When Bank of England governor Mark Carney gave his famous speech on climate change almost two years ago, he mentioned '*the tragedy of the horizon'*. He was referring to how the catastrophic impact of climate change will be felt beyond our traditional horizon – imposing a cost on future generations that the current generation has no incentive to fix.

The country where I'm from is a striking example of this phenomenon. One quarter of the Netherlands lies below sea level. This area is home to nearly one third of the population, and the heart of our economy. Although we are highly vulnerable to the effects of global warming, we still have one of the most carbon-intensive economies in Europe. As well as being heavy oil and gas consumers, we are also a major producer and exporter of it. So perhaps I'm not in the best position to preach to the world about the risks of climate change. But as a representative of an organization whose mission is to safeguard financial stability and contributing to sustainable prosperity in the Netherlands, climate change is a serious concern for me.

Fortunately, a number of recent events have presented us with a new horizon, the horizon for action on climate change. The most notable of these is the Paris Climate Agreement, which entered into force last November. I will briefly mention the unfortunate recent development in that respect later on, but today I'd like to concentrate on what this action on climate change might look like. I'd also like to offer some observations on the importance of managing climate-related risks for you as financial institutions. And lastly I want to provide you with an insight into the business opportunities that are available to you. And as the right rules and incentives are introduced, these opportunities will only become ever more numerous and attractive.

The theme of this conference is 'Responding to Sustainability Regulation.' What I want to stress to you is that, rather than waiting for the regulators, you must act now: To manage climate-related risks and seize the opportunities that the transition to a low-carbon economy offers. In the words of Axel Weber, written on the invitation to this conference: '*Finance is about seizing opportunities and managing risk*.' That's the spirit of the British financial sector. That is what you're good at.

So what could this action look like? After decades of scientific research on climate change, we have now entered the era of action. Climate change is no longer exclusively the preserve of scientists. Today it is also a challenge for policymakers and business people. A crucial driver of this is the Paris Climate Agreement. The agreement establishes a global commitment to limit global warming to well under two degrees Celsius. Very importantly, it provides for monitoring the reduction of emissions, and forges a pathway for more ambitious efforts, if current policies fall short of that goal. The Paris agreement has sent out a very strong signal that policymakers and regulators will intensify their efforts over the coming years.

The fact that the United States has withdrawn its support is of course no small setback. But I am confident that the international community will rally together, set the right example, and press on with implementing the Paris agreement. Today's announcement of a climate accord between the State of California and China is a vivid example of this.

China, once being amongst the world's largest polluters, is now becoming one of the global champions of renewable energy. Just a few days ago, the EU and China reinforced commitments to the Paris Agreement, pledging to:

- cut back on fossil fuels
- develop more green technology and
- help raise $100 billion a year by 2020, to help poorer countries cut their emissions.

So despite the setback, this is an encouraging development.

Numerous other initiatives, both on the national and international level, are already underway.
Allow me to name a few. At the end of 2015 the Financial Stability Board launched a private sector Task Force on Climate-related Financial Disclosures (TCFD). Led by Michael Bloomberg, the task force also draws its members from the British financial sector, including UBS. The consultation period for the report ended just a few days ago. The report contains recommendations for an efficient and voluntary framework for climate-related financial disclosures. And these recommendations can be used by companies across all sectors.

The potential impact of this framework, when put in practice, can hardly be overstated. For the first time, it will provide investors, lenders, insurers and other stakeholders with information about the concentrations of carbon-related assets in the economy and exposures to climate-related risks. Reliable, comparable and forward-looking information that will significantly improve your ability to assess, for example, how exposed potential investment targets are to the clean energy transition, and what they intend to do about it. Information that is crucial for kick-starting a functioning market for climate-related risk.

At a European level, the High Level Expert Group on Sustainable Finance will submit its interim report to the European Commission within the coming weeks. The Group's mission is to provide recommendations on hardwiring sustainability into the EU's regulatory and financial policy framework, identifying obstacles to sustainability in finance, and mobilizing more capital flows for sustainable investments.

I have the privilege of being a Group observer, so I can already tell you that the interim report will contain policy options that will be both concrete and far-reaching. It is now too early to go into any detail, but I would urge all of you to closely study it once it comes out and participate actively in the public consultation.

It is also important to pay attention to prudential regulation of financial institutions: incorporating climate factors in the risk management of banks and insurance companies will become both a mainstream and a regulatory requirement. And this will happen sooner rather than later. Regulators don't even have to completely change the rules for this. After all, already under current regulations, financial institutions must manage all relevant risks. Well, climate change <u>is</u> a relevant risk. Financial supervisors could implement this focus on climate risk management tomorrow. As a matter of fact, we do. In my view, all should.

Similarly, financial institution should be aware that regulations on disclosure of sustainability factors, including climate risk, are likely to be tightened. For instance, in France, specific reporting obligations are already set out for a range of financial institutions, on how they should integrate sustainability factors in their risk management. Regulators could also encourage or require sustainability knowledge and competence of board members, for example as part of fit and proper testing.

And that's not all. Government intervention will not be confined to the financial sector, but will cover the entire economy. The UK, back in 2008, was the first country in the world to enact comprehensive general climate legislation. More and more countries, from Sweden to Mexico, from France to Singapore, are following up on their commitments under the Paris Agreement by adopting and implementing climate transition laws. The Dutch Central Bank has publicly advocated for a climate law being passed in the Netherlands as well. These laws are intended to provide a predictable pathway to a low-carbon economy. These include clear targets, and new regulation to meet them on time.

The point of all this is not to give you a comprehensive overview of all the new regulation coming at us, but to signal that when it comes to climate change: governments mean business. And that has profound implications for the risks and opportunities your company faces. And even the greatest climate sceptic on Earth cannot afford to ignore these risks. At the same time, new regulation will create great opportunities for those who invest with foresight. And as the financial sector, seizing opportunities and managing risks is your core business.
Being a prudential regulator, you'll forgive me if I start by discussing the risks.

There are generally two types of climate-related risk. First, physical risks: the impact today on insurance liabilities and the value of financial assets arising from climate-related events, such as floods and storms that damage property or disrupt trade. Second, transition risk: the financial risks that could result from the process of adjustment towards a low-carbon economy. Changes in policy, technology and physical risks could prompt a reassessment of the value of a large range of assets as costs and opportunities become apparent.

While some are still debating the scientific evidence for climate change, representatives of the insurance industry know that physical climate risks are already a reality, affecting their underwriting strategies. As Governor Carney stated in his climate speech, a Lloyd's of London study estimated that the twenty centimeter rise in sea-level around Manhattan since the 1950s increased insured losses from superstorm Sandy by 30% in New York alone.

Ever since Hurricane Andrew in 1992 led to serious losses, the insurance industry has used natural catastrophe models to analyse and measure risk more accurately. Use of these instruments is now the norm. Insurers therefore seem well-prepared to manage physical risks in the near term.

But further ahead, beyond the typical insurer's horizon, previously unimagined levels of physical risk could shift the balance between premiums and claims significantly. This threatens solvency, and may even make some risks uninsurable. If high levels of greenhouse gas emissions continue, scientist predict that oceans could rise by close to two meters by the end of this century. Just think of the threat to the combined value of coastal property. And by the way, this estimate could turn out to be on the conservative side, given current uncertainties surrounding the stability of the Antarctic ice shelfs.

While physical risks pose a serious threat, transition risks may be even more important for financial institutions. Transition risk could also be called the risk of success. Take for example the commitment made in Paris to limit global warming to well under 2 degrees Celsius. Estimates vary, but it is certain that the remaining budget for carbon emission relating to this target will make large amounts of existing reserves of oil, gas and coal unusable. The exposure of financial institutions to the resulting write-offs of these stranded assets and the repricing of companies is potentially huge, and could pose a threat to financial stability. Possible delays in policy changes do not remove these risks, but magnify them. This is because we may see more significant and abrupt policy changes and market adjustments further down the road. This is very important: the longer we wait, the more radical the measures need to be.

What I want to stress to you is that despite the uncertainty, or even controversy, about the pace at which new policies are implemented, financial institutions and regulators have to take transition risks into account. Also here, the horizon for action is approaching fast. Climate-related risk is rapidly becoming a mainstream risk that financial institutions have to manage, using for example scenario analysis. And it’s not just the regulators. Increasingly, markets and investors are asking: how do you model and identify relevant trends and risks? How robust are your strategies given different scenarios and contingencies? Some institutional investors see climate risk management as a key indicator for the quality of board-level risk management.

Similarly, if you’re an investor, and you’re not already asking questions about how companies you invest in approach these risks, then it’s high time you did.

We’ve looked at the risks. Now let’s turn to the opportunities. Financing the transition to a decarbonized economy presents a major opportunity for financial institutions. It implies a sweeping reallocation of resources and a technological revolution. Estimates for investments required in areas such as efficiency improvements, renewable energy, nuclear energy, carbon capture and storage amount to as much as 1 trillion euro annually. Technological innovation is assisting this transition. This includes developing efficient heating solutions, advances in LED lighting technology, utilizing geothermal power, and developing electric vehicles.

I know there is still considerable uncertainty about the potential returns on these investments. But I expect this uncertainty to diminish significantly as international disclosure standards make climate risk more transparent, and governments introduce clarity by setting targets, rules and deadlines. This has the potential to transform green investment from a niche market into a major investment class of its own..

Let me give you an example of how public policy can kick-start a whole new market for green investment: early this year the Dutch housing ministry introduced new rules requiring all commercial real estate in the Netherlands to have an energy rating label of C or better as of 2023. Buildings that fail to meet this requirement can no longer be used as offices. Dutch banks are getting involved by adding surcharges to, or outright withholding, funding for non-sustainable buildings. At the same time they are offering energy efficiency plans and financing to owners that need to upgrade their buildings. Expectations are that the estimated 860 million euro in investments necessary to meet the target will be realized much earlier than 2023.

There are more examples. I name but two: All new public transportations busses in The Netherlands will be emission-free as of 2025. According to current government policy in The Netherlands the same holds true for all new passenger cars of 2035.

My expectation is that this process will play itself out over and over again in an increasing number of sectors within the economy. Public authorities will set deadlines. Deadlines for zero-emissions/climate neutrality to be reached by a certain date:

- in public transportation
- in shipping
- in aviation
- in housing
- in agriculture
- in manufacturing etc etc

And the private sector will jump on the opportunity. And often beat the deadline. As it makes business sense to do so.

After all, by acting now, financial institutions have a first mover advantage over their competitors. They can build up specialized knowledge that is valuable for assessing risk and return. For example, over 90% of wind farms in the Netherlands are financed by one bank. The same argument applies to all kinds of financing for frontrunners in sustainability. Despite uncertainty over how public regulation will develop, there is still plenty of opportunity for no-regret actions.

Ladies and gentlemen,

International consensus has been growing for some time that climate change is an urgent problem. What is new is the growing resolve among governments across the globe to do something about it. And I am convinced that the recent setback because of the decision of the present US administration will serve only to strengthen the resolve of the global community, including many, many public and private actors in the US, and foster even greater international cooperation.

Both climate change and government action will create new risks and opportunities. Risks and opportunities that you can and should anticipate today. So sit around the table with your authorities to discuss the obstacles for sustainable finance, and what changes in regulation are necessary. As our experiences with the Platform on Sustainable Finance in the Netherlands show, your input is highly valuable.

Don’t get me wrong: I am not here to sell you anything. As a regulator it is not my place to convince you to start financing green investment, or to buy green bonds just for the sake of it. Some of you may even be skeptical about the scientific evidence for climate change, still others may doubt the ability of governments to take action. Coming from an oil and gas-addicted little country below sea level, I would understand you for not believing me.

But you don’t have to. As uniform disclosure standards start to be adopted better information will become available about the carbon intensity of companies, and how they manage their risks and prepare for a low-carbon world. Information that will allow you to assess for yourselves how their valuations might change over time, and what the risk is to your capital. Information that brings the horizon more sharply into focus.

On this very day, 6th of June, 73 years ago as part of operation Overlord 62,000 British soldiers crossed the Channel to liberate Western Europe from barbarism. Churchill said of the Normandy landings:

“This vast operation is undoubtedly the most difficult that has ever occurred.
It involves tides, wind, waves, and contact with conditions which cannot be fully foreseen.”

Those soldiers overcame the challenge brilliantly by showing courage, devotion and skill. And I believe this spirit is still alive and well in the British business community. It’s the spirit that does not walk away from a challenge, but stands up to meet it, and turns it into an opportunity. Not oblivious to risk and danger, but with your minds and motives sharpened by it. Aware that what is in your company’s interest also helps preserve a world that is rapidly changing.

The challenge today is called climate change. Let’s be aware of the risks and turn them into opportunities.

Ladies and gentlemen I wish you a productive, stimulating and memorable conference.

Thank you.