SPEECH

# From charting the course to staying the course: the path ahead for climate and nature risk supervision

## Keynote speech by Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, at the ECB industry dialogue on “Climate and nature risk management: taking stock and looking ahead”

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## Introduction

Good morning and a very warm welcome to our industry dialogue on climate and nature-related (C&N) risks.[1]

It is great to see so many of you here today to share your views, discuss progress and explore solutions to the challenges we still face. Together, we have all come a long way since we first started discussing C&N risks in 2019.

Back then, the idea of C&N risks featuring structurally in banks’ risk appetite, risk management and stress-testing frameworks seemed a distant goal.

Today, however, we can see that banks across Europe have made impressive strides in building the capacity to account for C&N risks. Thanks to the hard work of many – not only in the boards but also in front offices, risk management and internal audit, to name just a few areas – considerable expertise has been built up. As a result, European banks have made good progress in identifying and managing C&N risks – and, crucially, in seizing the business opportunities from the transition that our economies are undergoing. Industries such as cement, steel, energy and shipping are part of the backbone of the European economy, yet they are also some of the largest contributors of emissions. With that in mind, I am particularly pleased that representatives from the corporate sector will speak to us about their own decarbonisation and adaptation journeys later today. Close collaboration between corporates and banks is an essential driver of decarbonisation, and the associated transition finance presents a clear business opportunity for banks.

## Supervisors and banks have taken action

But let me start by taking you back ten years, almost to the day, to Mark Carney’s landmark speech on the tragedy of the horizon[2] – a speech that brought climate change squarely into the realm of financial stability. Decisive action has been taken since then.

When the ECB started discussing C&N risks with banks, we were moving very much in lockstep with many other prudential authorities around the world, drawing on the experiences and practices developed in the Central Banks and Supervisors Network for Greening the Financial System (NGFS). Back in 2019 the NGFS had 45 members; today it has grown to 149 central banks and supervisors that all agree on the relevance of C&N risks in the pursuit of their mandates.[3]

But supervisors have not been alone in taking action: insurers, investors, financial market participants and banks have charted a course from awareness to preparedness.

Looking at the banks under our supervision, we see that they now have the institutional architecture in place to identify, monitor and manage C&N risks.[4] This means that all banks have defined key risk indicators for climate risk and have included climate risk in their stress-testing frameworks, while the vast majority of banks also have frameworks in place to start quantifying some capital needs.

That being said, there is still more work to do to make sure that banks are applying sound practices across all relevant portfolios, exposures and risk categories, and that they are effectively implementing their policies across the board. And we also need to continue improving measurement and estimation methodologies and broaden the risk management toolkit to enhance banks' resilience ahead of time.

In light of this greater preparedness and the challenges that remain, some may wonder about the path ahead for C&N risk supervision. Are we staying the course in ensuring that banks adequately manage their C&N risks? And do current discussions about banks' competitiveness have an impact on our commitment?

## Staying the course remains crucial

Let me start with the first question: are we staying the course? Considering the materiality of the climate and nature crises, taking a step back is not an option.

C&N risks are not just appearing at distant time horizons but are becoming an increasingly immediate concern for financial stability and economic growth.[5]

Consider that, in the next five years, extreme weather events could account for a loss of up to 5% of euro area economic output. That would be a shock similar in magnitude to the great financial crisis.[6] Analysis by the ECB, the University of Oxford and the London School of Economics shows that too much water, too little water or polluted water pose the most urgent risk to economic output in the euro area.[7]

The insurer Munich Re reports that damage from natural disasters has already increased from an average of USD 131 billion per year over the past 30 years to USD 320 billion in 2024 alone.[8] Similarly, Swiss Re records insured losses climbing by 5% to 7% every single year.[9] And the trend is only moving upwards.[10]

Science is also clear about what is still to come: global heating is on the brink of passing 1.5 degrees; the world is on track for an average temperature increase of 3.1 degrees by the end of the century[11]; and Europe, the fastest-warming continent, is heating up at twice the global average[12] And just earlier this week the European Environmental Agency warned that the degraded state of our natural ecosystems is putting our European way of life at risk.[13]

From a risk-based perspective, there is no other option but to stay the course and continue to ensure that banks are resilient to all material risk drivers.

Taking a step back on C&N risks would mean failing to account for a material factor that determines banks' soundness. No matter where political headwinds are blowing, the risks from climate change will stay, be it from physical or transition risks – and likely a combination of both.[14]

It is therefore no surprise that climate-related risks continue to feature in the ECB's supervisory priorities. This is in line with the Basel Core Principles[15], which were revised only last year, including to explicitly refer to climate-related risks, and the NGFS.[16]

And it is not just the supervisory community that recognises the need to stay the course:

"Climate change is a fact and its effects are being felt all around us … every step counts … every tenth of a degree matters."[17]

"The cost of climate change is going up. This is not a short-term thing that's going to go away."[18]

"Our clients are in transition to net zero. That's unabated despite some of the challenges."[19]

"If insurance is no longer available … no more mortgages … the financial sector as we know it ceases to function … capitalism as we know it ceases to be viable."[20]

Now, these words do not come from me, the Basel Committee or the NGFS. These are *your* words. And by this I mean the words of CEOs and board members of major banks and insurers.

The message closely mirrors that of the banks we supervise, which now overwhelmingly consider C&N risks as a material source of financial risk.[21]

## The path ahead for climate and nature risk supervision

As C&N risks are material and their manifestations will only become more frequent and more severe, it is critical that supervisors continue to focus their attention on them. What does this mean in practice?

First, as we approach the end of the multi-year programme launched by the ECB in 2020, C&N risk management in European banks has reached a stage of maturity that we can now move from a foundational to a business-as-usual approach in our supervision. In short, this means that our Joint Supervisory Teams monitor each individual bank and follow up, ensuring that any outstanding findings are adequately remedied in a timely manner. It also means that C&N risks will feature in our standard and regular supervisory activities such as on-site inspections, fit and proper assessments, provisioning analysis or the baseline and adverse scenarios in stress tests.

Second, while we acknowledge that banks' C&N risk management has become more robust, it remains crucial that banks make self-sustained progress in applying sound practices more comprehensively. This is because, in many cases, we see that sound practices are often only applied to a subset of relevant exposures, geographical areas or risk categories. For instance, a bank's C&N risk management may not cover all of its relevant assets, or a bank may focus only on transition risks but not on physical risks – and vice-versa – in certain portfolios. Additionally, some of the prudential transmission channels, such as operational or market risk, receive far less attention compared with credit risk.

Let me use real estate lending as an example. Although mortgage lending is a sizeable share of most European banks' business, it is not always fully incorporated into their C&N risk management frameworks. This means that some banks consider only transition risks in their collateral valuation, while neglecting physical risks. And even when banks do account for both physical and transition risks, or have established key risk indicators, they do not consistently link them to concrete follow-up actions in their risk management.

That is why our supervisory teams will continue to track progress and urge banks to implement sound practices across all material portfolios, geographical areas and risk categories, covering both physical and transition risks.

For banks to do this, a vital prerequisite is having reliable, meaningful and comparable data from companies. Therefore, excluding too many firms from the Corporate Sustainability Reporting Directive (CSRD) could impair the availability of comparable information about important parts of our economy.[22] And as the legislators highlighted in the CSRD in the absence of ''a consensus on the information that undertakings should report, there will be significant increases in terms of cost and burden for reporting undertakings and for users of such information''[23].

Third, with regard to transition planning considering banks' preparedness in managing C&N risks, banks under our supervision are well positioned to meet the prudential transition planning requirements that will come into effect in 2026.[24] We will therefore approach transition planning in a gradual and targeted way in dialogue with the industry and focusing on new elements regarding C&N risks in the European Banking Authority's Guidelines on the management of environmental, social and governance risks.

And lastly, allow me to say a few words on good practices, which we will have the opportunity to discuss later today.

Good practices are not new requirements. Good practices are not intended to create additional complexity or to continuously raise the bar.

Instead, from our vantage point as pan-European supervisor, where we can look closely at the inner workings of banks across the continent, we have compiled a repository of effective approaches that are already being applied in banks.

We view this repository as a useful tool for banks to explore potential avenues for meeting supervisory expectations. Clearly, the way the good practices are used will not be the same at each and every bank, given their different characteristics and business models. In other words, banks can have sound C&N risk management by implementing practices not (yet) listed in our repository. And for the avoidance of any doubt, applying the ECB's good practices will not be seen as a prerequisite for compliance with the European Banking Authority's guidelines.

Importantly, good practices can help banks address challenges in specific areas where we know some are struggling. For example, quantifying and managing the financial risks stemming from the degradation of our natural ecosystems remains a complex task.[25] We are, however, seeing a growing set of good practices in the area of nature-related risks being adopted by many banks across Europe.[26] That's why we plan to include these examples in the updated set of good practices that we aim to publish later this year.

## Preparedness gives European banks a competitive edge

Before concluding, allow me to focus for a moment on the transition of our economies more broadly. Reading the news nowadays, one might wonder: is the transition in full swing, or has it stalled?

Let's consider a few figures.

Since the Paris Agreement was adopted, renewable energy has increased by 140% and investment in clean energy has increased by 80%. And in Europe, our emissions have fallen by almost 40% compared to 1990.

A recent report by PwC found that, of the 4,000 firms that made climate commitments last year, 47% have upheld them, 37% have become more ambitious, and only 16% have dialled back.[27] In addition, last year saw the world add 585 gigawatts of new renewable energy capacity – an increase of almost 20% compared with the previous year.[28] Interestingly, 91% of these new renewable projects were more cost-effective than any fossil fuel-based alternatives.

These and many more examples led *The Economist* to conclude that we are moving from a time of "greenwashing" to one of "greenhushing" – which means getting on with the job of decarbonisation without making a fuss.[29]

With carbon neutrality by 2050 enshrined in the binding European Climate Law, many players across the economy are already making significant progress on their decarbonisation journeys.

But it is also no surprise that the transition continues to require vast investment. Achieving the binding EU intermediate target of reducing emissions by 55% by 2030 requires around €1.2 trillion of investment – not in total, but every single year.[30]

This vast financing need presents a business opportunity for banks to help their clients to navigate the transition.

Our latest euro area bank lending survey shows a net increase in demand for loans to green firms and businesses undergoing transition, highlighting the growing demand for transition finance.

Having the data and information architecture from risk management in place helps banks to support clients transitioning in sectors they know very well. By way of example, some banks are leveraging corporate power purchase agreements to increase their financing of renewable energy projects. Beyond lending, banks can also capitalise on transition finance by offering advisory services to assist their clients on their decarbonisation pathways, diversifying their revenue streams.

Moreover, the global sustainable finance market has seen notable growth in recent years. Assets under management in sustainable funds grew by around 80% between 2020 and 2024, while sustainable bonds increased threefold between 2019 and 2023. European banks are emerging as industry leaders in these fields. Maintaining this competitive edge is therefore crucial, as we reflect on the broader competitiveness of banks and Europe as a whole.

## Conclusion

Let me conclude.

Over the past few years, we have witnessed impressive progress in building the capacity to account for C&N risks in the banking sector. Banks and supervisors have successfully charted the course towards ensuring banks are resilient to these risks, while also positioning themselves to seize the opportunities presented by the green transition.

In the face of changing climates – whether economic, political or indeed at the level of our planetary ecosystem – we cannot afford to delay, dilute or defer our efforts. Instead, we must stay the course.

This means making sure that banks manage their risks effectively, remedy remaining inadequacies in a timely manner andremain resilient going forward.

Collaboration will be key if we are to succeed. Today's dialogue, which brings together banks, supervisors, financial market participants and, crucially, representatives of the real economy, is a testament to the value of working together.

I would therefore like to thank you all for participating in this dialogue and I wish you all a fruitful discussion.

Thank you for your attention.

1.

In European banking supervision we have typically referred to climate-related and environmental risks, or C&E risks. For the purposes of this speech, I will consider the terms "environmental risks" and "nature-related risks" as interchangeable.

2.

Carney, M. (2015), "Breaking the tragedy of the horizon – climate change and financial stability", speech at Lloyd's of London, 29 September.

3.

In addition to the steps taken from a supervisory perspective, the ECB takes climate change and nature degradation into account equally seriously in the pursuit of its price stability mandate. See Elderson, F. (2025), "Deepening our commitment to confronting the climate and nature crises", welcome address at the International Monetary Fund OEDNE/World Bank Group EDS19 Constituency Meeting, Luxembourg, 4 July; and Lagarde, C. (2025), "Strategy assessment: lessons learned", introductory speech at the opening reception of the ECB Forum on Central Banking, Sintra, 30 June.

4.

Elderson, F. (2025), "Banks have made good progress in managing climate and nature risks – and must continue", *The Supervision Blog*, ECB, 11 July.

5.

Losses from the droughts, heatwaves and floods that hit the EU this summer are estimated at €43 billion; this figure could climb to €129 billion by 2029, and that is likely to be an underestimation. See Usman, S., Parker, M. and Vallat, M. (2025), "Dry-roasted NUTS: early estimates of the regional impact of 2025 extreme weather", 14 September.

6.

Mauderer, S. and Stracca, L. (2025), "Climate risks: no longer the tragedy of the horizon", *The ECB Blog*, ECB, 9 July.

7.

Ceglar, A., Danieli, F., Heemskerk, I., Jwaideh, M. and Ranger, N. (2025), "The European economy is not drought-proof", *The ECB Blog*, ECB, 23 May.

8.

While the damage from natural disasters (corrected for inflation) averaged USD 131 billion per year worldwide over the past 30 years, it averaged USD 236 billion over the past ten years and USD 268 billion over the past five years. See Munich Re (2025), "Climate change is showing its claws: The world is getting hotter, resulting in severe hurricanes, thunderstorms and floods", 9 January.

9.

Swiss Re Institute (2025), *Natural catastrophes: insured losses on trend to USD 145 billion in 2025*, sigma report, 29 April.

10.

For Germany alone, climate-related damages between 2000 and 2021 were estimated to amount to €145 billion, and without effective climate protection, Germany faces damages of up to €900 billion between now and 2050. See DIW Berlin (2025), "Zwei Jahrzehnte Klimakostenforschung: Präventiver Klimaschutz als volkswirtschaftlicher Vorteil", *DIW Wochenbericht*, No 38/39, pp. 613-619.

11.

United Nations Environment Programme (2024), *Emissions Gap Report 2024*, 24 October; Intergovernmental Panel on Climate Change (2023), *Climate Change 2023 Synthesis Report – Summary for Policymakers*, March; Some recent research even suggests that the threshold of 3 degrees may already be reached by 2050. See Deutsche Physikalische Gesellschaft (2025), "Globale Erwärmung beschleunigt sich – Ein Aufruf zu entschlossendem Handeln", 24 September.

12.

Copernicus Climate Change Service and World Meteorological Organization (2024), *European State of the Climate – Summary 2023*, April.

13.

European Environment Agency (2025), *Europe's environment and climate: knowledge for resilience, prosperity and sustainability*, 29 September.

14.

For more information on why C&N risks form part of a comprehensive view on banks' resilience and are the opposite of being political, see Elderson, F. (2025), "What good supervision looks like", keynote speech at the 24th Annual International Conference on Policy Challenges for the Financial Sector, 12 June.

15.

The Basel Core Principles state that "Banks should understand how climate-related risk drivers may manifest through financial risks, recognise that these risks could materialise over varying time horizons (which may go beyond their traditional capital planning horizon), and implement appropriate measures to mitigate these risks. Supervisors are also expected to consider climate-related financial risks in their supervision of banks, to assess banks' risk management processes, and to require banks to submit information that makes it possible to assess the materiality of climate related financial risks.''

16.

In addition, also the European Insurance and Occupational Pensions Authority continues to consider climate-related risks in the exercise of its mandate. See European Insurance and Occupational Pensions Authority (2024), "Final Report on the Prudential Treatment of Sustainability Risks for Insurers", 7 November; and European Insurance and Occupational Pensions Authority (2025), "EIOPA monitoring exercise marks progress in the integration of climate change considerations into insurers' risk assessments", 23 July.

17.

Steven van Rijswijk, CEO of ING Group. See ING (2023), "ING publishes 2023 Climate Report", 5 October.

18.

Evan Greenberg, CEO of Chubb. See Vanderford, R. (2024), "Pricier Insurance Makes Sense as Climate Risk Grows, Chubb CEO Says", *The Wall Street Journal*, 7 May.

19.

Bill Winters, CEO of Standard Chartered. See Furness, V. (2025), "StanChart pledges to cut emissions linked to oil and gas bonds", *Reuters*, 21 February.

20.

Günther Thallinger, Member of the Board of Management and Chairman of the Sustainability Board, Allianz. See Carrington, D. (2025), "Climate crisis on track to destroy capitalism, warns top insurer", *The Guardian*, 3 April.

21.

More than 90% of banks under our supervision now consider C&N risks as material, while back in 2021 only 56% reached this conclusion.

22.

Opinion of the European Central Bank of 8 May 2025 on proposals for amendments to corporate sustainability reporting and due diligence requirements (CON/2025/10).

23.

See Recital 15 of Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) (OJ L 322, 16.12.2022, p. 15).

24.

Elderson, F. (2025), "Banks have made good progress in managing climate and nature risks – and must continue", *The Supervision Blog*, ECB, 11 July.

25.

See Elderson, F. (2025), "Nature's bell tolls for thee, economy!", speech at the Naturalis Biodiversity Center, Leiden, 22 May; and Ceglar, A., Danieli, F., Heemskerk, I., Jwaideh, M. and Ranger, N. (2025), "The European economy is not drought-proof", *The ECB Blog*, ECB, 23 May.

26.

Banks have significantly improved their nature risk management in recent years. While in 2022 almost 40% of banks had not yet defined a formal approach for managing nature risks, today only 7% lack a clear strategy. Around three-quarters of banks today are using quantitative approach to monitor and manage nature-related risks. Although many banks have yet to systematically link their materiality assessments to a risk management response, the ECB recognises the steps taken to develop sophisticated tools for risk quantification and management.

27.

PwC (2025), "PwC's Second Annual State of Decarbonization Report", 20 March.

28.

International Renewable Energy Agency (2025), *Renewable capacity statistics 2025*, March.

29.

The Economist (2025), "The remarkable rise of "greenhushing"", 29 July.

30.

European Commission (2024), "Securing our future – Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just and prosperous society", *Commission Staff Working*