

rise

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 **BARCLAYS**

Climate FinTech

Rise Insights report

#HomeofFinTech



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The time is right for Climate FinTech

Tackling climate change is an essential component of the global sustainability agenda and one in which financial services can make an important contribution.

The United Nations recognised this when it created the Principles for Responsible Banking, a framework to develop a more sustainable banking system. Many banks, including Barclays, have signed up to these Principles, which seek to align industry practice with the vision set out by the UN's Sustainable Development Goals and by the 2015 Paris Climate Agreement.

It's our ambition for Barclays to be a net zero bank by 2050. We are already net zero for our own operations, so our focus now is on reducing the client emissions that we finance – so-called 'financed emissions'. That starts with aligning our financing with the goals of the Paris Agreement, not just for lending but for our capital markets activity as well.

To help us do that, we have developed a methodology to measure our financed emissions and track them over time against a decreasing 'carbon limit'. We have already started work to track and reduce the financed emissions of our clients in the energy and power sectors, and we are committed to extending this approach to our entire client portfolio over time. As we progress, we will continue to work closely with clients to help them better understand and manage their transition to the low-carbon economy.

We are also committed to helping finance a greener economy. By 2030, we aim to provide £100 billion of financing for green activity that supports the low-carbon transition, including for renewables, energy efficiency and sustainable transport. This is driven by innovative products from our Corporate and Investment Bank, including things like green trade loans, green innovation loans, green deposits and green asset finance. Our retail bank, Barclays UK, is also helping small businesses to fund green energy and sustainability projects, and was the first mainstream UK bank to launch a green mortgage.

The FinTech sector has an important contribution to make. I see significant opportunities for innovative, fast-growth companies that are developing financial technology in supporting the transition. Capital is increasingly being deployed into the green economy with expectations of investment returns driven by several factors, including technological innovation and shifting consumer demand - two areas that FinTechs are disrupting. In addition, the collection and analysis of new types of climate-related data will lead to exciting value propositions in Climate FinTech.

But how can FinTechs understand the real-world possibilities and turn ideas into practical solutions? Collaboration with business and technology teams in banks is a great place to start. These teams have experience with new patterns of spending, saving and investing; and witness first-hand how attitudes towards money are changing. They are also engaged with the development of green financial products; appreciate the increased emphasis on sustainability in capital markets; and understand how to put new types of data to use.

Based on what the Rise ecosystem has achieved through collaboration over the last five years, I know that synergies exist between smaller, more agile FinTechs and the teams innovating in large financial institutions. Working together is fruitful. It allows both parties to discover new insights and drives greater, more rewarding innovation.

Whatever your interest in Climate FinTech, I encourage you to explore this report, learn about how financial services are evolving fast to support new low-carbon scenarios and industry enablers, and take part in the exciting innovations you'll read about – or invent your own.

To find out more about Barclays' commitment to a low-carbon economy, [visit our website](#), where you can also see our climate dashboard and learn about BlueTrack™, our methodology for measuring financed emissions.

To learn more about how to work with enterprises on Climate FinTech opportunities, [attend one of Rise's enterprise engagement workshops](#).



Sasha Wiggins
Group Head of Public Policy
and Corporate Responsibility,
Barclays

Macro landscape

Data, policy and technology are enabling startups across a range of sub-verticals. Take a look at a few of these startups in the macro Climate FinTech landscape.

Data

Policy

Technology





enablers

Three huge areas of change and opportunity are enabling Climate FinTech. New sources and ways of treating **data** combined with emergent government **policy** are allowing FinTechs to harness **technology** that informs environmental standards and product design. We spoke to several contributors to discuss how these enablers support organisations' ESG reporting problems, for investors' sustainability insights and for consumers' growing adoption of sustainable patterns of consumption.

Data

Quantifying the impact of environmental, social and governance (ESG) initiatives started over 20 years ago, but in the last three years, climate change has accelerated the need for new data sources, improved analytics and better benchmarking.

Access to data mirrors the growth and evolution of Open Banking and Open Finance over the last decade. In the EU, the revised Payment Services Directive (PSD2) required the UK's nine biggest banks to release their data in a secure and standardised form. Open Finance extends this beyond access to banking data, and includes other financial information such as investments, liabilities, lending and payroll. FinTechs have an opportunity to leverage this data to build use cases around transparency and increased connectivity and infrastructure in the sustainability space.

According to the Energy and Climate Intelligence Unit, almost one sixth of global GDP is now covered by net-zero emissions targets¹. It's no surprise that data is a key enabler of this global change as nations, regions, cities, companies and individuals measure how those targets are being met. But as so often with data, this raises questions. What exactly does it mean to be sustainable, and which metrics should the industry use? Who sets the data standards? And what technology will enable us to better understand and project these metrics?

Although the standardisation of environmental (as well as societal and governance) data has accelerated in the last few years, these questions aren't always easy to answer. Three things are currently in short supply: clarity, more granular data and tools.

Clarity

Broadly speaking, environmental data covers a company's energy use, waste, conservation efforts, and also environmental risks and how these are being mitigated. "Broadly speaking" is key. Turning these general terms into well-defined and clear measurements to obtain an accurate representation of a company's sustainable impact isn't simple. To take just one problem that needs fixing, with the growing use of carbon markets, there is potential for double counting in carbon offset issuance that must be avoided to maintain credibility.

Without the appropriate data points, asset managers and investors are unable to easily compare companies. Take the analogy with accounting. Investors wouldn't consider examining markets and comparing companies without accounting standards for the data they're using. But with ESG data, there is no GAAP (generally accepted accounting principles).

This lack of clarity extends to corporates who are relatively underserved, with few accounting data requirements and standards. Whether it's data in (data tracking and emissions recording) or data out (requirements around reporting), this lack of clarity affects sustainability and net zero policies across corporations and their supply chains, an area that has been particularly complex and undefined.



As more data sources are defined and environmental data frameworks take shape, FinTechs have the opportunity to access more granular transactional, expense, accounting and investment data sets and develop specific use cases and products to accelerate innovation.

More granular data

Finding, cleansing and comparing reliable data is hard. Currently, it's spread across many documents and websites, and not reported in a consistent way. What's needed is the capability to assess how well companies are doing against, say, the UN's broad financial inclusion or water usage goals, and ways of making that assessment robust when reporting requirements and data standards change. But right now, there are gaps in the measurements and it's difficult to identify the data that describes how companies' and customers' decisions affect the bottom line. Such measurement capabilities would really add value.

FinTechs' ability to put blue-sky thinking to practical use is allowing them to discover new, granular data sources and metrics that the traditional vendors are likely to have missed. Whether those discoveries amount to 5% or 50% of the total meaningful data required to accurately and reliably measure environmental performance is difficult to say. One thing is certain. There's a lot we don't know so even if it's 5%, the financial opportunity is enormous given the size of the market for data.

Tools

Investors and financial institutions need reporting tools to make sense of environmental data and to prepare submissions to regulators and other external bodies. The tools must allow users to easily align data and frameworks, and identify meaning that steers financial decision-making towards reduced environmental impacts and risk exposure.

Collaborations with institutions are more likely if FinTechs can show a unique approach to data and demonstrate how other companies won't be able to clone it. FinTechs must clearly demonstrate how their data or tools bring new information to decision makers that creates value, such as the eligibility of green products, or improvements in alpha (a basic performance indicator of a fund) or beta (the impact of a fund's volatility on performance).

"FinTechs have the opportunity to become the flag bearers for better ESG data."

**Katherine Wilson,
VC at Illuminate Financial**

You don't have to go it alone. Climate FinTechs are also adding value to well-established data vendors and other financial service providers by delivering enhancements and add-ons to their product offerings, while also creating marketplaces that allow corporates to find a respective offset partner based on specific sustainability mandates.

2. London Stock Exchange Group
3. New York Times
4. Green Digital Finance Alliance

Policy

15 countries already have policies to achieve net zero by 2050, have proposed it or are considering it.

More than 1,000 businesses are working with the Science Based Targets initiative (SBTi) to reduce their emissions in line with climate science. And more than one third of the FTSE 100 have joined the UN's Race to Zero campaign.

National governments, and leading industry and academic groups are collaborating on common standards and best practice around disclosure scores, with the Task Force on Climate-related Financial Disclosures (TCFD) aligning change in regulation and policy. The Task Force, comprising 31 members from across the G20, aims to develop consistent climate-related financial risk disclosures for use by companies, banks and investors.

Collaboration is taking place partly because governments are involved in programmes like TCFD, but also because the explosion in global investing means investors and asset managers need to compare companies from country to country. As the world's most international exchange², London is leading best practice and, like other global financial hubs, is promoting globally consistent disclosure standards for ESG. The EU, Canada, India, New Zealand and China are also developing taxonomies to define green business activities.

"Agreeing on policy details such as weightings attributed to some variables, can be hard. For example, some investors will overweight nuclear power as a zero-carbon power source. Others will underweight it based on concerns over its waste. Much research and consensus are required to decide the point of balance. Or, in finance, the emissions impact of Bitcoin may be high now, but technology and investment companies are actively seeking ways to make its production greener³.

Should we anticipate a single, globally recognised data standard? Probably not. Alternative frameworks may overlap and have commonalities but different standards will likely always exist. It's possible that de-facto standards will emerge and be accepted, especially in less regulated geographies, based on the work of individual providers who take the lead in developing data sources. This means that the key to comparing green investments in international markets will be to examine and understand the differences between frameworks and, at a more granular level, the factors used within frameworks. That can be complex but FinTechs are helping address the problem.

"One of the things that I get most excited about when I deal with FinTech is that I don't know what they're going to come up with."

**Mark Carney,
Secretary-General's Special Envoy
for Climate Action and Finance, United Nations**

A global initiative of interest to the FinTech ecosystem is the Green Digital Finance Alliance (GDFA), a partnership between Ant Financial, China's leading online and mobile financial services provider, and the UN Environment Programme, the global environmental authority. GDFA promotes the development of current and emerging digital technologies to advance sustainable finance, and creates publications about specific technologies and the digital sustainable landscape in individual countries⁴.



Technology

Any technology that opens new routes to customer engagement or removes friction for corporates has a place in new green finance products.

Perhaps the technology that's most relevant to Climate FinTech is blockchain. It's a vital enabler in tracking the highly connected world of carbon emissions and energy consumption. It makes taking action much simpler.

For example, blockchain allows smart energy distribution to take place, verifying how utility companies have redistributed their overproduction of energy. How else could that be done without connecting a myriad of incompatible systems and verifying data at each connection? FinTechs are already involved in this world of smart energy. One example is **Dipole**, the distributed energy aggregator that's decarbonising the energy sector, using blockchain, and the Internet of Things (IoT), to manage consumption and to allow energy providers to trade electricity.

"Open Banking can track the carbon impact of transactions and encourage lifestyle changes."

Bruno Werneck de Almeida, Corporate and Business Development Lead, Plaid

The convergence of blockchain, IoT and AI means that physical objects will be able to capture, validate and report 'impact' data that reflects the real-world effect the environment is having on them, or that they're having on the environment. The data can then be uploaded to storage devices where algorithms can analyse it, before it's reported to distributed ledgers.

IoT, 5G and AI will allow investors to track huge volumes of metrics on physical assets without human intervention and review the data against a chosen ESG taxonomy to examine the assets' environmental performance.

From enablers to opportunities

The three enablers – data, policy and technology – are supporting the development of products and services demonstrating the best of FinTech innovation.

Data providers like **Net Purpose** will begin to quantify many of the aspects of company behaviour which, until now, have sometimes been viewed as largely subjective and more of an afterthought⁴. Data points like this will move from being alternative to conventional and any market participant not factoring them into their analysis may be putting themselves at risk of mispricing assets.

In the policy field, **YvesBlue**, for example, has created a platform for investors that pulls together the disparate and growing number of ESG data sources, and presents a consolidated view of the impact characteristics of the companies in a portfolio. Investors can visualise this across regulatory frameworks, compare and prioritise scenarios, and then report back to clients.

Nossa Data, an alumnus of the 2021 New York Barclays Accelerator, powered by Techstars is streamlining the ESG world for corporates, simplifying all parts of their long

and complex reporting journey. Nossa Data provides companies with a platform with simple ESG reporting templates, data collection, workflow optimisation, and robust peer and investor analytics.

Up until this point, action has been driven by 'pull factors', particularly regulatory clarity and policy, that are pulling corporations to act in more sustainable ways. However, we're now seeing more 'push factors' led by increased engagement, profit motives and value-based signals that are pushing corporations and consumers towards sustainable products more organically.

There's no doubt that further innovations across financial markets and the consumer space will be demanded by consumers and clients, with Climate FinTech in a prime position to tackle the challenges.



alternative markets

Can you really get beer in exchange for electricity? Yes. Are there tradable assets that truly reflect physical carbon allowances? Also yes.

FinTechs are involved in shaping new asset classes, and markets are adapting to the increasing popularity of green solutions.

New financial markets for environmental assets

Technology has historically played a big part in the energy and environmental sectors. Nowadays, with green finance fusing 'digital' with 'sustainable', tech innovations are more fundamental.

For example, **Patch** is using the smart application of APIs to help digital banks calculate carbon footprints and identify offset projects to programmatically remove carbon from their operations.

Power Ledger's blockchain platform is being used to decentralise energy trading and provide trusted accounting and settlement solutions in energy markets. The loyalty peer-to-peer programmes that enable this allow exciting new ways for brands to engage consumers while also helping them meet their sustainability goals.

Asset managers and institutional investors can now track and index carbon in their assets and portfolios, and remove 'their' CO2 from the atmosphere through sustainable operating practices. Investing in carbon has become easier, allowing institutions to trade in green financial products that directly reflect the value of physical carbon allowances.

The traditional insurance sector is innovating too through collaboration and adopting the latest tech to offer new insurance products that promote sustainable behaviour.

The insurance market is also shifting towards greater collaboration of big players with smaller companies and use of the latest technologies. New ways of underwriting and disruptive product offerings are becoming established.

Common to all of these scenarios is the involvement of FinTechs, who continue to drive innovation in markets.

"Global ESG assets are on track to exceed \$53 trillion by 2025."

Bloomberg Intelligence

Loyalty peer-to-peer energy trading

Blockchain is reducing costs, increasing trust between customers and brands, and decentralising energy trading.

Customers are increasingly scrutinising brands' claims of sustainability. With energy, there's a disconnect in public perception between power sources, their green credentials, and how they get traded in highly complex often quite circuitous and abstract ways¹. Brands can address this issue by engaging in new ways that build trust – like loyalty peer-to-peer (P2P) programmes.

Loyalty P2P creates an increased and dynamic interaction with consumers by turning a commodity (for example, energy) produced by them into a currency that can be exchanged for goods, services or individual recognition.

Loyalty P2P energy trading turns the trust challenge into an opportunity for brands by using customers' interest in sustainability and getting them to do the work of a traditional energy provider. In the case of Carlton United Brewery (CUB, see the case study on the opposite page), the customer's acting as a solar farm and providing a significant proportion of the electricity the brewery needs to make the beer.

Like many really good ideas, you might ask why this hasn't been done before. Part of the answer is technology. Before the arrival of blockchain, the numerous small transactions between the various parties would collectively have been too expensive. Blockchain makes them economical. The accounting and settlement process, based on technology

like Power Ledger's blockchain platform, allows all the participants in the CUB programme to do instantaneously what is quite an extensive and complex piece of accounting, without the aid of any bank or 'trusted party'.

This cost efficiency feature brought by blockchain technology, combined with its intrinsic security (traditional systems are more likely to get hacked or corrupted), make blockchain key to decentralised energy trading. The public likes the blockchain part of it, almost like it's become a brand in itself.

"The brand can stop talking about being sustainable and just start demonstrating it."

Maybe the connection between CUB's beer and solar electricity isn't a particularly intuitive one. But it's easy to imagine many other consumer goods and services brands looking to loyalty P2P as a way to solve their energy procurement headaches in the future. Telecoms, supermarkets, fashion, hospitality, restaurants, food and beverages sectors are all now expressing an interest, but they will need help to integrate sustainability into their customer journeys using innovative products, such as those provided by FinTechs.

Thinking back to the 1990s, loyalty programmes were all predicated on air miles and burning fossil fuel in a conspicuous way. They've come a long way since then.

1. BBC

A case study: Energy beyond carbon, loyalty beyond air miles

For any ESG manager, sourcing green energy is a difficult balance to achieve. On one hand, companies need to procure electricity at an affordable rate. On the other, companies also need to make sure its credentials are solid enough for when the media start scrutinising what they are doing. This balance between perception, reality and the financing of green energy has never been easy.

Carlton United Brewery (CUB) and Power Ledger in Australia are trying a new option.

After CUB was acquired in 2020, it set about helping to meet a sustainability goal of its new owner, Asahi Beverages. That goal was to be powered entirely by 100% renewable energy by 2025, but balancing the cost of electricity while also ensuring its green credentials was difficult.

Loyalty P2P energy trading provided a solution. It allows CUB's customers to sign up to a deal supplying the brewery with their excess rooftop solar electricity, in exchange for beer. The programme involved Power Ledger's blockchain-powered software platform that facilitates the exchange of energy at a decentralised scale.

Participants in the electricity exchange programme can log in at any time and find out how much electricity they've produced for the brewery and how much beer they've accrued. And it's not long after they've provided the electricity that a van pulls up outside to deliver their beer.

There are so many different ways to source energy, but when you drill down to it they all come with issues and complications. CUB's energy exchange avoids these, and has the added benefit of promoting brand engagement. The brand gets to engage with their customers on a whole other level. They can stop talking about being sustainable and just start demonstrating it by buying their customers' solar energy.

Sustainability goals met.
Brand engagement increased.



Dr Jemma Green
Executive Chairman of
Power Ledger

[in](#) jemmagreen



Embedded carbon removal

Embedded carbon removal enables developers to build a whole new set of Climate FinTech products and features, fostering a more sustainable financial services industry.

Now poised to be at the vanguard of embedding environmental sustainability directly into digital products, a number of FinTech startups have recently gone to market with climate-focused products across banking, wealth and infrastructure.

In a few years, a majority of FinTech applications will offer environmentally sustainable products in one way or another. This shift to sustainability across industries is imperative to address climate change, so the business opportunity to offer sustainable products in the FinTech sphere is incredibly compelling.

Studies show that 88% of consumers want brands to help them live more sustainably¹. Products marketed as sustainable show growth at over five times the rate of those that are not². There's clear evidence that sustainability can improve employee acquisition and retention, and increase workplace satisfaction and overall productivity in the workplace.

To balance carbon emissions budgets, there are two primary levers businesses can pull. First, they can reduce the amount of carbon they emit into the atmosphere using more energy efficient business operations and renewable energy. Beyond that, businesses can also opt to remove any unavoidable

emissions through nature-based solutions, such as reforestation, and leading-edge negative emissions technologies, such as direct air capture, biochar (charcoal produced from biomass) and mineralisation processes. The science is clear that both levers need to be pulled to reduce the impact of climate change.

Patch focuses on carbon removal, facilitating negative emissions for businesses. The API-first platform makes it possible for businesses to programmatically remove carbon from a growing network of removal projects across the globe. APIs, or application programming interfaces, enable software to communicate with each other, and—in the case of API providers such as Twilio, Plaid, and Patch—can serve as an external infrastructure layer upon which developers can build products or features within their applications. In the case of Patch, developers are able to embed project metadata into their digital experiences, generate emissions estimates for certain activities, and then programmatically order carbon removal from our network of projects across the globe.

1. Forbes 2018
2. Harvard Business Review



Using Patch's platform, businesses can:

- Achieve net zero goals (they remove as much carbon as they emit) or negative emissions goals (they remove more than they emit)
- Embed carbon removal into their products and services

There are a number of FinTech use cases that are well suited for embedded carbon removal. Take cryptocurrency. Bitcoin mining has come under heavy scrutiny for its carbon footprint, which is estimated at nearly 37 megatons of CO₂ annually³. This energy requirement means Tesla's recent \$1.5 billion investment in Bitcoin has an estimated carbon footprint equivalent to the annual emissions of 1.8 million cars⁴. Many potential Bitcoin buyers may be put off by this negative environmental impact. We imagine a world in which crypto exchanges offer their users the option to offset the carbon footprint associated with their Bitcoin purchases.

In digital banking, we expect to see a growing number of applications providing users with the option to offset emissions for particular purchases – say a flight or petrol – or offering carbon removal as a credit or debit card reward type. Car insurance providers are exploring how they can let customers offset their driving emissions directly in a user portal. And all FinTech companies can offset operational emissions, which they should also be working to reduce, and position their brands and products as environmentally sustainable.

If you're a FinTech company wanting to efficiently acquire and retain users and deliver sticky, engaging experiences, we encourage you to explore climate-themed products and features. Some users won't care. But for the 88% of those who do, you'll be offering a powerful combination of financial services and environmental responsibility.



Brennan Spellacy
CEO, Patch

✉ patch.io
in bspellacy
🐦 @bspellacy_

3. Digiconomist
4. Cointelegraph

Sustainable foundations in the insurance market

Investors, rating agencies, regulators and consumers are looking for insurers to intensify their efforts in sustainability.

This is backed up by a 2020 survey¹, finding that only 14% of the insurance sector regarded ESG factors to be extremely important in the underwriting process (and 10% viewed them as unimportant), indicating that some insurers are still adapting to the ever-changing ESG landscape.

Nonetheless, industry leaders no longer view ESG defensively and instead see its opportunities. The industry is reacting with better climate-risk modelling and it increasingly recognises its part in promoting climate resilience, with larger insurers increasingly using tools like risk dashboards, risk capital allocation and limit consumption reports to understand early-warning indicators of breaking climate risks and the impacts on capital allocation.

The industry leaders now also conduct their own organisation-wide stress tests and include climate risk assessments more consistently in their broader enterprise risk management (ERM) framework. These activities help in assessing capital and liquidity implications and in identifying and correlating impacts across different lines of business and investments.

Regulators are increasingly mandating disclosure and stress-testing, and bodies like the International Association of Insurance Supervisors (IAIS) are working to share best practice on ESG regulation within the sector. Ratings agencies too are increasing pressure on insurers to take into account growing vulnerabilities to future payouts by the sector.

Underwriting

Climate change is often described as having three types of risk²:

- Physical: the risk resulting directly from extreme climate-related events
- Transition: the risk resulting from policies and regulation aimed at decarbonizing economies
- Liability: the risk resulting from clients suffering a loss resulting from a physical or transition risk (for example, if an investor claims against a business that makes a loss due to a climate-related event)

Uniquely, insurers are susceptible to all three risk types and are taking steps to address them.

The emergence of new hazards has required new underwriting solutions and new products. Today's challenge for many insurers is that traditional models are relatively simple – they merely reflect the experiences of past losses and don't adequately predict the future. With climate change, those models become less useful. New thinking is required in managing portfolios, but the compounding nature of climate losses adds complexity.

Sustainable insurance products

Recognising the importance of engineering behavioural change in customers, many insurers are expanding beyond traditional risk transfer activities into risk mitigation to develop engagement strategies that shift customer behaviour in a more sustainable direction.

A new impetus in the industry, 'impact alignment', aims to prevent unwanted events and instead promote positive environment outcomes. This makes perfect ecological and economic sense, as insurers are increasingly aware of the ESG underwriting dividend in a growing market that leads the way in driving a low carbon economy. In expectation of a rise in demand, insurers are already innovating with new types of cover for climate-related risks.

For consumers, the innovation has mainly centred on buildings insurance and motor insurance. In the latter class, many providers offer discounts for low emission vehicles. But now, depending on your location, you can also get limited mileage motor cover, with gradual discounts depending on the distances covered. Research has shown that such packages encourage customers to use their vehicles less, leading both to reduced greenhouse gas emissions and claims. In another green scenario, in France you can get covered if you hire a small urban, low-emissions vehicle during the week and a large family car over the weekend or for





holidays, thereby reducing overall emissions without the need to purchase two cars.

For companies, new and sustainable insurance includes pollution liability insurance, warranty insurance (to increase confidence in the long-term performance and financial attractiveness of photovoltaic products like solar panels), environmental liability insurance (for damage to the environment caused by companies' operations), crop insurance and flood insurance.

With global renewable energy capacities set to more than triple by 2050, the renewables sector is growing. Energy producers will increasingly need insurance for new energy installations. Accordingly, risk consulting and risk service solutions supporting those sites and their underlying technologies will also be required.

New approaches to close protection gaps have inspired new thinking on sustainable insurance. For example, Allianz proposes that the insurance sector can support clients' transition journey by offering³:

- Policies that support upgrades to eco-labelled appliances, and that encourage people to repair rather than replace products
- Insurance solutions for car-sharing and the transition to electric vehicles, including vehicle batteries and energy infrastructure
- Support as a mediator, service provider and risk bearer to help accelerate the take-up of energy efficiency measures in real estate properties

If impact alignment succeeds globally, a fraction of the industry's capital could make a substantial impact on global sustainability.

3. Allianz

Innovation and collaboration

2020 was a difficult year for the insurance industry, but it saw extraordinary digital transformation as the pandemic forced incumbents to explore digital distribution channels, enhance back-office capabilities and leverage analytics in new ways. The demand for digital solutions continues to increase across the value chain, from quote issuance to claim settlement.

New platforms, like **Pega**, and cloud solutions are driving operational efficiency, but InsurTech companies really bring their prowess in designing simple customer experiences and, perhaps most importantly, analytics with cutting-edge products such as ultra-customised policies and using new streams of data from internet-enabled devices to dynamically price premiums according to observed behaviour. This drive in precision allows products to be priced more competitively.

Some InsurTech companies are also experimenting with AI to automate the tasks of brokers and find the right mix of policies to complete an individual's coverage. An example of what's possible is **Lemonade**⁴, the US-based insurer, disrupting the buildings insurance model with AI and behavioural economics to evolve traditional insurance. This is unusual in the highly specialist industry with its high barrier to entry (due to regulation and capital requirement), and other solutions are likely to follow.

4. Forbes

Other InsurTechs are enabling on-demand insurance for micro-events (like borrowing your neighbour's car) as well as peer-to-peer insurance (when individuals pool a premium).

It's becoming more common for incumbents to partner with InsurTech companies in an effort to enhance the customer experience, up-sell and cross-sell, generate cost efficiencies and explore new markets. As with FinTechs and banking, incumbents in insurance often face barriers to innovation due to legacy technology, and InsurTechs lack the experience operating in one of the oldest financial insurance markets. Collaboration, where both companies form a strong relationship and learn from each other, is key to disruption in the industry.



Cedric Leung
Financial Institutions Group,
Barclays International

 cedric-leung-04861577



the green consumer

Debit cards can work for you in new ways, like helping you go green. You can even round up your card purchases to plant trees.

By understanding customers' aspirations and developing the products and services that meet their needs, FinTechs are playing a pivotal role in supporting green consumers.

Empowering consumers to make green decisions

FinTechs are seeking to innovate and empower individuals to turn climate thinking into climate action.

Transactions are a rich data source. They can broaden the understanding of how consumption affects the climate. And personal finance management tools – standalone or built into a bank's or utility provider's app – can use the data to tell users that they're purchasing a lot of fossil fuels, analyse their use and provide ways to soften the environmental hit.

In the US, companies like **Aspiration** have a green take on the shift toward digital banking. They foster consumer action with socially-conscious and sustainable cash management services, enhancing the trust between customers and banks. (Aspiration is the company behind the tree-planting idea.)

Surfacing insights into consumer behaviour is a great way of applying behavioural economics to environmental data. It's an imaginative fusion of data science and FinTech. **Envaluate**, a London-based startup, is using research-based behavioural economics to create new technology that's good for both individuals and banks.

OpenInvest uses technology to mainstream socially responsible investing, as individuals seek an ethical way to invest.

Perhaps nothing typifies an individual's long-term commitment to the planet like an 'ethical' pension. As more of us grow our pension pots with the environment in mind, **Cushon** is giving people a more active say in how pension investments are made.

"Highly empowered consumers seek and champion brands that commit to sustainability."

Forrester

Q&A: The rise of the green retail bank

Green consumer banking is one of the most direct ways that individuals can understand their impact on the environment, and challenger banks are helping their customers see the link between their money and their values. **Susana Lacouture**, FinTech Associate for Barclays Investment Bank, spoke with **Andrei Cherny**, Co-Founder and CEO of Aspiration, on the success of green retail banking.

Susana Lacouture: Tell us a little about Aspiration's aims.

Andrei Cherny: We're on a mission to build a better world. Aspiration is a 'Sustainability as a Service' platform that offers ways for individuals and businesses to align financial needs with their values.

SL: What was your inspiration to tackle climate change through a consumer finance solution?

AC: Climate change is an issue that I've been engaged with for 25 years, going back to when I was a young person with the incredible opportunity to work for then Vice President Al Gore in the White House on the issue that we called global warming at the time.

Since then, we've seen the rise of sustainable energy companies transforming the energy industry, the growth of sustainable transportation transforming the auto industry, and yet it was clear to me that if we really wanted to have the kind of impact we needed on an issue like climate change and the other ESG challenges that we are facing, we needed to have a financial institution for consumers that was going to turn the

concept of sustainable money into a reality. That was the inspiration for Aspiration.

While we have seen ESG investing grow by incredible leaps and bounds, especially over the past two or three years, when we started Aspiration eight years ago it was clear that ESG investing wasn't enough – we needed ESG banking, saving and spending.

SL: What steps are you taking to educate Americans on climate change and encourage action through the use of your products?

AC: Most people care a great deal about a challenge like climate change. They're changing the way they power their homes, get to work or the kinds of products they buy in the grocery store, but then think nothing about buying those products with a big-bank debit or credit card.

People might not realise that their deposits in a bank are not sitting in a vault but are being lent out and a large portion of those deposits are being used to fund oil and gas exploration, pipelines and the like. There is an education process to help that part of the 'conscious consumer' demographic really understand that they can also be conscious



consumers in their financial lives. We've seen a lot of movement on that front over the past couple of years, but there is certainly still more work to do.

SL: Will traditional retail banks follow suit or partner with FinTechs to address this demand in the market?

AC: We are seeing with Aspiration a real acceleration over the past few years as people seek out ways to align their money and their values and to bring ESG into all aspects of their financial life. When you see that kind of trend, it creates an enormous market opportunity, and so it is no surprise that we are seeing a lot of companies in different sectors jumping into aspects of the sustainable money revolution. It is going to be a multi-trillion-dollar trend. The growth in new startups and their acceleration in the space really speaks to the scale of the opportunity.

SL: Aspiration has amassed an amazing number of customers, so the platform is clearly resonating. What is driving that growth, adoption and engagement?

AC: We've seen that growth increase over the past six years since inception. The impact of COVID-19 has really supercharged that growth. Not only has there been a greater movement towards digital products across the board, specifically financial solutions, but there has also been what I think of as a 'flight to sustainability', as opposed to the traditional flight to safety and a return to the tried and true that people might have expected in this kind of crisis.

What we've seen at Aspiration, even more than before the pandemic, is consumers thinking about what kind of world they want to live in, and about what really matters to them (whether it's the need to buy plant-based foods or any other imperative of the consumer landscape). I really think that the COVID-19 impact has supercharged the sustainable money revolution and there is no going back.

SL: Could you tell us about the Aspiration Impact Measurement and other data Aspiration is tracking for their users? How does that tie into customer engagement and accountability?

AC: Aspiration Impact Measurement (AIM) is something that we launched almost five years ago and it really is a first and one-of-a-kind offering that empowers consumers by allowing them to see their own daily personal sustainability score based on where they are spending their money. Think of it as a Fitbit for sustainability.

It also shows you the People and Planet scores of different places where you might be thinking of making a purchase. So if you're walking down a street in New York and there is a Duane Reade, a CVS and a Walgreens across the street from one another, it helps you make a decision between them on the basis of both how those businesses treat their employees (the People score) and how they treat the environment (the Planet score).

Americans spend \$36 billion a day as consumers. That is an enormous amount of power that they can wield through their dollars to give them a voice and a vote. There are many people who want to take this sort of action.

AIM is a unique tool that allows them to, and it's built right into the app that they use for their day-to-day spending, saving and banking.

SL: While we are on the subject of products, congratulations on launching the Aspiration Zero credit card. Could you say more about your products and their impact?

AC: We are really excited to be rolling out our Aspiration Zero credit card. It's the first credit card that enables customers to reduce their carbon footprint by using it on a daily basis and rewards them for doing so. 70% of Americans are concerned about the climate crisis and 35% are highly alarmed by it. This tool allows them to reduce their carbon footprint easily and automatically – without changing their behaviour.

It builds on our plant-your-change programme that we launched last year for our debit cards, and then launched at plantyourchange.com. This allows customers to plant a tree with every purchase they make with any credit or debit card simply by rounding up that purchase to the nearest dollar (if the card enables that feature). The Aspiration community has planted over 10 million trees in the past year which has the collective carbon impact of taking every car in West Virginia off the road for a year. But that's just the beginning. As we scale, so will our ESG and climate impact.

SL: What's next for Aspiration and the future of green retail banking?

AC: We think a third of the US population (and even more than that in other parts of the world) are looking to bring conscious consumption and sustainability into the core of their financial life. Aspiration has really led this type of ESG and sustainability-focused financial service. While we've brought that to people's banking lives, credit cards and investments, there is still enormous room for

us to grow in reaching more customers and providing more products here in the US and other countries. And our Aspiration Sustainable Impact Services arm is helping all kinds of businesses meet the sustainability demands they are facing from government, shareholders, employees and customers alike.

SL: If you had to identify one key lesson from your journey as an entrepreneur in the sector, what would it be?

AC: When we first started in 2013, telling investors that we were going to launch a financial institution that would provide an alternative to big banks built around ESG and sustainability, that would allow customers to pick their fee (even if it was zero) and that would give 10% of its earnings to charity, it led to some pretty short meetings. My advice is that if people aren't telling you "you are crazy" then you aren't thinking big enough.

There is an enormous opportunity to sail into the sustainability revolution that's transforming all aspects of our lives. By aligning the ways in which a company can do well and do good at the same time, you are able to marry profit and purpose together in ways that not only create a lot of economic value but also create societal value.



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Susana Lacouture
FinTech Associate,
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Influencing green consumer choices with behavioural economics

Public concern for climate change is at an all-time high and consumers want values to be reflected in the products and services they use.

Green behaviour differs among individuals and is influenced by a number of variables such as income, attitudes to climate change and personality (for example, their degree of activism). Building 'green profiles' of consumers can segment the market and help to get the right products to the right people, increasing the uptake of green products and accelerating the transition to net zero.

Data can create visibility. One example is smart meters, where the goal is that households will change their daily behaviour if they understand how it impacts their energy consumption. We need to make it easy for consumers to adopt greener habits, and smart meters achieve this by automatically taking readings and reducing energy bills.

When it comes to green behaviour, there is an intention-action gap. There is a disconnect between the values people say they have and how this translates to their consumption. Framing language can be used to avoid the 'doom and gloom' of climate change and to motivate people with a sense of urgency and optimism. Prompts or cues can be used to shape good habits both digitally and in person, such as placing reusable cups at the front of a till when we order our morning coffee. While it's important to make people feel good about buying sustainable products, the focus should be on creating the products with the most positive impact and avoiding greenwashing (glossing over facts to appear green).

Envaluate is conducting research with University College London's Centre for Behaviour Change to determine the optimal combination of behavioural change techniques to get people to reduce their carbon footprint. Informed by this research, our technology can connect to users' bank accounts through secure APIs and analyse their spending to give feedback on the impact of their purchase, allowing users to monitor their behaviour and make changes (see the case study on Envaluate). Metrics and charts such as a monthly carbon score can be displayed, as well as breakdowns by different sectors (e.g. transport) that highlight users' most carbon-intensive purchases. By also implementing personalised tips, users can see the positive impact they have on their scores, which helps to close the intention-action gap.

Social comparison is an important method of inducing behaviour change. Envaluate, for example, incorporate this into their product through benchmarking against UK averages. Put simply, users who fall below the average are motivated by guilt and competition to reduce their carbon footprint. And using the right language encourages 'above-average' users to stay on track and lead by example.

Read more about Envaluate over the page.

Company spotlight: Envaluate manages individuals' carbon footprints and helps them lead a greener life.



The company

Carbon footprint should become a significant factor in decision making, similar to price. Envaluate is an early-stage startup aiming to achieve this by helping consumers to measure and reduce their carbon footprint through analysis of their spending habits.

The London-based company received pre-seed investment from Bethnal Green Ventures, Europe's largest tech for good VC, and rolled off their accelerator programme in December 2020. They also received investment from Atomico Angel, Harry McLaverty.

The proposition

Over 70% of adults in the UK are concerned about climate change, yet often feel overwhelmed and unsure what actions to take. Data shows that people also want to see green values from their bank. Retail banks are looking for innovative solutions to retain climate-conscious customers and increase stickiness, while also facing a rising pressure to put sustainability at the forefront of their operations.

By partnering with retail banks, our technology can reach a wider audience to achieve large-scale climate impact, and also be a platform for banks to segment their customers and launch green products. Banks benefit by being more attractive to climate-conscious customers, enhancing their sustainability agendas and by increasing the stickiness of their mobile app.

Key features

Transaction-level analysis and feedback

- Estimates, using unique Carbon Models, a carbon impact for each transaction made
- Provides analytics and tips to help lead a greener life

Carbon scoring

- 'CO2 per pound' factors take into account what spending across categories and brands
- Deep level of analysis unlocks the footprints of specific products

Simple, API-enabled product

- Banks enable the software via an API
- Users log in to their existing mobile banking apps to view their carbon footprint data
- Leverages Open Banking technology

Working with Barclays

Envaluate participated in the 2021 Barclays Black Founder Accelerator, kickstarting their relationships with Barclays and working with the Innovation team in their Chief Technology Office.

 envaluate.co.uk
 @envaluate

The team



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Bringing personalisation to impact investing

Impact investing is transforming from being a standalone product to a disruptive service for consumers based on transparency, personalisation, and new models of engagement.

ESG, especially the environmental side, is disrupting how individuals are choosing to invest their money. Though large corporations are educating their audiences about the need for change and are taking steps themselves, individuals are having a major impact. So much so, that we can think of ESG as a new paradigm for consumer investing.

Traditionally, well-paid experts have issued new investment products through legacy fund vehicles. While understanding and interpreting all the facts and figures may be easy for corporations, it's difficult and time-consuming for individuals. Thanks to FinTech, this product-centric industry model is being turned on its head.

"32% of consumers are highly engaged with adopting a more sustainable lifestyle."

Deloitte

Individual consumption is driving a new model

The psychology of investing is changing, and with it, the way that investment products work is being re-examined. Transparency and personalisation through digital channels are giving consumers the power to engage with and act on their ESG values.

In the pre-digital era, music was packaged and sold in the form of CDs, without the ability to purchase individual tracks according to taste and preference. From the perspective of consumption and simplicity, the experience wasn't great. Nowadays, it's all much easier – with consumers, not the record label, increasingly in control. Curating our favourite songs into a customised playlist is a wholly digital, quick and engaging experience thanks to excellent user interfaces and AI recommendation engines.

That consumption model is what's driving modern impact investing. Whereas ESG used to be sold to institutional investors as a product, its success increasingly rests on how the consumer experience addresses real-world impact. For example, the modern consumer might ask how the companies in their portfolio contribute to carbon emissions or how they can vote at shareholder meetings. Instead of impenetrable financial products, a new, environmentally aware generation wants



feature-rich experiences involving AI-enabled analytics, realtime dashboards, personal impact reports and stories based on ESG data. All the technology to design these experiences exists: it just hasn't been assembled on a large scale yet.

Societal factors also play a part

Increased exposure to environmental factors in our lives is driving consumers' demand for change and interest in impact investing. It was there 15 years ago, but the influence of climate change (and ESG as a whole) on decision-making comes down to:

- **Culture:** The 'silent generation' has traditionally left investments to the experts. Today, consumers are more aware that money has many dimensions. People are eager to take a more active role in their investments
- **Governments:** Addressing climate change is causing nation states to deliver policy ever more urgently. The resulting top-down legislation is high-profile and gets noticed
- **Education:** Large asset management firms have made retail investors aware of green products and impact investing for several years. Promotion and educational marketing will continue
- **Costs:** Trading costs have decreased in the last few years, allowing more people to explore what individual trading feels like on a small scale

These factors have stoked demand in impact investing. Capital flow is following and regulators are working to prevent the 'green washing' of investment vehicles that don't stand up to ESG scrutiny.

One impediment to greater capital flow is inertia with many people reluctant to switch investment providers. However, as the above drivers (especially the powerful cultural shift) take hold and innovative new providers become mainstream, that investor demographic may well view a switch as an exciting opportunity.

More granular data is needed

ESG data was originally designed for large institutions. Typically, a big data provider would help fund managers build a report describing large entities – funds or companies – and a third-party consultant would validate the report. This asset supported the fund managers' advice to institutional clients.

For impact investing to succeed, different data – in fact, a complete inversion of the old data model – is needed. Instead of large entities, the data must describe the individual accounts (within funds) into which investments flow. This more granular, account-level data can reveal insights and stories that plug a gap for investors who not only want to feel that they're making a difference to the planet, but see tangible results validating their efforts.

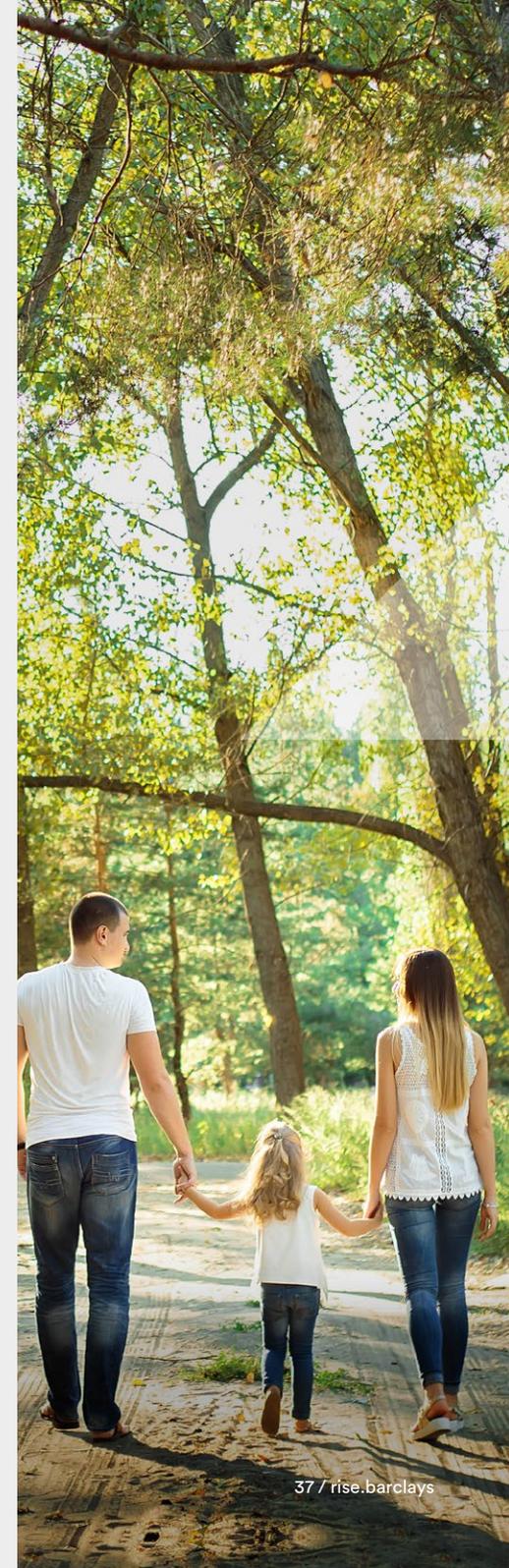
One area of opportunity as more granular data is accessed is supply chains, historically seen as black boxes. Supply chain issues account for 40% of environmental, governance and social impacts – 60% of which are for the environment alone. However, these ESG impacts have not historically been captured in the "four walls" that determine portfolio construction. As individuals demand more detailed impact tracking, AI and Big Tech use cases will address these needs for probability mapping around supply chain impact.

We need quality data to address these issues and quality technology to communicate them to consumers. OpenInvest is providing scalable compliance solutions for maximum impact. We offer values-based financial solutions that help financial advisors seamlessly build, manage and report on ESG portfolios by providing frontend visualisations and experiences to engage with clients on a new level.



Josh Levin
Co-Founder, Chief Strategy Officer, OpenInvest

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Solving the pensions and environment conundrum

The pensions industry faces a dual problem – how to get people saving more for retirement and how to reduce the negative impact the industry is having on climate change. What most people don't realise is that the two problems are inextricably linked, but in the wrong way.

Through the underlying businesses it's invested in, the average UK pension is creating 23 tonnes of carbon emissions a year, the equivalent of running nine family cars. It's an enormous amount. Our latest research shows that 99.5% of pension scheme members are unaware of the extent of the problem.¹

If the pension industry can improve engagement to help employees start saving more for retirement, that 23 tonnes figure increases. In other words, we have a situation that we cannot accept – the more money people save into their pension, the more damage they are inadvertently doing to the environment.

This link must be cut but, unfortunately, will remain until pension schemes move to a net zero position. This is one of the reasons Cushon developed its Net Zero Now workplace pension.

In the UK, auto-enrolment (in which, by default, employees join a workplace pension when they join a company) has done a great job of getting people into pension schemes, but it hasn't done anything to improve engagement or contribution rates.

In fact, average contribution rates still cluster at the minimum levels. Our concern is that people may believe the auto-enrolment minimum contribution rates are enough. We've got to bust this myth and get people saving more.

There are several points that can positively influence engagement rates but dealing with environmental issues is a big one, especially for younger employees. 62.37% of employees surveyed in our research confirmed that they would engage more with their pension if they knew it was making a positive impact on climate change. And this figure increased to 73.78% amongst under 25-year-olds.

Employees are starting to demand that their pensions play a role in the fight against climate change. Nearly 88% of employees told us that they want their employer to enact change, including moving to an alternative pension provider that is making a positive impact on climate change.

And it's not just limited to the environment. Employees are concerned about other ESG issues, with over 62% wanting the opportunity to have a say in how companies that their

instance, our pension scheme members can vote, using our app, on issues that matter the most to them and this ultimately feeds back into investment management decision making. It allows for members' voices to be heard and it also increases engagement levels.

Don't underestimate the importance of tech. Not only does it enable providers to do away with the reams of paper that the pensions industry is well known for, which in itself is a good thing for the environment. It also promotes engagement – nearly 66% of employees told Cushon they would engage more with their pension if they could manage it through a mobile app.

The fact is people want to interact and manage their pension in the same way they manage most other things – through a mobile app. The pensions industry could be accused of lagging behind other sectors when it comes to embracing tech and using it to improve accessibility and the overall user experience, and that needs to change. If you want to improve engagement levels, providers must give pension members what they want – a tech-based product. Ultimately, we need pension members to be saving more but this can't be at the expense of the environment. Decouple the two issues and we can solve both.



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ecosystem update

A flying start to 2021

The FinTech sector has seen huge growth in the first half of this year, fuelled by high levels of investment. This represents renewed confidence in the power of FinTech and an increased appetite from investors following a turbulent 2020.

So far this year, Rise member companies, alumni of the Barclays Accelerator, powered by Techstars, and other FinTechs in the Rise ecosystem have had some great successes. On the investment side alone:

- **3S Money** hit a £40 million valuation on a £3 million Series B funding round
- **Chainalysis** secured a \$100 million Series C financing, bringing its valuation to over \$2 billion
- **Cognism** raised \$12.5 million to support its plans to expand further across Europe
- **Cutover** added \$35 million in Series B funding
- **First Boulevard** raised \$5 million in seed funding from Barclays, Anthemis and angel investors
- **Flutterwave** landed unicorn status with \$170m in Series C funding, tipping its valuation north of \$1 billion

- **Safello** went public with a highly oversubscribed pre-IPO fundraising round
- **TomoCredit** received \$7 million in a seed funding round joined by Barclays
- **Waffle** brought its total pre-launch funding to \$5.2 million with an additional \$3 million

Congratulations to the teams in this year's **2021 New York Barclays Accelerator**, who made incredible progress since the programme kicked off in January. Read more about them in the Programmes and Strategic Initiatives update.

Amid all the drive and delivery in our world, our thoughts are with the Indian FinTech community that, like the country as a whole, remains impacted so heavily by the pandemic.

Read on for updates from our regional Rise coverage teams.

From our Rise sites

Rise London

A lot has happened in UK FinTech recently. In February, Ron Kalifa published his eagerly anticipated report on the sector, praising the UK for the advantageous position it has established, highlighting areas of threat and opportunity, and laying out five key recommendations to help the UK retain its position as one of the top global FinTech hubs. The report was commissioned by the Chancellor of the Exchequer, Rishi Sunak, who responded by saying the UK will take forward many of the report's recommendations, including a new FCA 'scale box', a Centre for Finance, Innovation and Technology, a central bank-led digital currency taskforce, support for new technologies and infrastructures as well as plans for capital markets reform to enhance London as an open and dynamic financial centre.

With the global climate conference, COP26, taking place in Glasgow this year, there's mounting pressure on the UK Government to lead change. The UK is in a unique position to challenge the global financial sector in tackling the climate crisis. More regulation and mandates for financial institutions could result from COP26 to ensure their investments and activities are aligned with stricter climate targets. There is also pressure from consumers who are becoming increasingly environmentally conscious. While retail and investment banks can be sluggish when adapting to change, FinTechs are well positioned and agile enough to adopt new tech and data analytics to create personalised products and services that meet new regulations and align to consumer sustainability preferences.

Former Governor of the Bank of England, Mark Carney, will take the role of Finance Advisor to the Prime Minister at COP26. Carney is an advocate for change and champions FinTechs, so there are potentially huge prospects for the sector to deliver new, ground-breaking solutions. He's particularly interested in accelerating change and investment by migrating traditional pensions to green pensions. This is an area where FinTechs such as Cushon – featured in this edition – meet the needs of a climate-conscious target audience. Having someone so passionate about the industry in such an influential role can only be a good thing for Climate FinTech. The finance sector is undergoing an enormous sustainability shift and the opportunity for FinTechs to enter the green finance space is huge!



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FinTech Platform Lead

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Grace Batchelor
FinTech Platform Manager

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Deals and events

\$2.7 bn in VC investments¹

85 VC deals¹

Top VC deals¹:

- Checkout.com (\$450m)
- Starling Bank (\$376m)
- Blockchain.com and Rapyd (\$300m)

37 Rise events²

602 Event attendees²

INNOVATE | FINANCE

1. Innovate Finance via PitchBook. Q1 2021 data, not reviewed or approved by PitchBook analysts, and not limited to Rise ecosystem companies.

2: Q1 2021 data

Rise Mumbai

India has been showing signs of economic recovery, largely supported by the startup ecosystem and FinTechs who have stepped up to tackle the challenges associated with lockdown – the lack of mobility, the lack of cash movement and so on. Over the past year, FinTechs have played a huge role in SME digitalisation and ultimately providing it with the necessary capital for survival and growth. This has kept the economy moving in large parts as SMEs contribute around 40 percent to GDP.

Green finance is gaining prominence in India, including in policy making. While green finance has been significant in the country from as early as 2007, India recently became the second-largest issuer of green bonds among emerging markets with cumulative issues worth more than \$10 billion.¹

Government and regulatory policy have played a critical role in this. India's central bank, the Reserve Bank of India, for example, has included lending to small renewable energy projects within Priority Sector Lending requirements for banks² and Indian Renewable Energy Development Agency, a government-backed agency, became India's first green bank in May 2016.



Lincy Therattil
FinTech Platform Lead

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Slowly but steadily, CleanTech is reducing negative environmental impacts with significant energy efficiency solutions. This sector is beginning to attract startups and investors, as the growing share of renewable energy on India's electricity grid spurs demand for clean power technologies. According to the Climate Collective Network, around 20 percent of all startups in incubators in India are focused on some aspect of sustainability³.

However, green finance, in general, is still at a very nascent stage, with green bonds constituting only 0.7 percent of all the bonds issued in India since 2018⁴. Challenges continue to exist in its widespread awareness and adoption – especially due to the lack of information and coordination among various stakeholders. Climate FinTechs will be critical to bridging this gap.

Deals and events

\$18m in VC investments¹

9 VC deals¹

Top VC deals¹:

- SarvaGram (\$10.5m)
- Svasti (\$4m)
- Epaylater (\$2.5m)

13 Rise events²

742 Event attendees²

1. Financial Express
2. G20 Insights
3. Media.com
4. RBI

Rise New York

The first half of 2021 has brought a great deal of change for Rise New York, for the FinTech sector, and for the US more widely. These changes bring new leadership, new growth and expansion opportunities, and a positive outlook for FinTech through the remainder of the year.

In April this year, Rise New York welcomed Brian Luciani, its new FinTech Platform Lead. Brian joins Barclays after a career at top-tier financial and technology firms building relationships for investment banking, trading, start-up operator and technology clients.

The United States also saw an administration change at the beginning of the year. The Biden administration has identified climate change as one of its top four priorities and through Executive Order, rejoined the Paris Climate Agreement. His goals for America to have a carbon pollution-free power sector by 2035 and be a net-zero economy by 2050 are positive reinforcement for the Climate Tech and Climate FinTech sectors¹. The US has typically lagged in climate initiatives versus Europe due to the lack of robust government support, so policy-led initiatives and an inflow of public and private capital towards green solutions will help the US catch-up and lead progress made by other countries thus far.

While the Climate FinTech sector is still in its early stage, the FinTech sector is maturing. The low cost of capital in the market has made it a prime time for startups to consider their exit opportunities – across the public markets and M&A activity. Special Purpose Acquisition Company (SPAC) activity reached an all-time high in the first half of 2020 with more than 30 FinTech-focused SPAC IPOs launched and is expected to continue through 2021.²



Brian Luciani
FinTech Platform Lead

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Alexandra Gheorghe
FinTech Platform Manager

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1. The White House

2. Business Law Today

Deals and events

\$1.9 bn in VC investments¹

63 VC deals¹

Top VC deals¹:

- NYDIG
(\$300m)
- Public.com
(\$220m)
- Cedar
(\$200m)

11 Rise events²

251 Event attendees²

INNOVATE | FINANCE

1. Innovate Finance via PitchBook, Q1 2021 data, not reviewed or approved by PitchBook analysts, and not limited to Rise ecosystem companies.
2: Q1 2021 data

Programmes and Strategic Initiatives

Barclays runs an Open Innovation Programmes portfolio whose objective is to facilitate collaboration between Barclays and startups. The Programmes team supports their growth through:

- Meetings with subject matter experts who can help validate ideas and provide direction
- A growth curriculum to move from 'ideate' to 'accelerate' and beyond
- Access to investment and brand boosting opportunities

Barclays not only believes that entrepreneurs are foundational to economic recovery and prosperity, but also that innovation requires external collaborators. Flows of talent and knowledge increasingly transcend company and geographic boundaries, which means that sourcing new ideas and insights as well as building new products and services will do too.

Barclays Accelerator, powered by Techstars

Our flagship programme, the Barclays Accelerator, powered by Techstars, was established in 2014. It is an intensive 13-week programme for FinTech startups designed to help businesses accelerate their strategy and deliver breakthrough FinTech innovations. Participating companies collaborate with a team of Barclays executives, the Techstars network and other industry leaders to

fine-tune their business propositions and solve problems at the cutting edge of financial technology. With 190 alumni, this is one of the largest single-bank-powered portfolios globally, with a valuation of over \$1.8 billion.

In April, Demo Day for the 2021 New York Barclays Accelerator showcased participants' exciting and highly relevant FinTech propositions for the new world we are in today. It was a great reminder to those who attended that startups have a unique ability to respond with immediacy to an exponential rise in digital trends, new enforced consumer habits due to COVID-19 and the growing groundswell of support for environmental and social causes.

One constant we saw during the selection process for this year's Barclays Accelerator was the number of applications from companies tackling ESG data reporting and investing. Coupled with multiple signals in the market of VC capital flowing towards ESG data companies and healthy M&A activity, we recognise that an ESG race to the top is on!

It's worth pausing to truly think about what those letters mean. Environmental, Social and Governance metrics are varied and complex to measure and track, and each carries its own weight and meaning. With \$38 trillion of ESG assets under management



in 2020¹, the gap between investor expectation and the relative lack of pertinent, comparable information to track ESG claims is fast becoming an issue. A range of verified data points is needed to gain a holistic understanding of all issues, rather than a narrow focus that might assess carbon but ignore biodiversity or even gender diversity. Yet ESG data is notoriously inconsistent, incomplete and frequently reliant on corporate voluntary disclosure. There's also the added complexity of multiple reporting standards, which makes reporting difficult on an ongoing and regular basis. We believe that creating new partnerships with FinTechs and alternative data providers are key to keeping pace with the growing appetite for ESG products and regulators ramping up pressure on ESG disclosure.

Two companies on the 2021 New York Barclays Accelerator are tackling exactly this issue. London-based Nossa Data simplifies ESG reporting, data management and analytics for corporates; and Floodlight uses AI to navigate publicly available records such as political contributions, which can be used by financial advisors to tailor client investments towards the issues that are important to them. You can find out more about them on our [website](#).

What's next?

In the coming months, the Programmes team will continue to release content to spotlight the founders in the 2021 New York Barclays Accelerator, thought leadership on the learnings we have gained on our seven-year journey and the importance of being an organisation that continues to build a world-leading Open Innovation platform and ultimately of being open to creating change and being changed by it.



Sonal Lakhani
Head of Programmes and Strategic Initiatives, Director Barclays

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Making an Unreasonable Impact

unreasonable **impact** Created with BARCLAYS

Unreasonable Impact is the global partnership between Barclays and Unreasonable Group, supporting entrepreneurs to create the jobs of tomorrow.

The programme supports growth-stage entrepreneurs whose ventures have the potential to employ thousands of people worldwide while solving some of the world's most pressing social and environmental challenges.

To date, Unreasonable Impact has worked with over 170 ventures, providing them with the resources, mentorship and a global network needed to rapidly scale their companies. We're continuing with our aspiration to support 250 high-growth businesses that make a positive difference to society by 2022.

Unreasonable Impact companies have:

- Supported more than 37,000 new jobs
- Reduced greenhouse gas emissions by 55 million tonnes
- Positively impacted over 220 million people
- Generated over \$2.9 billion in revenue

In 2020, Barclays and Unreasonable Group awarded \$2 million in grants to combat challenges related to the COVID-19 pandemic. Through this additional funding and under the continued mentorship of the programme, the entrepreneurs were able to address the immediate consequences of the pandemic and help move us into a greener and greater future.

Abundance Investment, is supported by Unreasonable Impact and is a good example of how technology can help individuals achieve their climate goals.

Abundance Investment

Making it possible for people to invest directly in the sustainable infrastructure of tomorrow

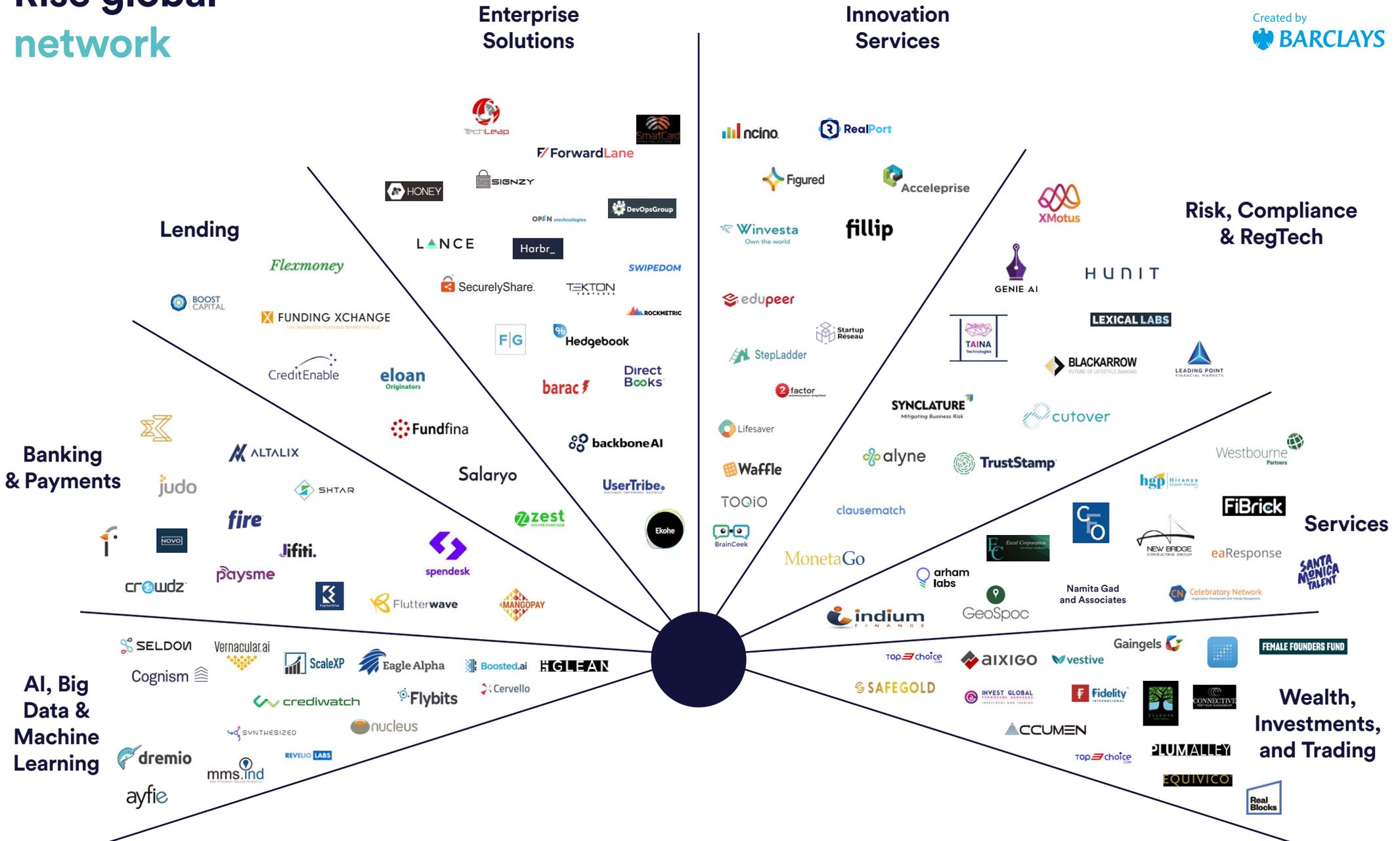
Abundance is a leading direct investment platform empowering people to take control of their money and contribute to solving major global issues such as climate change and social inequality with smart, informed investments of their money whilst also benefiting from attractive returns. Since Abundance launched in July 2012, it has raised over €100 million from individual investors who can choose from a variety of

projects and therefore know exactly where their money is going and how it is working for them. In 2015, Abundance created the first-ever direct green investment pension, allowing people to build a tax-efficient portfolio of investments that create an effective retirement income as well as a better world to retire into.

abundance.

www.abundanceinvestment.com

Rise global network



This infographic shows companies resident at our Rise sites. The information is accurate at the time of publication.

rise

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Rise, created by Barclays, is a global community of the world's top innovators and entrepreneurs working together to create the future of financial services. By connecting technology, talent and trends, the mission of Rise is to accelerate innovation and growth in the financial services industry.

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