting in dangerous upward trends in urban air pollution in major cities.⁹

Inside-out opportunities

- Support the scaling of existing, local, integrated low carbon transport (including multi-modal journeys) with streamlined payment solutions to facilitate customer choice, affordability and convenience.
- Proactively work with developers of electric vehicle (EV) charging infrastructure to implement interoperable payments systems (instead of a separate token for each charging network), thus decreasing 'range anxiety' for consumers and contributing to growth in EV uptake.

Outside-in opportunities

- In collaboration with mobility providers, empower citizens by mainstreaming a broader range of net zero mobility modes of transport that are accessible, convenient, safe and affordable.
- Leverage data-driven products and services to advise city authorities and transit companies on system efficiency and optimisation.

Sharing economy

Size and nature of opportunity: The 'take, make, waste economy' is estimated to contribute 50 per cent of global emissions. Moving to a sharing economy (in which goods are re-used, recycled and rented) could generate c.US\$335 billion by 2025.¹⁰

Inside-out opportunities

- Facilitate scaling and mainstreaming of the sharing economy by allowing consumers to participate through the safe, convenient, affordable leasing of products.
- Work with retailers and manufacturers/lessors to develop and deploy timely adaptations to payments capabilities, such as new fee structures, infrastructure, and tracking new data flows including the use, repair and optimisation of products.

Outside-in opportunities

- Support and drive efforts to measure and reveal lifecycle carbon impacts (and savings) of products, thus facilitating a new payments data flow for consumers and broader sustainability stakeholders (for example to identify and predict peaks in demand and to drive energy efficiency).
- Leverage corporate narrative and advocacy to accelerate the adoption of sharing economy services, including helping to shape enabling policy frameworks (such as regulation, standards, or infrastructure).

Sustainable retail banking

Size and nature of opportunity: Regulatory, shareholder and customer demand are propelling banks towards greater focus on sustainability. Eleven per cent of European banks are now looking into green credit or debit cards,11 while studies have found that up to a third of consumers in some EU countries would switch to a bank with a stronger product and service offering in sustainability.¹²

Inside-out opportunities

- Develop and scale engaging 'sustainable banking' products and services, including carbon offsetting services and 'green loyalty schemes'.
- Refine existing 'carbon footprint calculators' to become more robust, and deepen partnerships with sustainability fintechs to scale and broaden the range of associated services (such as options for charitable giving and personalised recommendations for low carbon lifestyle products and services).

Outside-in opportunities

- Support public campaigns promoting consumer empowerment through sustainable consumption choices.
- Extend carbon calculator tools beyond carbon impacts (for example incorporating biodiversity loss, water usage and broader environmental, social and governance (ESG) indicators).
- Use aggregated data on sustainability spend at a corporate or category level to inform the link between sustainability performance and credit risk, potentially driving greater financial inclusion for consumers and businesses.

Data-driven sustainability services

Size and nature of opportunity: Data-driven insights, products and services can be used by businesses, governments and third-sector organisations as important inputs towards developing strategies for achieving climate and other sustainability goals. The global 'Green Technology and Sustainability market' (including data and artificial intelligence (AI)) is predicted to grow from \$11.2 billion in 2020 to \$36.6 billion by 2025.¹³

Inside-out opportunities

- Data insights for business: leverage payments data to provide insights to organisations engaged in making decisions around sustainability, through tailored and generic products and solutions as well as consultancy services.
- Data insights for the public sector: leverage expert capabilities and broad data sets to provide public sector organisations with insights in domains such as urban mobility, transportation, city planning, population health performance, economic performance and planning, tourism, effectiveness of tax incentives and the effectiveness of climate strategies.

Outside-in opportunities

- Support efforts to unlock barriers to data use and sharing for sustainability, including standards, quality, interoperability and governance.
- Drive and support efforts to develop a consistent methodology for measuring and reporting carbon impacts across the life cycle of products and services.
- Advocate the merits of individual consumers having more control and choice around sharing their own data, grounded in the principle of consent.

Benefits to payments networks



Maintain and grow existing client relationships and revenues through value-added services.



Attract new clients by offering innovative sustainability-focused product and service suites.



Open up new payment flows and markets.



Drive brand trust and preference with key stakeholders (clients, investors, regulators, consumers, employees).

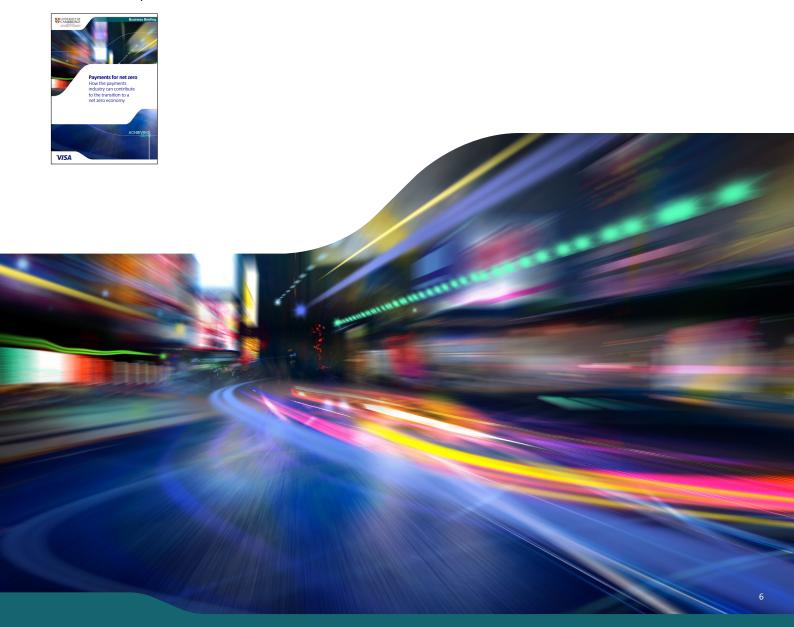
5. Overall recommendations

Bridging the opportunity gap will enable payments networks to play an important role in the transition to the net zero economy while capturing the commercial benefits that come with being an enabler of socio-economic transformation.

The report highlights the following steps that can begin to achieve this:

- 1. Identify net zero as a strategic opportunity for the core business.
- **2.** Identify and test potential net zero solutions, and the role of payments, with a broad range of stakeholders both including and beyond the four-party model.
- **3.** Use influence and assets to create the external enabling conditions for the net zero solutions.

To read the full report click here



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²The scope of this report focuses on European opportunities, however many of these may be globally applicable.

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