# The ECB and climate change: outlining a vision for success

#### Policy briefing

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#### **Summary**

The world is in the grip of an acute health crisis. Stopping the spread of the COVID-19 virus is impossible without also bringing the economy to a halt, pushing small, medium and large-scale firms over the edge, and risking many millions of jobs and livelihoods. The longer the economy is on pause, the deeper the recession and the more profound the challenge of recovery once the medical emergency abates.

In this context, governments and public institutions are rightly taking extraordinary steps to minimise the economic impacts of the crisis on individuals, businesses and society. The European Central Bank (ECB) has a pivotal role to play in this response, and has already implemented a number of ambitious measures.

However, the coronavirus crisis has hit us at a time of climate crisis too, and we cannot address one crisis while ignoring the other. It is essential that both short-term and long-term measures implemented by the ECB now are designed to both minimise the economic impacts of the coronavirus pandemic, and to achieve the EU's climate commitments. Achieving these commitments demands a structural re-alignment of our financial sector with the challenges and risks posed by climate change.

Prior to the crisis, the governing council of the ECB had launched a review of its strategic and operational framework, which was due to explore how the ECB could contribute to the EU's climate objectives. We recognise that the current crisis is having the effect of conducting parts of the review in real time, but we still hope that the review proper will recommence at the earliest possible opportunity. As debate about economic recovery begins, now is an opportune moment to consider how Europe's most powerful economic institution can align its operations with the goals of the Paris Climate Agreement.

We welcome the statements by ECB President Lagarde stating that "climate change and

environmental risks are mission-critical" to the ECB and should be "at the core" of any institution's mission. It is our view that incremental adjustments to finance are not enough to tackle the monumental challenge of a rapid, sustainable and fair transition to a clean economy. The EU economy urgently requires innovative and bold reforms that reshape finance, so that it can help sustain our planet and enable us to thrive.

As part of the strategic review, the ECB has committed to listen to and engage civil society with an open mind. In the same spirit of constructive engagement, we offer policy makers a list of recommendations that, if implemented by the ECB, would constitute a successful strategic review from a climate justice perspective.

#### The ECB must:

- Align its asset purchasing programmes and collateral frameworks with the Paris Climate Agreement, to support the low carbon transition.
- 2. Align its refinancing operations to the banking sector with the Paris Agreement to encourage more sustainable bank lending and fill the green investment gap.
- 3. Support asset markets for sustainable investment and coordinate operations with the European Investment Bank (or other equivalent European institutions) to ramp up green investment and lock-in a low carbon future.
- 4. Implement prudential measures to increase the resilience of the European banking sector to climate risks and reduce brown financial flows (e.g. financing of fossil fuels).
- 5. Lead by example on climate disclosures and transparency by assessing and regularly communicating to elected officials the alignment of its operations with the Paris Agreement and that of the European banking sector.

## The ECB, climate risks, and the scaling-up of green finance

The European Commission has recognised that climate change and environmental degradation represent an existential threat to Europe and the rest of the world. As a primary signatory to the Paris Climate Agreement, the European Union (EU) has committed to transform our economic model to deliver a sustainable and just green transition.

Two years ago, the European Commission adopted its Sustainable Finance Action Plan as part of aligning the EU's financial regulatory framework with the Paris Agreement. This is now recognised as a key part of delivering a European Green Deal and includes a classification system for, or taxonomy of, sustainable activities to inform investment decisions and the development of policies to prevent the build-up of climate-related financial risk both at the individual bank and systemwide levels (i.e. micro and macro prudential policies).

While the primary responsibility for climate policy will continue to rest with governments, alongside the Commission, the ECB has a vital role to play. Both the European Parliament and the ECB itself have acknowledged that the ECB is bound by the Paris Agreement, which includes "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". The European Parliament insisted in early 2020 that this should be reflected in its policies, while respecting its mandate and independence<sup>1</sup>. In other words, they should be acting to mitigate the risks that the financial sector poses to the climate, as well as the risks that a changing climate poses to financial stability.

The speed at which we now need to transition to a low-carbon economy presents a number of systemic risks to the financial system, with the potential to wipe out trillions of Euros worth of assets. The risks of inaction are far greater. Far from being Paris aligned, our financial markets are set to fund a 4C temperature rise<sup>2</sup> and have not priced in the catastrophic risks associated with climate change.

For example, leading economists at the ECB have argued that climate change will have direct consequences for macroeconomic stability through its impact on food and energy prices. These factors will directly influence price stability and inflation, and therefore they warrant consideration by the ECB.

There is no clearer illustration of this than in the climate-financial risks of investing in companies extracting, supplying or engaged in burning coal. According to recent research, EU banks account for 25% of lending to leading coal plant developers and yet four out of five EU coal power plants are already unprofitable, with the utilities that operate them facing unprecedented losses.<sup>3</sup> The web of companies surrounding the coal industry is well known and mapped, with the Coal Exit database, among others, providing data upon which investment decisions that account for carbon intensity can already base decisions.<sup>4</sup>

The risks are ever clearer and are implicitly a source of financial instability and fall squarely within the mandates of central banks and financial supervisors. The European Systemic Risk Board notes that there are broadly two types of risk to financial stability presented by climate change:

- Physical risks refer to the impacts of climaterelated weather events (e.g. droughts, floods, and storms) that could have a profound impact on the economy. For example, disrupting global supply chains, resource availability, and entire industries.
- Transition risks arise from the processes
  of mitigation and adjustment towards
  a lower-carbon economy (e.g. policy
  changes, technological innovation, changing
  consumer behaviour), which will have
  significant impacts on carbon intensive
  sectors.

Measuring climate-related risks is a complex

task, and often depends on highly attuned methodology and the availability of data. But initial estimates indicate the threat is severe. For example, it has been estimated that without mitigation efforts, physical risks related to climate change could result in losses of \$24 trillion of the value of global financial assets.<sup>5</sup> Estimates of global losses related to transition risks suggest losses of \$1 trillion to \$4 trillion when considering the energy sector alone, or up to \$20 trillion when looking at the economy more broadly.<sup>6</sup>

At the same time, the EU's 'green investment gap' – the additional investments necessary to achieve the government's climate goals – remains considerable. By its own estimation, the European Commission will require an additional €260 billion per year to reach its existing 2030 climate targets<sup>7</sup>. Reaching the more ambitious targets proposed by the Commission's President Ursula von der Leyen (a 50% reduction in emissions from 1990, rather than 40%) would most likely move the green investment gap to €300 billion per year<sup>8</sup>.

Public and private sources of finance will need to be tapped to help plug this green finance gap – the sooner the better. As Europe's economy emerges from the Covid Crisis and they set a course for recovery, the ECB will need to revisit its immediate crisis measures in the light of the forthcoming climate crisis and adjust its balance sheet and prudential regulation accordingly; taking account of climate-financial risk in EU recovery must be at the centre of the ECB's policy review and approach.

### What can the ECB do to address climate-related risks?

1. Align its asset purchasing programmes and collateral frameworks with the Paris Climate Agreement, to support the low carbon transition

While the ECB has warned that financial markets are failing to price in climate related

financial risks<sup>9</sup>, it too is exposed to those very same risks. Far from being Paris aligned, the ECB's monetary policy operations are actively at odds with the goals of a low carbon transition.

The ECB lends money to the banking sector against guarantees, referred to as collateral. The assets accepted as collateral guarantees by the ECB must satisfy a minimum level of credit quality. The amount of liquidity that banks can borrow against these assets also depends on their credit quality - i.e. a larger haircut is applied to assets of lower credit quality. Problematically, the risk measures used by the ECB in its framework to decide which securities are safe enough to be accepted as collateral are based on private sector credit rating agencies. While credit rating agencies have started to acknowledge climate related financial risks, to date these are not adequately reflected in actual ratings. Omitting climate risks in the collateral framework gives a relative advantage to carbon intensive securities that are climate risky compared to those that are climate safer.

A similar carbon bias exists in the ECB's asset purchase - or quantitative easing (QE) programme and it will almost certainly exist in the newly introduced Pandemic Emergency Purchase Programme (PEPP) too. A report by Positive Money Europe and Veblen Institute demonstrated how more than 63% (equal to €170 billion) of the portfolio of the ECB's Corporate QE programme was directly financing the most carbon-intensive sectors<sup>10</sup>. This echoes findings of an earlier report by the LSE Grantham Institute showing that 62.1% of ECB corporate bond purchases take place in the sectors of manufacturing and electricity and gas production, which alone are responsible for 58.5 percent of Eurozone area greenhouse gas emissions, but only 18% of gross value added (GVA)11.

The ECB's collateral framework and asset purchase programmes are extremely powerful and reverberate throughout the rest of the financial sector — affecting financial market prices and capital allocation more widely. The carbon bias in QE and collateral frameworks

creates better financing conditions — an implicit subsidy — for fossil fuel sectors and the corporations dependent on them.

A decision to align its monetary policy operations with the Paris Climate Agreement will send a strong policy signal to financial markets. These greener monetary policy operations could be made permanent with a long-run horizon to help support a just transition to a more sustainable economy, beginning with the measures covered by the EU's 'Green Deal' programme. 12 The carbon bias - affecting financial market prices and capital allocation more widely - could be eliminated, and would help boost green financial flows whilst discouraging more carbon-intensive ones. In doing so, the ECB would also increase financial resilience - by reducing its own exposures to climate risks, as well as that of the wider financial system.

## 2. Align its refinancing operations to the banking sector with the Paris Agreement to encourage more sustainable bank lending and fill the green investment gap

At present, the ECB offers cheaper loans to banks which can show that they are lending more to businesses and households. It does this through its Targeted Longer Term Refinancing Operations (TLTRO).

The TLTRO programme was introduced in order to provide longer-term loans to banks at a low rate, under the condition of eligible collateral (in line with the above). Banks that were able to use the TLTRO could borrow at a lower rate, provided they can report, a posteriori, an increase in lending to households and firms. In effect, the ECB is directly subsidising these types of loans – it is a form of 'credit guidance', where lower interest rates are targeted at particular sectors of the economy.

The TLTRO suffers from the exact same problem as the collateral framework. There is an inherent carbon bias in this programme since the lending that is provided to firms or households does not distinguish between carbon-related or non-carbon-related activities.

This means that the ECB's TLTRO programme is not Paris aligned, and that fossil fuel and carbon intensive lending is, in effect, being further subsidised.

The good news is that TLTROs are potentially a powerful tool to increase green lending at the level of SMEs or households, who do not have access to capital markets, and could be redesigned to target lower interest rates for green loans, such as for sustainable and affordable housing, energy efficiency, or renewable energy systems.

Interest rates could be recalibrated on the basis of the proportion of green or brown loans that banks have made, or on the basis of the new loans over the recent period. For example, the ECB could open bids for 10-year-long TLTROs at a very low interest rate on the condition that banks increase their volume of green loans (e.g. loans for housing energy renovation or renewables) by the end of the maintenance period. If banks do not achieve their green lending benchmark, the interest rate would be increased. This mechanism would create a huge incentive for banks to offer cheaper green loans to customers, thus contributing to increasing a demand for energy transition investments.

This would provide a further incentive to banks to support the low-carbon transition and help fill the green investment gap. Furthermore, to prevent a green TLTRO from being abused, the ECB would need to consider implementing relevant penalising measures for banks that breach the terms and conditions of the facility.

# 3. Support asset markets for sustainable investment and coordinate operations with the European Investment Bank (or other equivalent European institutions) to ramp up green investment and lock-in a low carbon future

As of March 2020, the ECB has created over €2.6 trillion of new money through its QE programmes, and this will increase by €1.1 trillion through 2020 following the additional measures taken in response to the Coronavirus crisis.

For the most part, this newly created money has been pumped into financial markets and helped push up property and asset prices, and thus often increased wealth inequality. <sup>13</sup> Unfortunately, governments have so far not seized upon the opportunity of this huge QE programme to ramp up their green investment plans.

The window of opportunity has so far been wasted, but it is not too late.

The money created by the ECB can be strategically redirected towards the real economy, to support the green transition without endangering the ECB's inflation target. This could be accomplished, for example, by establishing a large green investment programme led by the European Investment Bank (EIB), which the ECB could indirectly finance (i.e. by lending the EIB the new money it has created).

This can work in any of the following two ways:

- Green monetary stimulus: any new creation of money in a future stimulus, instead of being directed to big corporates (already experiencing record low borrowing costs), could be used to finance the EIB's green investment programme; or,
- Green Twist: the ECB sells the corporate and covered bonds it already holds and re-invests the proceeds into the EIB. Importantly, this option would not require more QE – and should therefore not rankle with members of the council who have opposed the bond buying programme.

The ECB is already funding the EIB through quantitative easing, by purchasing around €100 billion of EIB bonds on secondary markets. Although this decreased the EIB's cost of capital significantly, it had virtually no effect on the EIB's level of green lending.

Therefore, key to this operation is coordination and collaboration between the EIB and the ECB, as the ECB can only buy more EIB bonds under the PSPP if the EIB issues more of them. A significant increase of the EIB's balance sheet would ultimately need an agreement from

its shareholders – EU members States – to increase the EIB's capital base or by increasing its leverage ratio. Though this is mainly a (still controversial) political decision, the ECB could encourage such a move by committing to purchase more EIB bonds in the future.

## 4. Implement prudential measures to increase the resilience of the European banking sector to climate risks and reduce brown financial flows (e.g. financing of fossil fuels)

Climate change, and a delayed or disorderly transition to a low carbon economy, could have catastrophic consequences for our financial system, with the potential to wipe out trillions of euros worth of assets. Important steps on this front have already been made, the European Commission's Action Plan has for example taken steps to make climate risk disclosures mandatory. But these measures alone will not be enough to ensure the European economy is resilient to climate risks.

The ECB imposes capital requirements on banks. Capital requirements work by compelling banks to back a proportion of their lending with shareholders' investment (equity). In this sense, higher capital requirements are intended to act as a cushion to absorb losses when loans default and if raised high enough can discourage certain forms of lending. The ECB should consider increasing capital requirements for loans to economic activities that are not in-line with the Paris Agreement (e.g. for loans carrying carbon risk, or entities that are heavily reliant on fossil fuels).

A higher 'brown capital requirement' would reflect the growing potential for transition and systemic risk of investing in carbon intensive activities and could therefore disincentivize lending that contributes to climate change. It would also give banks a buffer to withstand climate related financial losses, and reduce the potential need of a bank bailout.

Conversely, a lower capital requirement for green loans is not advised, as it would not lead to a noticeable increase in the level of

sustainable investment. Instead, it would risk weakening an already fragile banking system and undermining the efficacy of the still developing field of sustainable finance. A green TLTRO programme as outlined above is a much better solution for stimulating green investment.

5. Lead by example on climate disclosures and transparency by assessing and regularly communicating to elected officials the alignment of its assets with the Paris Agreement and that of the European Banking sector

The ECB does not operate in a vacuum. As a public institution the ECB must be held properly accountable by elected officials and wider society. Transparency and effective communication are key elements of such accountability, and also a prerequisite for constructive engagement with different stakeholders, including civil society. Only by simultaneously enhancing transparency and accountability can the long-term independence of the ECB be legitimately assured.

Accordingly, it makes sense that the ECB leads by example and transparently discloses the exposure of its own operations (particularly monetary policy), and their alignment with the Paris Agreement. After all, can we really expect private financial institutions to make these climate disclosures when leading public institutions are unwilling to do so?

Leading members of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) have specifically called for senior managers at private financial institutions to be assigned personal responsibility for the management of climate related risks and for ensuring that relevant information is communicated to their investors and shareholders. The same principle should apply to the ECB, whereby it should regularly report climate related risks and other relevant information not to shareholders, but to the general public to whom it serves. This engagement can take place through European

parliament, via existing platforms such as the Economic and Monetary affairs committee.

Through this process, the ECB should also report and communicate the exposure of the European banking sector to climate risks and the alignment of its financial flows with Paris. This will give investors a more complete picture of the risks facing the European financial system, and allow for more informed decision making. It will permit policy makers and the general public to monitor the progress of the banking sector in aligning with the Paris Agreement, and assess the scope of the prudential measures that are necessary to increase the resilience of the financial system to climate risks.

#### **Endnotes**

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- 4 See https://coalexit.org
- 5 Dietz, S., Bowen, A., Dixon, C. and Gradwell, P. (2016): "'Climate value at risk' of global financial assets", Nature Climate Change, 6, 676–679.
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- 8 https://www.bruegel.org/2019/12/the-europeangreen-deal-needs-a-reformed-fiscal-framework/
- 9 See, for instance, President Lagarde's interview with Bloomberg TV, 24/01/2020 https://www.ecb.europa.eu/press/inter/date/2020/html/ecb.in200124\_1~a226a06d7a.en.html
- 10 www.positivemoney.eu/2019/04/report-aligning-ecb-monetary-policy-climate/
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