

# POLICIES FOR ADDRESSING CLIMATE CHANGE RISKS

## 1. Large scale and global climate related actions are necessary

### 1.1. Climate change cannot be reversed and raises material transition and physical risks

A policymaker stressed that climate change is real, as evidenced by hotter summers, deteriorating weather patterns, and the fires in the Amazon Basin. The changes brought about cannot be reversed but can be slowed down and attempts made to prevent further climate change taking place. Movement to lower levels of greenhouse gas (GHG) emissions in the future is required, as is an eventual arrival at net zero emissions in the EU in the next 30 years.

The effects being brought about by climate change are twofold. First is the transition risk. Investing in an asset with a lifetime of 30 to 40 years, where adjustments need to be made in the next five years, those adjustments come about either through regulation or consumer preference. Assets invested in or which are secured against lending will see a deterioration, in a shorter term than their economic life. Second, there is also physical risk. Where an industrial process is reliant on water for cooling, a sudden drought will cause the business to suffer.

A central bank official noted that, on the physical side, 10% of the value of UK mortgages is on flood plains, and the annual loss rate on those properties is expected to double by 2050. On the insurance side, weather-related insurance loss events have tripled since the 1980s. On the transition side, it is estimated that the proportion of unburnable carbon in the ground is 80% for coal, 50% for oil and 40% for gas, in order to keep below 2 degrees Celsius. UK banks' exposures to high-carbon industries equates to 70% of their common equity base. On the insurance side, 12% of equity exposures and 80% of corporate bond exposures are to high-intensity carbon industries. It is not difficult to see how financial institutions can lose a lot of money in this space.

An industry representative stated that the impact on the real economy will feed back especially on corporate bonds and equity in the first step. Consideration is also needed in the second step of the potential impact on government bonds, where insurers are heavily invested. Indeed, consideration should be given to the impact if the real economy cannot pay taxes as before.

Thought is needed about how these two risks play into the financial industry, and also how they can be tackled.

They are not separate risks. If mitigation and regulation are currently not quick enough, acceleration is required. Both a 'too little, too late' and a 'too sudden, too late' situation need to be avoided, and therefore action needs to be taken now. The real economy needs to be brought along with the financial services industry, investors, bankers and insurers to make the change work.

### 1.2. Facing climate related challenges requires large-scale and global actions including capital flow ones

An industry representative agreed that climate change is real and progress is being made. A large part of this is down to the leadership from the European Union. EU leaders came out in June and reaffirmed the commitment to climate over the next five years. Many European countries Individual contributions are around a target of net zero.

It is important not to treat this as a European-only challenge. Climate, as Europe will experience it, will be determined not just

by the actions taken by the EU, but in the world more broadly. It requires large-scale and global transition. Climate physical and transitional risks do not respect individual regulatory borders or mandates. Action taken in Europe risks being drowned out by the emissions movement from other countries, particularly fast-growing ones in Asia. On a net global basis, action taken in Europe must not displace GHGs to other markets.

There are two other important points on the implications of the next steps of things like the EU taxonomy. Firstly, those likely to see the biggest impact from climate change have probably contributed the least. On a per capita basis, many of the countries that are now rapidly growing emissions are still well below the averages of the EU and others globally.

Finally, there is the role of EU banks, insurers and investors themselves. Europe is the centre of a huge amount of global capital flow. The regulatory framework implemented in the EU will inevitably impact on how capital flows are directed in the wider world. A global, coherent approach is very important.

Action now in the real economy is important, but financial services play a very key role. The representative's company has signed up to the Task Force on Climate-related Financial Disclosures (TCFD) and announced that it will no longer finance any new coal projects. Last year it made a commitment to measure, manage and ultimately reduce all its emissions, scope one, two and three<sup>1</sup>, and the aggregate impact of lending and the emissions it led to, given the scale of this challenge.

### 1.3. Insurance companies are expected to play an important role in further optimising the transition

An industry representative noted that insurers look at the asset side of the balance sheet, but also at the liability side to address physical and transition risks. For insurers, it is about optimally using both sides of the balance sheet to encourage transition to a low-carbon economy, with a global view. To the extent that insurers have a carbon position, it is global, not European.

From the European Insurance and Occupational Pensions Authority's (EIOPA) perspective, it is very clear that insurers have a key role to play not only as important institutional investors but also in helping to provide coverage /services dealing with the risks. Insurers can potentially impact the transition risks with their investment behaviour. By taking climate risks into consideration in investment decisions, being active investors asking questions they can/will impact change. Through their engagement with the economic actors they can play an important role in a gradual transition to a more sustainable and resilient economy. In the insurance market there is the knowledge to deal with the risks faced. This knowledge can also be of help when providing coverage and services to the economy.

In light of available evidence about the impact of climate change on the frequency and severity of extreme weather and climate-related events, affordability and insurability of natural catastrophe protection are likely to become an increasing issue. EIOPA is therefore actively working with natural catastrophe experts to better understand and monitor the protection gap for natural catastrophe. Recent evidence is clear that neither individuals nor the industry alone might be able to deal with these risks. The impact of a protection gap on households and business as well as the financial system could be systemic. There needs to be a concerted action by individuals, NGOs, industry

and governments to see how to mitigate and adapt to climate change risks. As climate risk does not stop as borders a European solution should be envisaged maybe even going beyond climate risks and covering other risks such as terrorist risks as well.

On how to improve the sustainability approach in Solvency II, EIOPA has taken an approach where sustainability relates to all three pillars of the prudential framework: Quantitative, Governance & Risk Management, Reporting & Disclosure. It relates to both sides of the (re)insurers balance sheets: on the asset side the role as investor, on the liability side the role as risk carriers. In light of climate change a sustainable(re)insurance business model needs to be based on the principle of stewardship, both in its investment and in its underwriting activity. (Re)insurance should contribute to climate change adaptation and mitigation. The inclusion of (re)insurance activity in the EU taxonomy, which the TEG consulted on this summer, is an important signal in this direction.

## **1.4. Climate related actions required in both the financial sector and the real economy represent huge opportunities and strong coordination**

An industry representative agreed that the challenge is interconnected in terms of risk types, and the solution requires a great deal of interconnectedness. One element less touched on is the opportunities that the transition presents. This requires action both within the financial sector and the real economy sector, but it is very important to take care to harness that opportunity and help use that learning to help advance the progress required globally.

### **2. Policies for an optimal transition**

#### **2.1. The role of the public sector**

**A clear transition pathway supported by policy signals is essential**

Climate change is a systemic risk and, when looking at it from an investment perspective, it is very clear what needs to be done in terms of the net zero economy but getting there is not clear. Some of the scenario analysis work has shown distinct differences in terms of impacts on different economic sectors, depending on the technology path, timing, policy options, how coordinated or differentiated related policy is, and whether it is focused on energy efficiency, renewable energy, and so on. It is key to think about not just the policy and regulatory levers that need to be pulled, but when to pull them, and a transition pathway supported by policy signals for both the real economy and the financial sector that helps navigate it.

An industry expert noted that whilst climate and the transition is mainly not a finance issue, it is an issue that should be on the top of the agenda of heads of states, economic policy and industrial policy. This is where the lead should come from. Finance is mainly a service industry and will adapt. If there was the signal and ambition young people are asking for, it would not need to be discussed; much of the financial sector would follow. The financial sector often asks for fiscal policies and things like that to make their life easier and provide the certainty required.

A policymaker noted that Europe is in an extremely good place. GHG growth has been decoupled from GDP growth, which is very positive for the overall economy. Europe is also in a good starting place because very firm energy efficiency targets are in place for 2020, reducing GHG emissions and renewable energy. There is also legislation out to 2030 with much certainty as to reducing emissions, increasing renewable energy and improving energy efficiency. A policy paper looking out to 2050 and net zero emissions in the EU has now been published, based on modelling and a number of building blocks; energy efficiency and renewable energy will be part of that, though much of the low-hanging fruit in renewable energy has already been gathered. Adjusting the bioeconomy, and looking more to transport, as well

as really affecting the whole competitiveness of industry, is vital. Potential lifestyle changes which may come into effect have to be considered as well. This is why there has to be awareness of the aim. Everybody needs to be brought along, and the just transition invested in, whereby no person or region is left behind. The changes are huge, and there is not just one pathway.

**The size of the necessary investments requires focusing public budgets on catalysing the involvement of the private sector**

The costs of doing this are immense. To achieve the 2030 targets will mean an extra €180 billion per year investment in energy infrastructure. Going to 2050, those costs are even bigger; around 0.5% of GDP per annum. The whole financial community needs to be brought along. In the meantime, the European budget will do what it can; public budgets can be the catalyst but cannot pay for everything. Climate action needs to be mainstreamed into the future budget. 25% of the EU's budget will be spent on climate action. Research and innovation spending need to increase, which is happening through the International Platform on Sustainable Finance. Europe is responsible for 10% of global emissions and needs to influence everybody else.

A policymaker noted that sustainable finance by definition needs to follow other policies. Taxation plays a role in climate, as does product regulation; some cars have been banned both at the national and even city level. A plethora of policies exist, and sustainable finance takes those as given. Sustainable finance gives incentives to move money voluntarily towards re-orientating capital flows in a sustainable manner. The difficulty is looking at the estimations that have been made. People talk about €250 300 billion additional annual investments needed in Europe. At most EU and the national budgets can provide €40 50 billion. The remaining €200 250 billion must come voluntarily from the private sector.

#### **Leveraging existing economic, civic and political impulses**

The first advantage of this is a civic impulse; people in the street, particularly in Europe, are very alert to it. It is clear that there is a high level of civic attention. In 26 of 28 countries in Europe, people under 30 indicate climate as the number one risk. Secondly, there is the political impulse. As a consequence of politicians wanting to be re-elected, they tend to listen carefully to what the young people in the street say. The Commission issued three regulations. Two were adopted in about 10 months, which was unusually quick. Nobody says they are not advising their clients to put money into climate change. They have not become chairmen of charity institutions, but they have realised that they can make money by investing in this. They have understood the number one rule in finance: no risk, no return; lots of risk, lots of returns. The crucial point is that, because of this civic, political and economic pressure, this is clearly the crucial policy in Europe. Europe will get it right, but is only the third polluter in the world, and 10% of the pollution. The aim is to reduce the other 90%, which is done through cooperation, not in isolation. The international platform for sustainable finance has also been launched.

#### **2.2. Conditions for an optimal involvement of the financial sector**

**Avoiding unintended disbenefits reversing existing impetus**

An industry representative noted the benefit of all of the drivers moving in the same direction, but a real risk that if the transition presents disbenefits to swathes of society, the positive political momentum will start to reverse. Within Europe there is an opportunity to provide models on how that can work in a beneficial way across the economy. GHG emissions do not respect borders. The transition needs to take into account the broader impacts, and also the importance of diplomacy,

learning, understanding the risks, setting policy in a way that is constructive, and importantly mobilising that capital. There are good opportunities connected with blended finance, specifically focusing on where capital is needed. The question is how to mobilise capital in other countries and regions where infrastructure is required to help mitigate and reduce emissions.

The distribution of benefits is important. It can be compared to the last two transformational events that Europe has witnessed in the last 25 years. One was the introduction of the single market, and a fundamental change in how the economies of Europe would deal with one another. The single market was accompanied by mitigating measures, such as structural funds and so on, to compensate for the winners and the losers. The second event was the enlargement in 2004. That was also accompanied by mitigating measures.

### **Customer pressure on the financial sector might help**

An industry expert noted the need to distinguish between the two types of financial institutions. Some are mission-driven, such as a whole range of public finance institutions, development finance institutions, and so on. Then there are profit driven financial institutions. Their job and where they excel is looking for the optimal risk/return ratio. They should not be counted on to save the planet suddenly by themselves. However, despite not being equipped and not being at the centre of the governance model, they are making efforts and are moving.

In terms of what can move the private sector, which contributes the bulk of finance, customer pressure might help. There are reputation issues that can relate to that, but mainly it is the stability angle and the voice of central bankers or regulators, and the action plan from the Commission. The direction needs to come from outside, which is where the Network for Greening the Financial System (NGFS) should continue taking action and showing leadership.

### **Addressing the data and transparency challenge**

An industry representative noted that there has been talk about bringing the real economy along, which in some respects is right to be encouraged. In other respects, if the goal is to incentivise customers to transition, one of the issues is whether enough information is coming out of the real economy to be able to assess transition risks with a greater degree of accuracy. The financial industry is doing its part in relation to taxonomy and disclosures, and that needs to be extended to the real economy.

Different industries and companies are at different stages of development. There is no doubt that broader disclosure would help that transition. The taxonomy is helpful, so everyone speaks the same language, but flexibility must be maintained.

An industry representative noted that the scale of the challenge and opportunity, and the investment shift required over the coming decades, are significant. It will need public action and the private sector. Information is important for the financial sector to take the next steps. A recent speech by Mark Carney declared that for markets to anticipate and smooth the transition requires the right information, proper risk management and a credible policy framework. The financial sector has done a great deal of analysis work. However, without the data from the real economy further analysis and thinking, not just through the first reactions but second and third order reactions, are quite challenging. Collective action across both the public and private sectors to improve the availability of data from the real economy would enable consideration of the right policy choices.

A central bank official noted that the Bank of England has done a number of investigations into the UK financial sector, starting with insurance in 2016, and recently issued a supervisory statement. The Bank of England is committed to a quantitative climate stress test of the major banks in 2021. It is unclear what will be the best way to do this. There are a number of difficult

questions to think about when doing a quantitative version, including, which of the various scenarios should be used, what kind of timelines should be used, whether to do a static or dynamic balance sheet, and how to deal with management actions. The most difficult question may be which assumptions firms should make about second and third order actions of real economy actors. This goes to the point of improving disclosure as well as awareness of the exposures.

### **2.3. Regulatory efforts made to improve the information flow in the economy**

A policymaker noted that three regulations have been put out dealing with the three phases of the investment: before investment, once invested, and after investment. The first is the regulation on disclosure and financial advice, which takes onboard the recommendations of the TCFD, which many companies in the world have signed up to. The disclosure directive imposes the so-called double materiality around the effect of environmental change on the value of assets. Secondly, the taxonomy is in sustainable finance and giving incentives. It is not a compulsory tool, but an invitation for those who invest to contribute to the achievement of those results. The market will know whether a company has decided to finance or stop financing something. For the moment, all sustainable finance action is done in pillar 3, through the mechanism of market disclosure. The third regulation is the benchmarking regulation. The benchmarks are not Paris-aligned, which would be too demanding presently. There is also a benchmark for the transition. This operation is about ensuring all economy transitions move towards the sustainable.

For EIOPA as supervisory authority it is key to understand, assess and monitor risks and help to mitigate them. In view of this EIOPA is heavily involved in the NGFS, the Commission work to develop a taxonomy, having roundtables and workshops for developing our work to ensure strong engagement with industry, stakeholders and academia. It is key for supervisors and the industry to understand and assess the issues at hand. To better understand and assess these risks EIOPA included qualitative questions assessing environmental, social and government (ESG) factors in the pensions stress test and is developing a sensitivity analysis to assess the impact on transition risk on insurers portfolio together with the “2 degree investing initiative” and hopes to finalize the work by end 2020. EIOPA is also discussing how to enhance the assessment of ESG factors and scenario analysis in stress tests going forward and is actively working with natural catastrophe experts to better understand and monitor the protection gap for natural catastrophe. With its enhanced mandate under the revised ESAs regulation EIOPA will also continue providing technical advice to the EU institutions e.g. by providing an opinion on how to integrate sustainability within Solvency II.

The Commission has taken steps in the right direction with disclosure and benchmarking, but lack of underlying data limits the ability to act more quickly and strongly. On the protection gap, data is needed to assess the impact better. A taxonomy is required so that everyone can speak in one language. It will be a costly endeavour to go into that direction, but it is key to know and consider the underlying risks.

<sup>1</sup> Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect upstream and downstream emissions (not included in scope 2) that occur in the value chain.