

SPEECH

Integrating the climate and environmental challenge into the missions of central banks and supervisors

Speech by Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, at the 8th Conference on the Banking Union, Goethe University, Frankfurt am Main

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Many thanks for your kind introduction and for having me here today at this 8th Conference on the Banking Union. I am especially happy to be here, for this is the first time since I joined the European Central Bank last December that I am joining in a conference on site. It shows that we are indeed making progress in moving closer towards a world after the pandemic, which is the topic of this session of the conference. That being said, we are not there yet, and we are all certainly mindful of the many risks to global public health that currently still remain. This is also the first speech that I am making in a more traditional conference setting since moving to Frankfurt. And I am proud and humbled to deliver it in the university named after Frankfurt's most renowned son and standing alongside the many past board members of the European Central Bank who have visited this house of Goethe over the years.

When preparing this address, I went back as far as April 1999 when, for the first time, a member of the ECB's Executive Board spoke at Goethe University. The board member was Tommaso Padoa-Schioppa, and he was delivering the address on the occasion of his being appointed honorary professor of the University – a position he held until his passing in late 2010. The ECB had just been founded, and the Governing Council had adopted the institution's first monetary policy strategy. At Goethe University, Professor Padoa-Schioppa spoke of “new challenges for old missions”, referring to a number of daunting developments that the newly born central bank of the euro area would be facing. ^[1] In my address today, I will not dwell on the challenges that Professor Padoa-Schioppa identified back in 1999. They were certainly topical and some continue to carry relevance even today.^[2] What I want to emphasise here is the notion he conveyed that central bankers – and I would add supervisors – should always be mindful of the circumstances in which they will pursue their tasks and fulfil their responsibilities in the years to come. This message resonates strongly in the activities through which the ECB delivers on its mandate, in particular with respect to the key challenge that we are facing today and that will be the key topic of my address: the ongoing climate and environmental crisis.

The challenge of climate change and environmental degradation

While many of our societies have been gradually reopening over the past months, the summer still sent us stark reminders of another ongoing crisis. And, just like the pandemic, it is a global one. Unfortunately, unlike the pandemic, we are not even close to start thinking about a world after the climate and environmental crisis. We have barely seen the beginning. We have seen major flooding in north-western Europe, the north-eastern United States and China, as well as extreme heatwaves and wildfires in North America and southern and eastern Europe. Each of these events is yet another tragic confirmation that the climate and environmental crisis is already upon us. Confirmation that the associated consequences are materialising to an increasing extent. Confirmation that significant

efforts will be required to achieve an effective transition to a net zero global economy in a window of time that is all too rapidly narrowing.

The recent analysis of the Intergovernmental Panel on Climate Change (IPCC), which was also published this summer, adds to the existing overwhelming evidence that climate change is real and caused by humans.^[3] The report's findings and conclusions emphasise the need for urgent action. It concludes that unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting global warming to close to 1.5 or even 2 degrees Celsius will be beyond reach. Note that the report also finds that, even when keeping within the 2 degrees bound, the incidence of extreme weather events is already set to double or triple compared with now. If we manage to limit global warming to only 1.5 degrees Celsius, a very big if, the incidence of such events would increase less dramatically, but still by a massive 50% to 75%. A report by the UN's climate agency released last week suggests that, based on current commitments, the global economy is on a path to a warming not of 1.5 or 2, but of a whopping 2.7 degrees Celsius.^[4] This is clearly too high. This clearly shows more needs to be done. Governments clearly need to step up their efforts to keep the impact of the climate crisis within the bounds of what is manageable.

The IPCC report is expected to play a fundamental role at the 26th UN Climate Change Conference of the Parties (COP26) that is taking place in Glasgow in November this year, bringing countries together to update their plans for reducing emissions. And the challenge goes beyond our climate. As I have advocated on various occasions over the years and as was stated also by the ECB's President, Christine Lagarde, at a recent conference: "Climate and biodiversity are two sides of the same coin; it is vital that we look at them together".^[5]

The climate and environmental challenge and the missions of central banks and supervisors

To understand why and how all this is of importance for central banks and supervisors like the ECB, it is useful to imagine a frame for thinking about the economic consequences of the climate and environmental crisis. Typically, when thinking about climate change and environmental degradation we distinguish between physical risks and transition risks.

Physical risks refer to all risks resulting from the changing climate, that is, from more frequent extreme weather events and gradual changes in climate to environmental degradation, such as air, water and land pollution, water stress, biodiversity loss and deforestation. For example, extreme weather events – which have been steadily increasing over recent decades – can harm borrowers' ability to repay their debts and thus make the loan portfolios of banks much riskier. These risks can be further heightened if extreme weather events also depreciate the value of the assets used as collateral in those loans.

But there are also risks associated with a transition to a low-carbon and more environmentally sustainable economy. This adjustment would be triggered by legislation that will be adopted, such as carbon-pricing – where Germany has been leading compared with other European countries – or banning of carbon-intensive activities. In addition, the transition is supported by shifting consumer preferences towards goods and services that are more sustainable. These changes will have a significant impact on climate-sensitive economic sectors and the broader economy and financial system, in particular in the case of an abrupt transition to a low-carbon economy.

Whatever combination of physical and transition risks will materialise, the macroeconomic consequences and financial risks of the climate and environmental crisis will be profound. This is confirmed by an ECB Occasional Paper that was published earlier this week in the context of our monetary policy strategy review.^[6] These consequences place the need to act squarely within the traditional mandates of central banks and supervisors. Sharing this insight, many central banks and supervisors have joined forces in the Network for Greening the Financial System (NGFS). The NGFS is a coalition of the willing that brings together 95 central banks and supervisors from all continents. It is a network that I have been proud to chair since its foundation by – at that time – eight central banks

and supervisors in late 2017. The network is committed to developing climate and environmental risk management in the financial sector, as well as to mobilising mainstream finance to support the transition to a sustainable economy. It pushes frontiers and ensures that best practices are shared in and implemented by our policy community, covering all the tasks and responsibilities of central banks and supervisors.

ECB activities to address the climate and environmental crisis

In this context, the ECB has been systematically and consistently integrating climate and environmental considerations into the activities through which it carries out its tasks and fulfils its responsibilities. Or – to be more specific – in monetary policy, banking supervision, our non-monetary policy-related balance sheet management and in all our operational duties. Let me outline some of the main steps that we have set and are currently taking.

In November of last year, ECB Banking Supervision published a guide on climate-related and environmental risks.^[7] In that guide, we make clear that we expect banks to take a comprehensive, strategic and forward-looking approach to disclosing and managing all climate-related and environmental risks – which also include, for example, the risks of biodiversity loss and pollution. We then asked banks to conduct a self-assessment relating to the expectations we set out in that guide and to draw up action plans for how they intend to comply with them. This supervisory exercise has begun with, but will not be limited to, taking stock of banks' self-assessments.

We are now in the process of benchmarking the banks' self-assessments and action plans and will then challenge them as part of our ongoing supervision. The preliminary results show that no bank has the full picture on climate risks yet. None of the banks under our supervision meet all the expectations. But the good news is that many pieces of the climate and environmental risk puzzle can already be found scattered across the banking union. Almost all banks have developed implementation plans and many have started to progressively improve their practices. The progress that we have identified can be observed in banks from different countries, with different business models and different asset volumes. This confirms that what we are asking of the banks can be done. The ECB will see to it that every bank is making expeditious progress in embedding climate and environmental risks into their institution by following up with supervisory requirements where needed. This supervisory exercise will also offer banks a strong incentive to bolster their ability to identify and quantify their exposures to climate and environmental risks and their tolerance of these risks. To give you a sense of the magnitude of this exercise, we are reviewing plans covering €24 trillion worth of banking assets.

Next year, we will conduct a full supervisory review of banks' practices for incorporating climate risks into their risk frameworks, as we gradually roll out a dedicated Supervisory Review and Evaluation Process (SREP) methodology that will eventually influence banks' Pillar 2 capital requirements. In addition, ECB Banking Supervision will conduct a supervisory stress test with a focus on climate-related risks for which the methodology will soon be shared with the banks under our supervision. Let me reiterate here that the reflection of the outcome of our supervisory exercises next year will be of a qualitative nature. A possible impact – if any – will be indirect, via the SREP scores on Pillar 2 requirements and no bank-specific results will be published. But let me stress that it is unlikely that in the years to come things will stop here. This is not the endgame. In an analytical report published earlier this year by the Basel Committee on Banking Supervision it was concluded that climate-related risks can be captured in risk categories that are already used by financial institutions, for example credit risk, market risk, liquidity risk and operational risk.^[8] The ECB treating climate-related and environmental risks as any other risk, with a reflection in all relevant supervisory requirements, would be in line with this conclusion. Gradually we will start doing just that.

On the intersection between the macro and micro levels, yesterday we published the outcome of an ECB economy-wide stress test.^[9] Unlike the stress test that will be conducted next year, this was a top-down exercise relying on data, assumptions and models developed by ECB staff. It was a granular exercise relying on counterparty-level climate and financial information collected for millions of

companies to which euro area banks are exposed via loans and securities holdings. To the best of our knowledge, this data collection is the most comprehensive set of backward and forward-looking climate and financial information available to a central bank.

The results of the analysis show that the short-term costs of a green transition pale in comparison to the costs of unfettered climate change in the medium to long-term. The costs of a transition are always more than compensated by long-term benefits in terms of investing in sustainable technologies. By contrast, if policies on transitioning towards a greener economy are not introduced, physical risks become increasingly higher over time. It is thus of the utmost importance to transition early and gradually to mitigate the costs of both the green transition and the future impact of natural disasters. The results of this exercise show that the impacts of climate-related and environmental risks on average will increase moderately until 2050 if climate change is not mitigated, and they are concentrated in some geographical areas. The impact on banks' expected losses is shown to be mostly driven by physical risk and is potentially severe over the next 30 years.

Acknowledging the climate-related and environmental risks for our own balance sheet, in February 2021 the Eurosystem – encompassing the ECB and all the national central banks of the euro area – announced a common stance for applying climate change-related sustainable and responsible investment principles in their asset portfolios not related to monetary policy.^[10] The common stance prepares the ground for the measurement of greenhouse gas emissions and other sustainable and responsible investment-related metrics of these portfolios. With this, we aim to start making annual climate-related disclosures on our portfolios of this type within the next two years.

Finally, in July 2021 the Governing Council of the ECB concluded the 18-month process – delayed by around six months because of the pandemic – in which it reviewed its monetary policy strategy.^[11] The outcome of the strategy review included an action plan to incorporate systematically environmental sustainability considerations in the ECB's monetary policy. The Governing Council acknowledged that climate change has profound implications for its mandate to maintain price stability in the euro area through its impact on the economy and the financial system. Accordingly, the Governing Council has committed to an ambitious climate-related action plan. In addition to the comprehensive incorporation of climate factors in its monetary policy assessments, the ECB will adapt the design of its monetary policy operational framework in relation to disclosures, risk assessment, corporate sector asset purchases and the collateral framework.

As a concrete follow-up, the ECB will accelerate its work on new models that enable us to analyse and monitor the implications of climate change and transition policies on the economy, the financial system and the transmission of our monetary policy to households and firms. With regard to our monetary policy instruments, we will introduce disclosure requirements as an eligibility criterion or as a basis for differentiated treatment for collateral and asset purchases. We will consider climate risk in our valuation and risk control frameworks for assets that are submitted as collateral for lending operations. And we will adjust the framework guiding the allocation of corporate bond purchases to incorporate climate change criteria. Ultimately, where two different monetary policy instruments are equally conducive to maintaining price stability, the ECB will set out to choose the option that best supports addressing climate change. Finally, inspired by the economy-wide stress test and consistent with the upcoming ECB Banking Supervision bottom-up stress test, in 2022 we will conduct a climate stress test of the Eurosystem balance sheet.

Connected dots enabling connected action

The conclusion of the strategy review marks the ECB connecting the final, crucial dots to confirm its commitment to incorporating systematically and consistently the climate and environmental crisis in carrying out its tasks and fulfilling its responsibilities: monetary policy, banking supervision, our non-monetary policy-related balance sheet management and in all our operational duties. And we have announced concrete measures, expectations and action plans on how we intend to follow up on these commitments. This is not a crisis that the ECB can resolve by itself. Fortunately, we are not the only

ones connecting dots, as evidenced by the activities of other central banks and supervisors, both individually and jointly in the NGFS. And the call to action is also being brought to the institutions that they supervise. In fact, not acting may even expose financial institutions to liability risks.

We are mindful that many of the steps proposed are no easy undertaking. But, to paraphrase Tommaso Padoa-Schioppa speaking here back in the ECB's early days, identifying a challenge implies not only acknowledging the difficulty of fulfilling a task, but also its necessity. For addressing the climate and environmental crisis we know this to be true. We know we must act. Let us draw confidence from Goethe: "Unsere Wünsche sind Vorgefühle der Fähigkeiten, die in uns liegen, Vorboten desjenigen, was wir zu leisten imstande sein werden." It will be difficult, but we know we are up to the challenge. We must be.

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1. Padoa-Schioppa, T. (1999), "[Eurosystem: new challenges for old missions](#)", inaugural lecture by Tommaso Padoa-Schioppa on the occasion of his appointment as honorary Professor of Johann Wolfgang Goethe-Universität, Frankfurt am Main, April.
 2. The four challenges he identified were (i) making the Eurosystem a central bank; (ii) the high level of unemployment in Europe; (iii) accompanying and surveying the rapid changes that the European financial institutions and markets were undergoing and would continue to undergo over the subsequent years, partly – but not exclusively – as a result of the euro; and (iv) coping with the lack of political union in Europe.
 3. Intergovernmental Panel on Climate Change (2021), "[Climate Change 2021: The Physical Science Basis](#)", Summary for Policymakers, August.
 4. United Nations Framework Convention on Climate Change (2021), "[Synthesis report: Nationally determined contributions under the Paris Agreement](#)", September.
 5. See also OMFIF (2020), "[Central banks go beyond climate: in conversation with Frank Elderson](#)", December.
 6. ECB strategy review work stream on climate change (2021), "[Climate change and monetary policy in the euro area](#)", *Occasional Paper Series*, No 271, ECB, September.
 7. ECB Banking Supervision (2020), "[Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure](#)", November.
 8. Basel Committee on Banking Supervision (2021), "[Climate-related risk drivers and their transmission channels](#)", April.
 9. Alogoskoufis, S. et al. (2021), "[ECB economy-wide climate stress test](#)", *Occasional Paper Series*, No 281, ECB, September.
 10. ECB press release (2021), "[Eurosystem agrees on common stance for climate change-related sustainable investments in non-monetary portfolios](#)", February.
 11. ECB (2021), "[The ECB's monetary policy strategy statement](#)".

CONTACT

European Central Bank

Directorate General Communications

- > Sonnemannstrasse 20
- > 60314 Frankfurt am Main, Germany
- > +49 69 1344 7455
- > media@ecb.europa.eu

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Media contacts