

SPEECH

The contribution of finance to combating climate change

Speech by Christine Lagarde, President of the ECB, at the Finance at Countdown event

Frankfurt am Main, 12 October 2021

The urgent need to transition to carbon neutral

We have seen this summer what climate change can do in terms of disasters. We had floods in Europe, heatwaves in North America and elsewhere; there have been ample examples this year of what the world may look like in the future. And it might be worse. The prominence of climate change in the public debate shows that people are now sitting up and taking notice. To quote Honoré de Balzac, “It is easy to sit up and take notice. What is difficult is getting up and taking action”. This is now what we are seeing, and I take the view that everybody must take action, whatever their role, mission and position.

What we did at the ECB is conduct an economy-wide climate stress test, which provides evidence that there is a need for urgent action.^[1] We conducted an exercise that combined the financial information and climate exposures of four million companies and some 1,600 consolidated euro area banks, and we mapped this to data in order to understand, on the basis of the scenarios of the Network for Greening the Financial System, what the climate change consequences could be. Let me give you one number: the default probabilities of the corporate loan portfolios of the most vulnerable banks could increase by 30% in a scenario of no further climate policies. And we also found out that the risks would be concentrated in certain areas and in certain banks.

An orderly transition to carbon neutral entails greater costs in the near term, but these are far outweighed over the longer term by lower physical risks and higher output. It is a no-brainer option. We need to take action. Even a disorderly transition, where policies are enacted in a haphazard way or before green technologies are fully mature, is still less costly than sitting down and watching and there being no transition at all. The long-run benefits from acting early on climate are clear.

In that context, I wanted to focus on three particular elements which are critically important and in which the financial sector can provide serious input: by disseminating **information**, accelerating **innovation** and bolstering **adaptation**.

Information

Financial markets have certainly started to grasp the opportunities of the green transition. Since 2015, assets under management of ESG funds^[2] have almost tripled and the outstanding amount of green bonds issued by euro area residents has increased tenfold^[3]. Yet this is just a fraction of the finance needed to meet net zero ambitions.

One of the key strengths of financial markets is their ability to absorb, analyse and disseminate information in a way that far exceeds what individuals can achieve by themselves. That is a role that can greatly benefit the green transition. Yet for sustainable finance itself to be sustainable, it needs to be trustworthy. That means taking active steps to root out greenwashing, developing standards and labels for financial products and ensuring that disclosures are comprehensive, internationally comparable and auditable. In addition, disclosures should be complemented by forward-looking

measures that assess alignment with climate goals and net zero commitments. It is the future path for climate impact that matters most.

Innovation

By disseminating information, the financial sector can help steer credit to where it is needed to advance the transition. And one of the most vital places is innovation. Technological progress is necessary to further decouple economic growth from carbon usage, reduce emissions and develop working technologies for carbon capture and storage.

There are sectors where green innovation is beginning to have an impact. Solar power is now consistently a cheaper source of power than new coal or gas plants and in fact has become one of the cheapest forms of electricity generation the world has ever seen.^[4] Renewables already generate more electricity worldwide than natural gas, and are set to surpass coal in the next couple of years.^[5]

Yet there remain challenges for renewable energy to overcome, including the ability to flexibly change output on demand, or otherwise to efficiently store at scale. And there are several carbon-intensive sectors, such as metallurgy, cement and agriculture, for which carbon-zero technology is not yet mature and where much more and further innovation is needed.

While the rate of new technologies for climate change mitigation is increasing, Europe still has work to do. Bridging that gap and further accelerating innovation involves focusing on the entire structure of the financial system. Evidence produced by research at the ECB suggests that equity investments may play a beneficial role in boosting green innovation^[6], and funding for venture capital is another area where the euro area needs to pick up the pace. That is why completing the capital markets union, as financial as it may sound, is going to contribute to this innovation that is needed and for which financing is indispensable.

Adaptation

The third contribution that finance can make is to bolster the process of adaptation to climate. Even if we manage to limit global warming to the goals of the Paris Agreement, physical risks are still set to increase.^[7] For example, extreme sea level events that used to occur once in a hundred years could become annual events by the end of this century. While every effort needs to be made to contain that rise by transitioning to carbon neutral, greater attention also needs to be placed on mitigating and adapting to climate.

Banks can help ensure economic activity takes place in less exposed locations by incorporating exposures to physical risks, such as floods and droughts, into lending decisions. But banks are not the only players. Insurance companies can also play a key role by mitigating the negative impacts of climate-related catastrophes. Recent joint work between the European Central Bank and the European Insurance and Occupational Pensions Authority, which brings together all the insurance actors, finds that economic activity is less affected by catastrophes when a greater share of damages are covered by insurance.^[8] As such events become more frequent due to climate change, the value to society of insurance protection increases.

Yet, when you look at the protection around Europe, there is a significant protection gap: roughly speaking, only a third of the damage from catastrophes in Europe is currently insured. For climate-related catastrophes such as droughts, heatwaves and wildfires, the coverage drops to just about 7%. And there are reasons to suspect that coverage may fall even further. There are widespread reports of households and businesses in California and Australia struggling to renew insurance in the wake of devastating wildfires.^[9] So further consideration is needed at national and European levels to ensure the right constellation of risk-pooling is in place to ensure continued coverage. We need to adapt.

Conclusion

Combating climate change requires action from all parts of society. I have mentioned three important ways through which the financial sector can help protect against climate change: through information, innovation and adaptation. The ECB will also contribute within its mandate. Climate considerations played an important part in our recently concluded strategy review.^[10] And climate change is definitely part of our considerations for setting monetary policy and implementing it. The Governing Council has decided on a comprehensive action plan to further incorporate climate change considerations throughout our policy framework.^[11]

We need to not just sit up but take action. All of us, including the financial sector, including central banks, can play their part. And they will.

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 3. Alogoskoufis, S. et al. (2021), “[Climate-related risks to financial stability](#)”, *Financial Stability Review*, ECB, May.
 4. International Energy Agency (2020), *World Energy Outlook 2020*, Paris.
 5. International Energy Agency (2020), *Renewables 2020*, Paris.
 6. De Haas, R. and Popov, A. (2019), “[Finance and carbon emissions](#)”, *Working Paper Series*, No 2318, ECB, September; Popov, A. (2020), “[Does financial structure affect the carbon footprint of the economy?](#)”, *Financial Integration and Structure in the Euro Area*, ECB, March.
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 10. Workstream on climate change (2021), “[Climate change and monetary policy in the euro area](#)”, *Occasional Paper Series*, No 271, ECB, September.
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