



BANK OF ENGLAND

# Speech

---

## **Enable, Empower, Ensure: A New Finance for the New Economy**

Speech given by

Mark Carney, Governor of the Bank of England

Speech at the Lord Mayor's Banquet for Bankers and Merchants of the City of London at the Mansion House, London

20 June 2019

I am grateful to Jennifer Nemeth and James Benford for their assistance in preparing these remarks, and to Julia Kowalski, Tom Mutton, Varun Paul, Simon Scorer, Oliver Thew and the Climate Hub team for their help with background research and analysis.

## **New Economy – New Finance**

There's a new economy emerging driven by changes in technology, demographics and the environment.

This new economy requires a new finance.

A new finance to serve the digital economy.

A new finance with products that are more cost effective, better tailored, and more inclusive.

A new finance to support the transition to a sustainable economy.

A new finance that balances innovation with resilience.

With its leadership in fintech and green finance, the UK private sector is creating the new finance, but your efforts will be more effective with the right conditions in which to innovate and the level playing fields on which to compete.

## **New Finance - New Bank**

That's why a new finance demands a new Bank of England.

Our strategy is to enable innovation and to empower competition, while ensuring monetary and financial stability. Our levers are the hard and soft infrastructure that we control:

- Our hard infrastructure, such as access to our balance sheet and access to our Real-Time Gross Settlement (RTGS) system, the heart of the UK payments system.
- And our soft infrastructure, such as our rules, regulations and standards.

In this spirit, last year at Mansion House I announced that Huw van Steenis would lead a review of the future of the UK financial system, including recommendations for how the Bank could best support innovation while continuing to promote resilience.<sup>1</sup>

I would like to thank Huw and the Bank of England team, who over the past nine months have met 300 entrepreneurs, investors, consumer groups, charities, business leaders and policymakers across the country and around the world to produce an excellent report.

Today, we published Huw's recommendations and the Bank of England's response.<sup>2</sup> And tonight, I would like to focus on a few of the actions that the Bank will take to enable the new economy; to ensure the resilience of the financial system; and to support the UK's transition to a carbon-neutral economy.

---

<sup>1</sup> Carney, M (June 2018) 'New Economy, New Finance, New Bank' speech given at Mansion House.

## **First, to enable the digital economy**

The very nature of commerce is changing. Last year, one fifth of all sales in the UK were online.<sup>3</sup> Next year, it will be one quarter. Over the past decade, the proportion of total payments made in cash has declined from two thirds to one quarter.<sup>4</sup>

The digital economy is more inclusive, offering easier and more cost effective routes to market for firms both large and small, and greater access for consumers both near and far.

This new economy is placing new demands on finance. Consumers and businesses increasingly expect transactions to be settled in real time, checkout to become an historical anomaly, and payments across borders to be indistinguishable from those across the street.

While there have been some notable successes, the UK system has a way to go before it meets these expectations.

Thus far, most innovation has happened around payment initiation – the method used to instruct a payment – such as credit or debit card, banking app or mobile wallet.

There have also been some advances in the networks – or rails – that underpin some of these apps. For example, the Faster Payment System (FPS) launched a decade ago has made payments quicker (within two hours) and more cost effective by encouraging direct bank-to-bank transfers.

While mobile app PayM uses FPS to facilitate direct bank-to-bank payments between individuals via text, it requires both the sender and recipient to be signed up to the third party service. But few are.<sup>5</sup> And FPS is not yet used for in-store or online purchases as the infrastructure required at the point of sale does not reliably exist in the UK.<sup>6</sup>

In these regards, the UK is still a long way behind countries such as Sweden, the Netherlands and India where users can make direct, free and real time bank-to-bank payments in stores and online with a text or a scan of a QR code.<sup>7</sup>

UK card payments *are* convenient and they are now the most popular means of payment, but they can cost between 0.5% and 2% of the total transaction value, and it can take three days for the merchant to receive their money.<sup>8</sup>

---

<sup>2</sup> See: <https://www.bankofengland.co.uk/research/future-finance>.

<sup>3</sup> ONS: Comparing “bricks and mortar” store sales with online retail sales (August 2018).

<sup>4</sup> UK Finance: UK Payment Markets Summary (2019).

<sup>5</sup> See: <https://paym.co.uk/how-it-works/>.

<sup>6</sup> Particularly the soft infrastructure – such as rules around use and consumer protection.

<sup>7</sup> In Sweden, Swish launched in 2012 by the six largest Swedish banks and connects bank accounts to mobile numbers, allowing money transfer in real time and eradicating the need for a card reader. In the Netherlands, iDEAL facilitates direct bank-to-bank payment for online purchases. India uses GooglePay technology to enable direct bank transfers through its Unified Payments Interface, a central platform which connects entities for real-time payment.

<sup>8</sup> McKinsey research for Future of Finance Report; and UK Card Association Data.

And all these systems in the UK – whether card or bank payment – still depend on existing core infrastructure meaning they either carry the associated costs and limitations on speed or they require the right point of sale infrastructure for their full benefits to be realised.

The scope for improving cross border payments is bigger still. These can cost up to 10 times their domestic equivalent.<sup>9</sup> Anti-money laundering checks that are rightly required can be cumbersome, and settlement is slow with money taking up to a week to reach the recipient.

Most fundamentally, the new payment system must end the inequity that the people with the least money pay the most for financial services.

The revolution of payments may not be driven by the old bank-based systems but by a new architecture. Major changes are on the horizon, bringing enormous advantages but also more than a few new challenges. **That's why the Bank fully supports the Payments Strategy Review the Chancellor has launched this evening.**

To support private innovation and to empower competition, the Bank is levelling the playing field between old and new. This means allowing competitors access to the same resources as incumbents while holding the same risks to the same standards.

The Bank is in the midst of an ambitious rebuild of its Real Time Gross Settlement (RTGS) system, which processes £650 billion of payments on average every day. Until recently, only commercial banks<sup>10</sup> had direct access to it, and alternative payment service providers (or PSPs) had to route through participating banks. That made sense in the old financial world arranged around a series of hubs and spokes, but it is increasingly anachronistic in the new, distributed finance that is emerging.

So we are now making it easier for a broad set of firms to plug in and compete with more traditional providers. In July 2017, we became the first G7 central bank to open up access to our payment services to a new generation of non-bank PSPs. Since then, six have become members, processing over four million transactions over the past year. There is now a growing pipeline of twenty firms looking to join.<sup>11</sup>

Responding to demands from innovators, the RTGS rebuild will also now provide API access to users to read and write payments data, as well as implementing a system whereby each payment will be tagged with information in a standardised format across the world. This global messaging standard will speed up settlement both domestically and across borders.

It is not a one-way street, however. As we extend access, we will safeguard resilience by holding settlement account holders to the appropriate standards. Along with the FCA and HMRC, who together supervise these institutions, we are committed to applying a strengthened supervisory regime for those who apply for an

---

<sup>9</sup> McKinsey Global Payments (2016): strong fundamentals despite uncertain times.

<sup>10</sup> As well as Financial Market Infrastructure providers such as Visa.

<sup>11</sup> See: Bank of England: A Blueprint for a new RTGS service for the United Kingdom (May 2017).

RTGS settlement account, to give assurance that non-bank PSPs can safely take their place at the heart of the payment system.

**We can go even further. Today, the Bank of England is announcing plans to consult on opening access to our balance sheet to new payment providers.<sup>12</sup>**

Historically, only commercial banks were able to hold interest-bearing deposits, or reserves, at the Bank.<sup>13</sup> That reflected their role at the core of the payment system. As new payment providers and systems emerge, access to the Bank's core infrastructure should change and it makes sense to consider whether they too can hold funds overnight on the Bank's balance sheet.

From the Bank's perspective, expanding access can improve the transmission of monetary policy and increase competition. It can also support financial stability by allowing settlement in the ultimate risk free asset, and reducing reliance on major banks. Users should benefit from the reduced costs and increased certainty that comes with banking at the central bank.

From the perspectives of UK households and businesses, wider access can improve inclusion and services.

This access could empower a host of new innovation. In wholesale markets, consortia of broker dealers are working to develop settlement systems using distributed ledger technology that could overhaul how markets operate. These consortia, such as USC, propose to issue digital tokens that are fully backed by central bank money, allowing instant settlement. This could also plug into 'tokenised assets' – conventional securities also represented on blockchain—and smart contracts. This can drive efficiency and resilience in operational processes and reduce counterparty risks in the system, unlocking billions of pounds in capital and liquidity that can be put to more productive uses.<sup>14</sup>

The potential transformation in retail payments is even more fundamental.

Earlier this week, a cooperative of technology companies proposed a new payments infrastructure based on an international stablecoin – Libra. Libra would be backed by reserve assets in a basket of currencies including sterling. It could be exchanged between users on messaging platforms and with participating

---

<sup>12</sup> Currently, the criteria for access to our balance sheet, defined at the time of the Winters Review, are three-fold: firms should be inherently exposed to overnight liquidity risk, they should be systemically important, and they should be regulated to the same standard as UK banks. In practice, that means banks, CCPs and broker-dealers are eligible for access, but other firms are not. The Bank will reach out to firms and to users of payments services to understand the needs of participants in this market and the barriers that still exist to competition and innovation. This dialogue will allow us to consult on the appropriate level of access to the Bank's infrastructure. For more information, see the Bank of England's response to the Future of Finance Review available at: <https://www.bankofengland.co.uk/research/future-finance>.

<sup>13</sup> In recent years we have expanded access to our balance sheet to central counterparties and broker-dealers to recognise the important role played by these firms in the provision of critical financial services to the real economy. In providing these critical functions, both broker-dealers and CCPs are exposed to liquidity risk. As the supplier of the economy's most liquid asset, central bank money, the Bank is able to be a 'back-stop' provider of liquidity, and can therefore provide liquidity insurance to the financial system, promoting financial stability.

<sup>14</sup> Oliver Wyman: Fintech 2.0 Paper: rebooting financial services (June 2015) and McKinsey: Global Payments report (2016).

retailers. As designed, Libra may substantially improve financial inclusion and dramatically lower the costs of domestic and cross border payments.<sup>15</sup>

The Bank of England approaches Libra with an open mind but not an open door. Unlike social media for which standards and regulations are being debated well *after* they have been adopted by billions of users, the terms of engagement for innovations such as Libra must be adopted *in advance* of any launch

Libra, if it achieves its ambitions, would be systemically important. As such it would have to meet the highest standards of prudential regulation and consumer protection. It must address issues ranging from anti-money laundering to data protection to operational resilience. Libra must also be a pro-competitive, open platform that new users can join on equal terms. In addition, authorities will need to consider carefully the implications of Libra for monetary and financial stability. Our citizens deserve no less.

Leveraging our position at the heart of the international financial system and one of the world's largest fintech hubs, the Bank of England will help lead the way on these issues at the G7, G20, the FSB, BIS and IMF.

Whatever the fate of Libra, its creation underscores the imperative of transforming payments. The Bank's strategy to open access to a wide range of payment solutions combined with appropriate regulatory oversight of them maximises the likelihood that the payments revolution will meet the demands of the new economy and the needs of all our citizens.

### **Supporting more lending to SMEs through an open platform**

Big data is opening up new opportunities for more competitive, platform-based finance of SMEs. Artificial Intelligence (AI) and machine learning (ML) techniques are already mining fields of data generated by online activity. This has the potential to yield enormous benefits for households and businesses by opening up new lines of credit, providing greater choice, better-targeted products and keener pricing.

Putting data to work is critical to closing one of the biggest funding gaps in the country.

SMEs are the engine room of our economy, generating around 60% of all private sector employment and accounting for over half of all private business turnover.<sup>16</sup> And yet SMEs face a £22bn funding gap.<sup>17</sup> Almost half of all SMEs don't plan to use external finance, citing the hassle or time associated with applying. Of those that have approached their bank, two fifths have been rejected.<sup>18</sup>

Part of the problem is that the assets that SMEs are seeking to borrow against are increasingly intangible – the value of a brand or user base – rather than physical assets, like building or machinery. SMEs that have not borrowed lack the historic data required for credit scoring. And legal requirements to prevent money

---

<sup>15</sup> See: <https://libra.org/en-US/>.

<sup>16</sup> Federation of Small Business: <https://www.fsb.org.uk/media-centre/small-business-statistics>.

<sup>17</sup> NAO report 'improving access to finance for SMEs (Nov 2013).

<sup>18</sup> Report by British Business Bank: Small Business Finance Markets (2019).

laundering and “Know Your Customer” make the process especially burdensome for a small business with limited resources.

This should not be the case in a data-rich world. Lenders should be able to access a broader set of information on which to base credit decisions.

Already, search and social media data are supplementing traditional metrics to unlock finance for smaller enterprises whose assets are increasingly intangible. In the UK, Iwoca has made over £900mn worth of loans based on trading data, such as sales and customer reviews, to over 25,000 small businesses over the past five years. Even the big banks are getting in on the action. Earlier this month, Santander announced that it was partnering with eBay to offer small business loans, based on sales, cash flow and customer review data to sellers on the eBay platform.

These initiatives are welcome but are still too small to plug the SME funding gap in the UK. To make real inroads, SMEs must be able to identify the data relevant to their businesses, incorporate it into their individual credit files, and easily share these files with potential providers of finance through a national SME financing platform.

This would put into practice the recommendations from Professor Jason Furman’s Digital Competition Panel report on how to extract value from data and promote competition. One of the most important recommendations in this regard is to give consumers control of their data. This would allow consumers to move their personal information from one platform to another and avoid lock-in effects, opening the door to new services.<sup>19</sup> To some extent, this is what Open Banking hopes to achieve. Although to make this a success means establishing common off the-shelf API standards and operating platforms onto which developers can build.

An open platform for SME lending would enable open banking and empower SMEs. It would help avoid lock-in on existing platforms and enable providers of finance to compete for SME lending, helping to broaden the products available to companies and offer more competitive rates, making access to finance quick, easy and cost effective.<sup>20</sup>

It is not for the Bank of England to build this platform but we can help lay some of groundwork. The messaging standards we are adopting in the new RTGS will also include tagging payments with a unique ID called a Legal Entity Identifier (LEI).<sup>21</sup> This will be mandated for financial institutions and as a next step we are considering how to extend this to corporate payments. That could mean that the payment data sent via CHAPS of non-financial firms could be made available for inclusion in a portable credit file. The LEI could

---

<sup>19</sup> See: Furman, J ‘Unlocking digital competition’ Report of the digital competition expert panel (March 2019).

<sup>20</sup> See: <https://www.bankofengland.co.uk/research/future-finance>.

<sup>21</sup> The introduction of Legal Entity Identifiers (LEIs) will enable consistent and accurate identification of legal entities on a global basis. Their introduction was pioneered by the Financial Stability Board (FSB) following the financial crisis as a means of precisely identifying counterparty risks and exposures. The LEI is linked to a publically available database about each registered entity. LEIs are not yet widely used in payments or supply chains. Following a consultation, the Bank is making LEIs mandatory for all payments initiated between financial entities.

also act as the unique identifier for a digital ID, which could help the two-step verification process required for a secure system.

**The Bank will submit a formal response on how to develop an open platform for competitive SME finance to the Smart Data Review referenced by the Chancellor this evening.**

### **Strengthen resilience in the face of new risks**

The City of London has maintained its pre-eminence by innovating. This was as true in the First Industrial Revolution when finance oiled the pistons of the steam engines, as it is today at the dawn of the Fourth Industrial Revolution, with the advent of cloud computing and the *robosapien* fund manager.

Today the key competitive advantage in financial services is how firms – and supervisors—collect, store and analyse the explosion of data. Just as the steam engine transformed manufacturing, AI, ML and cloud-based technologies are transforming services.

Accordingly, the second focus of the Bank's initial response is how new general purpose technologies, like the Cloud and AI, can be used to strengthen the resilience of the system.

Embracing these technologies could herald leaner, faster and more tailored financial services. Banking is already the second biggest global spender on AI systems (after retail) and the sector is expected to invest a further \$6 billion on AI this year.<sup>22</sup>

A quarter of major banks' activities and almost a third of all UK payments activity are already hosted on the Cloud, and there are considerable opportunities for even more intensive usage.<sup>23</sup> Cloud service providers offer ready-made solutions that can speed up time to market, provide superior analytics, and enable businesses to adjust quickly their business models. If deployed at scale, cloud technology could provide low-cost, resilient computing power and easy access to AI capabilities, unlocking 30-50% unit cost savings.<sup>24</sup>

These savings can be passed onto customers and, if properly managed, improve the resilience of the overall system. For these reasons, the Bank of England is open to greater adoption of the Cloud and usage of AI. This means ensuring that these technologies are adopted in a safe manner, in ways that increase resilience.

Careful attention will have to be given to risks, including of those associated in the single point of failure and market concentration. Two providers account for nearly half of revenues in cloud computing, bringing scale and efficiency, but also concerns about dependence and a single point of failure in the case of a cyber-attack. In AI and ML, there is a reliance on data, but when there are biases in data or algorithms, or the situation isn't captured by past experience prediction becomes difficult and judgement becomes more important. These situations require robust governance at board level.

---

<sup>22</sup> IDC: Worldwide Semiannual AI Systems Spending Guide (March 2019).

<sup>23</sup> See: <https://www.bis.org/review/r180727a.pdf> and Finastra, FTI Consulting Survey 2019.

<sup>24</sup> McKinsey & Company research for the Future of Finance review.



**To ensure that the benefits of cloud computing are realised and the associated risks are well managed, the PRA will issue a Supervisory Statement in the autumn that sets out its supervisory approach. The Bank, together with the FCA, will also establish a forum to discuss the results of a survey that it has conducted on AI use in finance and determine an appropriate supervisory approach.**

The Bank's management and analysis of data is critical to our effectiveness as regulators and to the City's competitiveness.

The Bank now receives 65 billion data points each year of firm-related information. To put that into context, reviewing it all would be the equivalent of each supervisor reading the complete works of Shakespeare twice a week, every week of the year.

For firms, while the Cloud and AI have reduced the costs of storage and analysis, producing regulatory submissions is still labour intensive and costs the industry an estimated £2-4.5 billion per year.<sup>25</sup>

This is the new frontier of regulatory efficiency and effectiveness. The PRA is exploring how new technologies could streamline firms' compliance and regulatory processes while improving our ability to analyse relevant data.

We see opportunities at each of the three stages of the supervisory process:

1. Rule-setting and reporting;
2. Analysis and monitoring; and
3. Setting and communicating a supervisory strategy to mitigate identified risks.

Consider rule setting and reporting compliance. At over 638,000 words, the PRA Rule Book is longer than *War and Peace*. It is also somewhat less interesting and infinitely more complex. We are currently using advanced analytics to understand that complexity and to simplify our rules in order to make compliance with them easier and less expensive.

An even bigger opportunity lies in the Bank re-thinking completely how we collect, store and analyse data. We cannot do this in isolation but will engage with industry to explore a range of options.

Our vision is that the Bank could be able to "pull the data on demand" from firms rather than "sit back and wait to receive data" from them. With the right API, Web Portal or Platform, manual interventions could become obsolete, making the process quicker, more efficient and hugely less expensive. It would free up resources for firms to focus on delivering a better service to their customers, and it could discipline us to take only the data that we need to use and have the capacity to review.

---

<sup>25</sup> "McKinsey & Company research for the Future of Finance review".

Equally important, utilising ML and AI to analyse the data could free up supervisors' time to add the greatest value where humans excel over machines: judgement.

**That is why the Bank is today launching a Review to explore a transformation of the hosting and use of regulatory data over the next decade. This review will be conducted in close consultation with banks, insurers and financial market infrastructures. We are also embarking on proofs of concepts, in collaboration with firms and the tech sector, to test how we can automatically extract regulatory firm data. And we will identify and implement near term improvements in how we use data, including greater use of AI and ML to interpret the information.**

### **Support the transition to a carbon-neutral economy**

**My final example of how the new finance can serve the new economy is the most fundamental.**

**Indeed, it is existential.**

This year, the threats from climate change spurred demonstrations across the country and prompted Parliament to declare a 'climate emergency'. In response, last week, the Prime Minister announced legislation that would make the UK the first G7 country to commit to net zero emissions by 2050.

The changes required to achieve this are enormous. Carbon emissions will have to decline by 45% from 2010 levels over the next decade.<sup>26</sup> This will require a massive reallocation of capital creating unprecedented risks and opportunities. As one example, it is estimated that annual investment in sustainable infrastructure could top £20 billion for decades.<sup>27</sup>

Firms that align their business models to the transition to a carbon-neutral world will be rewarded handsomely; those that fail to adapt will cease to exist.

**The new finance can smooth the transition to a carbon-neutral economy.**

The City has been leading the way. UK underwriters, led by the former Lord Mayor Sir Roger Gifford, helped create the green bond market which has doubled every year since 2012 to reach \$500bn outstanding.<sup>28</sup> UK-based banks, like Barclays and HSBC, insurers, like Aviva, and asset managers, like Generation, helped develop climate financial disclosure standards and were amongst the TCFD's first adopters. Now a range of firms at the heart of the City are beginning to reshape the management of climate-related risks and opportunities.

But we must go much further if the UK is to reach net zero carbon emissions. Disclosure must become comprehensive. Risk management must be transformed. Sustainable investing must go mainstream.

---

<sup>26</sup> See: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/790626/2018-provisional-emissions-statistics-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/790626/2018-provisional-emissions-statistics-report.pdf).

<sup>27</sup> See: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/703816/green-finance-taskforce-accelerating-green-finance-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/703816/green-finance-taskforce-accelerating-green-finance-report.pdf).

<sup>28</sup> Source: Climate Bonds Initiative Data.

Fortunately, the momentum is growing.

Four years ago in the run-up to the Paris Climate accord, the Bank called for improved financial disclosure of climate-related financial risks in order to break the Tragedy of the Horizon.<sup>29</sup> Just two years ago, the TCFD led by Michael Bloomberg made its final recommendations to the G20 Leaders Summit in Hamburg.<sup>30</sup> Since then there has been a step change in climate reporting by the private sector.

On the demand side, current supporters of the TCFD control balance sheets totalling \$120 trillion and include the world's top banks, asset managers, pension funds, insurers, credit rating agencies, accounting firms and shareholder advisory services.<sup>31</sup>

On the supply side, the TCFD report published last week showed that four fifths of the 1100 G20 companies surveyed were now disclosing climate-related financial risks and three quarters of users of the information had seen a marked improvement in the quality of disclosures.<sup>32</sup>

In the future, to achieve a carbon-neutral economy, disclosure must become mandatory. Before it does, we need to get it right. Over the next few years, the current iterative process of disclosure, reaction and adjustment will be critical to ensure that these market standards are as comparable, efficient and decision-useful as possible.

Disclosure is just the start. Analysis needs to go beyond the static to the strategic. The nature of climate risks mean that the biggest challenge is in assessing the resilience of firms' strategies to transition risks.

Transition risks result from the huge adjustments required to create a low-carbon economy. Changes in policies, technologies and physical risks will prompt a reassessment of the value of a large range of assets as new costs and opportunities become apparent. The longer meaningful adjustment is delayed, the more transition risks will rise.

Where credible policy frameworks are in place (and when firms disclose the risks accordingly), the market will allocate capital to deliver the necessary innovation and growth and pull forward the adjustment to a carbon-neutral future.

The Bank of England is overhauling its supervisory approach in anticipation of these major shifts.

Earlier this year the PRA published a Supervisory Statement that sets out our expectations for banks and insurers regarding their governance, risk management, scenario analysis and disclosure of climate-related

---

<sup>29</sup> Carney, M. (Sept 2015). Breaking the Tragedy of the Horizon, speech at Lloyd's of London.

<sup>30</sup> Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017) available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>.

<sup>31</sup> Not surprisingly, the supply of disclosure is responding. 785 organisations, with a total market capitalisation of US\$9 trillion, have endorsed the TCFD recommendations since 2017. Full list of current TCFD supporters available at: <https://www.fsb-tcfd.org/tcfd-supporters/>.

<sup>32</sup> Task Force on Climate-related Financial Disclosures: Status Report (June 2019) available at: <https://www.fsb-tcfd.org/wp-content/uploads/2019/06/2019-TCFD-Status-Report-FINAL-053119.pdf>.

financial risks.<sup>33</sup> And to support the capacity building and the development of best practice, the PRA and the FCA established the Climate Financial Risk Forum to work with firms from across the financial system.<sup>34</sup>

**And today the Bank is going much further. The FPC and the PRC are announcing that they will stress test the UK financial system for resilience against different climate pathways.**

The design of this stress test will start in the autumn, and the tests will be completed in 2021. The stress test will reveal the UK financial system's ability to withstand the financial risks from climate change that arise from the increased frequency of weather events and from the transition to a carbon-neutral emission economy. The test will motivate firms to address data gaps and to develop cutting-edge risk management consistent with a range of possible climate pathways: ranging from early and orderly to late and disruptive.

This test will be the first of its kind to integrate climate scenarios with macroeconomic and financial models. The Bank will develop the approach in consultation with industry, including insurers, and other informed stakeholders including experts from the Network for Greening the Financial System and the PRA's Climate Financial Risk Forum.

With this new supervisory approach, the Bank will help ensure that the financial system is resilient to the risks and can take full advantage of the enormous opportunities in a carbon-neutral economy.

The path to a carbon-neutral economy will affect every institution in this country—very much including the Bank of England. We need to do more than just cutting out cups and bringing up bees.<sup>35</sup> **We must lead by example.**

**From next year, the Bank will become the first central bank to adopt the TCFD recommendations across our entire operations. And to improve our strategic resilience, the Bank will reduce the Bank's carbon footprint by almost two thirds by 2030, consistent with a transition to a 1.5 degree world.<sup>36</sup>**

## **Conclusion**

The new finance has the potential to unlock stronger, more sustainable and more inclusive growth. By taking the measures I outlined this evening, the Bank can enable the new economy; empower greater competition and ensure the resilience of the financial system.

---

<sup>33</sup> Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf?la=en&hash=7BA9824BAC5FB313F42C00889D4E3A6104881C44>.

<sup>34</sup> See: <https://www.bankofengland.co.uk/news/2019/march/first-meeting-of-the-pra-and-fca-joint-climate-financial-risk-forum>.

<sup>35</sup> The Bank has cut its use of cups and food boxes by over 80% since 2016, that's over 2 million fewer items of single use plastic each year. We are also working on promoting natural biodiversity at our sites. We have a beehive in place at our Debden print works, and we are due to introduce our next hive at Threadneedle Street this year.

<sup>36</sup> The Bank commits to reduce its emissions from gas and fuel, electricity and business travel by 63% by 2030. We plan for all the electricity and gas we purchase and use across our buildings to come from 100% renewable sources, such as wind, solar and biogas by April 2020. Our target is (1) informed by Science Based Targets, (2) in line with the aims of the Paris Agreement and (3) consistent with limiting global warming to 1.5°C [above pre-industrial levels]. The target has been fully validated by the Carbon Trust (CT).

Consumers should have greater choice, better services and equal access to finance. Small and medium sized businesses should have access to new credit to grow. Banks themselves should be more productive and supervision more efficient. And the financial system should seize the opportunities and manage the risks associated with the UK's transition to a carbon-neutral economy.

The success of the new finance will be assured if we remember some old lessons, namely:

- That similar activities should be regulated consistently;
- That markets don't always clear, liquidity is state contingent and the riskiness of an asset depends in part on the entity that holds it;
- That individual responsibility is essential for collective welfare;
- That ending Too big to Fail is a moral and a financial imperative; and
- That when it comes to financial stability, success is an orphan. Memories fade, complacency sets in and the virtues of prudence are soon forgotten.

Most fundamentally, we must always remember that finance is not an end in itself. It is a servant of the real economy, of the households and entrepreneurs that make this country great.

They are demanding a more sustainable, inclusive and prosperous future. The ultimate test of the New Finance is whether it helps deliver just that.