Revving the yellow brick road to resilience

The world today is grappling with urgent issues of ageing demographics, disaster risk reduction, cyber threats, climate change and extreme events. The insurance industry has a definite and emphatic role to play in these areas. Tying in with the IIS Global Insurance Forum 2016 in Singapore this month, we bring you a reality check on the progress made in advancing the global resilience agenda.

By Dawn Sit

In the past year or so, the international community has taken relatively significant steps to collectively address global concerns in the form of policy initiatives such as the Sendai Framework for Disaster Risk Reduction 2015, the G7 InsuResilience and Climate Insurance Fund, and the COP21 Paris Agreement. What is considered unprecedented, said a Geneva Association report on the COP21 agreement, is that insurance and reinsurance have been explicitly highlighted as a crucial component of risk management strategies.

The Paris Agreement, which has until 21 April 2017 for ratification by at least 55 states accounting for an aggregate share of at least 55% of global greenhouse gas emissions, will go into force by 2020. In the interim however, The Geneva Association said that "the next five years are crucial in setting the stage for 2020 and beyond".

So, is the industry doing enough to exert its influence on regional and global discussions, and more importantly, how successful has it been in taking concrete and necessary action?

Low insured losses unnecessary

"The answer is obvious when you consider that on a global basis, typically no more than 20% to 25% of economic losses are covered by insurance," said ACR Group Chief Executive Hans-Peter Gerhardt, who added that given the (re) insurance market's capacity to cover costly risks on a single-event basis, the protection gap could be reduced very significantly if governments were to earmark a fraction of its national budgets to purchase parametric covers.

"The low levels of economic losses covered by insurance reported are therefore not only unnecessary, but also an embarrassment for all of the industry's stakeholders."

Mr Kenrick Law, CEO for Allianz Re's Singapore branch opined that "we should act more and talk less". While there have been several discussions on the table, there has unfortunately, not been much execution. And even though some initiatives have been implemented, they are not done col-

Cover Story – Insurance: A Force For Good


Mr Philippe Derieux


Mr Rowan Douglas


Mr Hans-Peter Gerhardt


Professor Peter Höeppe


Mr Denis Kessler


Mr Kenrick Law


Mr Arthur Lee


Mr Andreas Spiegel


Mr Steve Waygood


Mr Jong-Gyu Won

lectively and are "too focused on local requirements, which make it harder for others to adopt similar initiatives".

"Nat CATs for example, are being driven mostly by local governments. In order to ensure a collective effort at improving data quality and availability, there is a need to combine expertise, knowledge transfer and best practices; this would help propel the industry to draw out more concrete actions at helping countries to cope with the economic and financial fallout from natural disasters," he added.

Mr Gerhardt said that the industry needs to market its ability to cover economic losses more aggressively, and that governments too "need to stop treating insurance as an optional item" in its planning and budgets. "Because limits are large, we need to come together to make a coordinated offer to create a showcase that will incentivise governments to take up covers; governments also have to be a lot more forward thinking, and not have the problem occur and then talk about the protection gap."

Industry a "canary in the cage" on climate change

Mr Steve Waygood, Chief Responsible Investment Officer of Aviva Investors, said that the insurance industry "has been the canary in the cage when it comes to climate change". Aside from Munich Re and Swiss Re which he acknowledged have done a considerable amount on climate change for most of the past two decades, "others like us, Willis, AXA and Allianz were all also very active in the run-up to COP21 negotiations in Paris last year, as was The Geneva Association".

Similarly, SCOR CEO Denis Kessler said (re)insurers are certainly very much involved in both regional and global discussions on key topics like climate change, the ageing population and extreme events among others. However, as these are complex global issues, "there will always be more effort, more work needed to drive the discussion forward" .

"Sustainability in insurance means that premiums need to be fully risk adjusted, and it is where many of the key challenges are centred on affordability and who in society pays for changing the risk landscape. There is much to be done in terms of working with governments to solve the protection gap issues; we have the expertise and under-utilised capital in our industry while much of our planet is unprotected from disaster," he said.

Since the Paris Agreement, Mr Waygood noted (re)insurers have continued to advocate for change, and on its part, Aviva has made a concerted effort on public policy engagement, have commissioned studies and is now serving on the FSB's climate risk disclosure task force. However, he questioned the sufficiency of the industry's actions.

"As climate change in some of its more extreme forms presents an existential threat to our industry, I think long-term investors in our sector should be calling for a lot more than what we are collectively doing. And until we have a price on carbon that corrects the price signals, the market failure will remain."

Unprecedented engagement and collaboration

However, it is not to say that (re)insurers' efforts in recent years have come to nought. "Whilst perhaps in the past, industry engagement may have been fragmented, we are now seeing an unprecedented level of engagement

and collaboration across the market," said Mr Rowan Douglas, Head of Willis Towers Watson's Capital Science & Policy Practice.

A shared dialogue he added, is emerging within the (re)insurance sector on the role of insurance and its related capabilities in promoting sustainable growth through mechanisms such as risk pooling, as well as the role of its models in stress-testing methodologies in helping businesses, financial markets and policymakers better understand and manage risks.

The world is becoming more aware of the role of insurance in promoting resilience and sustainable growth: the risk management sector is developing new solutions to pool risk, such as the African Risk Capacity and engaging with cities to finance risk protection and investment in resilience measures.

Further, Mr Douglas said that (re) insurers have been providing capacity for renewable energy for some time now, and more comprehensive solutions linked to risk reduction on the underwriting and investment sides are beginning to take shape.

Policy initiatives a culmination of industry efforts

Meanwhile, Tokio Marine Asia Regional CEO Arthur Lee noted that the adoption of the Sendai Framework and the Paris Agreement is a "culmination of the industry's persistent efforts in influencing disaster risk reduction policies on global, regional and national levels".

To put the Sendai Framework into practice, Mr Lee added that regional fora such as APEC and ASEAN are gearing up towards implementing disaster risk financing and insurance (DRFI) at either the regional or national level. APEC, with the input of the Asia-Pacific Financial Forum (APFF), incorporated DRFI as one of its priority issues in the Cebu Action Plan, a 10-year roadmap towards establishing resilient APEC economies, agreed on by APEC finance ministers in October 2015.

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> – Mr Hans-Peter Gerhardt, Group Chief Executive, ACR

It is worthy to note that the Plan recognised the importance of public-private collaboration to advance effective DRFI measures and in response, private sector members at the APFF have proposed a three-year plan to enable a meaningful interaction between public and private sector players, assisted by international organisations such as the World Bank and the OECD.

Mr Jong-Gyu Won, President & CEO, Korean Re said: "Governments have been putting its best efforts to mitigate these global issues but it is true that there are limits to what they can do. The industry has an increasingly crucial role to play in light of its capacity to transfer and pool risks that would otherwise be difficult for individuals or corporations."

Extensive data gathering critically important

Whilst (re)insurers' development of new products and re-adjustment of existing product structures in response to growing and varying risks, have been relatively successful thus far, there needs also be increased investment in developing CAT risk models.

"Extensive data gathering is also a critically important aspect of effective product development and risk management. In the case of Asian emerging markets, such investment is of great value to improving existing CAT models to effectively manage accumulation risk, but concrete actions are not sufficiently taken," Mr Won said.

"Many (re)insurers are eager to contribute to developing solutions and I believe we can make these discussions more active and we can also look to attract the public's attention with more publicity and awareness campaigns," he added.

The way forward

In spite of the momentum the industry has picked up in addressing the big issues in recent years, Mr Andreas Spiegel, Head of Sustainability and Political Risk at Swiss Re said it is obvious that global challenges – climate change, pandemics, food security among others – cannot be handled by a single party alone. Public-private partnerships geared to closing the protection gaps "are the way of the future", and active risk management and insurance are vital elements of that work.

In relation to the COP21 Agreement and setting the stage for greater resilience in the years ahead, he advocated a pre-emptive risk management approach, "putting our resources at the disposal of governments, regional and city administrations, critical utilities companies and individuals in order to raise awareness and help reduce the protection gap that climate change generates".

Further, putting price tags on risk would help policymakers compare the cost of doing nothing with those for minimising climate change and addressing its unavoidable effects. Aligning capital and community interests via this mechanism of insurance is a very effective way forward and would increase the shock-absorbing capacity of societies, add rigour in terms of risk

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analysis and would help incentivise risk reduction, Mr Spiegel added.

The beginning of a long journey

Professor Peter Hoeppe, Head of Geo Risks Research, Munich Re, said: "The most recent signing of the Paris Agreement in New York has been a very strong and positive signal for climate protection and adaptation. When it comes to ensuring that climate hazards remain manageable and adapting to the inevitable increased risks, we are still at the beginning of a long journey."

The voluntary pledges to reduce CO2 emissions given to date he said, fall far short of what would actually be required to comply with the limit of well under 2℃ prescribed in the Paris Agreement. Professor Hoeppe added: "We will need to see much more radical emissions cuts. To achieve this, the decarbonisation process under way in the power sector will need to continue and the heating/cooling and transport industry will need to follow suit with a swift introduction of meaningful measures. Greater support for research and development in the fields of energy efficiency, renewable energies and energy storage will also be key."

Such matters as climate financing and adaptation to the already unavoidable consequences of climate change also require urgent attention, if we are to mitigate human suffering and property losses, reducing political instability in the process, Professor Hoeppe added. Unfortunately, how the annual €100 billion (US$112 billion) for climate financing by 2020 is to be raised is anyone's guess, he said.

Investment influence

Aside from being "vocal in its support for Paris" – particularly to encourage broader private sector contribution – including through international initiatives like the UNISDR or the Carbon Pricing Leadership Coalition, and working with national governments to develop the right regulations to put in place to ensure long-term investment in cleaner technologies, the industry should ensure its investment policies take into account climate change and support the transition to a genuine, low-carbon economy, said Mr Philippe Derieux, Deputy CEO, AXA Global P&C.

"It is through its investments where the insurance industry arguably has the most influence."

Bigger role to play in ageing and health concerns

Ageing is a global phenomenon that has brought about funding issues for both individuals and societies, Tokio Marine Asia Regional CEO Arthur Lee said. "Though each jurisdiction has its way of coping, there is little question that private (re)insurers are expected to play a bigger role to enable affordable coverage for diverse needs and to educate the public."

Mr Peter Banthorpe, Senior Vice President and Global Head of Research & Development for RGA Re, said: "As life reinsurers, we have broad visibility to global health concerns, including rising levels of obesity and diabetes. These are issues that can be combated through sustained lifestyle changes, but adherence to long-term lifestyle change is typically low, and insurers will have a role to play in providing financial incentives and support networks to enhance adherence."

Push limits of insurability

(Re)insurers must also seek to push the limits of insurability and continuously expand its suite of products to cover new risks.

For SCOR, CEO Denis Kessler said he firmly believes that expanding the penetration of insurance is key to building financial resilience. In particular, the French reinsurer developed coverage for people with AIDS in South Africa, pushing the frontiers of insurability. Seven million, or roughly 13% of the South African population, are infected with HIV and have traditionally been refused life insurance.

"SCOR was one of the first reinsurers in South Africa to support life insurers as they pursued these enhancements. Ever since life insurance policies first became available to HIV-positive applicants, we have been continuously collecting data to improve the underwriting of such cover."

Mr Waygood agreed: "The insurance industry can use its investment clout to mobilise change. We can and should challenge the users of our capital – the companies we invest in – to ensure that they are on a sustainable path and transitioning to a lower carbon economy. This is tougher than it sounds, but by no means beyond the influence of our sector."

Innovative products

Mr Won emphasised the need for industry players to develop and provide more innovative products and specialised services for those at risk to ensure greater financial stability in the face of global challenges.

Mr Law said: "The industry needs to find solutions for a 'two degrees warmer world' – it's our responsibility to respond to these new type of risks and to question how we measure insurability. If a risk is not insurable with the methods and products of today, we need to find new methods and develop products to make it happen."

Insurance Development Forum

Meanwhile, Mr Douglas noted a significant step that the industry has taken through the Insurance Development Forum (IDF), created in partnership and coordination with the UN Agencies, World Bank and other international and multilateral institutions to develop coherent and effective responses to the challenges and opportunities posed by the world's exposure and vulnerability to disaster risk.

"We as an industry must plan for a world with greater need for risk mitigation and transfer, though this may not look like the traditional insurance solutions of the past," he said.

For example, there are huge exposures to infrastructure risk on public balance sheets that must be addressed. "We need to be focused on innovation that can harness data to model that risk and also on mechanisms that allow inclusive access to that information. Better model coverage and access is a first step, but so are new financing structures, such as insurance linked securities being used for assets that have traditionally been considered uninsurable."

Much still needs to be done

So with regard to climate change and its inherent risks, (re)insurers have been steering hard to make a difference. However, much still needs to be done. As Professor Höeppe said: "We are still at the beginning of a long journey."

Report card: (Re)insurers' efforts

Over the years, the industry has made concerted and significant efforts to advance the world's resilience against climate change. We check with several (re)insurers on their endeavours.

Allianz

Understanding and insuring climate risks

"In contributing to closing the insurance gap, we aim to insure climate risks in developing countries. To enable protection from climate risks in the countries most vulnerable to climate change, Allianz can build on its experience as microinsurer, offering primarily credit and life insurance policies to over 58 million lower-income customers.

In China and India, we are providing reinsurance cover for 125 million small-scale farmers. Allianz is also a reinsurer of natural catastrophe risk pools in vulnerable countries and covers Uruguay's hydroelectric power generation against drought.

We are currently working on innovative crop insurance for rice farmers in Asia based on satellite technology. The G7 has set the goal of providing an additional 400 million people with climate risk insurance by 2020. Under the umbrella of the Munich Climate Insurance Initiative (MCII), Allianz and other insurers are working on new insurance approaches to achieve this goal – both on the sovereign level as well as for the primary insurance market.

Better understanding of the risks from climate change

The 2015 Allianz Risk Barometer indicated that climate change is clearly perceived as the top long-term business risk for our industrial customers.

Additionally, the leading short-term risks are business interruptions and natural disasters, neither of which can be clearly separated from each other or from events induced by climate change, as evidenced by the Thailand floods of 2011.

In Brazil, for example, we are researching how the change of rainfall patterns and extreme weather events influence crop yields. Findings like these not only serve our business but enable our customers to take preventive measures and can inform decision-makers.

Commitment to decarbonisation

In December 2015, Allianz joined the Portfolio Decarbonisation Coalition (PDC) to support a group of investors' commitment to fight against climate change and to support clients and governments in their low-carbon transition.

Our climate and decarbonisation actions include the phasing out of coal investments, the use of environmental, social and governance scoring in investment decisions across its portfolio of own investments, and scaling up our investments in renewable energy."

– Mr Karsten Löffler
Managing Director, Allianz Climate Solutions

Aviva

Benchmarks and disclosures

"Aviva has long argued for the development of public climate risk benchmarks, which publicly rank corporate performance in this area on a sector by sector basis. This relies on corporate data, which is a lot better since the advent of the Carbon Disclosure Project in 2001, but is still incomplete.

In 2012, we successfully encouraged the UK government to include climate change as a disclosure requirement for listed companies so the data here is substantially better than in many other markets. Going forward, we'd like to see the global standard setter, IOSCO encourage climate change disclosure for all exchanges, and we'd encourage everyone in our industry to support IOSCO in taking this step.

Finally, we'd also like to see the development of auditable standards, so that our end clients can assure themselves that the products we offer them are doing what they can to manage and mitigate climate risk. Our clients want their capital to help create a future they actually wish to retire into. And our shareholders want us to invest in a way that improves the risk and real climate. We need a virtuous not vicious circle on climate change, on how we deploy our capital, and how we use our influence."

– Mr Steve Waygood
Chief Responsible Investment Officer, Aviva Investors

AXA

Building resilience, good investment and research

Supporting efforts to build greater resilience

"Through our own business activities, we have developed climate-related consulting, increased our Nat CAT coverage and grown parametric insurance. We have also engaged in further cooperation with other organisations such as the UNISDR's private sector initiative, ARISE.

Incorporating climate into our investment decisions – and supporting transition to low carbon

Last year, we divested from companies most reliant on coal and decided to triple green investments (in green bonds, infrastructure etc). We are also developing our impact investments, growing renewable energy insurance and increasingly integrating environmental, social and governance factors into day-to-day investment decision-making.

Supporting further research into climate change

Approximately one-third of current AXA Research Fund projects are focused on the environment, and we have also commissioned significant research last year into climate resilience among cities and SMEs."

– Mr Philippe Derieux
Deputy CEO, AXA Global P&C

Korean Re

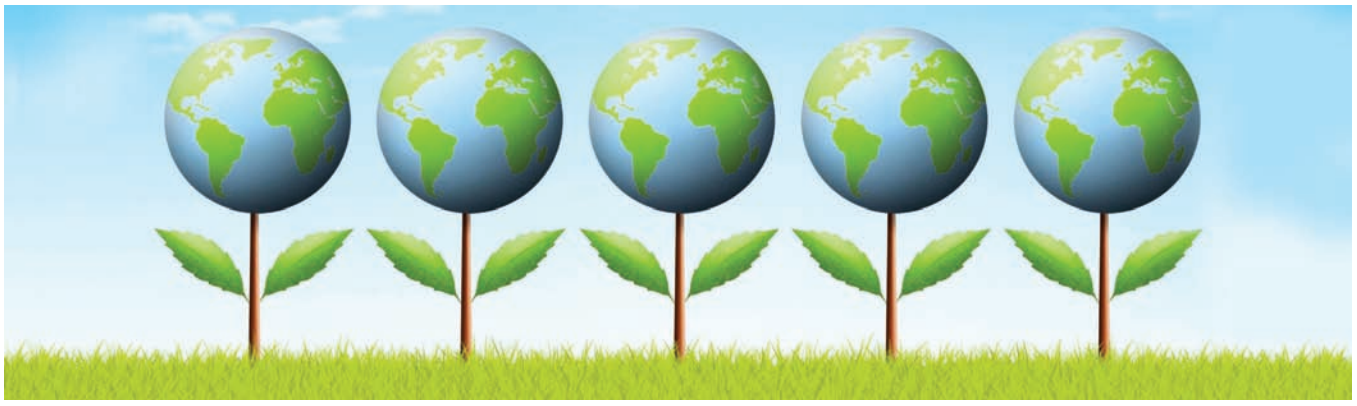
Financing a low-carbon economy

"An increasing number of insurers and reinsurers including Korean Re are figuring out ways to respond to climate change on various levels beyond simply compensating for the damage caused.

We are looking to develop and release new products that induce policyholders to reduce carbon emissions or cover carbon credit risks. Moreover, insurance companies are becoming an important group of investors in environmentally-friendly businesses, helping to finance and build a low-carbon economy.

We are also interested in resilience-building initiatives and are stepping up efforts on this front. We intend to expand our social outreach programmes across the globe going forward, with a particular focus on post-disaster activities like we did in the Philippines."

– Mr Jong-Gyu Won
President & CEO, Korean Re



Lloyd's

Solutions that address Nat CAT risks

Last July, Lloyd's Chairman John Nelson signed a Statement of Intent (SOI) between the British government, the Monetary Authority of Singapore (MAS) and Lloyd's, pledging to build natural catastrophe resilience across Asia. The three parties are committed to working together to share knowledge and support the growth of regional insurance markets.

Following the SOI, Lloyd's announced that eight syndicates have joined forces to develop new solutions to help developing economies tackle underinsurance and improve their resilience against the economic impact of natural catastrophes. The syndicates have committed capacity of US$400 million towards solutions that address Nat CAT risks in emerging and developing economies.

The initial group of Lloyd's syndicates participating in the initiative are managed by Amlin, Beazley, Hiscox, Mitsui Sumitomo Insurance Group, Nephila, RenaissanceRe Syndicate Management, Tokio Marine Kiln and XL Catlin. Membership however, is open to the entire Lloyd's market and the group has also issued an open invitation to work with international organisations, including but not limited to the World Bank and the British government's department for international development.

Last month also saw the launch of a collaboration between Lloyd's, Guy Carpenter and the UK National Meteorological Service (Met Office) to prove the concept of an agricultural weather index for insurance in Southeast Asia, with a focus on Vietnam, Thailand, Cambodia and Laos. The project will look to demonstrate baseline risk and prediction capability in meteorology to demonstrate methods for synthesis of crop data and high quality meteorological data; identify suitable indicators and thresholds as insurance scheme triggers; and stimulate debate on the development of innovative insurance solutions.

Munich Re

Commitments to various initiatives and projects

"With the clear strategy to create long-term value for all stakeholders in its core business of primary insurance and reinsurance, Munich Re is committed to meeting stringent standards. Voluntary commitments include the ***UN Global Compact (UNGC), the Principles for Responsible Investment (PRI) and the Principles for Sustainable Insurance (PSI)***.

Accordingly, the vast majority of Munich Re's investments in shares, government and corporate bonds meet recognised sustainability standards. Munich Re is actively participating in several initiatives worldwide to spur sustainability developments. Some examples below:

Australian Business Roundtable for Disaster Resilience & Safer Communities

Munich Re is one of the six founding members of the Australian Business Roundtable for Disaster Resilience & Safer Communities (other members: Australian Red Cross, IAG, Investa, Optus and Westpac) which aims to support the development of a more sustainable, coordinated national approach to making communities more resilient and the Australian people safer.

Munich Climate Insurance Initiative

In spurring sustainability developments, Munich Re has been the founder of the non-profit organisation "Munich Climate Insurance Initiative" (MCII) which brings together all relevant stakeholder groups to find insurance-related solutions for people in developing countries to support their adaptation to global warming.

Currently, such activities have resulted in the G7 InsuResilience project, which is supported by Munich Re and MCII.

Further initiatives include: Munich Re is engaged in being a member of the UNISDR ARISE initiative; board member of the *Global Climate Forum*; Member of the "*Extreme Event and Climate Risk*" *working group of The Geneva Association*; membership in the *Chief Risk Officers (CRO) Forum*; and *OECD* (Munich Re is member in the Advisory Board on Management of Large Scale Catastrophes).

In its core business Munich Re was and is still pioneering insurance solutions for green tech solutions, thus supporting the market entry of these new technologies.

– Dr Astrid Zwick
Head of Corporate Responsibility, Munich Re

SCOR

Initiatives in climate change and life reinsurance

"As Chairman and CEO of SCOR, I have been co-chairing the Extreme Events and Climate Risks working group of the Geneva Association since May 2015.

SCOR is also involved alongside other (re)insurance companies in the consultation surrounding the G7's InsurResilience initiative, a project which aims to increase access to insurance coverage against the impacts of climate change for up to 400 million of the most vulnerable people in developing countries by 2020, and to support the development of early warning systems.

For life reinsurance, SCOR is developing new distribution solutions for all market segments, using the latest available technology. By using more predictive modelling engines, enriched with data that was previously proprietary to the customer, we can more accurately evaluate risks and hence propose better rates to the market. This ultimately gives the end customer cheaper access to insurance coverage."

– Mr Denis Kessler
Chairman & CEO, SCOR

Swiss Re

Long tradition of contributing to society beyond their business

"In 2014, Swiss Re was one of the first private sector companies to sign up to a UN Climate Commitment, dedicating US$10 billion in insurance capacity, as a means to assist governments and cities around the world to reach their own climate commitments.

At city level, we're a founding partner of the 100 Resilient Cities initiative, working actively to help major cities around the world establish dedicated City Resilience Officers, and working with them to come up with effective risk resilience plans and solutions.

We have a long tradition of contributing to society beyond our business. The Swiss Re Foundation empowers communities to build resilience in the areas of water, climate, natural hazards, and other topics relevant to society. In fact, The Swiss Re Foundation just recently launched a Resilience Awards that recognises entrepreneurial initiatives that contribute to building resilient societies.

UN Global Compact

Swiss Re is a signatory to the UN Global Compact and is listed on leading sustainability indexes and ratings.

We actively participated in the three-year national consultation process in the run-up to the new UN Sustainable Development Goals (SDG) agenda 2030, providing insights from a private sector perspective to the Swiss government, and have strongly suggested that the new UN goals be backed up by a solid and transparent approach to measure progress and to hold stakeholders accountable for their commitments.

Task force on climate-related financial disclosures

Climate change affects the financial sector and managing climate related risk is essential for financial stability. As effective disclosure is a precondition for that, the FSB unveiled during the COP21 talks in Paris the creation of the Task Force on Climate-related Financial Disclosure.

Mr Andreas Spiegel, Head Group Sustainability Risk of Swiss Re, has been named a member of this new Task Force on 21 Jan 2016. Under the chairmanship of Mr Mike Bloomberg, the members will develop voluntary, consistent climate-related financial disclosures for use by companies in providing information to lenders, insurers, investors and other stakeholders. The Task Force membership includes a balance between preparers and users of financial disclosures. Mr Spiegel is the only representative from a reinsurance company."

– Mr Andreas Spiegel
Head Group Sustainability Risk, Swiss Re

Tokio Marine Asia

Facilitating constructive dialogue

Tokio Marine has been taking a leading role in promoting public-private discussions on ageing at the World Economic Forum (WEF), and disaster risk financing and insurance (DRFI) at the Asia-Pacific Financial Forum (APFF) respectively, with an aim to continue with its efforts to facilitate constructive dialogue towards implementing the agreed-upon policy goals. Tokio Marine Asia is also proactively participating in the regional discussions at the APFF.

– Mr Arthur Lee
Regional CEO, Tokio Marine Asia