



Private capital as a force to limit climate change

Long term investors' expectations for a global agreement on climate change

INTRODUCTION

Sustainable growth does not just happen on its own. Political and executive leadership is required to create conditions that keep investments in green growth attractive; policies that over the long term provide certainty. This paper describes our ambitions, ideas and needs. In order to increase our joint investment ambitions, the role of the governments is critical. It is of utmost importance that policies are reliable and undesirable effects of the supervision of financial institutions that impede investment in green growth are critically assessed. We therefore urge policymakers to act on the recommendations in this paper:

- Innovative de-risking models based on blending public and private finance could help to overcome the constraints that climate related investments in developing countries face: high political and financial risks.
- We strongly advocate mechanisms that put a price on carbon, as they are best at shifting capital and knowledge towards the most efficient solutions.
- Policymakers should increasingly support and explore the opportunities within energy efficiency in order to drive innovation, unlock private capital and mitigate risk of energy price volatility.
- Closer cooperation between public and private parties aiming at creating a stable investment environment is necessary to boost impact investing.

Together we believe we can counteract climate change, which is more than ever necessary.

Key messages

1. Collective pension arrangements are ideally positioned for investing in society

Because of their long-term horizon and liabilities, collectively organized pension funds strive for long-term profit. As the Danish, Dutch and European economy sorely need long-term investments in the real economy, pension investors are a the natural match with long-term value creation, in a social as well as an economic sense.

2. Climate change has a long-term impact for pension funds

Because of their long investment horizon, pension funds (and other long-term investors) need to consider and prepare for scenarios that might get overlooked by short-term issues, but which potentially have dramatic consequences in the long run, both for society and for their portfolios. Investment opportunities that address major challenges for society, such as climate change, are increasingly sought after.

3. Climate change is a key area of focus for PGGM and PKA

Climate change has an impact on society and the valuations of companies in which we invest in. For example, investment risks could increase because property may become flooded, political instability as a result of droughts may increase or because companies may lose value if they are no longer permitted to exploit their coal reserves to limit CO₂ emissions. On the other hand, investments in wind farms, for example, can contribute to solving the climate change issue while at the same time creating financial returns.

4. An ambitious agreement in Paris is a critical step to give investors certainty

An agreement in Paris, including a long-term international emissions reduction goal and strong national plans, with the aim to limit average global temperature rise to 2°C, will set a clear pathway in favor of a low carbon economy and give investors clarity. This will reduce policy risk, incentivize R&D, facilitate the deployment of new technologies and create new jobs.

Who are PGGM and PKA?

PGGM is a service provider for various Dutch pension funds, which have more than 2.6 million participants. On their behalf PGGM invests €180 billion in pension assets. PKA is a Danish pension administrating company which manages €30 billion for close to 270.000 participants on behalf of three pension funds. Both PGGM and PKA have origins in the healthcare and welfare sector. Our mission is to provide a good pension for our clients' participants.

What motivates PGGM and PKA

The long term

Pensions are all about long-termism, which means they can be geared towards stable, good, long-term yields.

Sustainable and responsible investment

We are conscious of the impact the actions we take today will have on the world of tomorrow and we use the driving force of capital to support sustainability and enhance returns in the long run.

PGGM and PKA seek dialogue

We continue to strive for good pensions, in the interests of our customers and their participants. Contributing to solutions for climate change is an important aspect of our aim of meeting the long term pension ambitions.

We believe that collaborative action between investors, policymakers and regulators is necessary for capital to be the driving force that brings real change. That is why we are determined to engage with likeminded stakeholders, policymakers and regulators.

PGGM AND PKA ACT

We are convinced that reducing the negative effects of climate change requires more sustainable growth initiated by the private and public sector, i.e. economic growth based on more renewable energy and a reduction in the wastage of raw materials. Sustainable growth offers opportunities. We are currently investing in renewable energy, such as wind energy at sea and on land, and in clean technology that contributes to greater efficiency and reduced wastage of raw materials. Encouraged by our clients, we want to grow these investments over the coming years. In order to increase our climate friendly investments, we need to address challenges in especially the areas of (1) developing countries, (2) carbon pricing, (3) energy efficiency, and (4) our commitment, outlined below.

1. Developing countries

Blended finance

Innovative de-risking models based on blending public and private finance could help to overcome the constraints climate related investments in developing countries face: high political and financial risks.

At the UN climate summit in Copenhagen in 2009 (COP 15) it was decided that the developed countries should raise capital for climate investments in developing countries. The objective is to raise USD 100 billion a year from 2020, and part of the funds should come from the private sector.

According to the International Energy Agency (IEA) the total investment required to avoid dangerous climate change exceeds USD 1 trillion per annum. We are not even halfway, despite the enormous investment potential. The fastest growing economies are developing countries. Their need for private investments to boost development is enormous and blending public and private capital could attract between USD3 and 15 of private capital for every USD1 of public money.¹

At the same time investors, both within and outside developing countries, are increasingly looking to partner with governments and donors to diversify their portfolios into new opportunities that generate higher yields. While public and private actors are seeking to mitigate key risks through innovative investment programs, very few mitigation mechanisms have scaled up or otherwise adapted fully to the standard that is needed to catalyze greater

private flows. Hence, there might be unrealized potential to deploy innovative financing models and public risk mitigation tools to leverage private finance, reduce transaction costs, and help satisfy the risk-return ratio of potential private investors.

In order to increase climate related investments in developing countries, PGGM and PKA urge governments to:

1. Commit to the Green Climate Fund at COP21.
2. Develop innovative de-risking models to mitigate the political and financial risks of climate related investments in developing countries.
3. Bring together relevant parties like investors, development banks, export credit agencies and companies in order to promote funds similar to the Danish Climate Investment Fund on a European and international level.

Showcase: The Danish Climate Investment Fund

PKA has invested € 27 million in The Danish Climate Investment Fund, which invests in projects, which – directly or indirectly – contribute to reduction of the emission of greenhouse gases. The fund provides risk capital in the form of equity or mezzanine financing for climate projects in developing countries. The Danish government and IFU, the Danish Investment Fund for Developing countries, have contributed € 70 million and private funds of a total of € 104 million have been contributed bringing the total commitments up to € 174 million.

Until this date, the Danish Climate Investment Fund has since inception in 2014 approved six investments. These cover a wind farm in Kenya with Vestas, a production company within wind energy in China, development of bioethanol in China, a number of solar energy installations in the Maldives, production of valves in Brazil, and finally a company which will develop wind and solar parks.

Showcase: investments in solutions in emerging markets

PGGM invests some € 150 million in solutions for climate change in emerging markets through several local funds: it has invested in a private equity fund of Tsing Capital, which focuses on investments in the clean technology and environmental sectors in China. Furthermore, PGGM has invested in Adecoagro, a farm holding that is active in the production of food and renewable energy in South America. Adecoagro recently expanded its combined sugar and ethanol plant in Brazil, without substituting food production with sugar cane production.

¹ United Nations Environment Programme



The relative modest size of these investments and the lack of any climate change related investments in developing countries show that at this stage, the right conditions are not yet sufficiently in place for PGGM and its clients.

2. Carbon Pricing

Shifting capital towards the most efficient climate change solutions

We strongly advocate mechanisms that put a price on carbon, as these mechanisms are best at shifting capital and knowledge towards the most efficient solutions.

Carbon pricing mechanisms have the potential to create a global reduction plan. Over 40 countries and 20 sub-national jurisdictions have implemented such mechanisms and several large countries are in the process of introducing such mechanisms. In addition, over 400 companies - including some of the largest multinational corporations - are now assigning a price to their carbon emissions to offset the costs and risks of their greenhouse gas production. Connecting and expanding these mechanisms to create a globally connected carbon pricing mechanism will enhance the mechanism, as it enables more liquidity and less price volatility. It will also contribute to a level playing field preventing carbon leakage through export of emissions to regions with no price for carbon or without any other climate change policies. Moreover, it will help shift capital towards the most efficient climate change solutions at global scale.

A meaningful and stable price on carbon will shift the burden for damage to those responsible for it, and those who can reduce it. It also stimulates clean technology and market innovation, fueling low-carbon

drivers of economic growth by introducing an economic signal, which creates a direct incentive for carbon efficiency to companies we invest in. In addition, a reliable system with a meaningful and stable carbon price will create certainty that is needed for the long-term investment decision making that renewable energy projects often require. In theory, market based mechanisms are the preferred option, as the required shortage of supply of carbon emitting permits that is necessary for a sufficiently high price will correspond with the carbon reduction that is necessary to prevent the worst effects of climate change. Unfortunately, creating sufficient shortage turns out to be a challenge. This should be addressed in the design of such systems.

In addition to direct climate change policies, most countries or regions have energy policies and tax systems that influence (corporate) behavior and impact carbon emissions. For instance by directly subsidizing fossil fuel extraction like coal mining (which is allowed in Europe until 2018) or by providing tax benefits for energy consumption. This is poorly spent government budget, as it will only increase future spending on adaptation to and mitigation of climate change.

In order for carbon pricing mechanisms to make an impact at global scale, PGGM and PKA encourage policy makers to:

1. Implement powerful and ambitious carbon pricing mechanisms that are aligned with national and international carbon reduction targets.
2. Establish links between existing markets by harmonizing benchmarks, registry, monitoring and enforcement.
3. Develop a more holistic approach for climate change and energy by aligning all relevant policies and regulations, aiming at reduction of carbon emissions and enabling low carbon energy transition.

Showcase: halving the carbon footprint of the investment portfolio of PFZW by 2020

PGGM's main client PFZW - the Dutch pension fund for the healthcare sector, investing over € 160 billion - has made a pledge to halve the carbon footprint of its investment portfolio by 2020. PFZW acknowledges that climate change is one of the most important global challenges, which requires strong and quick action. With its ambition to half its carbon footprint, PFZW hopes to inspire policymakers, peers, companies and other stakeholders to commit to a comparable contribution.

Through signing the Montreal Carbon Pledge, both PGGM and PFZW have taken the first step in this process to measure and disclose the carbon footprint of the listed equities portfolio. Through a partnership with GeoPhy, PGGM will be able to measure and disclose the footprint of its complete real estate portfolio at individual asset level. The first portfolio changes will be implemented in the beginning of 2016 and will contribute to halving the footprint in 2020.

Showcase: divestment from coal mining

PKA is the first Danish pension fund to exclude 31 coal-mining companies from the investment portfolio due to financial and climate related concerns. In addition, PKA has initiated dialogue with 23 mining and utility companies that generate 50-90% of their turnover from mining coal or producing energy based on coal. These companies have to put forward a business plan, which shows initiatives that reduce their exposure to coal. Companies that fail to do so will be excluded from the investment portfolio. Going forward, carbon intensive companies will in a low carbon scenario impose a risk to PKA's investment portfolio, a risk that will be accelerated if more effective carbon pricing mechanisms are introduced by policy makers. PKA will in 2016 subsequently introduce new initiatives to reduce the exposure to carbon intensive companies.

3. Energy Efficiency

The ultimate public-private challenge

Policymakers should increasingly support and explore the opportunities within energy efficiency in order to drive innovation, unlock private capital and mitigate risk of energy price volatility.

Energy efficiency is often overlooked as driver for energy security, cost savings, and as a climate change mitigation instrument. Projections reveal that under existing policies, the vast majority of economically

viable energy efficiency investments will remain unrealized. Projections to 2035 by the International Energy Agency (IEA) show that as much as two-thirds of energy efficiency potential will remain untapped unless policies change.

A report by IEA shows that large-scale energy efficiency policies show positive outcomes with economic growth ranging from 0.25% to 1.1% per year and potential to create 8 to 27 jobs for every € 1 million invested in energy efficiency measures. In addition, increased energy efficiency in buildings could add as much as € 30 - 40 billion to the European public budget whilst supporting EU's 2020 energy efficiency targets of 27% energy savings compared with the business-as-usual scenario. This emphasizes that energy efficiency both can contribute to mitigating climate changes and save public budgets of billions.

Given the Intended Nationally Determined Contributions (INDCs) many states have published ahead of COP21 in Paris in December 2015, accelerating investments in increased energy efficiency will be a prerequisite to meet these targets. There is a variety of financial instruments (e.g. risk-sharing facilities, subordinated loans, covered bonds, energy efficiency funds, and green bonds) that may be used to finance energy efficiency.

In order to accelerate investment in energy efficiency PGGM and PKA encourage policy makers to:

1. Use public funds, tax credits and grants to accelerate and de-risk investments in energy efficiency.
2. Scale investments in energy efficiency by adopting innovative financing models through blending of private and public capital.
3. Enforce stricter energy standards across high emitting sectors in order to drive innovation.

Showcase: SustainSolutions

PKA has together with the energy renovation company, SustainAir, launched the € 40 million energy renovation fund, SustainSolutions.

SustainSolutions offers fully funded energy renovation based on a package of well-defined energy services with a high return rate and will provide clients with a loan in order to finance the energy renovation. SustainSolutions will measure a clients' energy consumption before and after the implementation. Savings are split between the client and SustainSolutions, and once the loan is repaid, the full savings will pass to the client. This means that clients are of no need to provide any upfront funding, which typically can be a challenge for both the private and public sector.



Showcase: London offices

PGGM has launched a London Office joint venture Partnership with a local partner. The joint venture, named Vantage, has been set up to source attractive Central London office investments. With a focus on impact investment, the Partnership will look to integrate material environmental, social and governance (ESG) aspects throughout its assets, in turn realizing a strong ESG performance. All acquired offices will be compared to industry benchmarks and measures will be implemented to resemble best practices and reduce energy with a minimum of 25%. The partnership will also focus on reducing waste and water use. By (re)developing sustainable buildings and managing them efficiently, the Partnership reduces the risk of obsolescence and enhances the long-term value of the assets.

4. Our commitment

Directly investing in climate solutions needs public-private responsibility

Closer cooperation between public and private parties aiming at creating a stable investment environment is necessary to boost impact investing.

PGGM's largest client PFZW and PKA have set an ambitious target to substantially increase investments that directly contribute to sustainable development, including climate change. We will look for investment opportunities in all asset classes and we particularly have high expectations for our infrastructure investments, which will support Europe's climate change and energy ambitions for 2030.

Our ambitions as shown below display our willingness to take part in the transformation to a sustainable economy. However, the capital does not always find the most desirable destination.

In order to increase impact investing, PGGM and PKA encourage policy makers to:

1. Use regulation to encourage long term investing in the EU economy in order to provide long-term investors with a stable regulatory environment
2. Commit to ambitious and clear mitigation and development goals, which will spur investor appetite for sustainable projects
3. Bring private and public interests in line by linking private capital to public projects in which we define shared goals, collaborate and share both risk and returns.

Future ambitions:

PKA and PFZW are pension funds with very large allocations to climate related projects and we aim to invest even more. PGGM has on their client, PFZW's, behalf made considerable investments in clean energy, e.g. €100 million in the Walney offshore windfarm in the Irish sea, which will avoid emissions of over 750.000 tons of CO₂ and €250 million invested in renewable energy infrastructure funds, which collectively avoid 700.000 tons of CO₂.

PKA has e.g. invested €850 million in four wind farms, €140 million in green bonds financing increased energy efficiency and renewables, €550 million in sustainable forestry, and €30 million in The Danish Climate Investment Fund financing climate projects in developing countries.

Both PKA and PGGM aim to increase our sustainable investments. PFZW has made a pledge to quadruple these investments by 2020, which means the portfolio will grow from €5 billion to €20 billion in 2020 and PKA has pledged to invest €3 billion in 2020 and hence almost doubling the current investments.

To meet our ambitions is a huge challenge, given the relative scarcity of large-scale investments that combine both a financial and a sustainable return. We therefore encourage global leaders to take action and together with the investor community accelerate investments in sustainable projects by discussing the incentive structures for sustainable growth. We should together focus on the opportunities rather than the constraints and accept that the current direction is not sustainable. As responsible investors with participants supporting a global sustainable transformation, we are committed to being a part of the solution and contribute to close the current financing gap.

PGGM and PKA seek dialogue

PGGM and PKA will continue working towards a more sustainable financial system, in the interests of our customers and their participants. Of course, this also involves looking at our own behavior—but we cannot single-handedly bring about change. That's why we are determined to engage with likeminded stakeholders and the regulator.

PKA

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European pension fund service providers PGGM and PKA have an innovative knowledge exchange that eventually aims to look for joint investment opportunities as well as improving the way the funds conduct risk management and the benchmarking of investments, costs and socially responsible investing.