

## Climate Change

# THE FUTURE IS IN OUR HANDS

The Paris climate change summit is over — and now the work begins. What response will the insurance sector provide?

By Edward Murray



**A**t the tail-end of last year, world leaders finally reached consensus on climate change after decades of posturing, procrastinating and prevaricating. And now that there is a collective political will to push the climate change agenda forward constructively, there needs to be a massive commercial and cultural response to make good on the proposals.

The insurance sector sits right at the heart of that response and its ability to put climate change considerations at the very centre of its commercial ambitions will have a significant impact on the world's ability to hit the targets agreed on in Paris.

The headline target is to make sure that average global temperatures do not increase by more than 2°C and to try and limit the rise to 1.5°C. Progress against these benchmarks

will be reviewed every five years and by 2020 annual climate finance of \$100bn will be made available for developing countries.

Speaking last summer at the International Insurance Society Global Forum, UN Secretary-General Ban Ki-moon made reference to the role that insurers had to play in battling climate change. He commented: "The insurance sector can and must play a strong role in shaping a more sustainable



future. The insurance industry can be central in building a more resilient, climate-smart economy. You have seen the tragic human toll rise from extreme weather events. You know the staggering economic price tag.”

### Supporting the transition

Many insurers will argue that they are already doing a lot to promote a low carbon economy, to minimise the impact of climate change and to restrict it in the years ahead. Indeed major insurers including Zurich, Aviva and Allianz have led by example and become carbon neutral organisations.

At an industry level there are also many different programmes and projects that seek to pool market resources and use them to battle climate change.

Climatewise, for example, celebrates its tenth anniversary this year and aims to drive action on climate change risk. It is chaired by Maurice Tulloch, chairman of Aviva Global general insurance, who recently referred to climate change as “the greatest risk we have seen in our lifetime”.

More recently the launch of the Insurance Development Forum was announced at the Paris conference with the stated aim of reducing the impact of natural disasters and climate change in emerging markets.

The announcement of the IDF came hot on the heels of that made the previous month regarding eight Lloyd’s syndicates that are working to come up with solutions to help developing economies tackle underinsurance and improve their economic resilience to natural catastrophes.

At an individual level there are also many different areas where insurers can make a positive impact on climate change, as Richard Foulerton, CSR manager at Allianz, explains: “Insurers have multiple roles to play: as companies, as financial services providers and as investors.”

With billions of pounds of assets under management, how those assets are invested can make a very positive contribution to the climate change debate and David Williams, technical director at Axa UK, comments: “We were the first insurer to divest ourselves of any coal investments. We are also doing — through the Axa Research Fund — a lot of climate change work and in fact we sponsor a chair in climate change at Imperial College in London.”

In addition to investing in greener

## “ The insurance sector can and must play a strong role in shaping a more sustainable future

companies, supporting research and development and becoming carbon neutral organisations, insurers also have a role to play in underpinning the development of renewable energy sources and changing consumer behaviour. “We believe that renewable energy has an important part to play in delivering emissions reduction targets and decarbonising our energy market,” says Jennie Colville, group corporate responsibility manager at RSA. She continues: “We work with renewable energy developers to reduce the risk of projects and therefore, lower the resulting cost of the energy produced.”

Without insurance it would simply not be possible to raise the finance required to test experimental renewable energy projects and to then put them into commercial production.

This is a point that Dr Stefan Straub, spokesman at Munich Re, makes when he says: “As a pioneer we developed insurance solutions for green technologies such as performance guarantee covers for photovoltaic and wind turbine projects.

“We developed covers for lack of sun or wind, and to insure exploration risks of geothermal projects. The latest example is a geothermal project in Kenya. Furthermore we invest in renewable energy projects like wind- and photovoltaic parks. We aim to make €8bn (£6bn) of investments in renewable energy and infrastructure in the next few years and our latest investment is a wind farm in Sweden.”

But while this high level work takes place, there is also a need to promote a greener approach to everyday life and this is something insurers can drive at a policy level in both domestic and commercial lines business.

### Making a difference for individuals

In the UK, for example, there is a need to build many new homes and making them energy efficient must be a priority. But there is also a

huge stock of housing that is inefficient and work needs to go into changing that.

Foulerton says: “Incentives for households to make efficiency improvements are vital — we have seen lots of new initiatives over the past years to encourage more people to properly insulate their homes; replace old boilers with new efficient ones; save water; regulate heating, and so on. Such initiatives are usually incentivised through financial mechanisms; so if insurance could incentivise households to adopt energy efficiency measures then that would make a difference.”

But individual insurers have to come up with ways of doing this that also benefit their own commercial ends as Williams points out: “If I pay a policyholder to implement improvements the problem is that they then move their policy and we do not get the benefit of our spend.”

Despite the commercial hurdles to overcome, Williams is in no doubt that introducing improvements will make a huge difference and he feels this is particularly the case when it comes to resilience measures.

Taking the example of flood losses, Williams highlights the plight of a business that was flooded back in 2009 and took six months to get back on its feet. However, he says the same business was flooded again prior to Christmas and opened its doors again in a matter of days due to the changes it had made to its property following the initial flood.

Electric sockets are one example of how a property can be made more resilient and moving them to eye level and not wiring from the ground up can prevent damage to the electrics in a flood.

Similarly, putting plaster board in horizontally rather than vertically will reduce the number of panels that have to be stripped out, while water resistant plaster and tiled floors will also make a big difference. Although Williams says insurers will not generally pay for such improvements, he believes that property owners and particularly business owners should consider making changes to protect their homes and businesses and to make it easier to secure more competitive premiums in the future. He points to the availability of government grants and says insurers can work to inform their clients of how to access them.

The recent floods in the UK proved the need to add an improved level of resilience to extreme weather events and it is not ► 20

Climate Change

Email us your opinions  
postonline@incisivemedia.com  
For all the latest news  
www.postonline.co.uk

◀19 realistic to rely on ever higher flood defences that simply cannot hold back the rising tide of nature.

This is not to say that well-planned defences do not make a difference to domestic and commercial policyholders as Straub explains: “An example from Hamburg demonstrates the extent to which it already makes sense to invest in prevention. Investments in structural flood controls totalling around €2bn have been made since the catastrophic flood in 1962 and they have been estimated to have prevented losses of around €20bn from even stronger storm surges since then.” But it seems that working with nature, rather than against it would be a more practical solution in the long-term.

The role of risk modelling

For insurers, government agencies and local councils, a large part of their ability to strike the correct balance between prevention and resilience will be the level to which they understand the likely impact of future weather events.

Risk modelling has evolved in leaps and bounds on the back of exponential advances in computer processing and with each weather events comes new understanding. “We are trying to develop more and more knowledge and data to help insurers take more information into account,” says Andrew Lowe, director, vertical markets at Lexis Nexis Risk Solutions UK.

He adds: “In terms of introducing new information into the model the good news story is that technology has caught up to the point where it is a lot faster and it is more reasonable to run models on a much more frequent nature.”

For insurers the more accurate these models are the better, although events in recent years have highlighted some gaps in modelling techniques as Williams explains: “Back in 2007, 75% of the losses we had were not in areas that were considered to be high flood risks because nobody had got to grips with the whole concept of surface water flooding. It is really complex, but the good news is that technology is advancing quickly.”

In addition to accurate risk models enabling insurers to understand the dynamics of a particular event, they are also helping to provide clarity on the aggregated exposures that insurers carry.

Lowe believes that events such as the

Impact of rising temperatures on insured loss, insurance pricing and capital requirement for rain-induced inland flooding in Great Britain

Temperature change	2°C	4°C	6°C
Increase in average annual insured loss (AAL)	8% £47m	14% £80m	25% £138m
Increase in insured loss from 1-in-100-year events	18% £769m	30% £1240m	56% £2353m
Increase in insured loss from 1-in-200-year events	14% £832m	32% £1920m	73% £4346m
Theoretical impact on Insurance Pricing* (based on AAL)	16%	27%	47%
Additional minimum capital required for 1-in-200-year flood*	£1,065mx	£2,457m	£5565m

Source: ABI (2009). \*Annual GDP growth of 2.5% is assumed.

floods in Thailand back in 2011 surprised a lot of insurers in terms of the impact they had on global supply chains. He says: “The climate change movement has highlighted the need for understanding those exposures on a global basis. There is still quite a long way to go, although I do believe the topic has moved up the agenda quite significantly.”

That may be the case, but insurers still struggle to get a single view of their aggregated liabilities and Lowe adds: “We have a number of insurers that are trying to gather a central database on all of their exposures worldwide, which really very few of them do well for hundreds of different reasons.”

Whether it is down to IT challenges, the difficulties of combining information following merger and acquisition activity or

“A number of insurers are trying to gather a central database on all of their exposures worldwide, which really very few of them do well for hundreds of different reasons

the way an organisation is structured, the scale and scope of the data held is difficult to rationalise. But it is a challenge they simply have to overcome.

**Counting the cost of inaction**

The *Global Risks Perception Survey 2015* published by the World Economic Forum in partnership with Marsh and Zurich is very clear on the potential economic impact of climate change.

Detailing the 10 biggest risks that businesses face in terms of likelihood, it placed extreme weather events, failure of climate change mitigation and adaption, and natural catastrophes in positions two, three and five on the list.

Detailing the top 10 risks in terms of impact, failure of climate change mitigation and adaption took the number one spot. The table below shows the impact of rising temperatures in the UK in relation to flooding and the numbers are eye-watering. Across the Atlantic research conducted by Lloyd’s found that the approximate 20cm rise in sea levels off the tip on Manhattan had increased ground up-surge losses following Superstorm Sandy by 30% in New York alone.

The point, therefore, is that we simply cannot afford to ignore climate change and as Foulerton concludes: “Costs are not only measured in claims losses but also in the extra investments needed for projects such as new infrastructure and transport networks. What is easier to say with some certainty is that the cost of not acting will be significantly greater than the cost of taking action today.” ■