

GLOBAL CLIMATE 500 INDEX 2016

RATING THE WORLD'S INVESTORS ON
CLIMATE RELATED FINANCIAL RISK

EMBARGOED 2 MAY 2016

ASSET
OWNERS
DISCLOSURE
PROJECT



PREFACE

The fourth AODP Global Climate Index launches against a backdrop of positive change. The landmark Paris Agreement on climate change made between 195 nations in December will reshape the investment landscape over the next 30 years. Initiatives like the Montreal Carbon Pledge, the Portfolio Decarbonization Coalition and Global Investor Coalition on Climate Change are rapidly gaining signatories. It is now widely acknowledged that to ignore the financial risk of climate change is a threat to investment portfolios and a growing number of investors are taking actions to understand how holding the increase in the global average temperature to well below 2°C will impact their investment portfolios.

Perhaps as important an intervention as any was Bank of England governor Mark Carney's pivotal speech emphasizing this risk to the global financial community. This led to the creation of the Financial Stability Board's Taskforce on Climate-related Financial Disclosure, on track to make recommendations to the FSB by the end of this year for both corporate and investor reporting of this systemic risk.

ABOUT AODP

The Asset Owners Disclosure Project (AODP) is an independent global not-for-profit organisation that recognises the specific financial risk attributes of climate change. AODP has developed the world's leading reporting framework for institutional investors encompassing the disclosure and management of climate risk.

The AODP Global Climate 500 Index rates the world's 500 biggest asset owners - pension funds, insurers, sovereign wealth funds, foundations and endowments - on their success at managing climate risk within their portfolios, based on direct disclosures and publicly available information. Asset owners are scored on three key capabilities: Engagement, Risk Management and Low-Carbon Investment. They are graded from AAA to D while those taking no action are rated X.

Leaders	Top 5%	A - AAA
Challengers	Top 10%	B - BBB
Learners	Top 20%	C - CCC
Bystanders	Top 50%	D
Laggards	Zero score	X

Further information on the methodology can be found in the appendix.

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The Leaders are leagues ahead but the Learners are fast advancing.

Climate change risk is now a mainstream issue for institutional investors and last year has seen many significantly step up their action to manage this. However only a handful are protecting their portfolios from the very real danger of stranded asset¹ scenarios, and it is shocking that nearly half the world's biggest asset owners are doing nothing at all to mitigate climate risk.

Asset owners who do recognise climate risk are taking significantly more action than last year. The Leaders are widening the gap from the Laggards, but the Learners are starting to catch up. These results are even more impressive, as the 2016 Index is more stringent, requiring evidence of tangible action and removing credit purely for transparency or commitments.

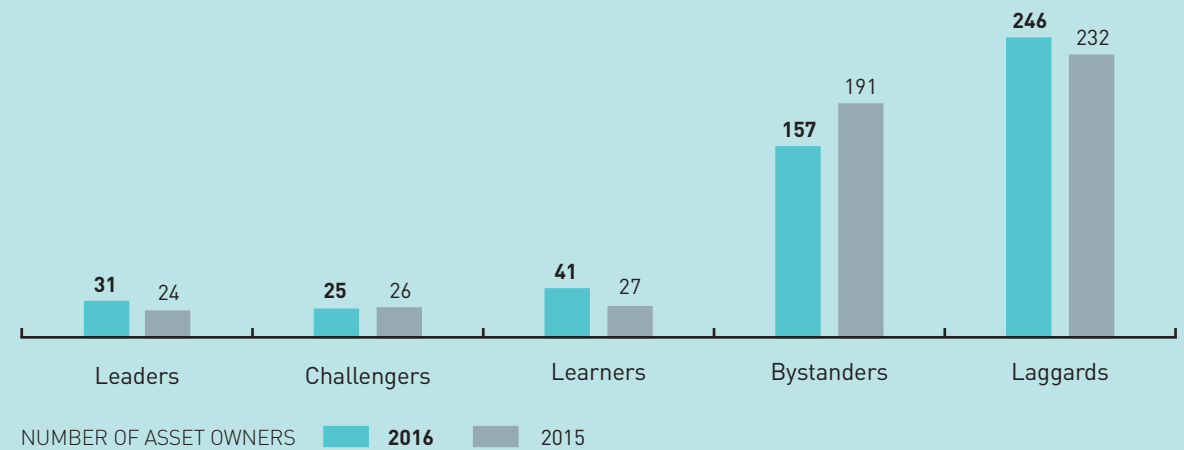
KEY DEVELOPMENTS

The 2016 Global Climate Index AUM coverage is \$38 trillion.

Upping the ante:

- 31 Leaders rated A and above, an increase of 29%.
- 12 asset owners are rated AAA, a 33% increase.
- The most significant increase is a 52% rise in asset owners rated CCC-C to 41, indicating many more are acknowledging and more importantly taking action on managing climate risk in their portfolios.
- The D group taking least action has shrunk 18% from 191 to 157 with \$14 trillion AUM. Some have improved, while others slipped to X due to stricter scoring.
- Nearly half the index remains X rated, with no evidence they are taking any action.

FIGURE 01 / NUMBER OF ASSET OWNERS BY RATING GROUPS



The positive findings indicate more asset owners are appointing staff with responsible investment and sustainability focus showing a 43% increase this year and support for climate resolutions is growing with a 62% increase.

10% of assets owners now calculate their portfolio carbon emissions – a 50% increase from 2015 (7%), yet still only 2% declare an emissions intensity reduction target for next year.

However there has been very little change despite the warnings on stranded assets. Just 5% of asset owners disclose measuring the impact stranded asset scenarios may have on their investments.

While there is a 63% increase in disclosed low-carbon investments from last year, \$138 billion represents just 0.4% of index AUM. This will need to improve dramatically if we are to meet the target of the Paris Agreement.

CONCLUSIONS

Momentum is building in the industry and there are many more asset owners embarking on the journey. 51% of the index are now taking some action in managing investment climate risk, which is a positive outcome.

There are clear areas for improvement that need to gather pace – investors need to take a more serious look at the potential risks of stranded assets in their portfolios and disclosure of both high and low-carbon investments needs to be more transparent. A sudden change in regulation is what could see the bursting of the carbon bubble.

NEXT STEPS

Over the coming months AODP will release more in depth findings to uncover the important areas of focus for asset owners, including comparative reports analysing asset owners strengths and weaknesses relative to their peers. This will be complemented by the launch of AODP's new supply chain indices which should provide asset owners with further insights to help to manage this risk.



**MOMENTUM IS BUILDING.
51% OF THE ASSET OWNERS
INCLUDED IN THE INDEX ARE
NOW TAKING SOME ACTION
IN MANAGING INVESTMENT
CLIMATE RISK.**

2016 LEADERS

- The Leaders – rated A and above – have increased by nearly 30% to 31.
- AAA rated asset owners have increased by a third (33%) to 12.
- USA tops total number in the Leaders group with 8, but this represents only 5% of US asset owners in the Index.
- Sweden is number one on proportional representation with 30% of their funds in the Leaders category.

The UK's \$4 billion Environment Agency Pension Fund tops the Global Climate 500 Index closely followed by Australia's \$7.1 billion Local Government Super in Australia, topping all three capabilities between them and showing that size is no barrier to managing climate risk.

Other leaders include giant institutions which have been active in campaigning for climate action, \$391 billion Dutch pension fund ABP, the \$184 billion New York Common Retirement fund and the \$301 billion California Public Employees Retirement System, all rated AAA, and UK insurer Aviva with \$445 billion of assets, rated A.



JOINING THE LEADERSHIP RANKS

This year has seen 10 new entrants to the Leaders group. The Church Commissioners for England have gone straight to the top, gaining a AAA rating for their awareness and action on climate risk. They are very active on the engagement front, driving many of the shareholder resolutions being presented to boards.

Caisse des Dépôts and FRR both jump to an AA rating, from CC and B respectively. Both perform well on Low-Carbon Investment, while Caisse des Dépôts shines in Engagement and FRR ranks highly in Risk Management. BPL and University of California also join the AA club.

On the first rung of the Leadership ladder, we have Sweden's AMF pension fund, and Greater Manchester Pension Fund, both jumping from D. Again different drivers – engagement for GMPF and risk for AMF.

Australia's BT Financial Group and Cbus Super also climb into A, along with Unilever who are the first corporate pension fund to join the elite Leaders table.

TABLE 01 / 2016 AODP GLOBAL CLIMATE 500 AAA-RATED LEADERS

2016 RATING	2016 RANK	2015/2016 CHANGE	ASSET OWNER NAME	TYPE	COUNTRY
AAA	1	^ 4	The Environment Agency Pension Fund (EAPF)	Pension fund	UK
AAA	2	v 1	Local Government Super (LGS)	Pension fund	Australia
AAA	3	^ 6	Fjärde AP-Fonden (AP4)	Pension fund	Sweden
AAA	4	0	Stichting Pensioenfonds ABP (ABP)	Pension fund	Netherlands
AAA	5	^ 1	New York State Common Retirement Fund (NYSCRF)	Pension fund	USA
AAA	6	^ 12	Pensionskassernes Administration A/S (PKA)	Pension fund	Denmark
AAA	7	0	AustralianSuper	Pension fund	Australia
AAA	8	^ 3	Andra AP-Fonden (AP2)	Pension fund	Sweden
AAA	9	^ 6	California Public Employees Retirement System (CalPERS)	Pension fund	USA
AAA	10	^ 13	Etablissement de retraite additionnelle de la Fonction Publique (ERAFP)	Pension fund	France
AAA	10	-	Church Commissioners for England	Endowment	UK
AAA	12	^ 1	First State Super	Pension fund	Australia
AA	13	^ 52	Caisse des Dépôts (CDC)	Sovereign wealth fund	France
AA	14	^ 65	Bedrijfspensioenfonds voor de Landbouw (BPL)	Pension fund	Netherlands
AA	15	v 5	Wespath IM ((General Board of Pension and Health Benefits of the United Methodist Church))	Pension fund	USA
AA	16	^ 30	Fonds de Réserve pour les Retraites (FRR)	Sovereign wealth fund	France
AA	17	^ 8	University of California Retirement System (UC Regents)	Endowment	USA
AA	18	v 10	Pensioenfonds Zorg en Welzijn (PFZW)	Pension fund	Netherlands
AA	19	v 17	Kommunal Landspensjonskasse Gjensidige Forsikringsselskap (KLP)	Insurance company	Norway
AA	20	^ 1	United Nations Joint Staff Pension Fund (UNJSPF)	Pension fund	USA
A	21	v 6	Victorian Superannuation Fund (VicSuper)	Pension fund	Australia
A	22	v 10	Aviva Insurance	Insurance company	UK
A	23	^ 113	AMF	Pension fund	Sweden
A	24	^ 3	BT Financial Group (BTFG)	Pension fund	Australia
A	25	v 11	California State Teachers' Retirement System (CalSTRS)	Pension fund	USA
A	26	v 7	New York City Employees Retirement System (NYCERS)	Pension fund	USA
A	27	v 7	Teachers' Retirement System of the City of New York (NYC TRS)	Pension fund	USA
A	28	^ 10	Cbus Super	Pension fund	Australia
A	29	-	The Church of England Pensions Board (CEPB)	Pension fund	UK
A	30	^ 106	Greater Manchester Pension Fund (GMPF)	Pension fund	UK
A	31	^ 4	Unilever Employee Pension Funds	Pension fund	UK

LARGEST LAGGARDS [BY AUM]

— Number of X rated funds – 246 managing \$14 trillion, up 6% from 2015.

— The 10 largest Laggards manage nearly \$5 trillion in assets: 13% of the total index.

— High proportion of oil-state sovereign wealth funds.

The 10 largest X-rated funds, worth a total \$5 trillion, are predominantly sovereign wealth funds from oil-producing nations and large Asian insurers.

Worth noting is the change in rating of Japan’s Government Pension Investment Fund, the world’s largest asset owner worth \$1.2 trillion, now rated D, up from X last year. By signing up to the UN’s Principles for Responsible Investment, it has committed to taking environmental, social and governance factors into account in its investments and has started asking its asset managers what they are doing to promote better behaviour in the companies it owns. This is a small but perhaps significant first step and sends a signal to the Japanese market, which has been ignoring the issue for far too long.

“I would encourage all Asset Owners to pick up the pace and ramp up their ambition in respect to a low carbon transition.”

CHRISTIANA FIGUERES

TABLE 02 / 2016 AODP GLOBAL CLIMATE 500 LARGEST LAGGARDS [BY AUM]

ASSET OWNER NAME	COUNTRY	TYPE	AUM USD MILLION
Abu Dhabi Investment Authority (ADIA)	United Arab Emirates	Sovereign wealth fund	\$773,000
Japan Post Insurance (Kampo Seimei)	Japan	Insurance company	\$602,007
Kuwait Investment Authority (KIA)	Kuwait	Sovereign wealth fund	\$592,000
SAFE Investment Company (SAFE)	China	Sovereign wealth fund	\$567,900
Thrift Savings Plan (TSP) (TSP)	USA	Pension fund	\$439,670
Nippon Life Insurance Company (Nissay)	Japan	Insurance company	\$437,621
Zenkyoren (JA Kyosai)	Japan	Insurance company	\$436,367
SAMA Foreign Holdings (Saudi Arabian Monetary Agency) (SAMA)	Saudi Arabia	Sovereign wealth fund	\$429,583
Hong Kong Monetary Authority (HKMA)	China	Sovereign wealth fund	\$406,111
China Life Insurance	China	Insurance company	\$357,103
Total			\$5,041,363
TOTAL X RATED			\$14,347,523

COUNTRY PERFORMANCE

TABLE 03 / REGIONAL LEADERS [RANKED BY AVERAGE SCORE]

REGION	2016		2015		CHANGE IN AVE SCORE
	# ASSET OWNERS	AUM USD MILLION	# ASSET OWNERS	AUM USD MILLION	
Oceania	35	\$1,090	29	\$926	-8%
Europe	171	\$12,625	150	\$9,654	9%
North America	208	\$11,017	231	\$10,923	-30%
South America	12	\$415	10	\$250	-37%
Africa	4	\$231	6	\$201	-88%
Asia	55	\$9,790	58	\$9,274	-37%
Middle East	15	\$2,570	16	\$2,692	75%
Total	500	\$37,737	500	\$33,920	

Regional analysis shows clear leadership by countries based in Oceania and Europe.

TABLE 04 / TOP 10 COUNTRIES [RANKED BY AVERAGE SCORE]

* P7 countries

RANK	COUNTRY	% OF ASSET OWNERS		PROPORTION OF AUM		# ASSET OWNERS	2015 %	
		LEADERS	LAGGARDS	LEADERS	LAGGARDS		LEADERS	LAGGARDS
1	Sweden	30%	0%	33%	0%	10	20%	0%
2	Norway	25%	0%	6%	0%	4	50%	0%
3	Australia*	18%	3%	16%	9%	33	17%	14%
4	France	21%	29%	13%	8%	14	14%	29%
5	Denmark	10%	20%	10%	19%	10	10%	20%
6	Netherlands*	17%	17%	51%	6%	18	11%	11%
7	UK*	14%	23%	15%	8%	43	6%	34%
8	Brazil	0%	40%	0%	30%	5	0%	0%
9	USA*	5%	67%	10%	46%	174	4%	53%
10	China	0%	63%	0%	59%	8	0%	100%
11	Canada*	0%	44%	0%	21%	27	0%	34%
14	Switzerland*	0%	33%	0%	16%	21	0%	67%
25	Japan*	0%	58%	0%	42%	26	0%	45%

Scandinavian asset owners are taking the most action to manage climate risk.

Sweden tops the country rankings on both highest average scores and proportion of their national funds in the Leaders group. Norway and Denmark also feature, at #2 and #5 respectively.

Interestingly, if you evaluate ranking by proportion of the country's asset owners rated as Leaders, the top two remain Sweden and Norway, however France – host of the 2015 climate summit – moves into 3rd place, with 3 of their 14 funds in the Leaders group. Netherlands also joins the top 5.

LEADERS VS LAGGARDS IN TOP 10 COUNTRIES

The big disappointments are USA, China and Japan, who together control 45% of index AUM.

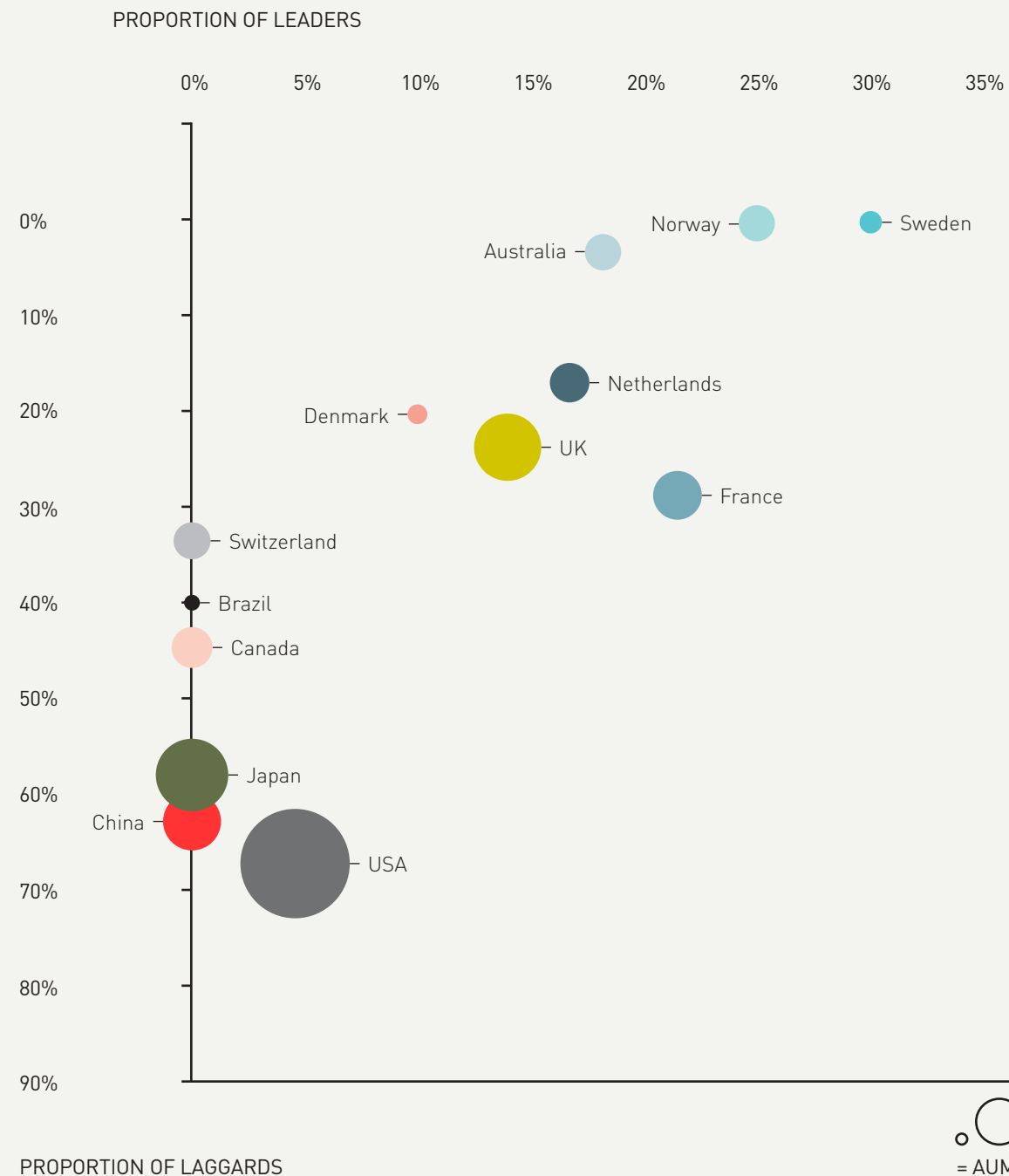
Pension funds account for nearly two thirds of the index but only four of the seven countries that dominate the pensions market make the top ten. Australia (3), the Netherlands (6), UK (7) and the US (9), are all well represented in the leadership group of institutions rated A to AAA. Canada (11) has just four asset owners ranked C to CCC, Switzerland (14) has one, and Japan (25) none. This indicates a wholesale lack of collaboration, sharing of best practice or understanding of the risks in these three key markets.

The chart on the right illustrates the large proportion of their asset owners languishing in the Laggard category. It will take action by this group to see a meaningful global shift in managing climate risk.

TABLE 05 / 2016 AODP GLOBAL CLIMATE 500 LARGEST LAGGARD COUNTRIES [BY AUM]

RANK	COUNTRY	AUM USD MILLION
1	Kuwait	\$648,871
2	Singapore	\$527,040
3	Saudi Arabia	\$429,583
4	Qatar	\$256,000
5	Malaysia	\$201,474
6	Chile	\$172,759
7	Belgium	\$141,856
8	Mexico	\$129,428
9	India	\$125,084
10	Russia	\$121,476

FIGURE 02 / LEADER COUNTRIES WITH LEADER/LAGGARD PERFORMANCE



CAPABILITIES REVIEW

The survey comprises 41 questions covering the following three key areas assessing the asset owner's capability in managing portfolio climate risk:

Engagement

How asset owners are influencing the transition to a Low-Carbon economy by actively engaging with the stakeholders in and outside of the investment chain: i.e. their members or clients, investment consultants, asset managers, investee companies, policymakers and regulators.

Portfolio Carbon Risk Management

How effectively asset owners are measuring, monitoring and managing climate change risks within their portfolios.

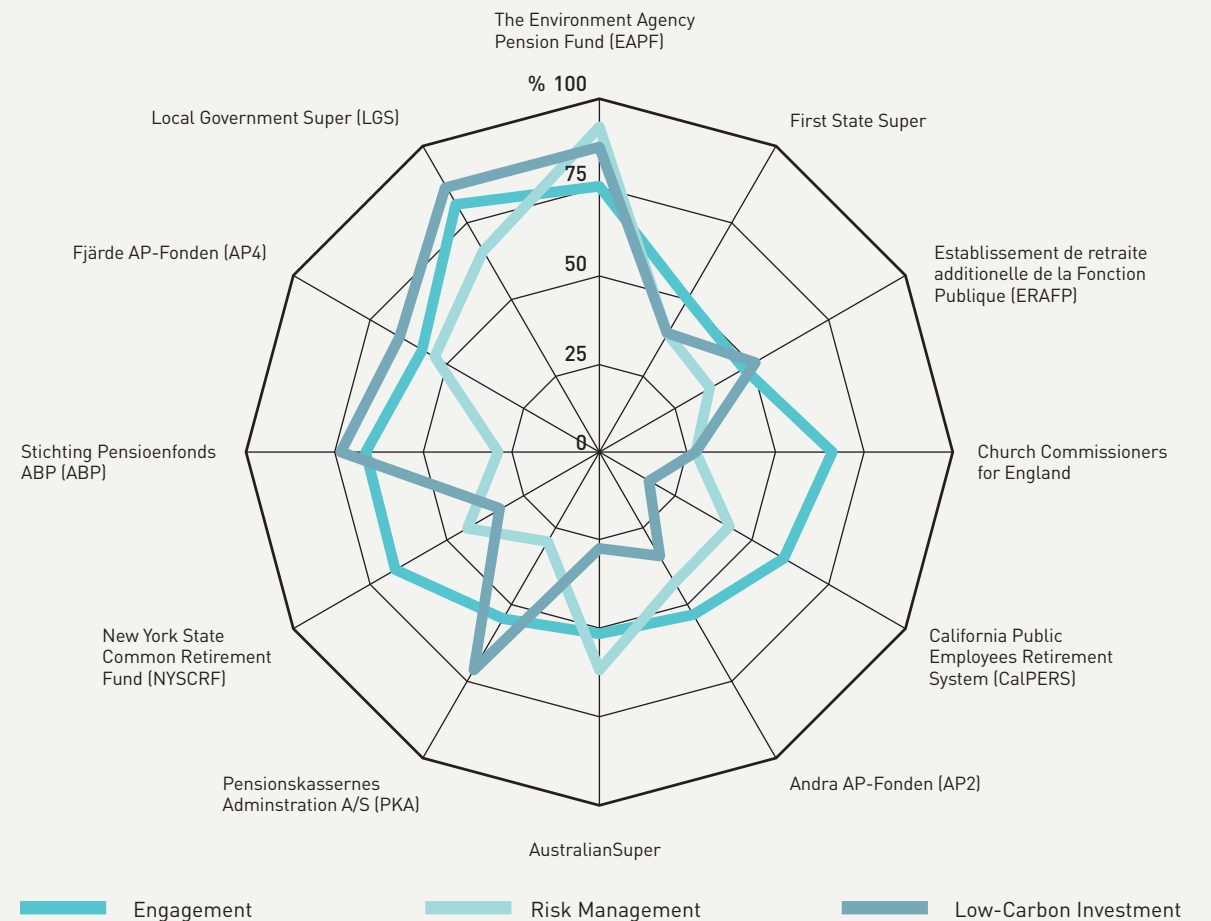
Low-Carbon Investment

The value asset owners have invested in low-carbon assets.

TABLE 06 / 2016 AODP GLOBAL CLIMATE 500 SURVEY LEADERS

	ENGAGEMENT	RISK MANAGEMENT	LOW-CARBON INVESTMENT
1	Local Government Super (LGS)	The Environment Agency Pension Fund (EAPF)	The Environment Agency Pension Fund (EAPF)
2	The Environment Agency Pension Fund (EAPF)	Local Government Super (LGS)	Local Government Super (LGS)
3	New York State Common Retirement Fund (NYSCRF)	AustralianSuper	Stichting Pensioenfonds ABP (ABP)
4	Church Commissioners for England	Fjärde AP-Fonden (AP4)	Pensionskassernes Administration A/S (PKA)
5	Stichting Pensioenfonds ABP (ABP)	MLC Superannuation Fund	Fjärde AP-Fonden (AP4)
6	California Public Employees Retirement System (CalPERS)	National Australia Bank Superannuation Fund (NAB Super)	Caisse des Dépôts (CDC)
7	Wespath IM (General Board of Pension & Health Benefits of the United Methodist Church)	AMF	Etablissement de retraite additionnelle de la Fonction Publique (ERAFP)
8	New York City Employees Retirement System (NYCERS)	Fonds de Réserve pour les Retraites (FRR)	Fonds de Réserve pour les Retraites (FRR)
9	Fjärde AP-Fonden (AP4)	Andra AP-Fonden (AP2)	Velux Foundation
10	Teachers' Retirement System of the City of New York (NYC TRS)	California Public Employees Retirement System (CalPERS)	PensionDanmark

FIGURE 03 / 2016 AODP GLOBAL CLIMATE 500 INDEX CAPABILITY LEADERS



DIFFERENCE OF APPROACH

The UK's \$4 billion Environment Agency Pension Fund and Australia's \$7.1 billion Local Government Super, top all three capabilities, proving that size is no barrier to managing climate risk. The AAA rated Leaders show strengths across the three capabilities to varying degrees, which emphasises the flexibility that can be used to effectively manage portfolio climate risk. Across the rated population, engagement is the initial focus, followed by Low-Carbon Investment.

The research also reveals the more complex risk management activities are often the last to be implemented. This is reflected in the low number of asset owners yet to consider portfolio carbon emissions and stranded assets exposures.

ENGAGEMENT

INTEGRATING CLIMATE RISK

43%

43% increase in the number investors with a role or team responsible for including climate considerations in the investment process, increasing from 47 to 67.

97%

30 of 31 Leaders (97%) have staff dedicated to this, compared with just 13% of all index participants.

Interestingly, a high proportion of Leaders place this role within investment strategy, in contrast to ESG/Sustainability in the majority of others. This is an indicator of best practice, demonstrating how climate risk management is embedded in the business.

CLIMATE RELATED SHAREHOLDER RESOLUTIONS

62%

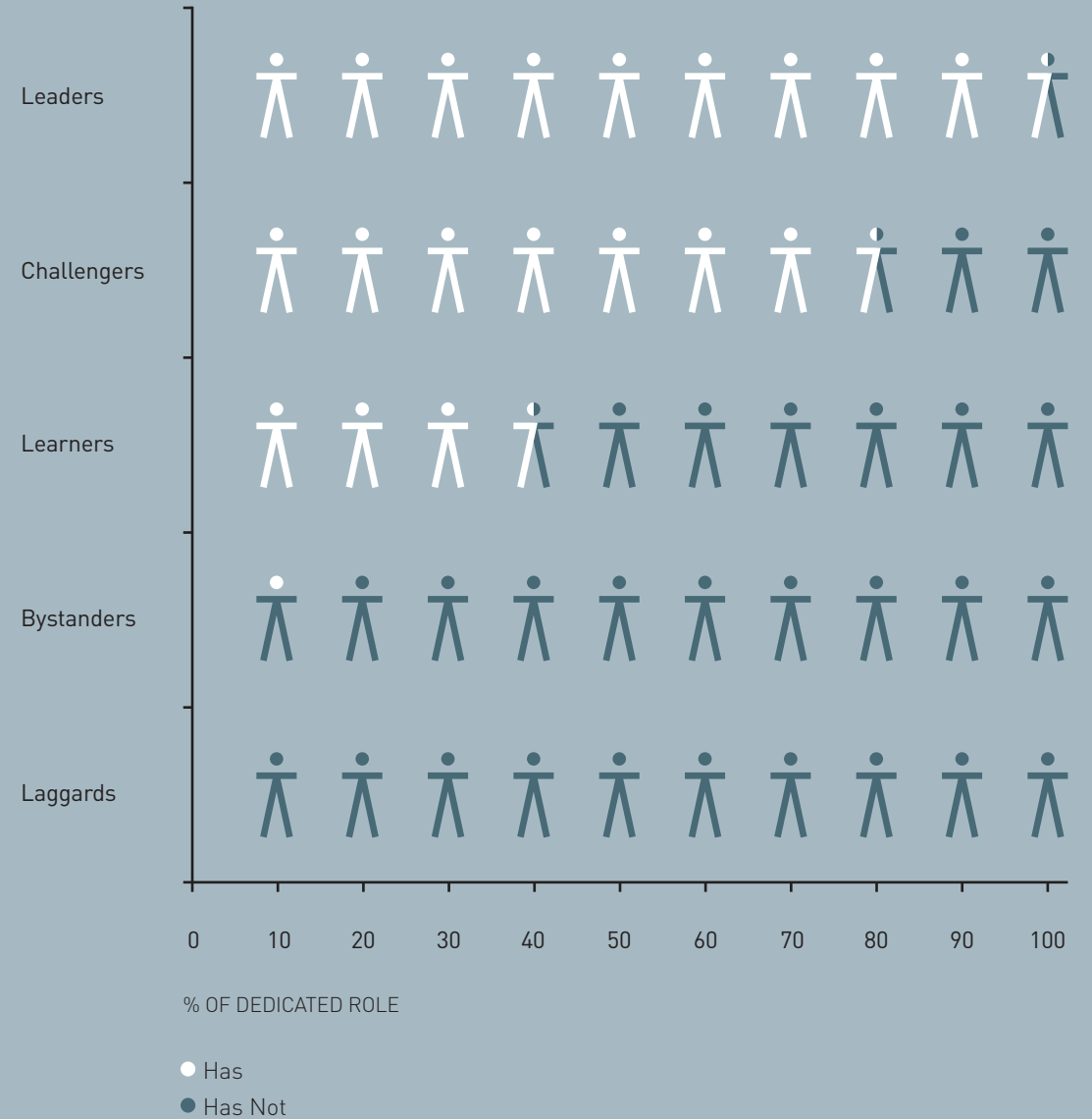
We've seen a 62% increase in support of shareholder resolutions focused on climate change, with 60 investors (12%) surveyed voting in favour of at least one (up from just 7% last year).

84%

84% of Leaders supported such resolutions, compared with 67% last year.

We expect to see more shareholder resolutions lodged, and more investors supporting them. The EY Center for Board Matters has identified climate change and the transition to a lower carbon economy as a key question investors will be asking of boards in the 2016 proxy season³. As further divestment takes place, especially in coal, the renewable energy and low-carbon economy could benefit provided investors are aware of the risks and opportunities on both sides of the equation.

FIGURE 04 / PROPORTION OF ASSET OWNERS WITH A DEDICATED ESG OR SUSTAINABILITY OFFICER WHOSE RESPONSIBILITY INCLUDES INTEGRATING CLIMATE CHANGE RISK MANAGEMENT INTO THE INVESTMENT PROCESS



RISK MANAGEMENT

STRANDED ASSETS

5%

Overall there has been very little change despite the warnings on stranded assets. Even though the number of asset owners measuring portfolio-level risk of stranded assets has nearly doubled (to 24), this still represents just 5% of the index, compared with 3% last year.

45%

While only 45% of Leaders measure this in some way, this is a significant factor differentiating their Leader status.

PORTFOLIO EMISSIONS

10%

10% of assets owners (51) calculate their portfolio carbon emissions – a 50% increase from 2015 (7%, 34).

2%

But still only 2% of asset owners declare an emissions intensity reduction target for next year.

74%

74% of Leaders calculate their investment emissions, up from 67% last year.

FIGURE 05 / ASSET OWNERS ASSESSING STRANDED ASSET EXPOSURE FOR FOSSIL FUEL HOLDINGS

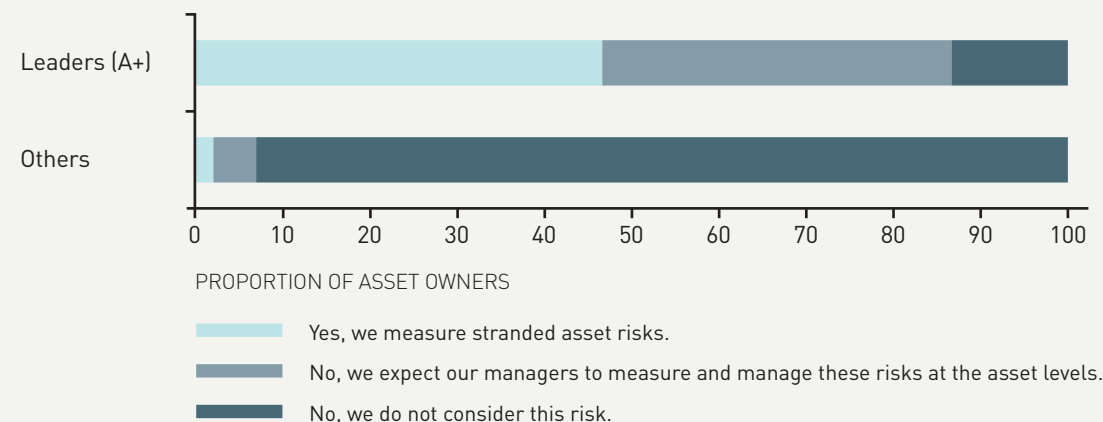
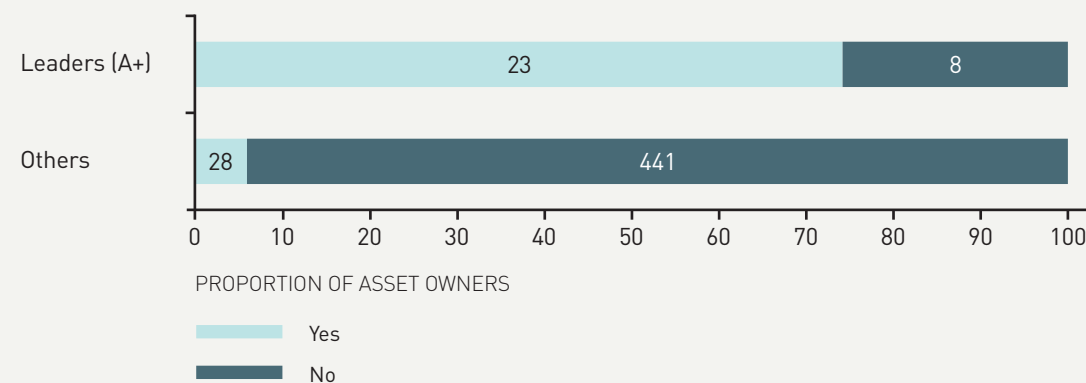


FIGURE 06 / ASSET OWNERS CALCULATING PORTFOLIO CARBON EMISSIONS



Mark Carney, Governor of the Bank of England and chairman of the international Financial Stability Board, has warned of the transition risks posed by the shift to a low-carbon economy⁴. Following this speech, the FSB has set up a task force to recommend how companies and financial institutions should report the potential impact of climate change on their bottom line.

Despite this warning, very few investors are yet to act. There is virtually no change from last year's level of understanding of stranded asset scenario, and 246 investors with \$14 trillion in funds are ignoring climate risk completely. Given the above developments, it would be prudent for investors to begin considering how they can disclose this information in the future.

LOW-CARBON INVESTMENT

63%

\$138 billion or 0.4% of index AUM has been identified as low-carbon investments, a 63% increase from last year's \$85 billion.

Likely underestimated as a result of two key difficulties:

- General lack of disclosure on low-carbon investment
- Difficulties defining which assets qualify as low carbon. Where possible, the Low-Carbon Investment (LCI) Registry's Taxonomy of Eligible Investments has been used⁵.

26.4%

Of our leaders, The Environment Agency Pension Fund ranks highest on a proportional basis with 26.4% of AUM invested in low-carbon investments. ABP ranks #1 in absolute terms.

3.4%

Netherlands tops the country table for LCI on both an absolute and proportional basis – with an aggregate of \$39 billion invested in low carbon, representing 3.4% of total NL index AUM.

30

30 countries have no investment in low-carbon assets identified.

If the US alone matched the Netherlands investment proportion, their LCI would rise to \$322 billion. If all countries were to divert the same percentage, an additional \$1.1 trillion would flow into the low-carbon economy.



CAPABILITIES



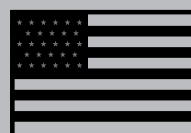
TABLE 07 / TOP 10 LEADERS [BY % LCI]

COUNTRY	AUM USD MILLION	LCI USD MILLION	% LCI
Netherlands	\$1,144,850	\$38,853	3.4%
Denmark	\$329,366	\$6,341	1.9%
Sweden	\$383,586	\$6,489	1.7%
Australia	\$1,047,676	\$14,857	1.4%
France	\$1,980,574	\$15,605	0.8%
Norway	\$991,961	\$6,603	0.7%
United States of America	\$9,481,690	\$28,097	0.3%
Germany	\$1,815,599	\$5,006	0.3%
United Kingdom	\$3,339,313	\$8,195	0.2%
Canada	\$1,405,602	\$3,028	0.2%



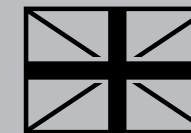
COUNTRY TABLES

TABLE 08 / COUNTRY: USA



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSET OWNER NAME
AAA	5	^ 1	New York State Common Retirement Fund (NYSCRF)
AAA	9	∨ 6	California Public Employees Retirement System (CalPERS)
AA	15	∨ 5	Wespath IM ((General Board of Pension and Health Benefits of the United Methodist Church))
AA	17	^ 8	University of California Retirement System (UC Regents)
AA	20	^ 1	United Nations Joint Staff Pension Fund (UNJSPF)
A	25	∨ 11	California State Teachers' Retirement System (CalSTRS)
A	26	∨ 7	New York City Employees Retirement System (NYCERS)
A	27	∨ 7	Teachers' Retirement System of the City of New York (NYC TRS)
BBB	39	^ 110	William and Flora Hewlett Foundation
BBB	42	∨ 11	Teachers Insurance and Annuity Association of America - College Retirement Equities Fund (TIAA-CREF)

TABLE 09 / COUNTRY: UK



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSET OWNER NAME
AAA	1	^ 4	The Environment Agency Pension Fund (EAPF)
AAA	10	-	Church Commissioners for England
A	22	∨ 10	Aviva Insurance
A	29	^ -	The Church of England Pensions Board (CEPB)
A	30	^ 106	Greater Manchester Pension Fund (GMPF)
A	31	∨ 4	Unilever Employee Pension Funds
BBB	33	∨ 5	The Pensions Trust
BBB	34	^ 115	Strathclyde Pension Fund
CC	66	^ 203	Old Mutual Group
CC	66	^ 166	Railways Pension Scheme (RPS)
CC	66	∨ 30	Norfolk Pension Fund

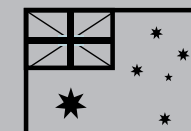
COUNTRY TABLES

TABLE 10 / COUNTRY: NETHERLANDS



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	4	0	Stichting Pensioenfonds ABP (ABP)
AA	14	^ 65	Bedrijfspensioenfonds voor de Landbouw (BPL)
AA	18	∨ 10	Pensioenfonds Zorg en Welzijn (PFZW)
B	56	^ 213	Stichting Pensioenfonds PGB (PGB)
C	87	^ 7	Pensioenfonds Metaal & Techniek (PMT)
C	95	-	Achmea Holding
D	99	^ 82	INGKA Foundation
D	104	∨ 37	Spoorwegpensioenfonds (SPF)
D	115	^ -	ASR Nederland
D	125	^ 85	Rabobank Pensioenfonds

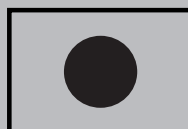
TABLE 11 / COUNTRY: AUSTRALIA



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	2	∨ 1	Local Government Super (LGS)
AAA	7	0	AustralianSuper
AAA	12	^ 1	First State Super
A	21	∨ 6	Victorian Superannuation Fund (VicSuper)
A	24	^ 3	BT Financial Group (BTFG)
A	28	^ 10	Cbus Super
BBB	35	^ 66	MLC Superannuation Fund
BBB	36	^ 103	National Australia Bank Superannuation Fund (NAB Super)
BBB	37	^ 80	Plum Superannuation Fund (NAB Group) (Plum)
BBB	40	^ 19	Mercer Super Trust (MST)

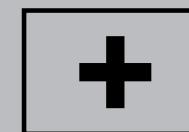
COUNTRY TABLES

TABLE 12 / COUNTRY: JAPAN



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
D	132	▼ 34	Dai-ichi Mutual Life Insurance Company
D	175	▼ 16	Pension Fund Association for Local Government Officials (Chikyoren)
D	175	▲ 94	Federation of National Public Service Personnel Mutual Aid Associations (KKR)
D	186	▲ -	Sompo Japan Nipponkoa Holdings, Inc.
D	191	▲ -	Sumitomo Mitsui Financial Group (SMFG)
D	191	▲ 41	Tokio Marine Holdings, Inc.
D	191	-	MS&AD Insurance Group
D	203	▲ 66	Government Pension Investment Fund (GPIF)
D	203	▼ 30	T/D Holdings, Inc.
D	222	▲ 10	Meiji Yasuda Life Insurance Company
D	222	▼ 41	Pension Fund Association (PFA)

TABLE 13 / COUNTRY: SWITZERLAND



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
CCC	59	-	Oak Foundation
D	116	▲ 153	BVK Personalvorsorge des Kantons Zürich (BVK)
D	123	▲ 50	Pension Fund City of Zurich (PKZH)
D	135	-	Vorsorgeeinrichtung der Suva Schweizerische Unfallversicherungsanstalt
D	135	▼ 79	Zurich Insurance Group

TABLE 14 / COUNTRY: CANADA



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
CCC	64	▼ 30	Ontario Teachers Pension Plan (OTPP)
CC	70	▲ 18	OPSEU Pension Trust
CC	71	-	The American Growth Fund (AGF)
CC	74	▼ 37	Canada Pension Plan Investment Board (CPPIB)
D	116	▼ 57	Ontario Municipal Employees Retirement System (OMERS)
D	116	▼ 62	B.C. Teachers Pension Fund

COUNTRY TABLES

TABLE 15 / COUNTRY: FRANCE



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	10	^ 13	Etablissement de retraite additionnelle de la Fonction Publique (ERAFFP)
AA	13	^ 52	Caisse des Dépôts (CDC)
AA	16	^ 30	Fonds de Réserve pour les Retraites (FRR)
BBB	40	∨ 2	AXA Group
CC	71	-	MAIF
CC	80	-	Crédit Agricole Assurances (CAA)
C	87	-	CNP Assurances Group
D	112	-	SCOR Group (SCOR)
D	169	^ 63	Natixis Insurance Division
D	203	-	BPI France (BPI)

TABLE 16 / REGION: SCANDINAVIA



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	3	^ 6	Fjärde AP-Fonden (AP4)
AAA	6	^ 12	Pensionskassernes Administration A/S (PKA)
AAA	8	^ 3	Andra AP-Fonden (AP2)
AA	19	∨ 17	Kommunal Landspensjonskasse Gjensidige Forsikringselskap (KLP)
A	23	^ 113	AMF
BBB	32	^ 66	Sjunde AP-Fonden (AP7)
BBB	38	^ 24	Sjätte AP-Fonden (AP6)
BBB	44	∨ 22	Government Pension Fund Global (GPFGB)
BBB	44	^ 7	PensionDanmark
BBB	46	^ 5	Tredje AP-Fonden (AP3)

COUNTRY TABLES

TABLE 17 / COUNTRY: SWEDEN



2016 RATING	2016 RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	3	^ 6	Fjärde AP-Fonden (AP4)
AAA	8	^ 3	Andra AP-Fonden (AP2)
A	23	^ 113	AMF
BBB	32	^ 66	Sjunde AP-Fonden (AP7)
BBB	38	^ 24	Sjätte AP-Fonden (AP6)

TABLE 18 / COUNTRY: NORWAY



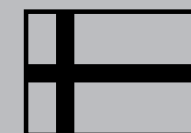
RATING	RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AA	19	∨ 17	Kommunal Landspensjonskasse Gjensidige Forsikringsselskap (KLP)
BBB	44	∨ 22	Government Pension Fund Global (GPFGB)
C	85	^ 11	Government Pension Fund Norway (GPFN)
C	89	∨ 39	Storebrand ASA

TABLE 19 / COUNTRY: DENMARK



RATING	RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
AAA	6	^ 12	Pensionskassernes Administration A/S (PKA)
BBB	44	^ 7	PensionDanmark
BB	49	-	Velux Foundation
C	90	^ 49	Industriens Pension
C	95	∨ 7	ATP - Arbejdsmarkedets Tillaegspension (ATP)

TABLE 20 / COUNTRY: FINLAND



RATING	RANK	2016 / 2015 CHANGE	ASSETT OWNER NAME
CC	78	-	Elo Mutual Pension Insurance Company (Elo)
D	122	^ 104	Valtion Eläkerahasto (State Pension Fund)
D	148	^ 16	Local Tapiola Group
D	175	^ 35	Local Government Pensions Institution (Keva)
D	222	^ 4	Varma - Insurance
D	222	∨ 92	Ilmarinen Mutual Pension Insurance Company
X	255	-	Sampo Group

DATA TABLES

TABLE 21 / RATINGS BANDS

RATING	2016		2015		CHANGE	
	# ASSET OWNERS	AUM USD BILLION	# ASSET OWNERS	AUM USD BILLION	#	%
AAA	12	\$1,141	9	\$1,248	3	33%
AA	8	\$641	7	\$836	1	14%
A	11	\$896	8	\$1,590	3	38%
BBB	15	\$2,280	9	\$994	6	67%
BB	4	\$17	9	\$1,111	-5	-56%
B	6	\$1,089	8	\$632	-2	-25%
CCC	8	\$570	9	\$628	-1	-11%
CC	17	\$1,092	9	\$893	8	89%
C	16	\$1,695	9	\$335	7	78%
D	157	\$13,969	191	\$12,262	-34	-18%
X	246	\$14,348	232	\$13,391	15	6%
Total	500	\$37,737	500	\$33,920		

TABLE 22 / ASSET OWNERS BY RATING SUMMARY TABLE

CATEGORY			# ASSET OWNERS		CHANGE	
			2016	2016	#	%
Leaders	Top 5%	A PACK	31	24	7	29%
Challengers	Top 10%	B PACK	25	26	-1	-4%
Learners	Top 20%	C PACK	41	27	14	52%
Bystanders	Top 50%	D	157	191	-34	-18%
Laggards	Zero	X	246	232	14	6%

TABLE 23 / ASSET OWNERS BY CATEGORY SUMMARY TABLE

ASSET OWNER CATEGORY	2016		2015		CHANGE	
	# ASSET OWNERS	AUM USD BILLION	# ASSET OWNERS	AUM USD BILLION	#	%
Endowment	12	\$356	20	\$453	0	0%
Foundation	8	\$166	-	-	-	-
Pension fund	322	\$15,868	375	\$16,462	-53	-14%
Sovereign wealth fund	38	\$5,821	39	\$7,232	-1	-3%
Insurance company	118	\$15,458	66	\$9,773	52	79%
Mutual fund	2	\$67	0	-	2	-
Total	500	\$37,737	500	\$33,920		

METHODOLOGY

The AODP Global Climate Index provides stakeholders with a ranking and rating to indicate how each major asset owner performs in managing their exposure to climate risk. The objective of the survey is to encourage integration of climate change capability in portfolio management across the investment sector.

The survey comprises 41 questions covering the following three key areas assessing the asset owner's capability in managing portfolio climate risk.

ENGAGEMENT

How they are influencing the transition to a Low-Carbon economy by actively engaging with the stakeholders in and outside of the investment chain: i.e. their members or clients, investment consultants, asset managers, investee companies, policymakers and regulators.



PORTFOLIO CARBON RISK MANAGEMENT

How effectively asset owners are measuring, monitoring and managing climate change risks within their portfolios.



LOW-CARBON INVESTMENT

The value they have invested in low-carbon assets.



The ratings are based on a mixture of publicly available information and asset owner disclosures. The world's largest long-term investors (pension funds, insurers, sovereign wealth funds, foundations and endowments) with at least USD 2 billion assets under management were invited to participate in this year's survey. Survey responses were used to rank and rate the asset owners to create the AODP Global Climate Index.

The top 500 asset owners (by AUM) that decline the invitation to participate were researched by our team of analysts and assessed using publicly available information or information provided to us by their members or stakeholders. Asset owners are rated from AAA through to D grade, with an additional X category for those asset owners that appear to be doing absolutely nothing to manage climate risk.

Asset owners are scored on actions implementing elements of climate risk best practice in their investment process.

Leaders	Top 5%	A - AAA
Challengers	Top 10%	B - BBB
Learners	Top 20%	C - CCC
Bystanders	Top 50%	D
Laggards	Zero score	X



ACKNOWLEDGEMENTS

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THE ASSET OWNERS DISCLOSURE PROJECT GIVES SPECIAL THANKS TO THE FOLLOWING PEOPLE IN PRODUCING THIS REPORT:

FRÉDÉRIC BACH, ALEX BAK, PATRICK BETTINGTON, ANDREW BLACK, FATAT BOURAD, LUIGI CALDAROLA, YIJIA CHEN, FRANCISCO FORTUNY, ARAM GHAZARIAN, NIVEDITA KALLA, BELINDA KINKHEAD, MICHAEL LAMBDEN, FABIO MICCOLI, ODETTE MOHANTY, SACHIN NAIR, GILA NORICH, MARCELO OKIDA, LIYANA OTHMAN, TIFFANY PAN AND SHEM SERMONIA.

THE ONGOING SUPPORT OF AODP'S FUNDERS IS ACKNOWLEDGED. A FULL LIST CAN BE FOUND ON OUR WEBSITE (WWW.AODPROJECT.NET).

THE VIEWS IN THIS REPORT REMAIN THOSE OF AODP.

REFERENCES

- ¹ <http://www.carbontracker.org/resources/>
Stranded assets are fossil fuel energy and generation resources which, at some time prior to the end of their economic life (as assumed at the investment decision point), are no longer able to earn an economic return (i.e. meet the company's internal rate of return), as a result of changes in the market and regulatory environment associated with the transition to a low-carbon economy.
- ² Willis Towers Watson: Global Pensions Assets Study, 2016. Seven countries account for nearly \$33trn of pensions investment: The US is by far the biggest with \$21.8trn, followed by: UK, \$3.2trn; Japan, \$2.7trn; Canada, \$1.5trn; Australia, 1.5trn; Netherlands, \$1.4trn; Switzerland, \$0.8trn.
- ³ <http://www.ey.com/GL/en/Issues/Governance-and-reporting/EY-2016-proxy-season-preview-a-focus-on-the-long-term#oversight-of-environmental-and-social-risk-and-value-drivers>
- ⁴ Breaking the tragedy of the horizon - climate change and financial stability - speech by Mark Carney, Lloyds of London, 29 September, 2015
<http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx#1>
"If [the IPCC's estimated carbon budget for a 2 degrees scenario] is even approximately correct it would render the vast majority of reserves "stranded". He further notes "the exposure of UK investors to these shifts is...potentially huge" and "a wholesale reassessment of prospects, especially if it were to occur suddenly, could potentially destabilise markets, spark a pro-cyclical crystallisation of losses and a persistent tightening of financial conditions."
- ⁵ http://1gkvgy43ybi53fr04g4elpcd.wpengine.netdna-cdn.com/wp-content/uploads/2015/10/LCI-Registry-Taxonomy_3rd-Release_211015.pdf

