

UNDERWRITING CLIMATE CHAOS

Insurance Companies, the Coal Industry and Climate Change

Civil Society Briefing, April 2017



urning coal is the biggest contributor to climate change. If the goals of the Paris Agreement are to be met, no new coal power plants can be built and existing plants must be retired over the coming decades.

Insurance companies are supposed to protect us from catastrophic risk. Some of them have warned about climate change for more than 25 years. And yet, many of the same companies continue to underwrite new coal projects and invest billions of dollars in coal and other fossil fuel companies to this day. In spite of their rhetoric insurers directly contribute to climate change.

As this briefing paper is about to be published, AXA, the world's largest insurer, has announced that it will no longer offer insurance services to companies that generate more than half of their revenues from coal. This is an important precedent which shows that progress is possible. Other insurers now need to follow suit.

This briefing paper presents facts and figures on insurance companies and climate change, and calls on the sector to come clean on coal.



THE CLIMATE COMMITMENTS OF THE INSURANCE INDUSTRY

We expect insurance companies to protect us from the impacts of natural disasters, accidents, disease and other catastrophes. They are among the ultimate managers of risk in our society. Their marketing departments boldly advertise their ability to manage risks: You Can Rely on Us, says AXA, the world's largest insurance company from France. You Can Trust Allianz, suggests Germany's insurance giant. Taking Care of What's Important, promises British company Aviva.

Climate change is the defining challenge of the 21st century and poses the greatest risks that humanity faces. Climate chaos caused by greenhouse gas emissions threatens our planet with ever more extreme storms, floods and droughts, rising sea levels, the large-scale destruction of ecosystems, widespread famine and new epidemics.

The insurance industry has recognized the threats posed by runaway climate change. "Climate change presents a major challenge for mankind and insurers will play a central role in helping society to adapt and mitigate its effects", the trade association Insurance Europe stated in October 2015.¹ For more than two decades, leading insurance and reinsurance companies such as Swiss Re, Allianz, AXA, Aviva and Generali have committed to supporting the development of a low-carbon economy and the adaptation to a changing climate.

Unfortunately, when it comes to climate change, the actions of insurance companies with few exceptions don't match their lofty statements. A new report by the research and advisory firm Profundo finds that most of the 15 largest European insurance and reinsurance companies – a group that includes the world's biggest insurers and those most vocal about our planet – continue to be highly involved in underwriting fossil fuel projects.² By their most recent filing dates, they had also invested more than \$130 billion in fossil fuel companies as asset managers. According to Ceres, 40 leading insurers in the U.S. have even invested \$459 billion in the fossil fuel sector. Insurance companies, in other words, contribute to the kind of catastrophic climate change from which they are supposed to protect us.

[The New York skyline] has only been made possible by the insurers. They are the ones who really built this city. With no insurance, there would be no skyscrapers. No investor would finance buildings that one cigarette butt could burn to the ground.

(Henry Ford, early 20th century)

A healthy insurance industry will not be possible in a world in the grip of humaninduced climate change. It is time to expand one of the underpinning concepts of insurance: the solidarity of the risk community.

(Jeremy Leggett, Climate Change and the Insurance Industry, May 1993)

UNDERWRITING THE COAL INDUSTRY

Rapidly implementing the Paris Agreement, which the world's governments adopted by consensus in December 2015, is our last hope for avoiding catastrophic climate change. The agreement commits governments to hold the increase in global average temperatures to well below 2 degrees Celsius and to pursue efforts to limit the increase to 1.5 degrees. The Paris Agreement was ratified in record time and entered into force on November 4, 2016. Urgent action by governments, businesses, civil society and citizens is now needed to turn its commitments into reality.

Burning coal contributes almost half of all CO2 emissions, and is the single most important threat to our climate. Climate Analytics, a science and policy institute, has calculated that emissions from burning coal around the world need to become close to zero by 2050 in order to implement the Paris Agreement at the lowest possible cost. This means that existing coal plants need to be retired early, and that no new coal plants can be built.

"Building additional planned [coal] capacity would be completely inconsistent with any development in line with meeting the Paris Agreement temperature goal", a recent Climate Analytics report states. Industrialized countries, according to the institute, need to phase out coal by around 2030, and developing countries, between 2040 and 2050.³



These findings were confirmed by a new report from Oil Change International. According to their research, 68% of all fossil fuel reserves need to be kept in the ground for a likely chance of keeping global warming below 2 degrees Celsius. For a medium chance of limiting warming to 1.5 degrees, 85% of all reserves must remain in the ground.⁴

Fortunately, clean energy alternatives are readily available and rapidly becoming the least cost solution throughout the world. In 2015 and 2016, worldwide investment in renewable energy installations was twice as high as investments in all fossil fuels combined, and solar power has become the cheapest source of electricity in almost 60 countries.

In spite of global climate commitments and the availability of better alternatives, more than a thousand new coal plants are currently still being built, planned and proposed. At the same time, the coal industry is fighting tooth and nail against the early retirement of their climate destroying projects.

The coal industry relies on four pillars for their mines, power plants and transport facilities to be built and to

A new report by Profundo finds that 11 out of 15 major European insurance companies have a high involvement in underwriting fossil fuel projects.

BOX 1

FURTHER INFORMATION AND METHODOLOGY

In April 2017 Profundo, a research and advisory firm based in the Netherlands, published a report mapping the involvement of the 12 largest insurance companies (except for pure life and health insurers) and the six largest reinsurance companies in Europe in the fossil fuel sector. Three large reinsurance companies are also direct insurers, so the research covered a total of 15 companies with total premiums of \$587 billion in 2015.

Profundo analyzed the underwriting activities, investments and policies of the 15 companies in relation to fossil fuels. Specific data on underwriting activities is not publicly available, and so the research analyzed the underwriting role of the 15 companies based on their own statements and on insurance market reviews for the power sector.

On the investment side, Profundo analyzed the investments in bonds and equities of companies that are classified as coal, oil and gas, mining and electric utility companies by standard industry classification systems. The researchers analyzed the funds that insurers invested on their own account as well as funds that they manage on behalf of third parties. They also analyzed insurers' investments through investment funds, but many of these funds offer very little transparency about their investments, and so the figures compiled in the Profundo report are not complete.

The main findings of the Profundo research are summarized in this briefing paper. The full report is available at www.unfriendcoal.com.

TABLE 1: RANKINGTHE INVOLVEMENT OFEUROPEAN INSURERSIN UNDERWRITINGFOSSIL FUELS

INSURANCE GROUP	IMPORTANCE IN FOSSIL FUEL UNDERWRITING SECTOR	
Allianz	High	
AXA	High	
Chubb	High	
Generali	High	
Lloyd's of London	High	
Mapfre	High	
Munich Re	High	
SCOR	High	
Swiss Re	High	
Talanx (Hannover Re)	High	
Zurich	High	
Aviva	Medium	
Covéa	Low	
DZ Bank (R+V Versicherung)	Low	
Unipol	Low	

continue operating: In addition to regulatory approval from government agencies, finance from banks and other funders, and equipment supplies from manufacturers, their projects require coverage of their sizable risks from insurance companies.

Insurance plays a critical role in enabling further coal projects. Coal mines, coal-fired power plants and associated facilities such as railways and coal ports are capital intensive and face serious physical, technical, legal, political and management risks as well as the risk that other parties to a contract will not live up to their obligations. Few of these projects would go forward without some kind of insurance cover.

The coal industry requires the following types of insurance for its projects and operations:

COAL MINE CONSTRUCTION: project finance insurance (for banks); credit insurance (for mining companies); contractor risks; delay in start-up insurance etc.

COAL MINE OPERATION: property and equipment damage; fire and special perils risk; directors and officers liability; pollution and environmental liability; workers' compensation; political risk insurance etc.

COAL TRANSPORT: contractor risks etc. in the construction of coal infrastructure; marine cargo insurance for coal shipments.

POWER PLANT CONSTRUCTION: project finance insurance; credit insurance; contractor risks; delay in start-up insurance, sovereign and currency risk insurance etc.

POWER PLANT OPERATION: property and equipment damage; fire and special perils risk; directors and officers liability; pollution and environmental liability; workers' compensation; political risk insurance etc.

By March 2017, 24 international banks had committed to no longer financing coal projects in some form.⁵ In comparison, the new Profundo report reveals that very few insurance companies have so far adopted policies that rule out the underwriting of fossil fuel projects. AXA, the world's biggest insurer, decided in April 2017 that "for reasons of consistency", it would no longer offer property and casualty insurance ("except on an exceptional basis") to companies from which it had divested because more than 50% of their revenue is from coal. AXA was the first company to do so. The French insurer continues to be highly involved in underwriting other fossil fuel companies.



Swiss Re, the world's biggest reinsurance company, doesn't offer coverage for off-shore drilling in the Arctic, greenfield tar sands projects, and unless certain conditions are ful-filled, hydraulic fracking. ERGO, a subsidiary of Munich Re, does not cover oil drilling in the Arctic either.

Many other insurance companies have adopted Environmental, Social and Corporate Governance policies that offer general guidance but do not rule out coverage of coal projects and other destructive sectors. Even though they are generally extremely vague insurers often use such guidelines as an excuse for not abandoning destructive sectors altogether.

As Climate Analytics has found, building any new coal plants contradicts and undermines the goals of the Paris Agreement. In spite of this, AXA is the only major insurance company that has ended underwriting some coal companies. Strict business confidentiality prevents access to information about insurance coverage for specific projects. Even so the new Profundo report found that 11 out of 15 companies investigated have a high involvement in underwriting fossil fuel projects. Underwriting climate destroying coal projects at this day and age exposes the climate rhetoric of most major insurance companies as hypocritical. [The fossil fuel industry] has become a rogue industry, reckless like no other force on Earth. It is Public Enemy Number One to the survival of our planetary civilization.

(Bill McKibben, August 2012)



on the use of highly polluting fossil fuels – especially coal, but also oil and, to a lesser degree, gas – needs to be progressively replaced without delay.

(Pope Francis, Laudato Si encyclical, May 2015)

INVESTING IN FOSSIL FUELS

Insurance companies don't only underwrite risks. They are also among the most important asset owners in the global economy, which allows them to balance the huge liabilities they are taking on under their policies. In 2014, insurance companies held a total of \$29 trillion under management, including on behalf of other owners who invest in their investment funds. This equals about one third of all assets under management globally. Insurance companies hold most of their assets in bonds, and a small percentage is typically held in global equities.

As some of the world's biggest investors, insurance companies have a large responsibility for the sustainable transformation of the global economy. Yet in spite of their rhetorical concern about climate change, most insurance companies are major investors in the fossil fuel sector, including in coal companies.

The new Profundo report found that the 15 biggest European insurance and reinsurance companies had collectively invested at least \$130 billion in the fossil fuel industry at their most recent filing dates (usually in 2016). This amounted to at least 2.15% of all assets under their management. \$90.9 billion (or just under 70%) of these investments were held in bonds, which fossil fuel companies can use to finance their capital expenditures as well as working capital needs, and \$39.8 billion were held in equities. Insurance companies also hold assets in investment funds, many of which offer very little transparency over their investments. Profundo could not ascertain insurers' investments in fossil fuels through such funds, and so their overall figures are conservative.

Insurers had invested most of the \$130 billion of fossil fuel assets in oil and gas companies and electric utilities. The coal sector received less than \$1 billion in equity investments, and is not identified as a separate sector for bond holdings, so the respective investments could not be quantified. Overall the biggest investors in fossil fuels were Allianz with \$59 billion, AXA with \$34 billion and Aviva with \$14 billion respectively. (See Table 1 for the fossil fuel investments of all 15 companies.)

TABLE 2: RANKING EUROPEAN INSURANCE GROUPSON TOTAL FOSSIL FUEL INVESTMENTS (IN \$ BILLION)

INSURANCE GROUP	TOTAL FOSSIL FUEL INVESTMENTS	% OF ANALYZED INVESTMENTS	% OF REPORTED TOTAL ASSETS UNDER MANAGEMENT
Allianz	59.03	6.56%	3.08%
AXA	34.34	8.79%	2.32%
Aviva	13.99	11.85%	3.25%
Chubb	5.25	11.53%	N.A.
DZ Bank	4.30	5.62%	1.01%
Swiss Re	3.97	11.21%	N.A.
Zurich	3.69	9.09%	1.45%
Generali	2.53	9.98%	0.46%
Munich Re	2.17	7.99%	0.87%
Talanx	0.65	9.71%	0.41%
Mapfre	0.35	9.95%	0.44%
Covéa	0.29	5.51%	0.30%
SCOR	0.17	4.74%	0.85%
Lloyd's of London	0.01	2.19%	N.A.
Unipol	-	-	N.A.
Total	130.74	7.79%	2.15%

(Source: Profundo report, April 2017)

The \$130 billion that 15 European insurers have invested in fossil fuels represent a value that is larger than the full current capitalization of transnational corporations like MasterCard, Total, or 3M. Customers of insurance companies need to be aware that, in addition to some investments from third parties, it is their premiums which insurers invest into fossil fuel projects. In the case of Allianz, the company has, on average, invested premiums of \$700 from each of its 85 million customers in fossil fuel companies.

The 15 biggest European insurance

and reinsurance companies currently have collectively invested at least \$130 billion in fossil fuels. The 40 biggest U.S. insurers have in turn invested at least \$459 billion in fossil fuels. A separate research effort by Ceres, a non-profit organization working to transform business and investment practices, found that U.S. insurers are invested even more strongly in the fossil fuel industry than their European peers. According to a Ceres report of June 2016, the 40 leading insurance groups in the U.S. had invested at least \$459 billion in bonds and equities of fossil fuel companies at the end of 2014.⁶ (As with European insurers, sufficient data on investments held through funds was not available.)

Like their European peers, U.S. insurers primarily held fossil fuel assets in electric utilities and oil and gas companies, and only \$1.8 billion in coal companies, whose value had plummeted in recent years. The biggest investors in oil and gas companies were Prudential, AIG and MetLife, and the biggest investors in electric utilities, the TIAA Family, MetLife and Prudential.

Ceres found that U.S. insurance companies are even more strongly invested in fossil fuels than average investors. The 40 insurance groups analyzed had a median concentration of 12.1% of their bonds in fossil fuels companies, while only 6.7% of index bonds were concentrated in fossil fuels at the same time. Unlike Profundo, Ceres did not analyze the underwriting activities and policies of U.S. insurance companies.

BOX 2

THE TRUE COST OF COAL

The mining, transport and burning of coal creates massive social and environmental impacts in terms of air pollution, water pollution, public health, deforestation and land grabs, among other impacts. According to the State of Global Air 2017 report, air pollution caused an estimated 4.2 million early deaths around the world in 2015, and in many countries, burning coal is a significant factor of air pollution.¹¹

On top of such local and regional impacts, coal is also the most important contributor to climate change. Researchers at Stanford University recently calculated the cost of CO2 emissions to society. Analyzing climate impacts in terms of lower agricultural production, human health and stunted economic growth, they estimated that each ton of CO2 emissions creates a social cost of \$220.¹² This doesn't include the local costs of air and water pollution.

According to the US Energy Information Administration, every ton of coal produces 2.86 tons of CO2 when it is burned (assuming an average carbon content of 78%). Taking the Stanford study into account, this means that every ton of coal that is burned creates costs of at least \$629 to society. In comparison, the market price of coal in industrialized countries currently hovers between \$50 and \$100 per ton. This means that coal users and the investors in coal companies are shifting approximately 90% of the true cost of their product onto society, and often society's poorest groups.

DIVESTMENT FROM COAL

As powerful governments are delaying or even stalling climate action, the movement to divest from fossil fuels is rapidly gaining momentum. By March 2017, 705 institutions and 58,000 individuals representing \$5.46 trillion in assets had agreed to divest from the fossil fuel industry.⁷ In contrast only very few insurance companies have so far divested from coal and other fossil fuel companies to some degree:

IN MAY AND NOVEMBER 2015, respectively, French (re)insurers AXA and SCOR decided to divest from companies which have at least 50% of their turn-over in the coal sector – a relatively high threshold. AXA divested € 500 million (at the time, \$528 million), while SCOR did not indicate the amount to be divested.

ALSO IN NOVEMBER 2015 Allianz decided to divest from companies deriving at least 30% of their revenues (or power generated) from coal. Allianz decided to sell coal equities of \notin 225 million (at the time, \$238 million) within three months, and will hold bonds of \notin 3.9 billion (at the time, \$4.1 billion) until they mature but will not replace them.

IN NOVEMBER 2016 Aviva identified two coal companies for potential divestment after an extended engagement process. The company is currently in the process of divesting from eight other coal companies which have not responded positively to its engagement on fossil fuels.

SOME PURE LIFE AND HEALTH INSURANCE COMPANIES

(which are not covered in the Profundo report) have also divested from coal. Storebrand, a Norwegian pension and life insurance firm, took the lead by starting to divest from the coal sector in July 2013. Aegon, a Dutch life insurer, followed suit in May 2016, and HCF, an Australian health insurer, in February 2017. "We tasked our investment advisors to identify a socially responsible investment vehicle", HCF's managing director explained, "so as to ensure our money is not invested with companies or industries that may impact the health and wellbeing of our members and the broader community."

SWISS RE VAGUELY STATES THAT THE COMPANY

"avoid(s) investments in companies where substantial part of their revenues stem from thermal coal", but does not offer any clear information about this commitment. Insurance companies divesting thermal coal assets will help reduce coal combustion, the single largest contributor to global climate change in the United States.

(Dave Jones, California Insurance Commissioner, January 2016)



Should the number and intensity of

storms continue to rise, risks will multiply exponentially and with gathering speed. As far as the insurance industry is concerned, this development calls for immediate action.

(Swiss Re, November 1990)

Most insurance companies still completely ignore the impacts their fossil fuel investments have in accelerating the destruction of our planet. In a recent report, the Asset Owners Disclosure Project found that as a group, insurance companies pay even less attention to the climate impacts of their investments than other investors. "Insurers are way behind pension funds in protecting their portfolio from climate risk", the report concludes. "Only one in eight is taking tangible action compared with one in four pension funds."

"Insurers manage a third of the world's investment capital, so their actions can have profound impact on the global economy", the new report warns. "As long as few insurers take action on climate risk, there is a danger of systemic failure which could have catastrophic effects on the wider economy."⁸ The financial and economic risks of fossil fuel investments are elaborated in Box 3. Through their short-sighted investment strategies, insurance companies also betray their fundamental mission: to protect us from catastrophic risks.

In 2016, California's Insurance Commissioner Dave Jones required all insurance companies writing premiums in his state to disclose their investments in fossil fuel companies and to voluntarily divest from their investments in thermal coal. Dave Jones argued that "as nations across the world begin to implement the commitments they made at the recent United Nations COP21 Climate Summit in Paris, investments in coal and the carbon economy run the risk of becoming a stranded asset of diminishing value". "Insurance companies divesting thermal coal assets", the Commissioner added, "will help reduce coal combustion, the single largest contributor to global climate change in the United States."⁹

BOX 3

INSURERS' SELF-INTEREST IN CLIMATE ACTION

Like all businesses, insurance companies have a moral and fiduciary duty to protect the climate and to operate within the boundaries of the Paris Agreement. Yet the insurance industry also has a self-interest in helping to avoid runaway climate change. In a recent report, the Bank of England's Prudential Regulation Authority identified three main risks which climate change poses to insurance companies:¹³

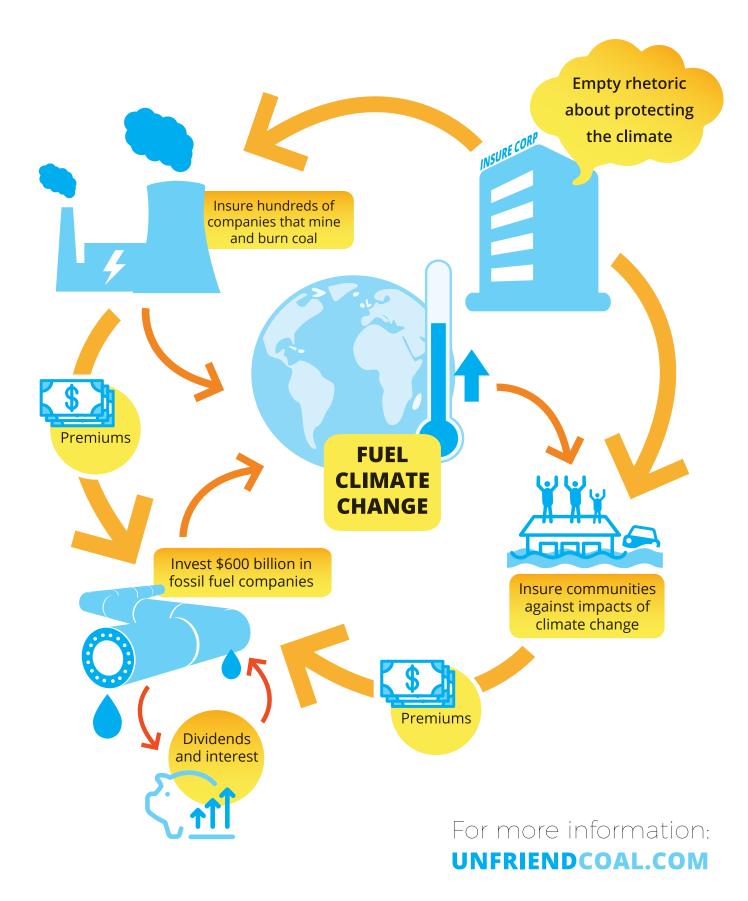
PHYSICAL RISKS: Extreme weather events such as storms and floods are causing increasing costs and losses for insurers. Global insurance losses from natural catastrophes have increased from an annual average of around \$10 billion in the 1980s to about \$50 billion over the past decade. Most insurance companies assume that they can gradually adjust to this risk by increasing premiums on their customers. But as the Standards & Poor's rating agency points out, "climate change may also lead to a sudden increase in the risk and volatility of weather losses if certain tipping points are reached, for example, the melting of the Greenland ice sheet."¹⁴

TRANSITION RISKS: The transition to a low-carbon economy is reducing the value of carbonintensive firms such as coal, oil and gas companies. Investments which insurance companies (and other investors) hold in such companies are thus turning into stranded assets. Lloyd's, a leading insurance company, warns that climate change, and society's response to it, "could potentially strand entire regions and global industries within a short timeframe, leading to direct and indirect impacts on investment strategies and liabilities".¹⁵ In the same vein California Insurance Commissioner Dave Jones argued that divestment from coal "will help protect insurance companies from holding an investment dropping in value, and which is likely to suffer substantial additional decline in value during a transition to a reduced carbon economy".

LIABILITY RISKS: People or institutions who have suffered losses from climate chaos will try to hold actors that share a responsibility for climate change legally liable for their losses, and the liability risks of these actors may be covered by insurance. The Prudential Regulation Authority views this climate risk "as being of most relevance to general insurers".¹⁶ For comparison, it notes that insurance companies have so far suffered losses due to liability claims for asbestos damages in the U.S. of \$85 billion.

Aviva, a leading British insurer, brought the fundamental risk that climate chaos poses to the long-term self-interests of the insurance industry to the point: "Left unchecked", the company stated in its strategic response to climate change, climate change will "render significant portions of the economy uninsurable, shrinking our addressable market."¹⁷ The risk calculations of the insurance industry rely on statistical predictability, yet with runaway climate change, all bets are off.

THE CLIMATE CHANGE-INSURANCE PROFIT CYCLE HOW THE INSURANCE INDUSTRY FUELS CLIMATE CHANGE



INSURERS NEED TO QUIT COAL

At the COP23 climate conference in November 2017, the world's governments will take stock and decide on next steps to implement the Paris Agreement. Given the shameful position of the Trump administration, it is all the more important that insurance companies and other businesses stop undermining the most important global climate agreement.

The insurance industry needs to undertake the following actions by the time of the COP23 meeting:

- Insurance companies need to adopt policies not to underwrite any new coal mining, coal power plant or coal infrastructure projects, and not to underwrite any insurance, including renewing existing policies, with companies that meet any one of the following criteria:
 - they derive at least 30% of their revenues or power generation from coal;
 - they produce, trade or consume at least 20 millions of tons of coal annually;
 - they plan investments in new coal mines, power plants or infrastructure.

(Workers compensation policies, which directly benefit workers in the coal industry, should be exempt from this policy.)

- Insurance companies need to adopt a policy to divest, within six months, any investments from companies that meet any of the criteria listed above.¹⁰
- Insurance companies will also need to divest from and stop underwriting other fossil fuel technologies (oil, gas and associated infrastructure) for their business to become fully compatible with the goals of the Paris Agreement.
- 4. As they divest from coal and other fossil fuel projects, insurance companies need to scale up their investments in clean energy companies that follow international social and environmental standards in their projects at a corresponding pace.

Public support for strong climate action and the promotion of climate friendly practices by insurance companies are welcome. But such efforts are little more than window dressing as long as the same companies continue to underwrite and invest in the burning of coal, the most important contributor to catastrophic climate change. We can no longer invest in companies that are part of the problem of the climate shocks that we're suffering from. There's an injustice in continuing to invest in fossil fuel companies that are part of the problem.

(Mary Robinson, former Irish President, October 2013)



Left unchecked, climate change will render significant portions of the economy uninsurable, shrinking our addressable market. Leading insurance companies have started the process of moving their underwriting business and investments out of coal. AXA's recent decision to no longer offer insurance services to certain coal companies sets an important precedent case.

The early movers need to make further progress, but they have shown their peers that the exit from coal is possible. Customers looking for insurance coverage will soon have the choice to switch their policies from climate laggards and deniers to the climate leaders in the sector.

Insurance companies can only regain their credibility if they come clean on coal. They need to stop underwriting and divest from coal projects by the time of COP23. The publishers of this briefing will hold them to account.

(Aviva's Strategic Response to Climate Change, July 2015)

ENDNOTES

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- 4. Oil Change International, The Sky's Limit, September 2016, p. 15. A "likely chance" is defined as a 66% chance; a "medium chance" is defined as a 50% chance.
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