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RESPONSIBLE FOR OUR FUTURE?

DANISH PENSION FUNDS & THE CLIMATE CHANGE CHALLENGE

*English version - This has been translated from the WWF-Denmark 2014 report **Ansvar for fremtiden?***

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WWF is one of the world’s largest and most experienced independent conservation organizations, with over 5 million supporters and a global Network active in more than 100 countries.

WWF’s mission is to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature.

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EXECUTIVE SUMMARY

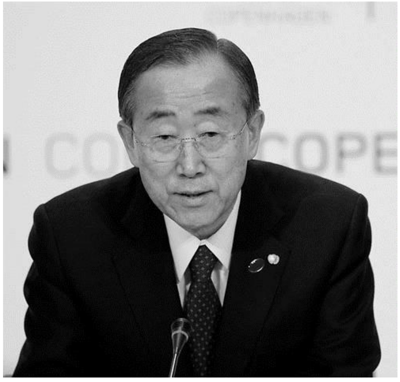
Awareness has increased in recent years of the importance of pension funds investing responsibly. This report aims to outline the extent to which current strategies and investments of Danish pension funds reflect the climate change challenge and the need for a green energy transformation.

It is becoming increasingly clear that it is one of today's greatest challenges to keep global temperature rise below two degrees Celsius (2°C), compared to preindustrial levels. This is the upper limit to avoid catastrophic climate change as set by the international community.

In its new synthesis report, the Intergovernmental Panel on Climate Change (IPCC) reaffirms that human activity is the main cause of global warming and that we are heading towards violent changes in climate. Climate change is already contributing to an increasingly unstable climate and extreme weather. Continued temperature rise implies an increase in the melting of Greenland's ice and of the world's glaciers, rising sea levels, more frequent heat waves and droughts, and increase in torrential rains and floods. At the same time, climate change will reduce economic growth, increase poverty and threaten food security. In addition, climate change poses a global threat to species and biodiversity.

The combustion of fossil fuels - coal, oil and gas - is the main cause of global warming. The International Energy Agency (IEA) has estimated that at least two thirds of known reserves of coal, oil and gas must remain in the ground, if we are to stay below the 2°C limit.

"I HAVE BEEN URGING COMPANIES LIKE PENSION FUNDS OR INSURANCE COMPANIES TO REDUCE THEIR INVESTMENTS IN COAL AND A FOSSIL FUEL BASED ECONOMY TO MOVE TO RENEWABLE SOURCES OF ENERGY."



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BAN KI-MOON, UN SECRETARY GENERAL

Presentation of IPCC's Fifth Assessment Report on Climate Change
November 2, 2014

The risks associated with ignoring climate science warnings are huge, and the longer action is postponed, the more expensive it will become. Therefore, it is vital that major efforts are made globally in the coming years to transform the energy sector. This requires massive investments in fossil fuel to be transferred to investments in green energy technologies, defined in this report as *renewable energy and energy efficiency* solutions.

As UN Secretary General Ban Ki-moon emphasized during the presentation of the IPCC's fifth report on climate change, pension funds play an important role as they, through the investments of their pension assets, can help to provide financing for the green transition.

This report shows that, although there is an increasing trend towards greener investments, Denmark's largest 16 pension funds continue to invest significantly in fossil fuels.

This report contains two analyses. One is of pension fund investments in oil and gas companies involved in economically and environmentally risky oil projects, such as drilling in ice-filled oceans in the Arctic, deep sea drilling, or unconventional oil production (i.e. tar or oil sands extraction). The other is a qualitative study of the pension funds' climate consciousness, looking at the extent to which climate considerations and green energy investments are incorporated into the companies' strategies.

MAIN CONCLUSIONS

1. All the investigated pension funds invest in the fossil fuel energy sector, including in oil and gas companies known for their economically or environmentally risky fossil fuel projects. This includes companies like Gazprom and BP, which have attracted highly negative attention in recent years: Gazprom from high-risk drilling in the Arctic and BP from the oil spill disaster in the Gulf of Mexico. Investments in high-risk companies can put the savings of pension holders at risk.

2. In total, those Danish pension funds hold equity investments of almost US$1.2 billion in 17 high-risk companies. These investments alone lead to potential future CO_2 emissions over 4.6 times the size of Denmark's annual emissions. In the worst-case example of Unipension, the investments of individual pension holders could result in the 241 tonnes of CO_2 emissions – an amount 30 times greater than the average Dane's annual CO_2 emissions.

3. None of the assessed pension funds has set goals for divesting fossil fuel assets. Continued investments are often justified by referring to the legal obligation to create the highest possible financial return to clients. Several companies perceive existing Danish legislation as a barrier to phasing out fossil fuel investments. However, the Financial Supervisory Authority (FSA) has confirmed that existing legislation does indeed allow for divestment.

MAIN CONCLUSIONS (continued)

4. Danish pension funds have become increasingly interested in executing direct investments in major renewable energy projects, primarily offshore wind farms. Several also invest in climate change and/or energy infrastructure funds. The primary reason for this is that these types of investments are considered to have a profile that matches well with the pension funds' long investment horizon.

   Additionally, these investments can provide an attractive return to the members of the pension funds. In the survey, the pension funds generally expressed an interest to invest more in green solutions, provided there is a stable political framework and that it results in financial returns. Two of the companies in particular, PKA and PensionDanmark, seem to lean more deliberately toward increased green energy investments.

5. Although the assessed pension funds have moved towards greater transparency in general, there is room for improvement. Their investment strategies and the extent to which they take the problem of climate change into account can both be more transparent. The pension funds differ significantly from each other on whether or not their investment portfolios and exclusion lists are publicly available.

   Furthermore, the published investment portfolios and exclusion lists differ in their level of detail. There are also significant differences in how straightforward it is for clients to gain an overview of the pension funds' investments and structure, as well as how to obtain influence. WWF's qualitative analysis of the pension funds' climate change consciousness shows an overlap between the companies with the least transparency and the companies with the lowest point score results in our pension fund assessment.

A small number of Denmark's 16 largest pension funds perform well. However, there is still a long way to go before the Danish pension funds demonstrate a clear understanding of their opportunities to ensure proper management of the clients' money while simultaneously being responsible actors in the fight against climate change.

WWF is of the impression that the assessed Danish pension funds do not clearly realize the effect that necessary climate change regulation can have on the risk profile of fossil fuel investments.

The tables below summarize the results of the report's two analyses. Table 1 shows the results from the report's initial analysis of the pension funds' shareholdings in 17 oil and gas companies with high-risk projects. Here we have calculated how much each pension fund has invested in these companies and the level of CO_2 emissions this investment will cause if the companies' reserves of oil and gas are burned. (See Chapter 4 for an explanation of the method used.)

Table 1: Overall results on the high-risk investments of assessed funds

Pension fund	*Million US$ invested in high risk companies*	*Mt CO_2 from high risk companies*	*Times the size of Denmark's annual CO_2 emissions*	*Number of members*	*Tonnes (t) CO_2 from high risk companies per pension member*
Unipension	**117**	26.5	0,60	110,000	241
JØP	**57**	8.5	0,19	50,400	169
Nordea Liv & Pension	**97**	17.2	0.39	330,000	52
Industriens Pension	**107**	19.5	0.44	400,000	49
Danica Pension	**194**	26.4	0.60	600,000	44
PFA	**259**	41.6	0.95	1,000,000	42
PenSam	**87**	17	0.39	413,000	41
PensionDanmark	**137**	24.2	0.55	640,000	38
PBU	**32**	3.6	0.08	110,000	33
AP Pension	**43**	5.3	0.12	167,000	32
Topdanmark	**31**	5.2	0.12	300,000	17
Sampension	**33**	4.3	0.10	279,000	15
PKA	**13**	2.9	0.07	260,000	11
ATP	N/A	N/A	N/A	4,700,000	N/A
Lærernes Pension	N/A	N/A	N/A	130,000	N/A
SEB	N/A	N/A	N/A	250,000	N/A
Overall average	**93**	**15.6**	**0.35**	**608,713**	**42**
In total	**1207**	**202.2**	**4.60**	**9,739,400**	**783**

Table 2 (right) shows the number of points each of the 16 pension funds has achieved in the qualitative analysis of this report.

The analysis assessed the extent to which climate considerations and green energy investments play a role in the companies' strategies as well as the degree to which members have the opportunity to influence the investment strategy.

WWF gave points based on six different criteria. We assessed the companies according to questionnaire responses as well as information on their websites.

There is a possible 0-2 points for each criterion. Each pension fund can achieve a maximum of 12 points from a total of six criteria.

See Chapters 5 and 6 for criteria and a detailed examination of the individual companies.

Table 2: Summary results of qualitative climate change prioritization

Pension fund	*Points*
PKA	7
PenSam	5
PensionDanmark	5
AP Pension	4
Lærernes Pension	4
Nordea Liv & Pension	4
PBU	4
PFA	4
Unipension	4
ATP	3
Danica Pension	3
Industriens Pension	3
JØP	3
Sampension	2
SEB	2
Topdanmark	1

RECOMMENDATIONS

Based on the study, WWF-Denmark recommends the following to Danish pension funds:

1. **Divest from the fossil fuel industry**
2. **Perform a risk assessment of investments based on a 2° C global scenario**
3. **Set clear targets for increased investments in green energy technology**
4. **Make further direct investments in renewable energy**
5. **Increase transparency about investments and exclusions**
6. **Increase engagement in international forums on responsible investment and climate change**
7. **Involve climate change when exerting active ownership**

See Chapter 7 at the end of the report for an elaboration of the above recommendations.

1 INTRODUCTION

This report focuses on Denmark's 16 largest pension funds and their investments in fossil fuel energy as well as in green energy technologies, such as renewable energy and energy efficiency.

We examine whether the pension funds' shareholdings in oil and gas companies with high-risk projects pose a financial risk to the funds' clients, whose savings they manage. Furthermore, in a qualitative analysis, we assess how conscious the pension funds are of climate change in their investment strategies. Moreover, the qualitative analysis assesses the ability of the pension fund holders to influence the pension funds' investment strategy. We based this assessment on a questionnaire as well as information available on the companies' websites.

This report is published subsequent to two previous studies by WWF-Denmark looking at Danish pension funds and their energy investments. The first study was published in August 2013. It examined the energy investments of Denmark's eight largest pension funds. The purpose was to show whether the pension funds were taking a responsible and active role in the green energy transition – from fossil fuels to renewable energy – through their investments. The report concluded that the amount of green investments and strategies were limited and that there was a mismatch between how the pension funds promoted themselves and how green their actual investments were.

WWF-Denmark conducted the second study in January 2014. This time the study focused on shareholdings in the 200 largest fossil fuel companies and the resulting prospect for CO_2 emissions. The report concluded that the seven largest private pension funds' investments in the coal, oil, and gas industries translated to ownership of a large amount of reserves. If burned, these reserves would lead to more than three times Denmark's annual greenhouse gas emissions released into the atmosphere. Since WWF-Denmark's first two reports on Danish pension funds' energy investments, the subject has appeared in April 2014 at the general assemblies of Unipension, DIP (pension fund for civil and academic engineers), and JØP (pension fund for lawyers and economists).

Members of these three pension funds proposed to divest from investments in the 200 largest coal, oil and gas companies. All three general assemblies rejected the proposals. However, in two cases the vote was quite close. In Unipension, 484 votes (49%) were in favour with 507 votes against. In DIP, 126 votes (46%) were in favour with 148 votes against. The vote in JØP ended with 235 votes in favour (38%) with 380 votes against. The boards of these three pension funds recommended a rejection of the proposal for divestment. Their main argument was that divestment from fossil fuels would involve a great risk to the members' financial returns. However, this is quite the opposite of the truth. Climate change itself is a business risk that pension funds ought to take seriously.

2 CLIMATE CHANGE IS A BUSINESS RISK

The latest report by the IPCC states that it is virtually certain that human activity causes global warming and that we are heading towards catastrophic climate change, if we as a world community refrain from action.

Action on climate change requires reducing global greenhouse gas emissions by 40 to 70 percent from 2010 levels by 2050. This is the premise for having a fair chance of staying below a global temperature rise of two degrees Celsius (2°C) compared to pre-industrial levels. Staying below a 2°C increase in temperature is the limit set by the world community at the UN climate change conference in Cancun, Mexico in 2010. Furthermore, the IPCC report shows that in order to stay below 2°C, investments in energy efficiency and renewable energy must increase sharply while reducing investments in fossil fuels.

An increasing number of international companies recognize that climate change poses a business risk that they must take as seriously as other risks. For instance, WWF works with a number of large companies towards reducing their CO_2 emissions through the global Climate Savers program. Among the participants are Coca Cola, Nike, Sony, HP, LEGO, Tetra Pak, Volvo and Yingli Solar.

The International Energy Agency (IEA) stated that compliance with staying below 2°C implies major consequences for companies with interests in coal, oil and gas. According to the World Energy Outlook 2012, two-thirds of all known fossil fuel reserves must remain in the ground. This involves major implications for investors and their returns in the form of stranded assets. That is, assets that - prior to the end of their economic life (as assessed at the time of the investment decision) - are unable to provide a reasonable economic profit because of changes in the market or tighter climate change regulation. In other words, fossil fuel investments pose a business risk that each investor must manage.

In early 2014, the international finance house Kepler Cheuvreux published a report on the risk of stranded assets in a 2°C world. According to the report, US$28 trillion in lost revenue is at stake during the next two decades, compared to a business-as-usual scenario in which there is no further action to limit CO_2 emissions. Kepler Cheuvreux further argues that facing the climate change challenge will increase pressure for greater transparency of oil companies' risks due to climate change regulations. In addition, they assess that, even in a business-as-usual scenario, the risk of stranded assets related to oil investments will increase because of the falling cost of renewable energy technologies.

Moreover, the cost of oil production is likely to increase in the future, regardless of climate change policy and regulation, as global oil reserves become more inaccessible and require ever-larger investments per barrel of oil. As a result, the business risk of investing in oil production is expected to grow in the coming years.

What is more, investments in fossil fuels are not associated with an extra high return. Figure 1 illustrates this, showing the evolution of the US S&P stock index. The blue line depicts the development of the overall index, while the purple line shows the evolution of the index without listed coal, oil and gas companies. Until 2013, the two curves are close.

This indicates that the return of investments in fossil fuel companies was expected to be at the same level as the return of investments in other companies. However, in recent years, the stock price developed less favourably for the fossil fuel companies than for the average stock. Accordingly, the Fossil Free Indexes US is higher than the traditional S&P500 stock index, which includes coal, oil and gas companies.

Figure 1: The evolution of the US S&P stock index

Source: Bloomberg New Energy Finance, *Fossil Fuel Divestment,* 2014

A growing group of investors, including the Dutch Rabobank and Norwegian Storebrand, has begun to sell their shares in fossil fuel companies because these shares risk losing value as a result of tighter climate change regulation.

In October 2014, the Swedish National Pension Fund, Andra AP-Fund, announced that it would divest from 12 coal-producing companies and eight oil and gas companies, representing a market value of over US$100 million. The CEO of the pension fund stated that according to assessments of the pension fund, divestment in those companies would reduce the financial risks associated with fossil fuel investments. These eight oil and gas companies are all involved in costly projects such as oil extraction from the tar sands.

The Norwegian Government Pension Fund Global, which has reached the value of US$890 billion, has also considered divesting from the riskiest fossil fuel investments.

In July 2014, the World Council of Churches announced that the organization intends to divest its fossil fuel investments and in September 2014, the Rockefeller Brothers Fund announced fossil fuel divestment. The latter is remarkable because the Rockefeller empire was originally built on massive oil revenues.

In connection with the announcement, Stephen Heintz from the Rockefeller Foundation stated that he was certain that if Rockefeller had been alive today, he would - as a shrewd businessperson himself - have pulled out of fossil fuels and instead invested in renewable energy. Heintz added, “The action we’re taking is symbolism, but it is important symbolism. We’re making a moral case, but also – increasingly - an economic case.”

"THE ACTION WE’RE TAKING IS SYMBOLISM, BUT IT IS IMPORTANT SYMBOLISM. WE’RE MAKING A MORAL CASE, BUT ALSO, INCREASINGLY, AN ECONOMIC CASE.”

STEPHEN HEINTZ, PRESIDENT, ROCKEFELLER BROTHERS FUND

October 10, 2014

3 HIGH RISK FOSSIL FUEL INVESTMENTS

In this report, WWF has chosen to focus on the equity investments of Denmark's pension funds' in oil and gas companies that are involved in projects with particular economic uncertainty.

In other words, projects that involve a significant business risk even in the absence of stricter climate regulation, in addition to contributing to the climate change problem themselves. In order to estimate the risk associated with the Danish pension funds' fossil fuel investments, this study uses a method based on the Carbon Tracker Initiative's (Carbon Tracker) report from 2014: "Carbon Supply Cost Curves - Evaluating Financial Risk to Oil Capital Expenditures." The Carbon Tracker report assesses the risk of investments of a number of oil companies based on their capital investment requirements as well as a number of scenarios for demand for fossil fuels and the consequent market price.

The risk accounted for in the Carbon Tracker report is based on oil companies' potential costs of capital expenditures in the period 2014-2025 with regard to various types of oil extraction projects. Carbon Tracker has calculated the market price that oil companies require in order to cover costs and generate returns. The costs of oil production in the Arctic, deep waters, and unconventional oil production are generally higher than for conventional oil production. These more costly oil extractions have particularly high financial risk, even in the absence of increased climate change regulation. In other words, these oil projects involve a clear overlap between economic and climate change risks.

What are high-risk projects?

According to the Carbon Tracker Initiative, high-risk projects are projects with capital costs requiring a market price of US$95 per barrel of oil. High capital costs may be due either to the areas from which the oil must be extracted or the type of oil itself. Examples are:

Arctic oil drilling

Arctic sea ice is decreasing because of climate change, meaning longer periods of ice-free waters, increasing the technical possibilities of drilling for oil. Accordingly, several oil and gas companies see new possibilities for oil drilling in the Arctic. However, oil drilling in the Arctic involves significant economic and environmental risks.

(Arctic oil drilling, continued)

The area is typically characterized by severe storms, intense cold, and difficult ice conditions that make drilling far more risky and costly than drilling on land or in waters with less extreme conditions. For instance, in some areas, icebergs risk drifting into drilling rigs. Furthermore, the Arctic environment is very sensitive to impacts and thus vulnerable to oil spills. Moreover, it is impossible to clean up spilled oil in icy water. The oil may very well flow down under the ice and any spill recovery process is likely to be slow because of low temperatures.

Deepwater oil drilling

It almost goes without saying that the deeper the ocean, the more difficult, expensive, and environmentally risky it is to drill for oil. The weather conditions are typically more difficult, and drill pipes face more pressure and extreme conditions compared to less significant depths. Accordingly, the equipment required for oil extraction will be larger and more expensive.

Deepwater projects occur in West Africa, Brazil, Norway and the Gulf of Mexico among other places. In 2010, BP had a major accident with its Deepwater Horizon oilrig in the Gulf of Mexico. This subsequently led to tighter rules for deep-water drills around the world - and thus higher costs. In addition, BP lost one third of its share value because of the accident.

Unconventional oil production

In recent years, unconventional oil has made up the largest additions to the oil industry's inventory of oil reserves. Unconventional oil is a common term for oil that requires different extraction methods than conventional oil, such as tar sands and oil shale. The extraction of unconventional oil requires more energy - in addition to water and chemicals - because the oil is hardbound and viscous. Moreover, the oil must go through a post-process to turn it into a usable substance, which requires additional energy.

As a result, unconventional oil extraction means a lower net energy dividend compared to extraction of conventional oil. Consequently, the CO_2 emissions per barrel are significantly higher for unconventional oil compared to conventional oil. In addition, unconventional oil implies negative consequences for the environment. For instance, in Canada, where there are significant amounts of tar sands, extraction has led to deforestation and problems with pollution.

In its report, Carbon Tracker has identified the 20 oil and gas companies with the greatest potential investments in high-risk oil production by 2025. Danish pension funds hold shares in 17 of the 20 oil and gas companies, listed below. Danish pension funds have not invested in the other three companies, based on available information to date.

Table 3: The 17 high-risk companies in which Danish pension funds hold shares

Athabasca Oil Sands	ExxonMobil	Shell
BG Group	Gazprom	Statoil
BP	Lukoil	Suncor Energy
Chevron	Petrobas	Total SA
ConocoPhilips	Repsol	
Eni	Rosneft	

Carbon Tracker does not give information about Athabasca Oil Sands. Therefore, the CO_2 emissions from the combustion of these reserves are not included in the calculations in this report. However, this does not significantly influence the results, since only two Danish pension funds have invested in Athabasca Oil Sands.

The following calculations of the potential CO_2 emissions from high-risk companies are based on a different report from Carbon Tracker from 2012: "Unburnable Carbon - Are the world's financial markets carrying a carbon bubble?" This report calculates how much CO_2 would be emitted if the reserves of the world's 100 largest coal companies and 100 largest oil and gas companies are burned.

WWF's calculations of the Danish pension funds' investments - and the potentially resulting CO_2 emissions - is based on the pension funds' own shareholdings.

WWF must stress that our calculations do not provide the full scope of Danish pension fund investments in oil companies with high-risk projects. The report only includes the shareholdings in these companies. Financial products other than shares, such as oil bonds, are not included.

The pension funds also have investments in other fossil fuel companies beyond these 17 companies that are subject for investigation in this study.

For example, many Danish pension funds have shares in AP Moller Maersk (Denmark's largest company, involved in shipping and logistics, as well as oil and gas activities). Shareholders of AP Moller Maersk are, by default, co-owners of Maersk Oil, which appears on Carbon Tracker's list of companies in need of capital for deep-water oil extraction. In August, Maersk Oil had to downgrade by approximately US$1.6 billion of their expected income from drilling in Brazil.

Table 4 shows the total value of shares held by Denmark's largest pension funds in the 17 oil and gas companies. It appears that ExxonMobil is the high-risk company with the largest concentration of shareholdings from Danish pension funds. This is remarkable because ExxonMobil has distinguished itself by lobbying strongly against active efforts to address climate change. Other companies with large Danish investments are Shell, Total SA, Chevron and BP. **Table 4** also shows the potential capital costs each oil company has in high-risk projects.

Table 4: Danish pension funds' shareholdings in the 17 high-risk companies

Oil and gas company	Company capital needs 2014-2025 in US$ million	Danish pension funds' investments in US$ million
Athabasca Oil Sands	21.3	0.3
BG	22.7	44.0
BP	41.4	91.6
Cenovus	26.0	4.3
Chevron	50.2	126.4
Conoco Philips	23.5	74.7
Eni	32.6	84.3
Exxon Mobil	66.0	256.0
Gazprom	40.3	44.1
Lukoil	26.1	44.3
Petrobras	75.1	29.3
Repsol	17.2	10.8
Rosneft	62.7	5.1
Shell	57.1	177.6
Statoil	34.8	27.2
Suncor Energy	31.2	34.6
Total SA	50.6	152.1

The pension funds' shareholdings were calculated as of December 31, 2013, apart from Industriens Pension (January 31, 2014), PKA (March 25, 2014), and Unipension (September 30, 2014). Conversion from DKK to US$ was calculated based on the average 2014 rate of 0.1641. For original figures, see Danish version of this report. Three of the 16 pension funds – Lærernes Pension, SEB and ATP - are not included in the statement, as it was not possible to obtain sufficiently detailed information on their investments. The list of shareholdings of Lærernes Pension does not contain information about the size of their investments in individual companies. However, the pension fund’s list of shareholdings shows that Lærernes Pension invests in some of the same oil companies as the other pension funds. SEB holds investments in seven of the 17 high-risk companies through index funds, but there are no figures available for the investments in each company. ATP has no direct shareholdings in the 17 high-risk companies noted in Table 4. Nevertheless, ATP invests in oil companies such as Maersk Oil due to ATP’s very large shareholding in AP Moller Maersk.

Table 5 shows the shareholdings of each pension fund in the 17 high-risk companies. It reveals that PFA is the pension fund with the most investments in the 17 high-risk companies, with shares of a total value of over US$250 million. Danica Pension, PensionDanmark and Unipension follow PFA, whereas PKA has the fewest equity investments in the 17 companies.

Table 5: Pension fund investment in oil companies with high-risk projects

Pension fund	*US$ million invested in high risk companies*	*Mt CO_2 from high risk companies*	*Times the size of Denmark's annual CO_2 emission*
PFA	259	41.6	0.95
Danica Pension	194	26.4	0.60
Unipension	117	26.5	0.60
PensionDanmark	137	24.2	0.55
Industriens Pension	107	19.5	0.44
Nordea Liv & Pension	97	17.2	0.39
PenSam	87	17.0	0.39
JØP	57	8.5	0.19
AP Pension	43	5.3	0.12
Topdanmark	32	5.2	0.12
Sampension	33	4.3	0.10
PBU	32	3.6	0.08
PKA	13	2.9	0.07
ATP	N/A	N/A	N/A
Lærernes Pension	N/A	N/A	N/A
SEB	N/A	N/A	N/A
Overall average	***75***	***15.6***	***0.35***
In total	**1,207**	**202.2**	**4.60**

Calculation excludes investments from three pension funds: Lærernes Pension, SEB and ATP. See Table 4 notes.

Moreover, **Table 5** shows the level of future CO_2 emissions resulting from the Danish pension funds' ownership of the 17 oil companies' reserves if burned. The calculations show that the pension funds' ownership in oil and gas companies overall would result in future emissions of 200 Mt CO_2. This is more than four times Denmark's annual CO_2 emissions.

As noted above, the pension funds can hold investments in other oil companies or oil bonds than the shareholdings in the 17 high-risk companies. In other words, the pension funds' potential contribution to increased global warming is greater than what is measured in this study.

Table 6: Future CO_2 emissions per member due to high-risk investments

Pension fund	*US$ million invested in high-risk companies*	*Number of members*	*Tonnes CO_2 from high-risk companies per member*
Unipension	117	110,000	241
JØP	57	50,400	169
Nordea Liv & Pension	97	330,000	52
Industriens Pension	107	400,000	49
Danica Pension	194	600,000	44
PFA	259	1,000,000	42
PenSam	87	413,000	41
PensionDanmark	137	640,000	38
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AP Pension	43	167,000	32
Topdanmark	31	300,000	17
Sampension	33	279,000	15
PKA	13	260,000	11
14. ATP	N/A	4,700,000	N/A
Lærernes Pension	N/A	130,000	N/A
SEB	N/A	250,000	N/A

Calculation exclude investments from three pension funds: Lærernes Pension, SEB and ATP. See Table 4 notes.

Table 6 (above) shows the pension funds' potential CO_2 emissions per member resulting from their high-risk investments. Unipension has by far the largest emissions per member, followed by JØP. PKA has the lowest emissions per member, followed by Sampension and Topdanmark.

It is important to mention that there may be considerable differences between the funds' profiles, depending on the type of pension scheme they offer. Danica and Nordea Liv & Pension are examples of funds that have a number of members with voluntary pension schemes in addition to a business pension plan in another pension fund. Other things being equal, this implies that invested pension assets are distributed to a higher number of members compared to pension funds managing only company pension schemes.

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WWF's Matthew Banks and Leslie Aun at the Business Climate Action Day reception, COP15, Copenhagen, Denmark.

4 ANALYSIS OF CLIMATE CONSIDERATIONS

WWF has conducted a qualitative study of the 16 largest pension funds in Denmark to assess the extent to which pension funds focus on climate change in their investment decisions.

The sixteen companies being the focal point of this study are AP Pension, ATP, Danica Pension, Industriens Pension, JØP, Lærernes Pension, Nordea Liv & Pension, PBU, Pensionskassen Pensam, PensionDanmark, PFA, PKA, Sampension, SEB Pension, Topdanmark and Unipension.

4.1 METHODOLOGY

We asked the funds a series of questions about their energy investments and their management of climate change and ethics. We supplemented the funds' own questionnaire answers with publicly available information, such as pension fund websites. Since AP Pension, ATP, JØP and Unipension have chosen not to answer the questionnaire, so we have based our assessment of these pension funds solely on their own websites' information.

The pension funds have received points based on a set of evaluation criteria developed by WWF-Denmark. We outline these criteria below. It is possible to be awarded with zero, one or two points, two being the highest. There are six categories. Accordingly, it is possible to obtain a maximum total of 12 points.

The six categories that are included in the assessment are:
1) Objectives for green energy investment, 2) Objectives for fossil fuel divestment, 3) Climate change considerations in the investment policy, 4) Potential influence of members on pension fund investments, 5) Existing exclusions, and 6) Existing green energy investments.

Compared to the study WWF-Denmark conducted in 2013, this analysis has included an extra category: “Objectives for fossil fuel divestment.” This is due to a desire to assess whether the pension funds intend to withdraw their fossil fuel investments. Moreover, we have adjusted some of the other criteria. Consequently, the results of this report are not directly comparable to the 2013 WWF study. We conducted the survey in April and May of 2014. Subsequently, WWF obtained information from websites, in particular those of the pension funds themselves.

6 Categories of the Pension Fund Assessment

1. Objectives for green energy investment

- **0** There is no objective to invest more in green energy technologies
- **1** There is a qualitative objective to invest more in green energy technologies
- **2** There is a quantitative objective to invest more in green energy technologies

We give a quantitative measure the highest points because such a measure is easier to pursue and it implies greater obligation, especially if it involves a time limit. Points are only given if the objectives are publicly available to members and others via the pension fund's website.

2. Objectives for fossil fuel divestment

- **0** There is no target for the withdrawal of fossil fuel investments
- **1** There is a qualitative objective for the withdrawal of fossil fuel investments
- **2** There is a quantitative objective for the withdrawal of fossil fuel investments

We give the highest points to a quantitative measure, preferable including a time limit, because this indicates a demonstrable attitude and willingness to divest from fossil fuels. We only give points if the objectives are publicly available to members and others via the pension fund's website.

3. Climate change considerations of the investment policy

- **0** The fund does not assume that global action on climate change can negatively affect fossil fuel investments
- **1** Efforts are taken to limit fossil fuel investment risks resulting from global action on climate change
- **2** The fund has developed a systematic approach to assess how global action on climate change, based on the 2°C limit, will affect fossil fuel investments

We give the highest number of points to funds with solid and comprehensive procedures for assessing how necessary global action on climate change affects fossil fuel investments.

4. Potential influence of members on pension fund investments

- **0** Members have the option of general inquiry
- **1** Members are able to contact a particular employee with regard to ethics, or they may influence their own investments by choosing products offering investments in climate-related funds
- **2** Members have a real opportunity to influence the overall investment strategy

(Continued)

We give the highest points to funds with a real opportunity for members to influence the overall investment strategy through the structures of the pension fund. Furthermore, it is regarded as an advantage if it is possible to contact a specific employee or a specific mail concerning ethics, since this helps increase focus on responsible investments to the members.

5. Existing exclusions

0 Exclusion list is not published
1 Exclusion list is published
2 Exclusion list is published and exclusions have been made based on climate change considerations

We give the highest points to pension funds that make exclusions based on climate change considerations and publish their exclusion list. This is a visible and tangible sign that the pension fund actively addresses the climate change risks associated with fossil fuel investments.

6. Existing green energy investments

0 The pension fund does not invest in green energy technologies
1 The pension fund invests in green energy technologies through shares or funds with a broad focus on environment, climate change or green energy
2 The pension fund makes direct investments in green energy technologies or invests in funds, which are exclusively dedicated to green energy technologies

WWF considers the demonstration effect and the financial contribution of significant direct investment in green energy technology as particularly important for the green energy transition and therefore awards maximum points for this. The same applies to investments in funds that have a clear focus on green energy technology.

Direct investments include offshore wind projects, biomass facilities, infrastructure that supports the development of renewable energy, etc. Pension funds' investments in energy efficiency of their properties or buildings, as well as initiatives in the head office as part of the pension fund's climate strategy for its own operations, are not counted as direct investments in this study.

How WWF has evaluated the various pension funds against six criteria:

Points		*Pension funds*	*# of funds*
1.	**Objectives for green energy investment**		
0	*There is no objective to invest more in green energy technologies*	AP, ATP, Danica, Industriens Pension, JØP, Lærernes Pension; Nordea Liv & Pension, PBU, Pensam, PFA, Sampension, SEB, TopDanmark, Unipension	14
1	*There is a qualitative objective to invest more in green energy technologies*	PensionDanmark, PKA	2
2	*There is a quantitative objective to invest more in green energy technologies*		0
2.	**Objectives for fossil fuel divestment**		
0	*There is no target for the withdrawal of fossil fuel investments*	AP, ATP, Danica, Industriens Pension, JØP, Lærernes Pension, Nordea Liv & Pension, PBU, Pensam, PensionDanmark, PFA, PKA, Sampension, SEB, TopDanmark, Unipension	16
1	*There is a qualitative objective for the withdrawal of fossil fuel investments*		0
2	*There is a quantitative objective for the withdrawal of fossil fuel investments*		0
3.	**Climate change considerations of the investment policy**		
0	*The fund does not assume that global action on climate change can negatively affect fossil fuel investments*	AP, ATP, Danica, Industriens Pension, JØP, Lærernes Pension, PBU, Pensam, PensionDanmark, PFA, Sampension, SEB, TopDanmark, Unipension	14
1	*Efforts are taken to limit fossil fuel investment risks resulting from global action on climate change*	Nordea Liv & Pension, PKA	2
2	*The fund has developed a systematic approach to assess how global action on climate change, based on the 2°C limit, will affect fossil fuel investments*		0

Points		Pension funds	# of funds

4. Potential influence of members on pension fund investments

0	*Members/customers have the option of general inquiry*	Danica, Industriens Pension, Sampension, SEB	4
1	*Members/customers are able to contact a particular employee with regard to ethics, or they may influence their own investments by choosing products offering investments in climate-related funds*	ATP, Nordea Liv & Pension, PensionDanmark, PFA, Topdanmark	5
2	*Members/ customers have a real opportunity to influence the overall investment strategy*	AP, JØP, Lærernes Pension, PBU, Pensam, PKA, Unipension	7

5. Existing exclusions

0	*Exclusion list is not published*	AP, JØP, Lærernes Pension, PBU, Sampension, TopDanmark	6
1	*Exclusion list is published*	ATP, Danica, Industriens Pension, Nordea Liv & Pension, PensionDanmark, PFA, PKA, SEB, Unipension	9
2	*Exclusion list is published and exclusions have been made based on climate change considerations*	Pensam	1

6. Existing green energy investments

0	*The pension fund does not invest in green energy technologies*	TopDanmark	1
1	*The pension fund invests in green energy technologies through shares or funds with a broad focus on environment, climate change or green energy*	ATP, JØP, Nordea Liv & Pension, Pensam, SEB, Unipension	6
2	*The pension fund makes direct investments in green energy technologies or invests in funds, which are exclusively dedicated to green energy technologies*	AP, Danica, Industriens Pension, Lærernes Pension, PBU, PensionDanmark, PFA, PKA, Sampension	9

4.2 SUMMARY CONCLUSIONS

The Good News

This study reveals that several Danish pension funds have invested directly in green energy technology, primarily offshore wind farms. Large pension funds are no longer the only ones making these types of investments. The pension fund report conducted by WWF-Denmark in 2013 highlighted that the funds regarded direct renewable energy investments as being quite complex and requiring resources, which the smaller pension funds often did not have. However, current developments suggest that investments in offshore windfarms are now becoming more mainstream.

Over the last year, several of the 16 surveyed pension funds have invested in various funds that support green and climate-friendly investments. Among these funds is the newly created Danish Climate Investment Fund, to which PBU, PKA, and PensionDanmark have financially contributed, along with Denmark's Investment Fund for Developing Countries (IFU), and Danish Growth Capital.

Three of the pension funds - ATP, Pension Danmark and PKA - chose to support the political statement issued by 355 financial investors from around the world ahead of the UN Secretary General Ban Ki-moon's special summit held on September 23, 2014. The declaration calls for, among other things, stronger political leadership and action to support investment in green energy technologies and climate change solutions.

Several of the larger Danish pension funds are members of the Institutional Investors Group on Climate Change (IIGCC), which "provides investors with the collaborative platform to encourage public policies, investment practices, and corporate behaviour that address long-term risks and opportunities associated with climate change". ATP, Nordea, PensionDanmark, PKA and Sampension are members of IIGCC.

One of the pension funds, PKA, highlights climate change as a special area of focus in the fund's work with responsible investments. Although climate change is not specifically mentioned, one of PKA's five priorities of its investment strategy is to make socially responsible investments that make a difference.

The Bad News

However, it is still the general impression that climate change and climate concerns are not a major focus for Danish pension funds. The pension funds still have significant investments in coal, oil and gas companies. Moreover, none of the pension funds aim to divest from fossil fuels, not even the companies with the most engagement in investments in green energy technologies.

In the questionnaire, PFA states that it has reduced its investments in fossil fuel companies by approximately 20% over the past five years. However, since PFA has no official divestment goals, it is difficult to assess whether this is a result of a clear strategy. In any case, with PFA's significant current investments in companies with high-risk projects (discussed in the first part of this study), this indicates that PFA's investments in fossil fuel companies were before at an exceptionally high level. Few pension funds express that they take the risk of stranded assets in fossil fuel companies seriously. Moreover, no pension funds have developed a systematic approach to assess how climate change action, based on the 2°C limit, will affect their investments in coal, oil and gas companies.

Lack of transparency is still a challenge

The area of pension fund investments is complex and can be difficult to grasp for both members and other stakeholders. The secrecy that has traditionally characterized the investments does not make things easier. In general, the Danish pension funds are moving towards greater transparency. Most of the surveyed pension funds regularly publish both the list of shareholdings and an exclusion list. However, a few funds still do not. Not publicly sharing these lists on their websites hinders transparency. In this study, there is an overlap between the companies with the least transparency and the companies with the lowest point score. Examples are Sampension and Topdanmark.

In general, there is still room for improvement when it comes to the pension funds communicating their investments and exclusions. Transparency can be increased by describing in more detail the activities of the companies in which investments are made. Moreover, the pension funds can be clearer about how big their investments in specific companies are, and on what basis exclusions have been decided.

Not every member's influence is created equal

The pension fund board usually decides the company's investment strategies, including prioritizing climate change and other socially responsible considerations. A relevant question in this context is whether the members of the pension funds are able to influence investments and strategies. This varies a lot depending on the structure and traditions of the pension fund.

In some of the pension funds - JØP and the pension funds administered by Unipension - any member can make proposals at the general assembly. This provides a good opportunity for members to have influence. Accordingly, the members have a responsibility to mobilize, if they want the pension fund to act more consciously with regard to climate change.

The structure of other pension funds - AP Pension, PBU and PKA - is such that members appoint delegates. The delegates typically meet during the year and discuss various themes, including responsible investments. Moreover, delegates have the right to vote at the general assembly. Such a structure also allows the members to have a reasonable degree of influence.

Some pension funds - PFA and Nordea Liv & Pension - have established a customers' board, which aims to ensure that the fund knows its corporate customers' needs and wishes. The board is typically made up of executive employees of the largest corporate customers. In such a structure, it is more difficult for ordinary members to have influence compared to a structure that allows members to elect delegates or raise proposals at the general assembly.

WWF estimates that members' opportunity to have influence is most limited in companies where the only option to influence the pension fund is through the board of directors.

Table 7: Summary of 2014 Surveyed Pension Fund Scores across Six Criteria

Pension fund	*Green energy target*	*Fossil fuel divestment target*	*Climate change in investment policies*	*Potential influence of members*	*Exclusions*	*Green energy investments*	*Total score*
AP Pension	0	0	0	2	0	2	**4**
ATP	0	0	0	1	1	1	**3**
Danica Pension	0	0	0	0	1	2	**3**
Industriens Pension	0	0	0	0	1	2	**3**
JØP	0	0	0	2	0	1	**3**
Lærernes Pension	0	0	0	2	0	2	**4**
Nordea Liv & Pension	0	0	1	1	1	1	**4**
PBU	0	0	0	2	0	2	**4**
PenSam	0	0	0	2	2	1	**5**
PensionDanmark	1	0	0	1	1	2	**5**
PFA	0	0	0	1	1	2	**4**
PKA	1	0	1	2	1	2	**7**
Sampension	0	0	0	0	0	2	**2**
SEB	0	0	0	0	1	1	**2**
Topdanmark	0	0	0	1	0	0	**1**
Unipension	0	0	0	2	1	1	**4**

5 REVIEWING THE PENSION FUNDS

The review of the companies is in alphabetical order and is based on the six evaluation criteria described in Section 4.

5.1 AP PENSION

167, 000 customers - US$15 billion in investment assets

The core business of AP Pension is company pension schemes. AP Pension describes itself as the only customer-owned commercial pension fund with its roots in the co-operative movement. AP Pension has not responded to the questionnaire and its website lacked the information we sought.

WWF's assessment of AP Pension: 4 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	0	The pension fund's goals for investments in renewable energy and energy efficiency cannot be found on the AP Pension's website
2. *Objectives for fossil fuel divestment*	0	AP Pension does not express any intentions or aims to divest from coal, oil and gas.
3. *Climate change considerations of the investment policy*	0	AP Pension emphasizes that the fund wants to create good investment returns in an ethical way. There are no specific references to climate change on its website. WWF assesses that AP Pension does not consider there being any business risks associated with fossil fuel investments in light of action on climate change.
4. *Potential influence of members on pension fund investments*	2	AP Pension emphasizes that, as a member-owned pension fund, the member community's interests come first. Everyone who has a pension plan or insurance at AP Pension is a member of the association. All customers are entitled to attend the general assembly. However, only the delegates have the right to vote. The customers elect the delegates. Employers and employees each select their delegates, who in turn elect the board of AP Pension. WWF-Denmark believes this structure gives customers a reasonable opportunity to influence the investment strategy.

		In addition, the fund gives customers who develop their own savings the opportunity to invest through its fund: AP Invest Forest and Green Energy. However, this fund, as the name suggests, does not have an exclusive focus on green energy technologies. It is possible to contact AP Pension via the website, but not to a particular corporate social responsibility representative.
5. *Existing exclusions*	**0**	WWF has not succeeded in finding the exclusion list on AP Pension's website.
6. *Existing green energy investments*	**2**	AP Pension publishes its 20 largest shareholdings on its website. There are no green companies among the largest shareholdings. AP Pension does not have direct investment in, for example, offshore wind farms. However, in 2009, the pension fund founded the fund Green Power Partners with Proark Energy. This fund invests in solar and wind energy.

5.2 ATP

4.7 million customers - US$98 billion in investment assets

ATP Lifelong Pension is the largest supplementary pension scheme in Denmark and among Europe's largest pension investors. ATP was one of the first Danish pension funds to focus on social responsibility. In 2009, ATP announced its ambition of having 10 percent of its investment portfolio allocated to investments in climate and energy over the following four or five years. However, this goal no longer applies. ATP did not want to participate in WWF's 2014 study because "the ATP finds participation meaningless, as the company's approach to the issue, on a fundamental level, differs from that of WWF's."

WWF's assessment of ATP: 3 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	ATP's website does not show any indication that the pension fund aims to increase investments in renewable energy and energy efficiency.
2. *Objectives for fossil fuel divestment*	**0**	ATP has no goals or plans to divest from investments in coal, oil and gas. On its website, ATP writes the following with regard to its fossil fuel investments: "Extraction of oil and raw materials is necessary. The world community demands oil for heating and transport (...). In general, ATP does not exclude investments in oil and in the mining industry. Instead, ATP values investments in companies that show commitment to dialogue and make efforts to promote accountability in their activities."
3. *Climate change considerations of the*	**0**	On its website, ATP writes very clearly about its investment strategy: "In ATP, we invest with a single purpose: To ensure the highest possible pensions to customers." However, ATP also recognizes that social responsibility is often a prerequisite for lasting, sound

investment policy		earnings and for the preservation of the shareholdings' real value. There is nothing on the ATP website indicating that it recognizes action on climate change as a business risk to fossil fuel investments. According to the website, ATP has not revised its guidelines for social responsibility since 2008. In 2011, ATP released its latest independent report on social responsibility. Since then, ATP has reported via its website or in connection with its annual reports.
4. *Potential influence of members on pension fund investments*	**1**	ATP has a question and answer site on climate change. It is also possible to contact directly a representative responsible for issues of infrastructure, forests, climate change and social responsibility. We assess the opportunity for customers to affect ATP's overall investment strategy to be very limited.
5. *Existing exclusions*	**1**	With regard to social responsibility, ATP's preferred tools are dialogue and a focus on improvement. In contrast, ATP sees exclusion as a tool only to be used when all other options have been exhausted. ATP regularly publishes information on exclusions. ATP has made no exclusions based on climate change considerations.
6. *Existing green energy investments*	**1**	Investments in companies engaged in renewable energy development and clean technology are included in the portfolio of shareholdings. ATP's seventh largest shareholding is in Vestas. ATP has not made any direct investments in major renewable energy projects such as wind farms. It is not clear from their website whether ATP expects increased investments in green energy technology.

5.3 DANICA PENSION

600, 000 customers - US$51 billion in investment assets

Danica is a subsidiary of the Danish Bank Group. It manages retirement savings for individuals, both through business schemes and for clients independent of a business.

WWF's assessment of Danica Pension: 3 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	Danica Pension has not set a target to increase its investments in green energy technologies. But, the pension fund declares on its website that it has an overarching desire "to help create a financial infrastructure that supports low CO_2 consumption by taking into account the environment and climate change in the development of our products and services."
2. *Objectives for fossil fuel divestment*	**0**	Danica has no objectives for divestment.
3. *Climate change considerations*	**0**	Danica does not give the impression that it recognizes climate change as a business risk and that it has adopted a systematic approach to deal with it. In the questionnaire, Danica answers that it

of the investment policy		is up to the manager to assess whether specific risks may affect the risk profile of a given investment, compared to the expected returns. Danica emphasizes that its overall investment target is to create the best financial return. This also applies to Danica's climate and energy investments, in order to spread out the risks of the pension fund.
4. *Potential influence of members on pension fund investments*	**0**	Customers are able to contact Danica with questions regarding investments. However, the website does not list a special contact person or e-mail address in relation to questions regarding investment ethics. Danica highlights in its questionnaire response that customers have the opportunity to select their own investments through a product called "Link and Select." In principal, having this opportunity is positive; however, apparently it is not possible to select shares in green technologies specifically. Moreover, the ability of customers to influence the overall investment strategy does not appear to be significant.
5. *Existing exclusions*	**1**	Danica receives 1 point, because the pension fund publishes an exclusion list. However, Danica has made no exclusions based on climate change considerations. Danica has excluded three oil companies based on other considerations, including violation of human rights.
6. *Existing green energy investments*	**2**	Danica holds shares in companies that produce green energy technology. Moreover, in the questionnaire, the pension fund states that it also invests through funds that exclusively focus on green energy technology: Black Rock NTR Renewable Power Fund and Hudson Clean Energy Partners. Danica expects an increase in green investments in 2014.

5.4 INDUSTRIENS PENSION

400, 000 members – US$19 billion in investment assets

A number of social partners, including both employer organizations and trade unions, owns Industriens Pension. The members are primarily industrial employees, particularly in the food industry.

WWF's assessment of Industriens Pension: 3 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	Industriens Pension does not have a clear qualitative or quantitative target for investments in green energy. However, the company states that it would like to invest in renewable and climate-friendly energy to the extent that it still ensures members the highest possible returns.

2. *Objectives for fossil fuel divestment*	**0**	Industriens Pension has no plans to withdraw investments in fossil fuels.
3. *Climate change considerations of the investment policy*	**0**	In the questionnaire, Industriens Pension expresses a desire to achieve a responsible investment profile on climate and energy. However, when asked what Industriens Pension does to take into account the UN agreed 2°C limit, the company states, "We have no current plans to change our present practice, but await political positioning." According to the Industriens Pension's answers to the questionnaire, the pension fund is aware that climate change may involve negative impacts on investment and expected returns. Nevertheless, the word "climate" is not used anywhere on the pension fund's website. Overall, it is WWF's impression that Industriens Pension fails to acknowledge the business risk to investments in fossil fuel companies by global action on climate change.
4. *Potential influence of members on pension fund investments*	**2**	According to Industriens Pension, its members are able to influence the investment strategy through their board representatives. However, it is not described how the members can have this influence in practice. WWF assesses that the members' access to influence through the board is limited. There is no specific contact person or e-mail address for requests in relation to ethics or corporate social responsibility.
5. *Existing exclusions*	**1**	Industriens Pension publishes an exclusion list. However, it has made no exclusions based on climate change considerations. It would increase transparency if the otherwise relatively short list of exclusions included explanations of why these specific companies have been excluded. This is practice in several other pension funds.
6. *Existing green energy investments*	**2**	Industriens Pension lists all its shareholdings on its website and holds shares in green energy technology producers such as Vestas and Rockwool. Additionally, in 2013, Industriens Pension invested directly in the German offshore wind farm Butendiek being built in the North Sea. Moreover, in 2014, the pension fund invested in another upcoming German offshore wind farm, Gode Wind. Industriens Pension expects to increase its investments in green energy technologies in 2014.

5.5 JØP

50, 400 members – US$9 billion in investment assets

JØP is a pension fund primarily for lawyers and economists and is owned by its members. JØP has not answered WWF's questionnaire.

WWF's assessment of JØP: 3 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	0	JØP has no specific targets to increase its investments in renewable energy and energy efficiency. However, members have expressed an interest in greener investments. As a result, the pension fund is currently considering whether to invest more in renewable energy and action on climate change.
2. *Objectives for fossil fuel divestment*	0	JØP does not seem to have any plans for divestment from coal, oil and gas.
3. *Climate change considerations of the investment policy*	0	JØP is a member of the Carbon Disclosure Project. On its website, JØP writes that it aims to invest responsibly in order to generate the highest possible risk-adjusted return. According to the website, JØP recognizes the importance of investing in companies that do not pose a serious and long-term damage to the environment. In this context, JØP finds it essential that companies are aware of the consequences that may arise resulting from climate change. This applies not only to impacts on production and living conditions locally but also globally. However, the website does not express reflections on climate change as a financial risk associated with fossil fuel investments.
4. *Potential influence of members on pension fund investments*	2	Because JØP is a pension fund owned by its members, they have relatively good opportunities to influence the fund. Accordingly, members are able to raise proposals at JØP's general assembly. In 2014, a member proposal regarding fossil fuel divestment was considered at JØP's general assembly. However, the proposal did not gain a majority of votes.
5. *Existing exclusions*	0	JØP has an exclusion list, but it does not publish it. However, on its website, JØP notes that all members, media and business partners can always request information on whether and to what extent JØP has exposure to a given company. JØP signals that the pension fund is in favour of active ownership and therefore seeks to have dialogue with companies in order to change their behaviour in areas such as human rights, labour rights, and environmental issues.
6. *Existing green energy investments*	1	JØP publishes its list of shareholdings, which reveals that the pension fund holds shares in green energy technology producers. By request from the group of members that wants a greener investment strategy, JØP's director gave a presentation in September 2013 on green investments. The presentation, which is available on the website, states, "Analyses of several funds have been conducted; however no funds have yet met the investment criteria."

Nevertheless, in October 2014, like several other pension funds and financial investors, JØP invested in a new energy infrastructure fund managed by Copenhagen Infrastructure Partners. According to the press release, the fund intends to focus on energy infrastructure such as biomass-fired power plants, electricity transmission, as well as onshore and offshore wind power. Consequently, it can be expected that JØP will contribute to the financing of larger renewable energy plants in the future.

5.6 LÆRERNES PENSION

130, 000 members – US$9 billion in investment assets

Lærernes Pension is a pension fund for Danish primary school teachers.

WWF's assessment of Lærernes Pension: 4 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	Lærernes Pension has neither a qualitative nor a quantitative target for investments in green energy technologies.
2. *Objectives for fossil fuel divestment*	**0**	Lærernes Pension has no objectives for fossil fuel divestment. However, in its response to the questionnaire, the pension fund expresses the intention to exclude investments in companies that irresponsibly use nature. Nevertheless, the pension fund does not connect this intention directly to fossil fuels.
3. *Climate change considerations of the investment policy*	**0**	Lærernes Pension does not assess of the impact of climate change on investments. Lærernes Pension has drafted a code of ethics, which it reviews on a regular basis. However, the word "climate" does not appear at all in the description of the ethical code or elsewhere on the website.
4. *Potential influence of members on pension fund investments*	**2**	The members of Lærernes Pension have representatives on the pension fund's board as well as in two special member forums. Every second year there is a dialogue with the pension fund’s two member forums regarding the development of the pension fund's code of ethics. This process allows members a reasonable opportunity to influence the company's ethical guidelines and investments.
5. *Existing exclusions*	**0**	Lærernes Pension does not publish its exclusion list. In the questionnaire, the pension fund states that it "has excluded companies that show irresponsible use of natural resources and/or harm the environment". Since it does not publish the list, it is impossible to assess whether these exclusions have been made based on climate change considerations.

6. *Existing green energy investments*	**2**	Lærernes Pension has published its list of shareholdings on its website but without specifying the size of the different shares. The list shows that the pension fund holds shares in Vestas. Moreover, in July 2014, the pension fund made its first direct investment in future offshore wind farm, Gode Wind 2 in Germany. The pension fund has no investments in funds that focus exclusively on renewable energy. Lærernes Pension expects to increase investments in green energy technologies.

5.7 NORDEA LIV & PENSION

330, 000 customers - US$27 billion in investment assets

Nordea Liv & Pension is part of the Nordea Group and manages retirement savings for individuals, both inside and outside of company schemes. Nordea Liv & Pension emphasizes that it strives to be a leading actor in sustainable investments, including in climate and energy.

WWF's assessment of Nordea Liv & Pension: 4 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	In its questionnaire response, Nordea Liv & Pension writes that it has "an intention to move in a clearly defined direction towards increased green investments, provided that it assesses the resulting returns to be satisfactory". However, because this intention is only expressed in the response to WWF, and not publicly on the website, WWF has chosen not to give Nordea Liv & Pension points for a qualitative objective.
2. *Objectives for fossil fuel divestment*	**0**	Nordea Liv & Pension has no objective to divest from fossil fuels. The pension fund expresses doubts that divestment from fossil fuels will reduce CO_2 emissions, and instead prefers to engage those companies.
3. *Climate change considerations of the investment policy*	**1**	Nordea Liv & Pension regularly assesses the CO_2 profile of assets managed by Nordea Asset Management. It conducts an internally produced carbon footprint analysis of the investment funds in order to provide increased transparency to portfolio management. It has initiated a project to map the energy sector in relation to sustainable development and CO_2 reduction. Among other things, this mapping seeks to determine Nordea Liv & Pension's position on investment in shale gas. With the initiatives mentioned, it is surprising that Nordea holds so many investments in oil and gas companies, including those with high-risk projects.
4. *Potential influence of members on*	**1**	Nordea Liv & Pension writes in its questionnaire response that customers are able to contact the pension fund direction or via its corporate customer board, yet it's not mentioned on its website. Similarly, it is not possible to contact a specific employee or e-mail

pension fund investments		address regarding ethical investments. WWF assesses that it is difficult for customers to affect the pension fund's overall investment strategy. However, Nordea customers can choose to invest through the Nordea Climate and Environment Fund. This is good, yet the fund does not exclusively focus on green energy technologies - it also includes other kinds of environmental investments.
5. Existing exclusions	**1**	Nordea Liv & Pension publishes its exclusion list. It has not yet made exclusions based on climate change considerations. However, the pension fund states in its questionnaire response that it is currently involved in a dialogue with five oil producers. It is not clear whether potential exclusion factors would include environmental or climate change considerations.
6. Existing green energy investments	**1**	Unlike several of other the other major Danish pension funds, Nordea Liv & Pension does not invest directly in offshore wind farms. Nordea Liv & Pension publishes its list of shareholding. The pension fund has informed WWF that it invests in renewable energy through shares spread over the entire portfolio and through private equity funds, which invest in wind and solar energy. Nordea Liv & Pension does not specify which funds they invest in; nevertheless, WWF assumes that it includes the Nordea Climate and Environment Fund. This fund contains shares from a number of companies that do not exclusively have products related to climate change or green energy. Nordea Liv & Pension expects an increase in its green investments in 2014.

5.8 PBU

110, 000 members – US$8 billion in investment assets

PBU is the pension fund for Danish pedagogues.

WWF's assessment of PBU: 4 points

Criteria	*Points*	*Description*
1. Objectives for green energy investment	**0**	PBU has neither qualitative nor quantitative objectives to invest in green energy technologies. The company emphasizes that it wants to invest widely, including in renewable energy, if and when it implies attractive financial return potential.
2. Objectives for fossil fuel divestment	**0**	PBU states that it has no targets for fossil fuel divestment. The fund emphasizes that it wants to invest broadly in energy. Similarly, in its 2013 report on social responsibility, PBU states that it does not intend to divest from fossil fuels because the world is going to be dependent on fossil fuels far into the future. Furthermore, the pension fund does not believe that the campaigns, launched in Denmark and abroad with the purpose to put pressure on pension funds – among others - to stop investments in coal, oil and gas, have had any appreciable effect.

3. *Climate change considerations of the investment policy*	**0**	PBU does not seem to focus on limiting the risks of fossil fuel investments associated with global action on climate change. However, the fund states that it assesses climate change impacts as part of its managerial due diligence, in the case that there is an actual risk or possibility that climate change affects its investments.
4. *Potential influence of members on pension fund investments*	**2**	PBU's ethics leaflet clearly encourages members to give their views on responsible investments by sending an email to PBU. PBU includes ethical investment information in quarterly reporting to the member representatives. Furthermore, PBU regularly reports on ethics through a designated blog. The frame of PBU's ethics and general basis for investments is part of a “pension school” for selected delegates and is an ongoing discussion in the delegate assembly. According to PBU’s website, PBU has 35 delegates elected by other members for five-year terms. The delegates may vote at the general assembly. While regular members do not have the right to vote at the general assembly, all members have the right to speak. Three of nine board members are elected by and among the members.
5. *Existing exclusions*	**0**	PBU does not publish its exclusion list. According to its questionnaire response, it has made no exclusions based on climate change considerations.
6. *Existing green energy investments*	**2**	PBU does not publish its list of shareholdings on its website. However, PBU states in its questionnaire response that it invests in green energy through funds, of which at least one of them exclusively invests in green energy technologies. Moreover, in 2014, PBU has put money into the newly created Danish Climate Investment Fund, IFU, also supported by Danish Growth Capital, PKA and PensionDanmark. According to PBU, approximately three percent of its total assets is invested in green energy technology. In October 2014, PBU put money into the new Copenhagen Infrastructure Partners fund, which is expected to focus on energy investments like transmission networks and onshore as well as offshore wind.

5.9 PENSAM

413, 000 customers – US$20 billion in investment assets

PenSam administers pension schemes for various employees in the public sector such as medical assistants, nurses, caretakers and porters. PenSam has only answered half of the questionnaire.

WWF's assessment of PenSam: 5 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	PenSam has no defined objectives for increased green energy technology investments.
2. *Objectives for fossil fuel divestment*	**0**	PenSam has no target for divestments from its fossil fuel investments.
3. *Climate change considerations of the investment policy*	**0**	In response to the questionnaire, PenSam writes that the company wants to achieve an attractive risk and return combination while still taking into account the agreed ethical guidelines. Factors such as the impacts of climate change can be included in this assessment. Furthermore, on its website, PenSam highlights that it does not see ethical considerations and good returns as contradictory. That said, neither the answers to the questionnaire nor the website provides an earnest impression that PenSam considers climate change as a factor that can affect the risk profile of its investments. Nevertheless, it is an important signal that PenSam has excluded Exxon Mobil based on climate change considerations (see below).
4. *Potential influence of members on pension fund investments*	**2**	According to PenSam, customers are able to influence pension and investment policies through a customers' advisory committee. These groups consist of customers elected to represent broader customer interests. The committee can bring forward suggestions and questions from other customers as well as presenting their own requests and ideas. The website encourages customers to influence the pension schemes through these committees. The committees provide a sensible option for active customer participation.
5. *Existing exclusions*	**2**	PenSam receives 2 points because it publishes its exclusion list *and* has carried out the exclusion of ExxonMobil on the grounds of the Kyoto Protocol limits to greenhouse gas emissions. In fact, PenSam is the only pension fund, in this study, that achieves 2 points for this criterion. It should be mentioned that PenSam has a relatively extensive exclusion list and that environmental considerations play a role in connection to several of these exclusions.
6. *Existing green energy investments*	**1**	PenSam has not answered the questions concerning its investments in green energy technologies. However, the list of shareholdings, available on its website, shows that the pension fund has invested in green energy technology suppliers, including Rockwool and Vestas.

5.10 PENSIONDANMARK

640, 000 members - US$25 billion in investment assets

PensionDanmark administers collective agreements and company agreed occupational pensions for 12 unions and 37 employers' associations. PensionDanmark is considered a leader among Danish pension funds when it comes to direct investments in offshore wind farms.

WWF's assessment of PensionDanmark: 5 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**1**	PensionDanmark does not have a specific target to increase investments in green energy technology. However, over the next five years, PensionDanmark aims to invest additional US$1.38 billion in infrastructure, including energy. Ultimately, these investments are supposed to constitute over 10 percent of PensionDanmark's assets. This target appears on its website. Today, PensionDanmark holds US$2.1 billion in infrastructure investments. In recent years, most of these assets have been invested in renewable energy. On this basis, WWF assumes that renewable energy projects will continue to be a focus point of PensionDanmark in the coming years. However, recent investments also include a natural gas fired plant.
2. *Objectives for fossil fuel divestment*	**0**	PensionDanmark does not currently aim to divest its fossil fuel investments. Furthermore, PensionDanmark's list of shareholdings shows that the company holds significant investments in fossil fuel companies.
3. *Climate change considerations of the investment policy*	**0**	PensionDanmark does not seem to acknowledge that action on climate change can affect the value of fossil fuel investments. According to the fund, the overall goal is to make investments that provide a good return to the members. However, the pension fund highlights that, "In addition, PensionDanmark would like to invest in assets that contribute to the transition to more sustainable energy production, provided that this does not negatively affect returns."
4. *Potential influence of members on pension fund investments*	**1**	The pension fund members have the possibility of influencing the investment policy through the board members. However, this gives limited access to influence for the individual member. Furthermore, it is possible to contact PensionDanmark through the website and comment on a particular investment. Thereafter, the pension fund will examine the case and decide whether to start a dialogue with the company in question.
5. *Existing exclusions*	**1**	PensionDanmark publishes an exclusion list. However, it has made no exclusions based on climate change considerations.
6. *Existing green energy investments*	**2**	PensionDanmark invests in green energy technology through both shares and funds. Moreover, PensionDanmark has invested directly in several offshore wind farms and in a transmission network in the German North Sea, which will transmit the offshore wind generated

	electricity to the mainland. In addition, the pension fund has invested directly in a biomass-fired power station in the United Kingdom. Copenhagen Infrastructure Partners, founded by PensionDanmark in 2012, have carried out some of the investments. Additionally, in 2014, the fund invested in the new Danish Climate Investment Fund along with PKA, PBU, IFU and Danish Growth Capital. PensionDanmark expects to increase its investments in green energy technology in 2014.

5.11 PFA

1 million customers – US$68 billion in investment assets

PFA is Denmark's second largest pension fund. Company pension schemes represent a large part of the pension fund's business.

WWF's assessment of PFA: 4 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	0	PFA does not have a target for green energy technology investments. It exclusively aims to generate the greatest possible financial return for customers in a responsible manner. However, PFA stresses that it increasingly invests in renewable energy and energy efficiency solution providers. According to the fund, its green investments have multiplied from 2010 to 2013, so that they now account for almost 10 percent of the pension fund's shareholdings.
2. *Objectives for fossil fuel divestment*	0	PFA has no objective to divest from fossil fuel investments. However, PFA notes that it has reduced its fossil fuel investments by 20 percent between 2010 and 2013. This is obviously positive. Nevertheless, its fossil fuel investments are still significant and, without a clear goal for divestment, it is difficult to determine whether there is a clear direction towards a phase-out of fossil fuel investments or whether the current divestiture is the result of other factors.
3. *Climate change considerations of the investment policy*	0	In its response to the questionnaire, PFA writes that international and national policy objectives on climate change will affect investment decisions. However, nothing suggests that PFA already has taken steps to minimize the risks of fossil fuel investments posed by global action on climate change. PFA further notes that it continuously assesses the themes of climate change, environment and energy, which may affect either individual companies in the PFA's portfolio or its forward-looking investment policy. Moreover, PFA states that it considers climate change as one element among others in its assessment of whether an investment provides an attractive and sustainable return in the long term.
4. *Potential influence of*	1	Individual customers have the possibility of contacting a special consultant dedicated to questions regarding corporate social

members on pension fund investments		responsibility in investments. Large corporate customers can also take part in a customer board, which consists of 70 executive employees, and try to influence the pension fund in this way. The majority of PFA's customers have the opportunity to invest their money through a platform called *You Invest*, where customers can choose to place their money in various funds and indexes. However, the platform does not include a climate change related fund.
5. *Existing exclusions*	**1**	PFA publishes its exclusion list. In its response to the questionnaire, PFA states that it has earlier made exclusions based on climate change considerations. However, the examples mentioned suggest that it is in fact other considerations than climate change that have caused the exclusion decisions (e.g. gold producers Freeport McMoRan and Goldcorp), and in any case these companies no longer appear on the exclusion list. It is apparent from the list of shareholdings that PFA has heavy investments in the oil company Exxon Mobil, which has actively advocated against action on climate change. In comparison, PenSam has chosen to exclude Exxon Mobil, referencing the Kyoto Protocol.
6. *Existing green energy investments*	**2**	PFA invests in green energy technology through shares and funds, including the fund SE Blue Renewables, which was created in 2013 as a joint venture between the energy company SE and PFA. This fund operates around 300 Danish onshore wind turbines that were purchased from DONG Energy in 2013. In addition, according to its 2013 corporate social responsibility report, the PFA provided US$39 million through Denmark's Export Credit Agency (EKF), to an offshore wind project, led by a state-owned Irish energy company. Recently, PFA put money into the new energy infrastructure fund managed by Copenhagen Infrastructure Partners. PFA expects an increase in green energy investments in 2014.

5.12 PKA

260, 000 members - US$33 billion in investment assets

PKA is a common management company for several pension funds. PKA manages pensions for employees of mainly the social and health sectors. Approximately 90 percent of its members are women.

According to PKA, members have asked for several years for more focus on climate change. Accordingly, PKA wants a significant climate change profile.

WWF's assessment of PKA: 7 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**1**	PKA aims to invest 10 percent of its capital in climate-related investments. This objective does not have a time limit, and PKA emphasizes, "Which investments PKA will make in renewable energy

		depend on the economic conditions of these investments." Since the objective does not appear on the website, PKA receives one point instead of two. However, compared to the other pension funds in this study, PKA has the most concrete quantitative target for investments in green energy.
2. *Objectives for fossil fuel divestment*	**0**	PKA has not set an objective to divest from fossil fuels. It would strengthen the PKA target of a strong climate change profile, if the company - in parallel with its green investments - actively and worked towards divestment from fossil fuels.
3. *Climate change considerations of the investment policy*	**1**	On its website, PKA highlights that it actively seeks investment opportunities where both economic and responsible considerations coincide. In its response to the questionnaire, PKA also mentions that its investment strategy specifically refers to the desire to make investments that, in addition to providing a satisfactory return, also reduces dependence on fossil fuels. On its website, with regard to its investment strategy, PKA emphasizes that socially responsible investments are a priority and an area of strategic focus. Climate change is one of three special focus areas mentioned on the website in relation to the pension fund's work on responsible investments. PKA recognizes that investments in coal, oil and gas can pose a financial risk due to climate change policies. In its response to the questionnaire, PKA writes that it is "in a process of examining its exposure to the fossil fuel sector, and to account for CO_2 with regards to PKA's CO_2-reducing investments". Moreover, the director of PKA is a board member for the Institutional Investors Group on Climate Change (IIGCC). IIGCC is a platform for financial investors to cooperate in order to strengthen public policies, investment policies and business practices that address the long-term risks and opportunities associated with climate change.
4. *Potential influence of members on pension fund investments*	**2**	PKA's members have the opportunity to be elected as a delegate representing other members. One to two times a year, PKA's 800 delegates attend seminars that address priority topics for PKA members, including responsible investments. Furthermore, at PKA's general assembly, delegates are able to make proposals stating that a specific theme should be discussed more in detail by the board. The other members can contact PKA via the website or phone. However, there is no specific contact person dedicated to corporate social responsibility issues.
5. *Existing exclusions*	**1**	PKA has published its exclusion list. The pension fund reports that it has made 17 exclusions based on climate change related concerns. However, the company's explanation of these 17 exclusions is as follows: "Non-use of best standards in connection with extraction of oil/gas or minerals, which has resulted in a significant negative impact on nature." This explanation indicates that environmental concerns, rather than specific climate change concerns, have led to the exclusions. Accordingly, these exclusions have received just one point.

6. *Existing green energy investments*	**2**	PKA invests in green energy technology through shares, funds and direct investments. PKA's list of shareholdings are published, but without specification of investment size. PKA has, among other things, invested in four wind farms and in at least one fund that focuses on green energy, the European Clean Energy Fund. PKA states that in order to reach its objective of investing 10 percent of its capital in climate-related investments, the company has established a private equity fund, PKA AIP. This fund aims to strengthen PKA's direct infrastructure investments, including investments in renewable energy. Moreover, in 2014, PKA put money into the newly created Danish Climate Investment Fund along with IFU, Danish Growth Capital, PensionDanmark, and PBU. PKA expects that its green investments will grow in during 2014.

5.13 SAMPENSION

279, 000 customers - US$32 billion in investment assets

Most of Sampension's customers are municipal and state employees in the public sector.

WWF's assessment of Sampension: 2 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	In its response to the questionnaire, Sampension notes that it has an ambition to invest in energy efficiency, as well as economically competitive initiatives to develop, manufacture and distribute sustainable energy. However, this objective does not appear on Sampension's website. Accordingly, WWF has not given any points for this.
2. *Objectives for fossil fuel divestment*	**0**	Sampension expresses no intention of divesting from fossil fuels. Sampension notes that it seeks to avoid investing in the least environmentally and climate change conscious companies in the oil industry. Nevertheless, the list of shareholdings shows that the pension fund holds a large inventory of shares in various oil companies.
3. *Climate change considerations of the investment policy*	**0**	Sampension states in its questionnaire response that it wants to support efforts associated with climate and energy that have national and international consensus. Sampension has joined the Carbon Disclosure Project and IIGCC. In its latest corporate social responsibility policy from the 2014, Sampension writes, "Sampension has adopted an investment policy that, among other things, rests on the assumption that socially and environmentally responsible companies increase the likelihood of a better return over the long-term through reduced business risk." Sampension adds that it consequently "invests in companies that seek to promote a cleaner environment by focusing on CO_2 emission reductions and by supporting the development and diffusion of environmentally friendly technologies."

		Sampension states that it assesses climate change impact on investments, particularly in connection with investments in forests and property. However, Sampension does seem to think coal, oil and gas investments will become stranded assets in the longer term due to action on climate change.
4. *Potential influence of members on pension fund investments*	**0**	Sampension states that its customers can influence its investment policy indirectly through the board. In other words, customers have no direct access to influence. It is possible to contact the pension fund with questions about investments, but the website mentions no specific contact person or e-mail for questions on corporate social responsibility. Through a scheme called Linkpension, customers may choose how to invest their own pension funds. However, while this gives the customers the option to place money in an index fund focusing on oil and gas, it is not possible to select funds that exclusively targets renewable energy. This is, in WWF's view, sending the wrong message to customers, if the company wants to be responsible on climate change.
5. *Existing exclusions*	**0**	Sampension does not publish its exclusion list, which hinders transparency. Accordingly, the pension fund cannot be awarded with points in this category. In its response to the questionnaire, Sampension states that it has made exclusions based on climate change considerations. Sampension does not reveal which companies these are, but notes that it excludes companies that have "shown inadequate efforts to stop/prevent environmental impacts of the company's activities." Sampension further emphasizes that, in current dialogues with companies on responsibility, climate change considerations are the primary criterion in about 20% of the cases. Sampension's 2013 annual report distinguishes between dialogue due to climate change considerations and dialogue due to other environmental concerns. This is positive even though it is not explained what a dialogue on climate change implies.
6. *Existing green energy investments*	**2**	Sampension publishes its list of shareholdings. In response to the questionnaire, Sampension writes that the pension fund invests in green energy through shares, funds and direct investments. However, the funds are not specified. In 2014, Sampension announced its first direct investment in green energy, an onshore wind power project to be built in Denmark. The company expects increased green investments in 2014. In relation to Sampension's own activities, the company, in addition to energy saving initiatives in 2013, has established 760 solar panels on the roof of its office building in Tuborg Havn with the expectation that it can cover about 15% of total electricity consumption.

5.14 SEB PENSION

250, 000 customers - US$13 billion in investment assets

SEB Pension is part of the Swedish SEB group and therefore uses the same corporate social responsibility policy.

WWF's assessment of SEB Pension: 2 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	**0**	SEB has no objectives for investments in green energy technology.
2. *Objectives for fossil fuel divestment*	**0**	SEB has no plans for divestment from its fossil fuel investments.
3. *Climate change considerations of the investment policy*	**0**	SEB is a member of the Carbon Disclosure Project. Furthermore, it has prepared a position statement on climate change, which is of course positive. In this statement it says, "*SEB continuously strives for sustainability by minimising the carbon footprint from our financial services in dialogue with our clients and our portfolio companies*." In addition, SEB has developed a number of sector policies including on fossil fuels, renewable energy, and mining. These policies advise on best environmental practices for the companies in which SEB invests, and are not policy papers as such. SEB does not give the impression – either in its questionnaire response or on its website - that it considers climate change policy as a financial risk to fossil fuel investments.
4. *Potential influence of members on pension fund investments*	**0**	According to SEB, customers are not able to directly influence the overall investment policy of SEB Pension. However, the customers can contact the pension fund at any time if they have any questions. The website does not inform of a particular contact person or e-mail address for inquiries on ethics. Customers who choose to have their savings placed in an option called "Link" are free to choose from a number of funds, including the Schroder Global Climate Change Fund. Accordingly, they are able to influence their own investments directly. The Schroder Global Climate Change Fund focuses on companies that are expected to grow as a consequence of the climate crisis, and the investments are not exclusively in renewable energy and energy efficiency, but also in natural gas and agriculture.
5. *Existing exclusions*	**1**	SEB publishes its exclusion list. It has made no exclusions based on climate change or environmental considerations. Only producers of controversial weapons have been excluded.
6. *Existing green energy investments*	**1**	SEB publishes its list of shareholdings and holds shares in Vestas. Moreover, SEB issues "green bonds" in collaboration with the World Bank Group to support loans to climate change projects, primarily in

developing countries. SEB states that its green investments rose in 2013, but that it expects a *status quo* in 2014.

5.15 TOPDANMARK

300, 000 customers - US$5 billion in investment assets

Topdanmark is best known in Denmark as an insurance company, but it also offers pension schemes. Topdanmark has only answered a small part of the questionnaire. Furthermore, it is not easy to retrieve information from its website concerning its pension fund. The lack of information on the website, together with the lack of response to the questionnaire, affected its low score.

WWF's assessment of Topdanmark: 1 point

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	0	Topdanmark does not have a target for investments in green energy technology.
2. *Objectives for fossil fuel divestment*	0	Topdanmark has not defined an objective to divest its fossil fuel investments.
3. *Climate change considerations of the investment policy*	0	With regard to the corporate social responsibility work related to climate and environmental policy, Topdanmark highlights on its web site that its focus on preventing damages from occurring in the first place contributes positively to the action on climate change and the environment. As an example, Topdanmark refers to an avoidable building fire that emits large amounts of CO_2, requires large amounts of water, and creates waste. This approach clearly relates to Topdanmark's core business as an insurance company. Apart from this statement, in the section of the website on climate change, Topdanmark primarily focuses on its own emission reductions as a company through its own operations and its employee travel. While it is positive that Topdanmark aims to reduce its own emissions, WWF assesses that there is a lack of considerations of the larger climate change perspective associated with the fund’s investments of its customers' assets, including the business risks that may be associated with fossil fuel investments.
4. *Potential influence of members on pension fund investments*	1	Customers are able to contact a specific employee in Topdanmark regarding issues related to corporate social responsibility. It is possible for the customers to choose a “Link" pension scheme, allowing them to choose how to invest their pension assets. However, it is not possible to select funds that invest solely in green energy technologies.

5. *Existing exclusions*	0	Topdanmark's does not publish its exclusion list. The pension fund has not made exclusions based on climate change considerations. However, in its response to the questionnaire, Topdanmark notes that it screens its portfolio and that climate change issues are considered equal with other issues in the screening process.
6. *Existing green energy investments*	0	Topdanmark has not answered this question in the questionnaire and it does not publish its list of shareholdings. No other information is available to suggest that the pension fund invests in green energy technology. Accordingly, the pension fund receives 0 points. Elsewhere in its response to the questionnaire, Topdanmark notes that the legal obligation to provide customers with the best possible return is a barrier to investing in renewable energy and energy efficiency. It is noteworthy that Topdanmark, as part of its climate change strategy for its own operations, has installed a large photovoltaic system with 3,042 solar panels located on the roof of the headquarters in Denmark.

5.16 UNIPENSION

110, 000 members - US$16 billion in investment assets

Unipension is a consolidated pension administration service tasked with the daily management of three pension funds: the Architects' Pension Fund (AP), the Pension Fund for Danish Masters of Arts, Masters of Sciences, and Doctorates of Philosophy (MP), and the Pension Fund for Agricultural Academics and Veterinary Surgeons (PJD). Each of the three individual pension funds has its own capital, members and supervisory board. Unipension has chosen not to answer WWF's questionnaire.

WWF's assessment of Unipension: 4 points

Criteria	*Points*	*Description*
1. *Objectives for green energy investment*	0	Unipension has not set a target for an increase in its green investments.
2. *Objectives for fossil fuel divestment*	0	Unipension has no target for divestment from fossil fuel investments. In its corporate responsibility report for 2013, Unipension states that it generally favours active ownership rather than exclusions. It further notes, "It is not appropriate to exclude entire regions or industries in an effort to act as a responsible investor, since this will inappropriately increase the portfolio's risk profile."
3. *Climate change considerations of the investment policy*	0	In its guidelines for responsible investments, Unipension notes, "The companies in which the pension funds invest should not cause serious long-term damage to the environment (...), including the pollution of water, soil and air, and large emissions of greenhouse gases in the atmosphere." Nevertheless, Unipension largely argues in a 2014 report (on stranded assets and climate policy challenges) for

		business as usual with continued investments in fossil fuels. The report finds that there is a lack of legal documents and global guidelines that may help the pension funds challenge the companies they invest in on their CO_2 emissions. Unipension argues: "The only legally binding document on CO_2 emissions is the Kyoto Protocol, which must be regarded as factually outdated."
4. *Potential influence of members on pension fund investments*	**2**	Unipension stresses on its website that, "The pension funds managed by Unipension are owned by its members, and it is the members' approach to responsible investments that we apply in our responsible investment efforts." Since member preferences differ, it has been a central task to map preferences in a way that best represent the membership as a whole. Common to the three pension funds managed by Unipension are their statutes stating that any member has the right to require a specific item recorded on the agenda for the general assembly. In early 2014, members of one of the three pension funds, MP Pension, dealt with a proposal for divestments from fossil fuel assets. However, the proposal did not receive a majority of votes from attendees.
5. *Existing exclusions*	**1**	Unipension publishes an exclusion list, but it has not made any exclusions based on climate change considerations. In its report on stranded assets, Unipension writes that it will exclude companies if it assesses that dialogue will not result in the necessary improvements for the company to comply with the guidelines for responsible investments. Unipension further notes, *"Due to lack of global standards, it is not possible for Unipension to define what is meant by "necessary improvements" or "the desired effect" in relation to CO_2. Accordingly, the fund does not find that it can exclude companies based on high CO_2 emissions since external guidelines do not exist."* The exclusion list reveals that Unipension has not made any exclusions based on environmental considerations either.
6. *Existing green energy investments*	**1**	Unipension publishes its list of shareholdings on its website. According to this, the pension fund holds shares in companies that produce green energy technology. The website does not present an overview of the company's investments through funds.

6 RECOMMENDATIONS

Pension funds have tremendous power since they manage a very large share of society's wealth. With power comes responsibility - particularly for the future.

These funds have obligations towards the generations that are to become pensioners. In other words, pension funds have both the tools and the obligation to do something about the climate change problem and support the green energy transition.

Therefore, WWF's recommendations to the pension funds are as follows:

1. Divest from the fossil fuel industry

WWF recommends that Danish pension funds develop strategies for divestment from fossil fuel investments. Green investments are important to efforts to limit climate change. However, this effort must be combined with significant reductions in fossil fuel production. Pension funds and other institutional investors can send an important signal and simultaneously free themselves from the business risk associated with continued fossil fuel investments by divesting their shares in fossil fuel companies.

A first step may be to sell off shares in coal companies, as well as oil and gas companies with high-risk projects. In other words, companies that extract tar sands or companies with oil exploration plans associated with great financial risk in deep sea and in the Arctic, or in critical natural areas. WWF also recommends divesting from companies that actively oppose responsible climate change policies.

2. Perform a risk assessment of investments based on the two-degree limit

WWF recommends that pension funds clearly focus on assessing the financial risks associated with fossil fuel investments. Funds ought to base this assessment both on the 2°C limit and on the high economic and environmental risks associated with certain types of oil drilling. For example, Bloomberg New Energy Finance has developed a risk tool called the Carbon Risk Valuation Tool.

3. *Set clear targets for increased investments in green energy technology*

WWF recommends that pension funds set quantitative and time-bound targets for investments in green energy technologies. Clear goals are important to maintain an intense and sustained focus that can drive investments forward and ensure that the fund actually lives up to its good intentions. Of course, pension funds should not pursue targets without considering returns. However, investments in renewable energy are – fortunately - becoming increasingly economically viable. Costs have fallen dramatically in recent years and much faster than expected. A notable example is the reduction in solar cell cost. In addition, average onshore wind generation costs around the world are within the lower ranges of, or even lower than, that of fossil fuels.

4. *Make more direct investments in renewable energy*

WWF recommends that pension funds continue their current trend of increasing direct investments in major renewable energy projects such as offshore wind farms. These provide volume and demonstration effect and have a financial gap that matches well with the pension funds' long-term horizon. Investment in major infrastructure projects designed to strengthen electricity transmission will support the transition to renewable energy and is therefore an area where pension funds can to put their wealth to work while contributing to carry out an important task of society.

5. *Be more transparent about investments and exclusions*

Easy and clear access to information is a prerequisite for transparency for members and the outside world. WWF recommends that pension funds publicly and clearly inform how they are addressing the climate change problem as well as which objectives and strategies they are pursuing with respect to energy sector investments and in other companies with high greenhouse gas emissions. Their investment portfolios and exclusion lists ought to be publicly available (e.g. on its website) so that members can easily get an overview of the pension funds' investments and thus what they are contributing to financing. Pension funds should also disclose the level of CO_2 emissions that potentially will result from the burning of the fossil fuel reserves in which the pension fund has invested.

6. *Increase the engagement of international forums in responsible investments and the climate*

WWF recommends that pension funds increase their involvement in the international forums focused on responsible investments and climate change – in order to help strengthen these organizations and their work. An example would be Carbon Disclosure Project (CDP), which is an international independent non-profit organization. Through company reporting systems, CDP works to provide transparency of corporate CO_2 emissions and environmental initiatives. This gives pension funds a good opportunity to examine the companies in which they are considering investing.

Many Danish pension funds already do this as part of their responsible investment work. However, only a few of the largest coal, oil and gas companies report to CDP. WWF calls on pension funds to require fossil fuel companies to report to CDP on the environmental impact and CO_2 emissions of their portfolios. Furthermore, pension funds ought to divest their assets from companies that refuse to report to CDP.

7. Involve climate change when using active ownership

The energy sector is crucial in the transition necessary to solving the problem of climate change, but it cannot solve the problem alone. Therefore, pension funds ought to require that the non-fossil fuel companies that they co-own develop action plans and targets to reduce their contribution to climate change. Climate change should be a core component in the practice of active ownership.

However, when it comes to companies whose core activity is the extraction of fossil fuels like coal, oil and gas, it can be questioned whether active ownership is enough. Continued use of fossil fuel company's products is accelerating climate change and delaying the much-needed green energy transition - even if factors like working conditions and environmental security are addressed. Instead, WWF recommends that pension funds develop a divestment strategy for their investments in such companies.

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CLIMATE CHANGE & FINANCE

1/3

Animal species at risk of extinction from climate impacts

US$1 TRILLION

Amount of renewable energy investments needed every year to sufficiently address climate change and build a just energy transition

2°C

Levels of global average temperature rise beyond which scientists expect extremely bad and probably irreversible impacts of climate change

2/3

Portion of all remaining fossil fuel reserves that must stay in the ground if we are to avoid dangerous climate change

Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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