



Our progress against the  
ClimateWise principles

# Contents

ClimateWise reporting.....	3
1 Be accountable .....	7
2. Incorporate climate-related issues into our strategies and investments.....	29
3. Lead in the identification, understanding and management of climate risk.....	67
4. Reduce the environmental impact of our business.....	94
5. Inform public policy making .....	139
6. Support climate awareness amongst our customers/ clients .....	154
7. Enhance reporting .....	166
References .....	169
Lloyd's / The Market / Beazley / References .....	169
Lloyd's / The Market / MS Amlin / References .....	177
Lloyd's / The Market / QBE / Supporting Exhibits .....	178
Lloyd's / The Market / Tokio Marine Kiln / References .....	178
Appendix .....	179
Lloyd's / The Market / RenaissanceRe Note on Forward Looking Statements .....	179



# ClimateWise reporting

## Sharing risk to create a braver world

Lloyd's is the world's leading insurance and reinsurance marketplace. Through the collective intelligence and risk-sharing expertise of the market's underwriters and brokers, Lloyd's helps to create a braver world. The Lloyd's market provides the leadership and insight to anticipate and understand risk, and the knowledge to develop relevant, new and innovative forms of insurance for customers globally. It offers the efficiencies of shared resources and services in a marketplace that covers and shares risks from more than 200 territories, in any industry, at any scale. And it promises a trusted, enduring partnership built on the confidence that Lloyd's protects what matters most: helping people, businesses and communities to recover in times of need. Lloyd's began with a few courageous entrepreneurs in a coffee shop. Three centuries later, the Lloyd's market continues that proud tradition, sharing risk in order to protect, build resilience and inspire courage everywhere.

## How we deliver on our purpose

Everything Lloyd's does is underpinned by one unifying purpose: sharing risk to create a braver world. This purpose speaks to the impact and aspiration of the market and is as true today as it was in Edward Lloyd's coffee shop in 1688. The Lloyd's market has been at the forefront of its industry for more than 300 years, pioneering new forms of protection for a rapidly changing world. Collectively, the Lloyd's market enables innovative ideas, shares insight and creates lasting partnerships to make a tangible difference for our customers, helping to create a braver, more resilient world. From start-ups to small and medium-sized enterprises, national governments and multinational corporations, our customers are the people driving the global economy; and they rely on the specialism, strength and security of the Lloyd's market to help them protect what matters most. The Lloyd's market has helped customers around the world withstand shock, recover and rebuild, and we are proud to continue that essential service today.

## Our business model

Our unique market has an unrivalled concentration of specialist insurance expertise, and every day 50 leading insurance companies, 350 registered Lloyd's brokers and a global network of more than 4,000 local coverholders operate in and bring business to the Lloyd's market. The business written at Lloyd's is brought by brokers and coverholders to specialist syndicates, operated by managing agents, who price and underwrite risks. Much of the (re)insurance capacity available at Lloyd's is provided on a subscription basis – where syndicates of Lloyd's underwriters join together to underwrite risks and programmes.

Combined with the choice, flexibility and financial certainty of the market, this makes Lloyd's the world's leading insurance platform. But in an unpredictable global climate, Lloyd's underwriters must also rely on their experience and industry knowledge to cast light into the darkness ahead. Behind the Lloyd's market is the Society of Lloyd's, not itself an insurer but an independent organisation and regulator that acts to protect and maintain the market's reputation and provides services and original research, reports and analysis to the industry's knowledge base. Under one globally trusted name, the Lloyd's market and the Society of Lloyd's share risk to protect our stakeholders' interests, promote economic growth and create a braver world.

## Our impact on society

Lloyd's has a long track record in contributing to the communities in which we operate and, crucially, helping them to recover from disaster. We are proud of the enduring role we play in protecting society from some of the greatest threats, and in doing so supporting economic growth and societal prosperity. Over the past decade the Lloyd's market has paid £145bn of claims to our customers in their time of need, as well as the insurance and reinsurance critical to propelling the advancement of people, businesses and communities around the world. Lloyd's is also a significant engine for the UK's economy. The London (re)insurance market, of which Lloyd's represents two thirds of business written in London, employs 47,000 people and makes up 1.7% of the UK's gross domestic product.

Business flow		The market		Capital flow	
<b>Customers</b> – Global commercial organisations, such as FTSE 250 and Fortune 500 companies – Small and medium-sized enterprises – Individuals – Other insurance groups	<b>Distribution channels</b> – 350 brokers: distributing business – 427 service company locations – 4,030 coverholder locations: offering local access to Lloyd's	– 50 managing agents: managing syndicates – 76 syndicates: writing insurance and reinsurance – 12 special purpose arrangements: set up solely to write a quota share of another syndicate – 2 syndicates in a box: writing innovative, new business	<b>Capital providers (members)</b> – Trade capital: insurance companies from around the world – Institutional capital: such as pension funds and private equity – Private capital (via members' agents): such as small companies and individuals		
		<b>Gross written premiums:</b>	<b>Capital and reserves:</b>		
		<b>2020</b> £35.5bn	<b>2020</b> £33.9bn		
		<b>2019</b> £35.9bn	<b>2019</b> £30.6bn		
		<b>2018</b> £35.5bn	<b>2018</b> £28.2bn		

**The Society – supporting the market**

**How we create value for our stakeholders**

**A market fuelled by possibility**

Lloyd's is the world's largest specialist insurance market and global distribution network, competing to share risk whatever the size, location, industry or complexity in order to provide outstanding service for our customers. Built for an interconnected economy, Lloyd's insures people, businesses and communities in more than 200 countries and territories through a unique flow of business, and can develop tailor-made policies for customers in every sector, covering more than 60 lines of insurance and reinsurance.

**Protection you can rely on**

We take pride in doing what's right, paying all valid claims. For more than three centuries the security of Lloyd's has protected what matters most to people, businesses and communities and helped them recover in times of need. We are committed to being an inclusive global market that treats our people and customers with dignity and respect. Our unique capital structure provides the financial strength that backs all insurance policies written at Lloyd's and the common security that underpins the market's strong ratings and global licence network. Lloyd's central assets, which include the Central Fund, are available, at the discretion of the Council, to meet any policyholder's valid claim that cannot be met from the resources of any member. With more than £33.9bn net resources backing Lloyd's policies and competitive financial strength ratings, our stakeholders have confidence that we will be there to meet all valid claims.

**Solutions from the best minds in the market**

A Lloyd's policy benefits from the combined expertise of an entire market, not just a single company. Our market combines the specialist knowledge and resources of 90 underwriting operations and 350 brokers and uses this collective expertise, professionalism and judgement to

protect stakeholders' interests. With this unrivalled depth and breadth of insurance expertise, Lloyd's is the leading marketplace for protecting against new and emerging risks. Together our underwriters and brokers create innovative, responsive solutions to the most unique challenges. We embrace new challenges, create new products and champion new solutions – no matter how specialist or complex the risk.

**A partner for the long term**

The trusted relationships which underpin our marketplace are one of our greatest strengths. Our community of experts working to best serve our customers, enable us to share risk. The long-term relationships between customers, brokers and underwriters, built on mutual trust, create the collaborative spirit which enables our market to create innovative solutions and work together in the best interests of our stakeholders.

**Insight and leadership to build resilience**

Lloyd's has always been an intelligence network and we continue to convene and lead the global (re)insurance industry. Our insight, experience and judgement inform decision making, enable innovation and ensure our stakeholders stay resilient and ahead. Lloyd's latest research and reports provide insights into emerging risk issues and innovations to help our underwriters, brokers and customers understand and better manage risk.

**An ecosystem of opportunity**

As a marketplace, Lloyd's provides access to economies of scale through consistent standards, single regulatory interface and shared business services. The global risk landscape is changing at pace and our customers operate in a complex and fast changing world. Lloyd's is building the world's most technologically advanced insurance marketplace, offering our stakeholders the widest range of risk solutions and services to help them face these new risks with confidence. Our competitive environment, central oversight and capital efficiencies

improve performance, unlock new opportunities and enable the best possible outcomes for our stakeholders.

### Our strategy: how we preserve value

Lloyd's strategy is to maintain and enhance the value we offer to our many stakeholders:

- **Customers**, ensuring we provide them with the products and services they need, and being there when claims arise;
- **Distributors**, offering the capacity to place specialist risks on behalf of their clients;
- **Managing agents**, providing access to attractive insurance risk from around the world;
- **Capital providers**, giving the opportunity to sustainably invest in different types of insurance risk; and
- **People**, creating a culture in which every employee can fulfil their full potential.

We are creating a market which attracts new risks, new customers and new forms of capital, and which will provide a superior experience while operating at materially lower costs. When we achieve this, the market will be bigger and more relevant, through:

- Offering even better solutions for our customers' risks;
- Simplifying the process of accessing products and services at Lloyd's;
- Reducing the cost of doing business at Lloyd's; and
- Continuing to build an inclusive and innovative culture that attracts the most talented people to Lloyd's.

By delivering against our four strategic pillars and effectively managing our Tier 1 risks, we will realise these aims, enhance the value we offer our stakeholders and ensure that this is sustained over the long term. Our strategic pillars are:

- **Performance:** continuing our work to deliver first-class underwriting;
- **Digitalisation:** our Future at Lloyd's strategy to build the world's most advanced insurance marketplace and deliver the widest range of products and services to our customers;
- **Culture:** building a diverse, inclusive and high performing culture in the Society and the market in which everyone feels safe, valued and respected, and that reflects the global markets we work in; and
- **Purpose:** strengthening the market's performance, capital and financial credibility, putting sustainability at the heart of our operations and embedding trust and the reputation of Lloyd's around the world through thought and action leadership.

## Understanding Lloyd's reporting

For the purpose of this report, case studies evidencing activities carried out under the ClimateWise principles have been split into two groups to reflect the structure of Lloyd's. For example:

### – Lloyd's / The Corporation of Lloyd's

The Corporation oversees and supports the Lloyd's market, ensuring it operates efficiently and retains its reputation as the market of choice for specialist insurance and reinsurance risk.

### – Lloyd's / The Lloyd's market / [market member name]

The majority of business written at Lloyd's is placed through brokers who facilitate the risk-transfer process between clients (policyholders) and underwriters.

Reporting is made [publicly available online each year](#) by the Corporation on behalf of the Lloyd's members, with members also carrying out their own activities throughout the year. This also includes examples of Lloyd's reporting in the annual review, where examples of best-practice activity are often highlighted.

This year will be the last year that the Corporation will publish ClimateWise reporting on behalf of its members. From reporting year 2021-2022, members will conduct their ClimateWise reporting separately.

## The Corporation of Lloyd's

As a founder member of ClimateWise, the Corporation of Lloyd's continues to publicly recognise that climate change affects everyone, and recent natural disasters show the cost climate change could cause insurers in the future and the devastating impact it has on businesses and communities. Lloyd's is therefore in regular dialogue with insurers, businesses and policymakers to address the challenges posed by climate change that affect our sector and society in general.

### Sustainability

Business leaders have a responsibility to align their commercial interests with the challenges of climate change. Evidence suggests that more than two-thirds of economic losses from natural disasters remain uninsured. More needs to be done to close this protection gap and mitigate the wider damage caused by climate-related disasters.

Lloyd's recognises the insurance sector enables business and individuals to manage risk including long-term threats such as climate change. The long-term stability of our economy hinges on an appropriate response to this threat. Lloyd's continues to support action to tackle climate change through leading risks analysis, informing public policy making, supporting climate awareness and reducing its own environmental impact.

The Corporation is proud to take a lead role in addressing wider social and environmental issues and in 2020, published its first Environment, Social and

Governance (ESG) strategy and report, demonstrating its commitment to leading a sustainable insurance industry. This follows the publication of its first [United Nations Global Compact report](#). In so doing, the Corporation agrees to align strategy, culture and day to day operations with universal principles on human rights, labour, the environment and anti-corruption, and to take actions that advance societal goals.

The Lloyd's membership continues to be an active member of the ClimateWise initiative, a collaborative endeavour by insurers to drive action on climate change.

## The Lloyd's market

There are six managing agents that operate within the Lloyd's market that have signed up to the ClimateWise principles.

Case studies evidencing their compliance with the principles and actions against them are included to provide an overarching submission from Lloyd's and provides a public account of progress year-on-year.

Each case study is written by the named market member, and reflects the group views, policies and practices of that entity only.

### ClimateWise members in the market



# 1. Be accountable

## 1.1 Ensure that the organisation's Board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.

### Board level commitment

Climate change is recognised as an issue at Council, and ExCo level at the Corporation, and each market participant has a ClimateWise sponsor at equivalent senior level:

Company	Designated Board Member	Title
The Corporation of Lloyd's	David Sansom	Chief Risk Officer
Beazley	Adrian Cox	Chief Underwriting Officer
MS Amlin	Martyn Rodden	Deputy CEO, MS Amlin Underwriting Limited
QBE	Nigel Terry	Chief Risk Officer – European Operations
Renaissance Re	Ian Branagan	EVP Group Chief Risk Officer
The Hartford	David Robinson	Executive Vice President and General Counsel
Tokio Marine Kiln	Vivek Syal	Chief Risk Officer

Evidence also applies to principle(s): All

Source: Lloyd's ClimateWise members



## Lloyd's / The Corporation

We are defined by our purpose and now is the time to act. That purpose is sharing risk to create a braver world. It is our reason for existing, a guidepost for our strategy, and an articulation of why what we do matters and the value we bring to customers and to society. So, reflecting on the events of recent years, we intend to highlight this as a fourth strategic pillar (on top of Performance, Culture and Digitalisation) and in doing so ensure that our purpose is central to everything we do.

We want to be known as a responsible business leader, operating in a way that makes those who work for us and with us feel proud of what we do and how we do it. We have been working on our Environmental, Social and Governance (ESG) strategy throughout 2020 and outlined our ambition to integrate sustainability into all of Lloyd's business activities in our first ESG report, which was published in December 2020.

In our first ESG report, we committed to engaging widely with stakeholders across the Lloyd's market to further develop and operationalise our ESG strategy, policies and processes. We will develop a framework to help insurance businesses in our market integrate ESG principles into their business activities over the next 18 months. More details of our ESG strategy commitments are outlined under sub-principle 1.2.

As a major player in the global economy, it is important that Lloyd's acts responsibly. Lloyd's is already highly regarded for the responsible business activities undertaken in its local communities. As the market grows and diversifies, so does our community support.

This responsibility also applies to business practices. The Lloyd's market should aspire to the highest standards in business conduct and ensure its customers are fairly treated at all times. Lloyd's also wants to use its experience and expertise to help communities around the world build resilience against disasters, including the effects of climate change and extreme weather events.

Lloyd's is considered as the world's leading insurance and reinsurance marketplace, with nearly 60% of its business being written in reinsurance and property classes of business; as such it is exposed to both physical and transitional risks arising through climate change.

Overall responsibility for the Corporation of Lloyd's strategy, and risks including climate-related risks, sits with the Chief Executive Officer and the Council of Lloyd's. The Corporation has been developing its risk assessment and governance structure to embed the management of climate-related risks throughout the organisation over the past few years. In the reporting

year, two key developments include the establishment of an Environmental, Social & Governance ('ESG') strategy and Advisory Group who regularly reports to the Council of Lloyd's, and also the development of the Corporation's overall risk management processes to further embed climate-related risks. During the reporting year, John Neal (Lloyd's Chief Executive Officer) has also joined the Council of ClimateWise.

More detail on the new ESG strategy and Advisory Group and updated Risk Management Framework are provided under sub-principle 1.2.

## Governance structure

Under the Lloyd's Act 1982, the Council undertakes the management and superintendence of the affairs of the Society and has the power to regulate and direct the business of insurance at Lloyd's. Certain functions are reserved to the Council, including: — the making, amendment or revocation of byelaws (which are available at [www.lloyds.com/byelaws](http://www.lloyds.com/byelaws)); — the setting of Central Fund contribution rates; and — appointing the Chairman and Deputy Chairmen of the Council. Beyond the reserved functions, the Council can delegate its powers or functions to any person, committee or employee of the Society. Until 1 June 2020, the Council delegated authority for the day-to-day management of the market to the Board. The Board was able, in turn, to sub-delegate authority to the Chief Executive Officer and through him to the Society's executive. On 1 June 2020, the Board dissolved, and the Council resumed responsibility for the day-to-day to management of the market. The Council has delegated authority to carry out specified functions to committees including the Remuneration and Nominations & Governance Committees and the Executives, as summarised below.

The Council is the governing body of the Society of Lloyd's ('Society') and has ultimate responsibility for overall management of the market.

Prior to 1 June 2020, the Council delegated many of its functions to the Board, whose members were appointed by the Council and came from both within and outside the Lloyd's market. With effect from 1 June 2020, following consultation with members of the Society and the Lloyd's market, the Board merged into the Council and a revised Council was established. From 1 June 2020, all the committees of the Board became committees of the revised Council. The day-to-day powers and functions of the Council are carried out by the Society's Executive Committee – the Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Risk Officer, Chief Human Resources Officer, General Counsel and Company Secretary, and Chief Marketing and Communications Officer. The Performance Management Director left the Society on 31 May 2020. A new role of the Chief of Markets was created and a candidate was appointed in January 2021. Lloyd's is regulated by the PRA and FCA, which have direct supervision of



managing agents and monitor capital, solvency and conduct. The Society is active in managing risk within the market to ensure that Lloyd's central assets, brand, licences and reputation remain protected.

A list of the members of the Council can be found at: <https://www.lloyds.com/about-lloyds/governance-and-management/council-of-lloyds>. Details of the Executive Committee can be found at: <https://www.lloyds.com/about-lloyds/governance-and-management/executive-team>

The Council met on ten occasions in 2020. One of these was a joint meeting with the Board. The meetings of the Council are structured to allow open discussion. ESG is an item on the agenda for Council meetings, which includes climate-related issues as part of its "Environmental" pillar. At each meeting the Council receives certain regular reports – for example, a written report from the Chief Executive Officer and updates from the principal committees. This includes a written update report from both the Risk Committee and the ESG Advisory Group for each Council meeting, which include both climate-related risks and issues as part of ESG. Private sessions are held regularly by the Chairman at the end of Council meetings without the Executive members being present.

## Risk Committee

The Risk Committee's role is to assist the Council in its oversight of the identification and control of risks to the objectives of Lloyd's. In carrying out the role, the Committee takes into account the relevant work of the Investment Committee, the TTC and the Audit Committee. The Risk Committee was chaired by Patricia Jackson, an independent non-executive member of the Board until 31 May 2020. The Committee is now chaired by Neil Maidment, an independent non-executive member of the Board until 31 May 2020 and of the Council with effect from 1 June 2020 when Board and Council merged. The other members of the Committee are drawn from the Council. Other individuals including the Chief Executive Officer, Chief Risk Officer and Chief Financial Officer are regular attendees, with others invited to attend all or part of any meeting as and when deemed appropriate by the Committee or its Chair.

The Committee submits an annual report to the Council. It also reports to the Council on its proceedings after each meeting. Climate change is becoming an increasingly prominent topic within the Risk Committee's activities.

The Risk Committee discussed the Corporation's Own Risk and Solvency Assessment (ORSA) in October 2020, which for the first time contained a climate change scenario. The Risk Committee also ensured that climate change was prominent in the 2021 Risk Plan when they approved it at the December 2020 Risk Committee meeting.

The Risk Committee has received various updates on progress being made to the risk framework in response to requirements set out in the Bank of England's Prudential Regulation Authority (PRA)'s Supervisory Statement SS3/19. Issued in 2019, SS3/19 requires insurers to address financial risks from climate change through their own risk management frameworks, and to consider disclosing how financial climate-related risks are embedded within their governance and risk management processes. The Risk Committee has been actively monitoring the response to these requirements as climate-related risks have been integrated into risk management framework.

As part of an update to our Risk Taxonomy in 2021, we are looking at how to incorporate Climate risk into our risk appetite framework. This will ensure that there is quarterly reporting of position against risk appetite to the Risk Committee alongside wider monitoring of climate-related Key Risk Indicators (KRIs).

The Chief Risk Officer has committed to bring a proposal to the Risk Committee for discussion in October 2021 to formalise a risk appetite statement for the new Climate category. From October 2021 onwards once the risk appetite for the new Climate risk category is agreed, monitoring against related targets and metrics will be conducted on a quarterly basis and reported to the Risk Committee.

Additionally, in 2021, the Corporation of Lloyd's is involved in the Bank of England's Climate Biennial Exploratory Scenario (CBES). The Risk Committee has been monitoring the Corporation's involvement in the exercise and will discuss the results of the exercise in October as it concludes. The CBES uses three scenarios of early, late and no additional action to tackle climate change to explore the impacts of two key risks: transitional and physical risks, on a selection of the UK's largest banks and insurers.

The Committee met on eight occasions in 2020. It records attendance to Committee meetings within Lloyd's Annual Report.

## The Environmental, Social & Governance Advisory Group

The ESG Advisory Group was established on 2 December 2020. Its first meeting was held on 15 December 2020. The Advisory Group's role is to provide advice to the Council and the Executive to enable environmental, social and governance integration for the Lloyd's market. The "Environmental" pillar of the ESG Advisory Group includes consideration of climate-related risks and opportunities for the Corporation.

The ESG Advisory Group is chaired by Bruce Carnegie-Brown, the Chairman of Lloyd's. Other members include:

- John Sununu, Nominated Member of the Council of Lloyd's, who joins the ESG as a Council Representative
- Ingrid Holmes, Director and Head of Policy and Advocacy at Federated Hermes International, who joins the ESG as an Independent Representative

Corporation representatives:

- David Sansom, Chief Risk Officer at Lloyd's, who is also the key sponsor for ESG within Lloyd's
- Jo Scott, Chief Marketing Communications Officer at Lloyd's
- Patrick Tiernan, Chief of Markets at Lloyd's
- Hannah-Kate Smith, Executive Officer to the CEO at Lloyd's

Market representatives:

- Dominick Hoare, Group Chief Underwriting Officer of Munich Re Syndicate Ltd
- Peta Kilian, responsible for innovation and strategy at Talbot
- Jane Warren, UK Legal Entities Managing Director at Liberty Specialty Markets (LSM)
- Emma Woolley, Chief Executive Officer of Lancashire Syndicates Limited

## Our ESG commitments

In 2020 Lloyd's published its first ESG report, including an overall ESG strategy and ambitious commitments. We committed to engaging widely with stakeholders across the Lloyd's market to further develop and operationalise our ESG strategy, policies and processes. We will develop a framework to help insurance businesses in our market integrate ESG principles into their business activities over the next 18-24 months. Below is a summary of our ambition statements.

### Sustainable insurance

To encourage product innovation, we have introduced a new allowance of 2% of gross written premiums for new innovative and sustainable products in addition to syndicates' business-as-usual plans.

Lloyd's also encourages each managing agent to formulate and implement an ESG strategy and framework that is fit for purpose for their business and supports the UK Government's commitment to achieving net zero by 2050

### Responsible investment

The Corporation of Lloyd's believe that we should use our shareholder power to influence the behaviour of the companies in which we invest – and persuade them to respond more effectively to the impact of climate change (principle 2.1, which also includes 2.2 and 2.3 activity).

The Corporation has a responsible investment strategy that has been communicated publicly (principle 6.1). Details are available as part of the annual report, Responsible Business webpages, and in outputs throughout the year, such as regulatory responses and media requests.

The Corporation's investment philosophy focuses on generating long term, sustainable capital growth for Central Fund assets. The approach to responsible investment is built upon three core pillars;

- Protecting the Central Fund assets by considering environmental, social and governance risks;
- Promoting responsible business practices in companies through activities such as corporate engagement and shareholder action; and
- Providing capital to support a sustainable future, through investments in green and social impact bonds and by excluding investments in coal focused companies.

The Society will allocate 5% of the Central Fund to impact investments by 2022. We will phase out new investments in thermal coal-fired power plants, thermal coal mines, oil sands and new Arctic energy exploration activities by the Lloyd's market and the Society by 1 January 2022 and existing investments by the end of 2025. This includes phasing out existing investments in respect of companies with business models that derive at least 30% of their revenues from these activities by the end of 2025.

### Responsible operations

We will ensure that the Society is net zero carbon emissions for our operations by 2025 and publish a roadmap to support that ambition. The Society will work with the Lloyd's market in 2021 to support their own implementation of net zero carbon emission plans and will explore the potential to develop a Lloyd's market-wide carbon offset project.

### Customers

We will set up a customer working group to explore how we can make our insurance contracts simpler and easier to understand. We will continue to explore how our open source frameworks could be leveraged and applied globally to offer customers greater protection against future systemic risks. We will improve our customer satisfaction monitoring and continue to regularly review how we can improve our customers' experiences through product oversight and governance and through promoting best practice.

**People and culture**

We will work to achieve our phase one target of 35% female representation in leadership positions across the Lloyd's market by 31 December 2023. We will continue to reduce the Society's gender pay gap, and work to ensure that Lloyd's market Boards and Executive Committees combined will have at least 20% female representation by 31 December 2023.

- Quarterly meetings between the ESG Advisory Group
- Fortnightly meetings between the ESG Steering Committee, which involves relevant representatives per business function to facilitate decision making
- Regular engagement with the Lloyd's Market Association (LMA), London & International Insurance Brokers Association (LIIBA), Association of British Insurers (ABI), and International Underwriting Association (IUA).

**Community**

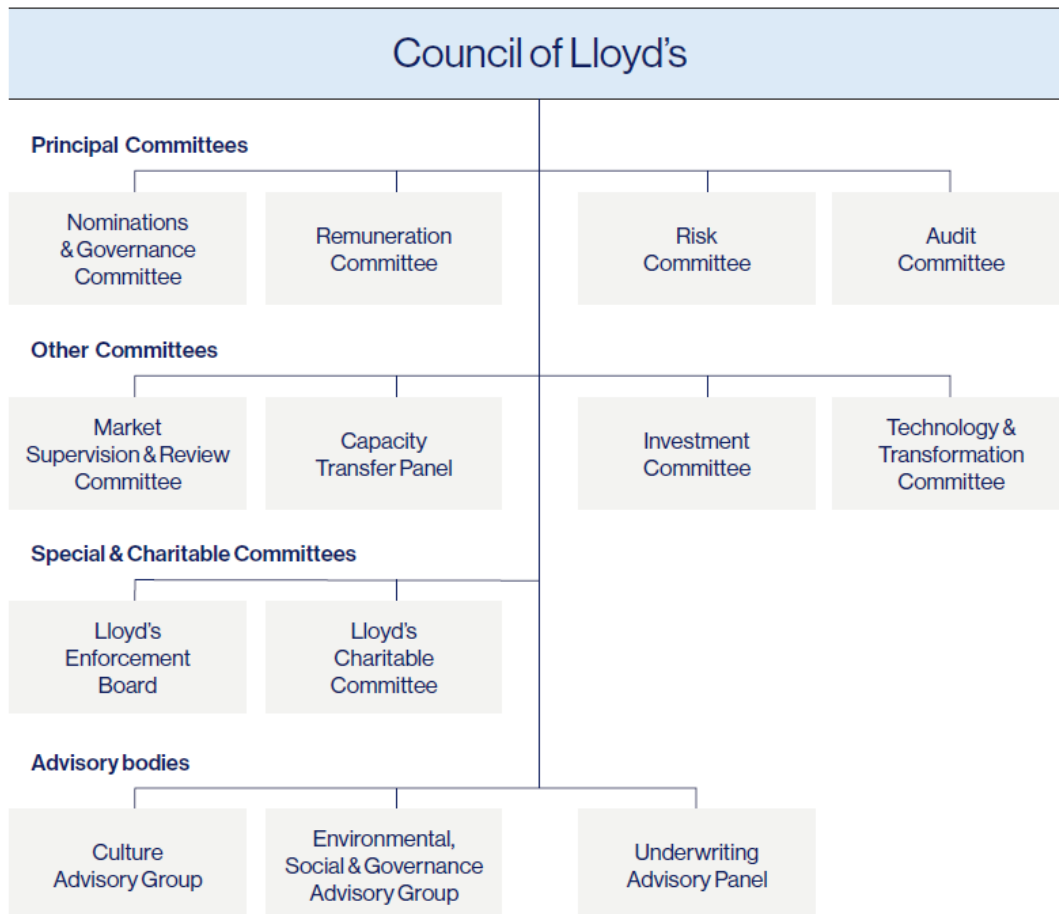
We will continue to work with all businesses in our market to engage them with our community work and support our network of more than 200 community champions. We will strengthen our relationships with charity partners to help them raise more funds, provide business support and increase their risk management skills.

[Supplementary slide has been provided as confidential submission, outlining the ESG Group's governance structure.]

Evidence also applies to principle(s): All

Source: The Corporation of Lloyd's

Key Programme Governance structures in place to deliver against ESG commitments include:



## Lloyd's / The Market / Beazley

Beazley's corporate structure has a number of different boards, depending on the jurisdiction in which the company operates. The Plc Board has complete oversight for the business and consists of a chairman, two executive directors (CEO and Finance Director) and seven non-executive directors. Within Lloyds, Beazley Furlonge is the managing agent responsible for management of the Lloyds syndicates. The board of Beazley Furlonge includes Beazley's CEO and Chief Compliance and Risk Officer, both of whom are the current nominated senior management functions for climate change. The Boards meet on a quarterly basis, and are supported by a number of committees chaired by non-executive directors. The Board, and sub committees, therefore, monitor and oversee progress of the work being undertaken by the business, one aspect of which is Beazley's climate risks and opportunities. Beazley wishes to embed our response to climate risk as a business as usual function of all disciplines, therefore, the board receives a number of updates from different departments in response to our approach to climate related risk and the opportunities it brings.

In June 2020, Beazley appointed a Sustainability Officer to lead on the delivery of ESG matters for the business. This position title was altered to Head of Responsible Business as the role has developed over the last year. It is the responsibility of the Head of Responsible Business to provide a minimum of a quarterly update on responsible business issues, both in the form of a written report, and then a verbal presentation with opportunities to answer any questions the board may raise. The content of these reports includes an update on our actions to determine the risks and opportunities arising from climate change. In 2021, Beazley published our first Responsible Business Strategy, the Boards were crucial in the development and approval of this strategy. This ensured that the strategy could reflect the strategic direction of Beazley and enable the Board to engage throughout this process.

The exposure management team has the responsibility for developing approaches to monitor the aggregation of exposure to natural catastrophes. Part of this work involves assessing the latest views on climate change and reporting to the business on the impacts this could have to the insurance portfolios. The exposure management team reports into the Chief Compliance and Risk Officer, who in turn provides regular updates to the board on these matters. The Head of Capital also provides an update, using modelled and non-modelled information to help determine the impact of climate change on the business. This has been included in annual Board sessions for the last 2 years. An example of this is the internal modelling the capital team undertook to determine the impact of wildfires, which are

becoming increasingly prevalent as a result of climate change. We also set out a view on the more material hurricane risk as part of this process.

To help support the board and ensure they had the necessary knowledge to provide challenge to the business, a training session was delivered on sustainability and climate change risk by Deloitte. This session enabled the board to further understand climate related risks, become familiar with regulatory requirements which need to be delivered against and understand how Beazley compares to its peers in this regard. The session also provided a forum for the board to ask questions of the training providers and delve deeper into the climate risk work, where required. This session was also attended by members of Beazley's Executive Committee. This training was seen as essential to firstly provide adequate challenge to Beazley's first Responsible Business Strategy, and secondly ensure that as Beazley incorporates more climate related risk into the business planning process that the strength of these plans, can be scrutinised.

The reporting of progress against the Responsible Business Strategy is a prominent mechanism by which the Board can oversee improvements in line with the strategic plans, goals and targets set for addressing climate-related issues. The Board is kept apprised by the Head of Responsible Business on a quarterly basis, as a minimum. Within the strategy, we set out key commitments including objectives to embed climate related risk into business as usual approach, and thus requires us to deliver workstreams which identify both the risks and opportunities from climate change, with an aim to deliver underwriting products and services to support and protect our insureds from the impacts of climate change. The document also outlines our commitment to embedding an appraisal of wider ESG considerations into our underwriting process, as well as the utilisation of carbon intensity metrics within our investment decision making. This will help Beazley determine its true impact on climate matters and drive the development of future business strategies. We have also set out targets for how we will reduce the impact of Beazley's own operations, and thus help to reduce the climate risks associated with our business. These goals include a commitment to a 50% reduction in carbon emissions across the next three years, as well as a working towards setting Science Based targets.

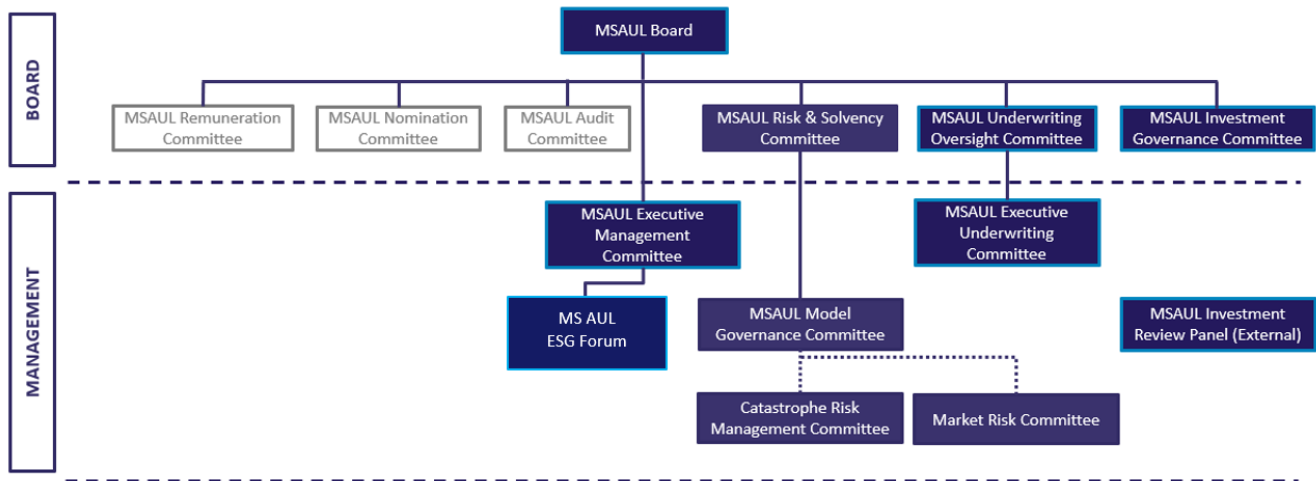
To enhance the line of sight on these matters, as well as the delivery of specific Climate related financial risk workstreams, we have created a Responsible Business Steering Group (RBSG), which reports both into the Executive Committee and the Plc Board. This group is attended by those personnel who have responsibility for the delivery of both Responsible Business and Climate Related Risk workstreams, with a number of Board



members also in attendance. This group was created following the finalisation of the Responsible Business Strategy and will commence meetings in July 2021.

through careful management in each of these critical aspects that MS AUL can achieve its objectives and

### Governance Structure



As part of a wider business strategy refresh, Beazley is in the process of finalising its new group strategy. One of the five pillars within this strategy, which underpins Beazley’s vision is Responsible Business. This demonstrates that Responsible Business and thus matters such as climate change are fundamental to our plans going forward. This is also reflected in the fact that we have begun to enhance our consideration of climate related risk within our annual business plans. This strategic thinking is beyond the consideration of our annual review, and requires each of the underwriting focus groups to determine the actions and resources to enable climate change to become part of the long-term plan for Beazley. Once finalised, these plans will be signed off by the Executive Committee and then the Board, progress is then tracked throughout the year.

Source: Beazley

### Lloyd’s / The Market / MS Amlin Underwriting Limited

The MS Amlin Underwriting Limited (MS AUL) Board recognises that climate change is one of the highest profile topics driving political, social and economic decision making across many countries and most markets. The Board has overall responsibility for business performance, risk management, setting and overseeing the implementation of the strategy, and ensuring high standards of corporate governance are maintained. It is

manage the risks and opportunities arising from climate change.

During 2020-21 the Board commissioned a strategic review to assess MS AUL’s approach to climate risk, and approved an operational response, covering a 12-24 month timeline.<sup>a</sup> This response will support MS AUL in its delivery against the ClimateWise principles and regulatory requirements, and align climate risk strategy to the existing risk appetite and exposure management framework. The outcome of this review has provided the Board with targets and performance measures<sup>b</sup> to ensure effective governance and an ownership matrix that assigns accountability to key individuals for delivery.

The strategic review also agreed a climate risk management strategy statement confirming the approach and strategy MS AUL will take towards tackling climate risk. The statement was approved by the Board in Q1 2021:

“We at MS Amlin are committed to making transparent, sustainable financial decisions and to actively managing the long-term financial risks of climate change, in partnership with our customers as we transition together towards to a low carbon future.”

To ensure effective governance and keep the Board informed of the ever-evolving landscape surrounding climate change, a Directors’ training session<sup>c</sup> was held in

<sup>a</sup> See evidence 1a  
<sup>b</sup> See evidence 1b

<sup>c</sup> See evidence 1c

April 2021. The session identified climate change as a financial risk and included a long-term view outside of standard business planning horizons. The objective for the session was to increase Board awareness of this



topic and educate members on their responsibilities, allowing them to make informed decisions on climate change risks and opportunities.

The MS AUL Board member responsible for Climate Change is Strategy & Transformation Director, Martyn Rodden. Martyn represents MS AUL on the ClimateWise Insurance Advisory Council, is Chairman of the newly formed ESG Forum, and is the named executive with regulatory responsibility for climate change.

The Board has a number of committees, to which it delegates oversight and decision making powers in accordance with documented Terms of References (see figure 1).

The Board Level Committee with the highest level of engagement in Climate Change is the MS AUL Risk and Solvency Committee which approves the business appetite and tolerance limits, receiving regular reports from the risk function to ensure the approved appetites and limits are monitored and the risk profile is understood. This includes risks associated with climate change.

Each quarter the Board also receives a specific report from the ESG Forum (see principle 1.2) for discussion.

Source: MS Amlin

### Lloyd's / The Market / QBE / Board led incorporation of Principles into business strategy

Our climate governance framework clearly defines the roles and responsibilities for effective oversight and management of climate-related risks and opportunities at the Board and senior management levels.

Responsibilities for climate-related issues have been assigned to the Group Board due to the long-term strategic importance of this topic for QBE's investment and insurance businesses, and operations. QBE's Group Board of Directors (Group Board) recognises that climate change is a significant risk for the business. Climate-related issues are a scheduled agenda item, with formal quarterly updates to the Group Board. The Group Board is supported by the Board Risk and Capital Committee

(BRCC) which met six times in 2020 and receives quarterly updates on climate change. In addition, divisional Board Risk & Capital Committees regularly receive and review reports on climate-related risks and opportunities affecting each division.

The Group Board oversees the work of all Board sub-committees. The Group Board sub-committees oversee the disclosure, risk management, investment and operational aspects of climate change, as shown in the graphic below.

The Risk and Capital Committee is responsible for climate-related risk management according to our strategy and business plans. The Audit Committee is responsible for climate-related financial reporting (including half-year and full-year reporting on ESG and climate-related information). The Investment Committee is responsible for climate-related investment risks and opportunities. Finally, the Operations and Technology Committee is responsible for climate-related operational risks and opportunities.

The BRCC, comprised of independent directors, oversees, and guides QBE's risk management and monitoring, including for sustainability and climate-related risks, and serves as an escalation point based on analysis and deliberations within the Group Executive Committee (GEC). The GEC (of which our Group Executive Corporate Affairs and Sustainability is a member) also receives regular updates on climate change. We continue to embed stronger governance of climate-related risks and opportunities in our divisional operations and continue to engage with our divisional boards and committees on this issue.

QBE is fully committed to applying a disciplined approach to risk management and ensuring that our practices and systems are robust, independent and aligned with global best practice. QBE's Enterprise Risk Management (ERM) framework is outlined in QBE's Risk Management Strategy (RMS) and is supported by frameworks for each risk class, including strategic, insurance, operational, credit, market and liquidity risks. Climate-related risks are assessed and classified as part of ESG risks – a subclass of Strategic risk within our Board-approved RMS and are managed through this integrated framework.

The Group Board plays a significant role in the ERM framework. It is responsible for defining the risk appetite within which risk must be managed and for ensuring that an effective risk management strategy is implemented. All risk categories are managed through Board governance, an approved risk appetite set by the Group Board, scenario analysis and stress testing and robust capital management.

In 2020, we developed an environmental and social (E&S) risk framework to help us identify and mitigate risks to our underwriting and investment portfolios. The E&S risk framework, which will be fully implemented by 1 January 2022, was developed to promote informed decision making that is consistent with our commitment to sustainable insurance and investment. In line with our United Nations Environment Programme Finance Initiative (UNEP FI) Principles for Sustainable Insurance (PSI) and Principles for Responsible Investment (PRI) commitments, the E&S risk framework further supports the integration of Climate and other ESG considerations into our underwriting and investment and increases transparency with customers. Please refer to section 2.2 for further details of this framework.

A component of our GEC's short-term incentive (STI) outcome is determined with reference to the achievement against QBE's strategic priorities. Delivery of key sustainability and climate commitments forms part of QBE's strategic priorities and directly impacts remuneration outcomes. Please refer to section 2.2 for further details.

In 2020 QBE committed to achieving net zero emission by 2050 for its investment portfolio. Over the coming years interim investment portfolio emissions targets and progress against these targets will be included as part of QBE's annual reporting. Please refer to section 2.2 for further detail.

Evidence also applies to principle(s): All

Source: QBE Annual Report 2020 (p.28-35); 2021 CDP Climate Change Questionnaire (p.6-9).

## Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

### Foreword

*At RenaissanceRe, our commitment to environmental, social and governance ("ESG") factors has always been a central part of our corporate strategy, and it remains firmly embedded in our values today. A core pillar of our ESG strategy is to Promote Climate Resilience and reporting through ClimateWise allows us to outline the key risks and opportunities climate change poses on our business.*

*We are a long-standing member of ClimateWise and report annually against their 7 Principles to help drive the industry response to climate change. We are proud to have made progress in our reporting each year and are committed to continuously enhancing our public disclosures in this space to outline the various ways in which we are managing our exposure to climate-related risks.*

*The ClimateWise Principles were revised in 2019 to align fully with the Task Force on Climate-Related Financial Disclosures ("TCFD") recommendations and go beyond the standard TCFD requirements to provide a detailed, industry-specific insight into the management of climate change risks and opportunities.*

*We are pleased to continue our engagement with ClimateWise, which we believe provides an unique opportunity for the industry to collaborate and build a sustainable response to climate change.*

### Ian Branagan, Group Chief Risk Officer

RenaissanceRe Holdings Ltd. ("RenaissanceRe" or the "Company") currently reports to ClimateWise through its Lloyd's operations, RenaissanceRe Syndicate Management Ltd ("RSML"). Environmental, social and governance factors have always been a central part of RenaissanceRe's culture and strategy, and in 2020 RenaissanceRe formalized its efforts through the introduction of a comprehensive ESG framework. The ESG strategy focuses on areas where RenaissanceRe can leverage its business strengths, such as its deep understanding of climate change, to make a meaningful impact. Correspondingly, Promoting Climate Resilience has been identified as one of RenaissanceRe's key ESG strategic priorities, to which it has already committed significant time and resources over many years.

### Global Governance

RenaissanceRe's Board of Directors (the "Board") has active oversight of strategic planning and enterprise-wide risk management, including environmental and sustainability matters. RenaissanceRe considers enterprise-wide risk management ("ERM") to be a key strategic objective and believes that its ERM processes and practices help to identify potential events that may affect it; quantify, evaluate and manage the risks to which it is exposed (such as climate change); and provide reasonable assurance regarding the achievement of corporate objectives. For each identified and measured risk, it has identified (i) a day-to-day owner and management response, (ii) a process for monitoring and reporting on the risk, (iii) a senior management committee, and (iv) Board and/or committee oversight. RenaissanceRe believes that this risk management process, along with its culture and focus on enterprise-wide risk management, ensures effective oversight of climate change risk by its Board.

The Board maintains three principal standing committees: the Audit Committee, the Compensation and Governance Committee, and the Investment and Risk Management Committee. The full Board, and each of its standing committees, receive reports on relevant ESG and risk matters, including climate change, in order to ensure effective oversight. The primary responsibilities of

each committee are summarized in the Risk Management Process overview on page 7 below (excerpt from RenaissanceRe's 2021 Proxy Statement, page 33). At least annually, RenaissanceRe's SVP Chief Risk

risks, including climate change. This overview outlines RenaissanceRe's procedures for the identification, measurement of, response to and reporting of risks, and progress against strategic plans and goals of the year.

### UK Governance

The Prudential Regulatory Authority Supervisory Statement on the Climate Change (SS3/19) set out the expectations for boards to adopt a strategic approach to managing climate risk, including outlining how the financial risks of climate change are monitored and understood across four areas: governance arrangements; risk management; stress testing and scenario analysis; and disclosure. Within the UK, under

Officer presents a comprehensive risk management overview to the Board to demonstrate management coverage and Board oversight of significant identified

the Senior Managers and Certification Regime ("SMCR"), RenaissanceRe's SVP, Head of Risk Oversight holds the Senior Management Function for identifying and managing the financial risks of climate change. The board of directors of RSML, a U.K.-based company which is a wholly owned subsidiary of RenaissanceRe and the managing agent of RenaissanceRe Syndicate 1458, the Company's Lloyd's syndicate, is provided with quarterly updates on this topic through its Risk Committee, which includes an outline of progress against the various climate-related regulatory requirements, and the provision of climate-related metrics where relevant. Board members of RSML are also provided with regular training sessions on upcoming regulatory requirements and RSML's progress in understanding and mitigating the financial risks of climate change.



**BOARD**

- The Board is responsible for overseeing enterprise-wide risk management and is actively involved in the monitoring of risks that could affect us.
- The members of the Board have regular, direct access to the senior executives and other officers responsible for coordinating enterprise-wide risk management, including our Chief Financial Officer, Group Chief Risk Officer, Group Chief Underwriting Officer, and Group General Counsel, each of whom reports directly to our Chief Executive Officer, as well as other senior personnel such as our Chief Investment Officer, Chief Accounting Officer, Chief Human Resources Officer, Head of Internal Audit, Chief Compliance Officer, Chief Technology Officer, Corporate Information Security Officer and Corporate Actuary.
- The Board delegates certain of its risk management responsibilities to its committees as set forth in the committee charters.
- The Non-Executive Chair of the Board participates in meetings of each committee from time to time on an ex officio basis and monitors the identification of risks or other matters that might require cross-committee coordination and collaboration or the attention of the full Board. Mr. Gibbons has also been serving as an interim member of the Audit Committee and the Compensation and Governance Committee during the COVID-19 pandemic.

**COMMITTEES**

- Each committee regularly receives and discusses materials from the other committees, and we believe this allows the directors to be aware of the various risks across the Company.
- Each committee performs a comprehensive annual self-assessment as part of the Board's overall governance effectiveness review and assessment, which reflects the committees' evaluation of our corporate risk management practices and, if applicable, the identification of potential new oversight needs in light of changes in our strategy, operations or business environment.

**Key Risks Overseen**

**Audit Committee**

- Financial statements integrity and reporting
- Cybersecurity and business continuity
- Legal, regulatory and compliance
- Tax compliance

**Compensation and Governance Committee**

- Executive and employee compensation
- Succession planning (executive and director)
- DEI, employee development, CSR and similar ESG matters
- Governance structure and processes
- Shareholder concerns

**Investment and Risk Management Committee**

- Enterprise risk management framework
- Investment strategies and risk limits
- Key financial, non-operational risk or exposures
- Reserve risk
- Capital and liquidity requirements

**MANAGEMENT**

- At least annually, our Chief Risk Officer presents a comprehensive risk management overview to the Board to demonstrate management coverage and Board oversight of significant identified risks. This overview outlines our procedures for the identification and measurement of, response to, and monitoring and reporting of risk.
- Management representatives from our risk, legal, regulatory, compliance, human resources, treasury, finance, investments, reserving, information security, accounting and internal audit functions:
  - Regularly report to the Board and each committee at quarterly scheduled sessions, including at least annually to the Compensation and Governance Committee regarding the potential risks of our compensation policies and practices; and
  - Separately meet with, and are interviewed by, our committees in executive sessions.

Source: RenaissanceRe Syndicate Management Ltd

## Lloyd's / The Market / The Hartford

At The Hartford, the full Board of Directors (the "Board") has oversight of sustainability matters, including climate-related issues. The Nominating and Corporate Governance Committee of the Board (the "Nominating Committee") has oversight of the company's sustainability governance framework. Per [its charter](#), the Nominating Committee is formally responsible for overseeing the establishment, management and processes related to the Company's environmental, social and governance activities and issues of significance to the Company, its host communities, shareholders and employees. This includes oversight of climate-related risks and opportunities, in line with the incorporation of the ClimateWise Principles into The Hartford's business strategy.

In addition, the Board's Finance, Investment and Risk Management Committee, which is comprised of the full Board, routinely receives updates on risk management activities related to severe weather and climate change.

The governance structure starts at the Board and cascades to the Enterprise Risk and Capital Committee (ERCC) and then to individual risk committees across the Company. The Enterprise Risk Management organization is responsible for managing and underwriting to mitigate risks associated with climate change, such as severe weather events, which are discussed in the Company's [10-K](#), and described in the company's [Statement on Climate Change](#).

In an effort to view Environmental, Social and Governance (ESG) topics holistically, and to coordinate efforts across the company, the company formed an ESG Sustainability Governance Committee in 2017. The Committee is comprised of senior management that sets and helps to drive execution of the company's sustainability strategy, reporting to the full Board of Directors at least annually. This governance framework helps drive the coordination of the company's sustainability efforts and enables the full Board to oversee ESG risks and opportunities that contribute to the long-term sustainability of the company.

### Support Links:

- [Corporate Governance Guidelines](#)
- [Nominating and Corporate Governance Committee Charter](#)

- [Finance, Investment & Risk Management Committee Charter](#)
- [The Hartford's 10-K](#)
- [Statement on Climate Change](#)
- [CDP – C1.1b](#)
- [GRI – Disclosure #102-18 and #102-19](#)

Source: The Hartford

## Lloyd's / The Market / Tokio Marine Kiln / Accountability

Tokio Marine Kiln's (TMK's) Board leads the development of Culture, Strategy and Risk Management for the company. The Board is unanimous in its recognition of the risks posed by climate change to the business, and the need for a robust risk management response which effectively identifies, measures, monitors, manages and reports those risks, both within the company and to its external stakeholders.

TMK has invested heavily during recent years in its Risk Management function, which is now recognised by its NEDs as being a strength of the company. During 2020/21 the Risk Management Team have worked closely with the Board, both collectively and with individuals, to develop TMK's climate related risk appetites and to ensure these are correctly integrated within our overarching risk management framework. Our climate risk appetites take into consideration the Tokio Marine Group Sustainability strategy and the Lloyd's ESG strategy.

Each year the Board meet to consider the company's risk status via the annual ORSA process in March, and this is then monitored and reported quarterly by the Risk Management Team. TMK's ORSA process is searching and inclusive, taking account of external research and the views of executives and managers in the company. The Board consider both short-term, medium-term, and emerging risks. Climate related risks and their detailed evaluation featured heavily in our 2021 ORSA.

The CRO, Vivek Syal is the appointed member of the TMKS and TMKI Board with responsibility for climate-related risks and opportunities, in accordance with the PRA's Senior Managers and Certification Regime (SMCR). This is recorded in his Statement of Responsibilities. He is an active leader of change at the company, hosting the commemoration of the 50<sup>th</sup> Earth Day with a panel discussion on the impact and opportunities of climate change for the insurance industry and engaging staff with a presentation from McKinsey and Co. Furthermore, the CRO, the Deputy CEO, and leads of the Climate Group conducted a board training in Q1 2021 which had increased the understanding of the

risks and opportunities of climate change facing TMK and in context of its competition.

The CRO is also the Chair of the Environmental, Social and Governance Committee (ESG Committee). The ESG TMK is also a meaningful contributor to the Tokio Marine Group Sustainability strategy and we are recognised as being at the forefront on setting our Climate Risk Appetites compared to other subsidiaries of the Group. Members of the Climate Group and Risk Management team have frequent engagements with the Tokio Marine Sustainability Group in order to share industry /

is a delegated Committee of the Board, meeting quarterly throughout 2021. It receives reports from its three sub-groups dedicated to Climate, Ethics, and Inclusion, (see ESG Committee Terms of Reference).

regulatory developments and exchange ideas around best practices. In return this helps to shape our own strategy alignment with our Head Office.

*Source: Tokio Marine Kiln; ESG Committee Terms of Reference, TMK Annual ORSA Report 2021*

## 1.2 Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.

### Lloyd's / The Corporation of Lloyd's

The Corporation oversees the Lloyd's market. It provides the market's infrastructure, including services to support its efficient running, and protects and maintains its reputation. The Corporation's role includes:

- Managing and protecting Lloyd's network of international licences;
- Agreeing syndicates' business plans and evaluating performance against those plans. Syndicates are required to underwrite only in accordance with their agreed business plans. If they fail to do so, Lloyd's can take a range of actions including, as a last resort, stopping a syndicate underwriting;
- Monitoring syndicates' compliance with Lloyd's minimum standards; and
- Continuing to raise standards and improve performance across two main areas:
  - Overall risk and performance management of the market; and
  - Maintaining and developing the market's attractiveness to capital providers, distributors and clients, while preserving its diversity.

Addressing climate change has been incorporated in different streams of work within the Corporation. Examples include: Innovation, Risk, Investments, Syndicate Oversight, Responsible Business, Procurement, Regulatory Affairs.

While other teams address Lloyd's carbon footprint in a much more practical way. For example, by taking steps to reduce the energy consumption of Lloyd's buildings. Lloyd's is also responsible for a number of market members who rent office space from us, as well as engaging employees with practical steps they can take at work and at home. Examples are listed throughout the report under Corporation of Lloyd's activities.

### Risk Management processes

The Corporation's risk management framework ensures that the risks which could have a significant impact on Lloyd's business are identified and there are mitigating actions to reduce or eliminate the risk. While climate change has previously been categorised as an emerging risk, it is now considered a cross-cutting risk type that manifests through many of the Corporation's established risk categories.

At a senior management level, the Executive Risk Committee (ERC) is responsible for overseeing the identification and control of key risks to the objectives of Lloyd's, including climate risk. David Sansom, Chief Risk Officer, is the Director responsible for ensuring climate risks are identified and adequately managed.

The Risk function is coordinating the Corporation's response to the Bank of England's PRA SS3/19 and is working with a number of teams across the Corporation to put in place Key Risk Indicators (KRIs) that will allow management to monitor the various climate-related risks posed and put adequate management actions in place.

The risks from climate change may crystallise in a number of different ways, and responsibility for managing those risks therefore sits with numerous teams across the Corporation. Climate specific risks have been added to the risk libraries of a number of risk owners, with a self-assessment of those risks and corresponding controls now performed by the risk owner every 6 months. As part of this process, if any of the climate specific risks are assessed as being 'heightened', they will be escalated to the relevant Director or ERC for approval, depending on the risk score.

The ERC has received numerous updates over the past 12 months on progress being made to the risk framework in response to requirements set out in PRA SS3/19 and our involvement in the Bank of England's CBES exercise, for example, in May 2021.

Following discussion at the ERC in April 2021, the Executive Directors requested a workshop to discuss climate risks in depth and to begin development of our climate risk appetite. That workshop took place in June 2021 and will inform the proposal being prepared for the Risk Committee in October.

Further quarterly reporting against risk appetite and KRIs will be improved later this year as climate specific metrics are embedded into the risk appetite reporting process.

Recognising that best practice on climate risk management is still evolving, the Corporation has been engaged with several industry wide working groups. For example, Lloyd's has played an active role on the Climate Financial Risk Forum, whose objective is to build capacity and share best practice across the financial services industry. Lloyd's has helped draft guidance and has presented at industry workshops.



## Responsible business

We want to be known as a responsible business leader, operating in a way that makes those who work for us and with us feel proud of what we do and how we do it. We have been working on our Environmental, Social and Governance (ESG) strategy throughout 2020 and outlined our ambition to integrate sustainability into all of Lloyd's business activities in our first ESG report, which was published in December 2020.

## The Environmental, Social & Governance Advisory Group ('Advisory Group')

The Advisory Group was established on 2 December 2020. Its first meeting was held on 15 December 2020. The Advisory Group's role is to provide advice to the Council and the Executive to enable environmental, social and governance integration for the Lloyd's market. The "Environmental" pillar of the Advisory Group includes consideration of climate-related risks and opportunities for the Corporation, and these considerations are addressed in the group's advice to the Council via the Executive Committee, at regular Council meetings. The topic of climate change and related risks have been the main area of discussion at regular meetings for both the ESG Advisory Group and Council of Lloyd's during the reporting year.

The ESG Advisory Group is chaired by the Chairman of Lloyd's. The Chief Risk Officer, Chief of Markets and Chief Marketing and Communication Officer are members of the Advisory Group. The remaining members are: two members of Council; a representative of the Corporation; three subject matter experts; and two representatives of the Lloyd's market with relevant experience.

More details of the ESG Advisory Group's commitments are outlined under sub-principle 1.1.

## Oversight

The Underwriting team, led by Matt Roles, Head of Underwriting, monitors press activity and discusses with MAs all issues related to underwriting, including climate-related issues. This allows the team to feed in expert judgment to business planning decisions and performance management market oversight activities.

A future looking view of climate-related risks are also monitored by the Portfolio Risk Management team, led by Dr Kirsten Mitchell-Wallace. Her Exposure Management team manages Lloyd's catastrophe risk at syndicate and market levels. Through this team, the Corporation of

Lloyd's contributed to the PRA "[Framework for assessing physical climate change risk](#)". Produced with contributions from a cross-industry working group, the report outlines a framework for practitioners in the general insurance sector to use to assess the financial impacts of physical climate change. This activity also contributes to principles 2 and 3.

Within the Solvency Capital Requirement (SCR) Review Process; managed by Market Reserving and Capital Finance team, managing agents are expected to recognise any potential impacts on peril frequency and severity in their risk models. Whilst the impact is slow year on year, the possibility of an overall worsening of risk levels compared to historic experience is taken into consideration. The review looks for evidence that climate change has been considered and included in the managing agent's internal model where appropriate<sup>d</sup> (principle 3.1 and 3.2).

The Minimum Standards contain requirements which represent the minimum level of performance required of any organisation within the Lloyd's market to meet the Minimum Standards. Minimum Standard 4 (Governance) covers expectations for managing agents to be responsible businesses, but there are also a number of standards around areas that include underwriting, governance, risk management.

## Policy

The Corporation of Lloyd's Government Policy team, led by Cameron Murray, Head of Government Policy & Affairs, engages directly with UK, EU and international governments and regulators to discuss policy to facilitate resilience to, and mitigation of, climate change. For example, in January 2021 we responded to the IAIS consultation on its draft Application Paper on the Supervision of Climate-related Risks in the Insurance Sector, and in May 2021 we submitted a response to the UK Governments' consultation on Mandatory climate-related financial disclosures by publicly quoted companies, large private companies and LLPs. Further examples can be found in principle 5.1 and 5.2, featuring Corporation employees (principle 4.4 activities).

The Corporation plays an active role in ongoing discussions about climate change within insurance trade associations such as Insurance Europe, the Reinsurance Advisory Board and GFIA.

It is also a key objective for Lloyd's to minimise duplication with work undertaken by the PRA and the

<sup>d</sup> See [Bulletin Y5189](#), p4

FCA, and for the regulators to take comfort from the oversight undertaken by Lloyd's itself. The Corporation of Lloyd's engages in consultations and submits responses to ensure that we understand and act in accordance with regulatory expectations of our role in relation to the market, so that we act in a co-ordinated manner in relation to Lloyd's managing agents. This may include ensuring that syndicates comply with new requirements as they come into effect. See principle 5.1 for further examples.

## Innovation

The Innovation team provide materials and thought leadership that help the market and policy holders think about their risks. Examples of past work include Harvesting Opportunity, Stranded Assets, Climate Change and Opportunity, Food System Shock. The Innovation team also engage with the market and external stakeholders through work around disaster risk financing and responding to the protection gap.

Climate related risks are covered in all Innovation team presentations, regulator and government programmes, and public speaking slots from the London team and slide decks, speaking notes, and briefing packs provided to our country managers on request. The majority of the presentations mentioned the work commissioned in this space, as well as details on our ClimateWise membership and why the Corporation supports disclosure (principle 5.1).

The Innovation team holds positions on the Geneva Association "extreme events and climate risks" group, London Climate Change Partnership, and the Insurance Development Forum (principle 5.1 and 5.2).

[Evidence also applies to principle\(s\): 2.1, 2.2, 3.1, 3.2, 4.4, 5.1, 5.2](#)

*Source: The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

Beazley's Executive Committee reports to the board and is responsible for managing the business on a day to day basis. The committee includes the two executive directors who sit on the Plc Board, as well the senior management team from across underwriting, operations and claims. Both the nominated SMF for Climate Risk – the CEO and Chief Risk and Compliance Officer sit on the Executive Committee. Such is the seriousness with which Beazley takes climate change, it is covered through two teams – Responsible Business Team, and Risk team, and as previously described they provide regular updates to the Plc Board, either individually or going forward through the RBSG as well. The same individuals work together to provide the business with the detail and knowledge required to deliver not just against regulatory requirements, but also ensure the work we are

undertaking delivers opportunities to enhance our relationships with our stakeholders.

The Responsible Business team, led by the Head of Responsible Business is responsible for co-ordinating the delivery of the Responsible Business Strategy. This strategy requires collaboration across all business functions including underwriting, investments and operations. As part of the approvals process the Executive Committee also provided input into its development and signed off on it prior to its submission to the Plc Board. Again, like the updates provided to the Plc Board, the Head of Responsible Business is required to provide regular updates on at least a quarterly basis to not just the Executive Committee, but also the Underwriting Committee as well. Where items are of a pressing nature and action/ decision making is required between these updates then further reports are submitted, as required. A more high level update is also provided to the Executive Committee via the Corporate Development report, of which Responsible Business is a function. This is provided on a regular basis throughout the year. It is a function of all of these committees to review and challenge progress, identify further opportunities for improvement or synergies with other business functions, and where appropriate manage the issues arising to ensure climate related risk continues to be embedded within our business as usual approach to insurance.

To provide further resource to manage our response to regulators and to accelerate the embedding of the consideration of the financial implications of climate change risk within our business as usual approach, the business has created a separate project team which reports into the Chief Risk and Compliance Officer. This team, headed by a Senior Risk Manager, is leading on the delivery of our response to the PRA's Climate Biannual Exploratory Scenario (CBES), and is responsible for providing regular updates to two committees/ groups at a management level. The first has cross over with the Plc Board reporting structure through the creation of the Responsible Business Steering Group. As outlined in our response to criteria 1.1, this group is a cross section of both Executive Committee and Plc Board members whose responsibility is to monitor and assess the implementation of strategic plans, goals and targets agreed by the business to address climate-related issues. The outputs of all this work will be fed into the management action and wider short and long term business plans.

[Evidence also applies to Principle 1.1 and 2.1](#)

*Source: Beazley*

## Lloyd's / The Market / MS Amlin Underwriting Limited

The Board is briefed by each of the Management-level Committees which provide regular board papers alongside details of climate related initiatives, compliance requirements and research.

Risk types which are impacted by climate change are regularly reviewed by a dedicated Catastrophe Risk Management Committee (CRMC) at least two times per quarter. The purpose of the CRMC is to provide an effective control framework over the management and reporting of current annualised catastrophe risk. The Committee reviews the suitability of the current catastrophe model suite to real-world conditions. The Committee also directs any research into where the catastrophe models diverge from current scientific understanding or our own loss experience.

The CRMC recommend to the Model Governance Committee (which oversees the capital Internal Model) any changes to our view of risk, observations or areas of concern that relate to risk impacts by climate change.

In 2021 the Board established a dedicated ESG Forum to consider all aspects of Environmental, Social & Governance matters as they impact MS AUL. While the forum has multiple priorities across ESG related topics, climate change has been the overriding priority for this reporting period. The purpose of the forum is:

- To enable MS AUL to measure and report the real sustainable and societal impact of its business activities
- To consider and initiate climate risk and ESG related activities
- To oversee compliance with PRA, Lloyd's & other regulatory requirements
- To oversee MS AUL's commitment towards ClimateWise and TCFD principles
- To ensure ESG approach is consistent with MS&AD and MSIJ ESG commitments and targets
- To be the advocate for MS AUL on ESG principles

The forum meets monthly and includes three Board members: Strategy & Transformation Director, Chief Risk Officer, and Director of Underwriting Performance, alongside senior level representatives who have authority, influence and motivation to prioritise climate change on MS Amlin's strategic agenda. These include, Chief Investment Officer, Assistant Investment Manager,

Head of Risk Analytics, Head of Risk and Governance, Head of Property Services, and Head of Procurement.

These forum members work actively in their business-as-usual roles to respond to regulatory requirements, to take account of stakeholder interests and concerns, to be familiar with the latest relevant scientific research and modelling techniques, to be aware of industry developments, and in particular are tasked with delivering components of the company's strategic plan and Risk Framework relating to climate change. They are also supported by the Head of Internal Comms, Strategy and Marketing teams, to ensure that effective internal and external engagement for climate change issues are coordinated and communicated effectively. In addition, MS AUL continues to align its climate and ESG work through charitable initiatives, such as Shelter Box.

This report has been written by members of the ESG Forum, and each question has been answered both with reference to their specific management role and with reference to their ESG Forum strategic participation.

*Source: MS Amlin*

## Lloyd's / The Market / QBE / Management's role in assessing and managing climate related issues

The GEC is our most senior management committee and has the highest level of management oversight of climate-related issues. The GEC is accountable for the implementation of our approach to Climate change and receives and reviews climate change strategy progress updates quarterly. The CEO is Chair of the GEC and a member of the Executive Non-Financial Risk Committee (ENFRC). Responsibilities for climate-related issues have been assigned to our GEC as the Board has identified climate change as a significant risk for the business and relevant to the roles of all QBE senior executives.

In 2020, within the GEC, the Group Chief Risk Officer (GCRO) and Group Chief Financial Officer (GCFO) had the highest level of day-to-day oversight and responsibility for climate-related issues. Our climate governance framework, which is illustrated on page 7, also references the roles of our Group Executive, Corporate Affairs and Sustainability and Group Chief Underwriting Officer.

The GEC is supported by two cross-functional Committees, the ESG Risk Committee chaired by the GCRO and the Climate Change Steering Committee (CCSC) which is co-chaired by the GCRO and our Group Financial Controller (as a delegate of our Group CFO). Both committees consist of senior representatives from our Underwriting, Investments, Finance, Risk, Legal, Corporate Affairs and Sustainability and Operations

teams. Divisional representatives are also included to ensure that regional impacts are considered for our activities.

Climate Change Action Plan. This action plan was developed in 2018 after QBE signed the public Statement of Support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. The CCSC also plays a key assessment and aggregation role over the detailed analysis undertaken by the climate-related physical, liability and transition risk working groups.

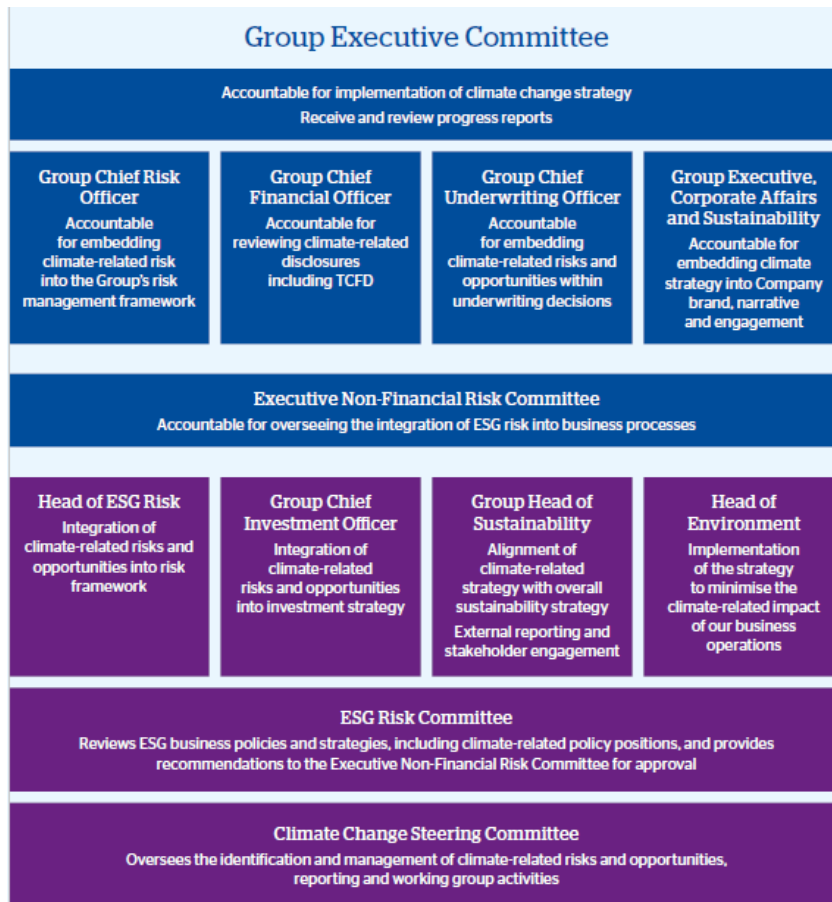
In 2019, we established three working groups under the Climate Change Steering Committee to focus our work in the key areas of physical, transition and liability risk. These cross-functional groups comprise representatives from our underwriting, finance, investment, risk, sustainability, strategy, reinsurance and product development teams and include representatives from all of QBE's divisions.

The Climate Change Working Groups (liability, physical, transition) provide an integrated view of the risks and opportunities associated with climate change and supports the CCSC. The Group Executive Committee is also supported by several other governance forums

The CCSC provides quarterly updates to the ESG Risk Committee and is responsible for the delivery of the QBE

responsible for managing our wider sustainability activities. One of these is the Group Sustainability Committee, which is responsible for delivering the Group's overall sustainability strategy, initiatives and reporting requirements. The Group Sustainability Committee is chaired by the Group Executive Corporate Affairs and Sustainability and supported by the Group Sustainability team.

The Group ESG Risk Committee, which is supported by a dedicated ESG Risk team and reports to the Group CRO, considers and recommends policy positions on ESG risks that impact underwriting, investment and/or operations across the Group to the Executive Non-Financial Risk & Capital Committee (ENFRCC). The graphic below demonstrates how the GEC (of which the Group Chief Risk Officer, the Group Chief Financial Officer, the Group Chief Underwriting Officer, the Group Executive, Corporate Affairs and Sustainability are members) is supported by the ENFRCC, the ESG Risk Committee and the Climate Change Steering Committee.





In QBE's European Operations ('EO'), the Chief Underwriting Officer – Insurance and the Chief Risk Officer were approved jointly by the PRA in 2019 as accountable senior executives under the Senior Managers Regime. In addition, a Roadmap for meeting the requirements of the PRA's SS 3/19 Supervisory Statement was approved by the Board and submitted to the PRA.

The EO Executive Management Board ('EMB') Climate Change Steering Group ('CCSG') was established in May 2021 and is chaired by the Chief Underwriting Office – Insurance. EO's EMB and Board members received a second round of external training in Q2 2021 supporting their ability to identify, assess and oversee climate change risks. The group is attended by EO's EMB, along with Subject Matter Experts ('SMEs') from across the business and meets on a quarterly basis. The CCSG is responsible for overseeing the activities of the Climate Risk Working Group ('CRWG') and the Climate Change Underwriting Group ('CCUG'). This is to ensure that EO can effectively identify, measure, monitor, manage and report on the risks arising from climate change, and to develop strategic underwriting responses to climate change, respectively. The CCSG is also responsible for ensuring that priority actions are identified and delivered within agreed timeframes. The CCSG reports to EO's EMB and Boards via the chair, who also provides regular updates, as required, to the Group CUO and GUC. Please refer to the diagram below which illustrates this structure and the workstreams that address each climate change objective.

The CRWG was set up in 2019 to oversee the implementation of the SS 3/19 Board-approved Roadmap. The group meets on a monthly basis and reports to the EO Risk and Capital Committee, in addition to the CCSC, on progress with implementing the Roadmap. This is done on a quarterly basis via ORSA reporting by the CRO. The group is also accountable for ongoing oversight, challenge, management and reporting of climate financial risks post Roadmap implementation and the development of framework for managing non-Climate ESG risks

QBE European Operation's Climate Change Underwriting Group works alongside the Climate Risk Working Group and is chaired by the EO CUO – Insurance. The group

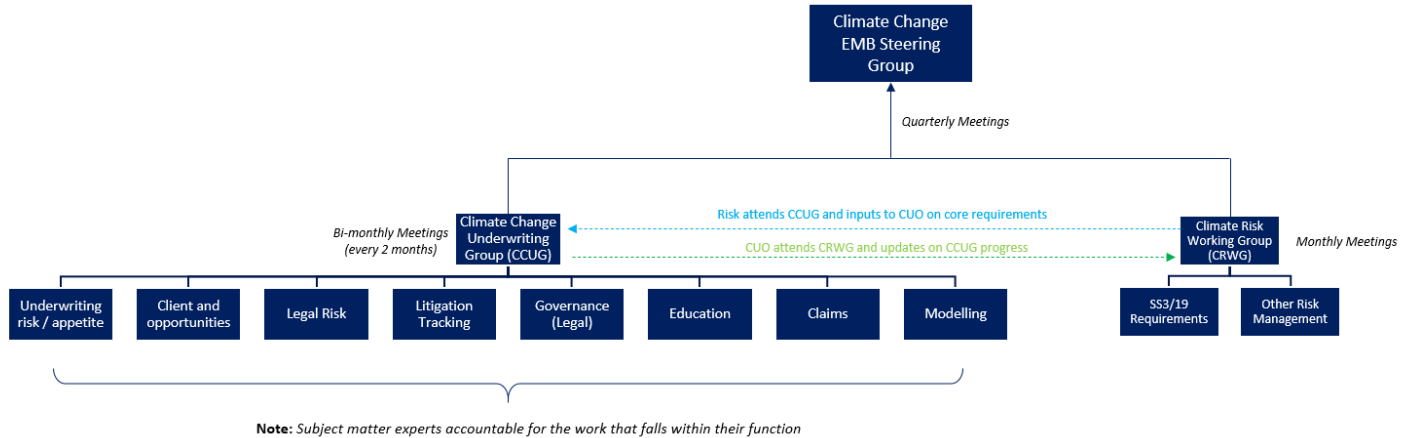
has several workstreams operating underneath it which are outlined in the diagram above.

QBE management are informed about and manage climate-related issues through several processes which are integrated into our business strategy and guide our decision-making, including but not limited to our:

- **Group Environmental Policy**, which sets out our commitment to minimising our impact on the environment (including our climate-related impact) as this relates to our operations and supply chain, investment and underwriting activities, as well as employee engagement, governance and reporting.
- **Environmental and Social Risk Framework**, which outlines our commitment to invest in business opportunities with positive environmental impacts and actively mitigate environmental risks. This framework was released in February 2021 and will become fully effective in January 2022. QBE's Group Energy Policy will be subsumed into this framework. Please refer to section 2.2 for further details of this framework.
- **Environmental Sustainability Plan** sets out our program of work to reduce our direct climate-related impact, including through application of best practice design standards, energy efficiency, behaviour change initiatives and transitioning to 100% renewable electricity for our operations.

*\*In July 2020 the EO CRO became the sole accountable executive for Climate change under SS 3/19. In Q2 2021 the EO CUO – Insurance*

*was approved as jointly accountable with the EO CRO for Climate financial risks.*



Evidence also applies to principle(s): All

Source: QBE Annual Report 2020 (p.28-35); Group Environmental Policy

### Lloyd’s / The Market / RenaissanceRe Syndicate Management Ltd

As referenced in sub-principle 1.1., RenaissanceRe formed an ESG strategy comprised of three core pillars that are central to the Company’s overarching corporate strategy. RenaissanceRe has various pro-active methods of embedding the first pillar, Promoting Climate Resilience, into its corporate strategy through the identification and management of climate-related issues and opportunities.

#### Climate Working Group

RenaissanceRe has an internal, cross-functional Climate Change Working Group (“CWG”) responsible for the co-ordination of climate change activities across the organization. The CWG is made up of a diverse group of internal stakeholders, including representatives from the investments, risk, underwriting, legal and strategy functions, who respond to climate-related risks and opportunities including regulatory requirements, scientific research, consideration of stakeholder interests and concerns, innovative business opportunities and proactive ESG initiatives. The CWG generally meets at least quarterly to review progress, confirm task ownership and discuss collaboration opportunities across the organization, and reports regularly to RenaissanceRe senior management on key activities, risks and opportunities relating to climate change as part of a monthly ESG update.

RenaissanceRe also has several dedicated internal information channels to raise awareness of climate related risks and opportunities, and to facilitate information sharing amongst key internal stakeholders.

### Risk Management Framework

The consideration of the impacts of climate change is integral to RenaissanceRe’s ERM. RenaissanceRe believes that high-quality and effective risk management is best achieved when it is a shared cultural value throughout the organization and considers ERM to be a key process with many functions and individuals across the Company sharing responsibility. In particular, RenaissanceRe has taken measures to mitigate losses related to climate change through its underwriting process and by continuously monitoring and adjusting its risk management models to reflect the higher level of risk that it thinks will persist.

RenaissanceRe integrates the anticipated impact of climate change holistically into its ERM process and catastrophe models, and regular reports by management to the Board and its committees on these issues are central to RenaissanceRe’s governance processes. RenaissanceRe’s ERM framework operates via a three lines of defense model. The first line of defense consists of individual functions that deliberately assume risks on its behalf and own and manage risk within the Company on a day-to-day and business operational basis. The second line of defense is responsible for risk oversight and supports the first line to understand and manage risk. A dedicated risk team led by the Group Chief Risk Officer is responsible for this second line and reports to the Investment and Risk Management Committee of RenaissanceRe’s Board and the Chief Executive Officer. The third line of defense, its Internal Audit team, reports to the Audit Committee of RenaissanceRe’s Board and provides independent, objective assurance as to the assessment of the adequacy and effectiveness of its internal control systems and also coordinates risk-based audits and compliance reviews and other specific initiatives to evaluate and address risk within targeted areas of the business.

Source: RenaissanceRe Syndicate Management Ltd

## Lloyd's / The Market / The Hartford

At the management level, The Hartford has an ESG Sustainability Governance Committee (the "Sustainability Governance Committee"), which sets and helps drive execution of The Hartford's sustainability strategy. The Committee comprises senior representatives across the enterprise including Marketing and Communications, Law, Strategic Sourcing and Real Estate, Human Resources, Enterprise Risk Management, Hartford Investment Management Company, Strategy and Underwriting. The Committee meets at least quarterly and serves as the senior management forum within the company for the oversight of sustainability activities including the assessment and management of climate-related issues. In addition, the committee serves as the mechanism that facilitates the Board and management's comprehensive understanding of The Hartford's collective sustainability efforts that address material environmental, social and governance (ESG) factors, risks and opportunities.

Among the Sustainability Governance Committee's specific responsibilities and authority are the following:

- Determining strategic focus for sustainability efforts by identifying and prioritizing areas that The Hartford will consciously address, including: (a) defining scope of sustainability initiatives; (b) establishing goals or defining measures of success; and (c) reviewing materials to be shared with the Board and a selection of those to be published externally.
- Overseeing the work of any sub-committees and work efforts addressing ESG issues.
- Reporting to the enterprise leadership team and Board periodically on progress towards key goals and initiatives.
- Contributing to and reviewing the company's annual sustainability report.
- Sponsoring company sustainability initiatives, including those that engage employees of The Hartford.

In addition to - and represented on - the Sustainability Governance Committee, The Hartford has an Environment Committee, which was created in 2007 as part of The Hartford's public commitments on climate change. The Environment Committee is composed of executives from across the enterprise with a wide range of responsibilities and perspectives including enterprise risk management, applied research & product development, actuarial and underwriting, corporate finance, workplace resources, law and government affairs.

The Environment Committee is responsible for:

- Serving as a senior forum to coordinate and promote environmental activities within the company that reduce The Hartford's impact on the environment.
- Ensuring that the annual response to the CDP is accurate.
- Offering advice and direction on all company environmental efforts.
- Ensuring that all meaningful opportunities to improve the environment and engage our employees are discussed within the Committee and shared with the Sustainability Governance Committee such that the Sustainability Governance Committee will report these actions to the enterprise leadership team and the Board of Directors.

In addition, The Hartford's Environmental Action Team ("HEAT") was established in 2011 and as of 12/31/20 has since grown to 976 employee members. HEAT leadership meets at least monthly and maintains an internal website to inform employees about the company's environmental stewardship and employee volunteer opportunities. HEAT has a representative on the Environmental Committee and its leaders set an annual operating plan and meet with the General Counsel to report on and seek guidance on its activities.

### Support Links:

- [CDP – C1.2a](#)
- [GRI – Disclosure #102-18 and #102-19](#)

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln / Accountability

The Climate Group is the governance group via which TMK management come together to deliver on its purpose: 'To embed sustainability in our business activities, manage the risks and opportunities arising from climate change in delivering our strategic goals and supporting transition to a low carbon economy'. The Climate Group is comprised of senior managers from across a diverse range of functions including Underwriting, Innovation, Finance, Actuarial, Claims, Programme Management, Facilities, Operations and HR.

Despite the lockdown this group has made strong progress in the last year. It has:

- Developed a series of climate related KPI's across Underwriting, Innovation, Investments, Operations, Quantitative Risks Analysis and Charity and Inclusion, with which it can measure and monitor progress against TMK's strategy and associated risks;
  - Commissioned further work utilising external environmental consultants to measure the emissions and resource utilisation of the company, and to recommend areas for further improvement;
  - Gained further insight into the underwriting portfolio and the impact of climate change, and explored opportunities for product innovation presented by climate change;
  - Evaluated TMK's investment portfolio for reputational risks, and sought to identify opportunities for more responsible investing;

- Participated and a leader in the Lloyd's market innovation initiatives to measure the carbon footprint in the supply chain.
- Engaged staff in selecting 3 climate-related charity partners for 2021 and heightened awareness through "Brunch and Learn" events hosted in H2 2020 and Q2 2021.

The Group meets at least quarterly and reports to the ESG Committee each quarter, with the Chair of the Climate Group also a member the ESG Committee.

The Climate Group shall be implementing the processes and systems to measure and report progress against the new KPI's over the coming year, benchmarked against pre-lockdown performance in 2019.

The Risk Management Team work in close association with the Climate Group to advise and ensure its activities are aligned with the risk appetites set by the Board.

*Source: Tokio Marine Kiln; Framework for the Climate Group; ESG Committee Terms of Reference; TMK ERM Framework*



## 2. Incorporate climate-related issues into our strategies and investments

### 2.1 Evaluate the implications of climate change for business performance (including investments) and key stakeholders.

Lloyd's / The Corporation of Lloyd's

#### Corporation facing

We want to be known as a responsible business leader, operating in a way that makes those who work for us and with us feel proud of what we do and how we do it. We have been working on our Environmental, Social and Governance (ESG) strategy throughout 2020 and outlined our ambition to integrate sustainability into all of Lloyd's business activities in our first ESG report, which was published in December 2020.

In 2020, Lloyd's published its first ESG report, including an overall ESG strategy and ambitious commitments. We will develop a framework to help insurance businesses in our market integrate ESG principles into their business activities over the next 18 months.

These commitments have been developed in alignment with the United Nation's Sustainable Development Goals and in support of the principles set out in the Paris Agreement, following consultation with the market and other external stakeholders. They cover seven key areas which are central to our ESG strategy, with a summary of the targets and ambitions set out below.

#### Our commitment to a responsible market

1. We will engage widely with stakeholders across the Lloyd's market to further develop and operationalise our ESG strategy, policies and processes, including responsible underwriting and investment.
2. We will develop a framework to help insurance businesses in our market integrate ESG principles into their business activities over the next 18-24 months.
3. The Corporation will review whether we can formally adopt the United Nations Principles for Responsible Investment and the United Nations Principles for Sustainable Insurance.
4. Lloyd's will consider how the insurance sector can best support the global effort to address climate change in the context of the 2021 United Nations Climate Change Conference (COP26), and also respond to UK

Government's Ten Point Plan for a green industrial revolution.

5. We will recruit a dedicated team to support the implementation of our ESG strategy, monitor progress and to update our ESG Advisory Group.

#### Our commitment to people and culture

1. We will continue to drive cultural change within our market and wider sector through the provision of a comprehensive culture framework. This includes detailed and practical guidance via our Culture Toolkit, as well as our annual culture survey and other regular measurements against targets, published via a Culture Dashboard.
2. We will work to achieve our phase one target of 35% female representation in leadership positions across the Lloyd's market by 31 December 2023.
3. We will continue to reduce the Corporation's gender pay gap, and work to ensure that Lloyd's market Boards and Executive Committees combined will have at least 20% female representation by 31 December 2023.
4. In the wake of the COVID-19 pandemic, the Corporation will continue to focus on employee wellbeing and flexible work, incorporating what we learn into longer term 'build back better' planning.

#### Our commitment to sustainable insurance

1. We will continue to support innovation for the development of products to support resilient infrastructure, low carbon economies and more resilient cities and communities through the Future at Lloyd's, Lloyd's Lab and the Product Innovation Facility.
2. We will provide guidance to all managing agents in our market to support our planned 2% of annual premiums on innovative and sustainable products by 2022.
3. We will be setting out its Climate White Paper throughout 2021 and 2022 which will support firms in considering how they may contribute towards this.

4. We will work with our MA's to help them play a leading role in our sector to promote the Green Industrial Revolution and move towards Net-Zero

5. We will develop guidance to support all managing agents in our market to develop their ESG strategies from 2022. This will include helping managing agents to put in place robust governance processes to support their own underwriting decision making in relation to sustainable insurance.

6. In early 2021, we launched Futureset, a new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks. Futureset has been developed in response to the world's rapidly changing risk landscape and the urgent need to begin a new, connected conversation with customers, insurers, and government to tackle the challenges these risks bring.

7. We will develop a framework to help managing agents in our market integrate ESG within their own underwriting and risk management procedures.

#### **Our commitment to responsible investment**

1. The Corporation will allocate 5% of the Central Fund to impact investments by 2022.

2. We will phase out new investments in thermal coal-fired power plants, thermal coal mines, oil sands and new Arctic energy exploration activities by the Lloyd's market and the Corporation by 1 January 2022.

3. We will phase out existing investments in thermal coal-fired power plants, thermal coal mines, oil sands or new Arctic energy exploration activities by the Lloyd's market and by the Corporation of Lloyd's by the end of 2025. This includes phasing out existing investments in respect of companies with business models which derive at least 30% of their revenues from either thermal coal-fired power plants, thermal coal mines, oil sands or new Arctic energy exploration activities.

4. We will develop a framework to help market participants integrate ESG into their investment decision-making processes.

5. We will develop guidance on impact investing to support insurance businesses in our market to create their responsible investment strategies.

More information on Lloyd's responsible investment strategy is outlined on p.32.

#### **Our commitment to responsible operations**

1. The Corporation will publish a roadmap to support our commitment for our operations to be net zero by 2025. Our commitments to measuring and reducing our

greenhouse gas emissions, along with other initiatives to reduce our business' environmental impacts, are further outlined under principle 4.

2. The Corporation will work with the Lloyd's market in 2021 to support their own implementation of net zero carbon emission plans and will explore the potential to develop a Lloyd's market wide carbon offset project.

#### **Our commitment to our customers**

1. Through our strategy to build the most technologically advanced marketplace in the world, we will transform our claims processes. Blueprint Two will help accelerate this process and the improvements we are making over the next two years will support market growth, attract new talent and enable all market participants to trade more efficiently and effectively. This in turn will enable them to build innovative products for their customers, as well as reducing costs which will in turn make policies more affordable for customers.

2. We will set up a customer working group to explore how we can make our insurance contracts simpler and easier to understand.

3. Building on our Building simpler insurance products to better protect customers report, we will set up a customer working group to explore how we can make our insurance contracts simpler and easier to understand.

4. We will continue to support and work with governments and the global insurance industry to explore how our open source frameworks (*ReStart*, *Recover Re* and *Black Swan Re*), detailed in our report [Supporting global recovery and resilience for customers and economies](#), could be leveraged and applied globally to offer customers greater protection against future systemic risks.

5. We will improve our customer satisfaction monitoring and continue to regularly review how we can improve our customers' experiences through product oversight and governance and through promoting best practice.

6. We will continue to publish insight and analysis on the risks our customers are facing to support better understanding, mitigation and coverage selection.

#### **Our commitment to the community**

1. We will continue to work with all insurance businesses in our market to engage them with our community work by the end of 2021 and support our network of more than 200 community champions.

2. We will strengthen our relationships with our charity partners to help them raise more funds, provide business support and increase their risk management skills.

3. We will support our charity partners to develop new remote virtual engagement opportunities and services.
4. We will offer further learning and development opportunities to all our charity partners.
5. We will further invest in our community volunteer programme to ensure we are prioritising high impact, skills-based initiatives, including our financial literacy and charity trusteeship programmes.
6. We will look at expanding the career opportunities that are available in the Lloyd's market in order to support our social mobility programmes.
7. We will increase Corporation employee engagement with our community initiatives to 25%.

### The Corporation's policies

- Environmental and Energy policy requires the co-operation and support of all managers, employees, tenants, contractors and visitors in its implementation. The Chief Executive Officer takes overall responsibility for environment and energy usage including the formulation, development and implementation of the policy.
- Lloyd's puts the environment at the centre of its office planning. LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world, providing a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognised symbol of sustainability achievement. Four of Lloyd's offices have been given LEED status and two more have local accreditation.
- Lloyd's mission is to deliver an effective and sustainable approach to all third-party sourcing and supplier management, with a clear purpose to support our Protect, Promote and Provide principles while achieving maximum value, minimising risk and driving efficiencies to invest in the future.

Please see our vision and our expectations from our suppliers in our [Sustainable Procurement Statement](#) and our [Supplier Code of Conduct](#). Further information can be found in principle 4.1.

### Investment

The Corporation of Lloyd's believes that we should use our shareholder power to influence the behaviour of the companies in which we invest – and persuade them to respond more effectively to the impact of climate change (principle 2.2).

The Corporation of Lloyd's Treasury & Investment Management (LTIM) provide specialist fixed income investment management services to the Lloyd's market,

on a discretionary basis to Managing Agents and acts as the manager of Lloyd's centralised trust fund assets and the Central Fund. LTIM manages approximately £14bn of assets; for some of the Central Fund investments the role of the investment manager has been outsourced to external firms.

### Responsible Investment Strategy

The Corporation's investment philosophy focuses on generating long term, sustainable capital growth for Central Fund assets.

As part of Lloyd's recently launched ESG Strategy, Lloyd's has made 5 new commitments to Responsible Investment. These commitments prioritise investing in companies with strong ESG behaviour as well as companies that are in transition to lower carbon emissions. Accordingly, Lloyd's looks to avoid companies with significant revenue from investment in thermal coal, oil sands, Arctic oil and gas production, tobacco and controversial weapons. Lloyd's also looks to make investments in impact bonds to meet the UN's Sustainable Development Goals.

### Voting and Engagement

- LTIM continues to employ the services of an overlay manager, BMO Global Asset Management (BMOGAM), to engage with companies in which Lloyd's Central Fund invests as a shareholder and to exercise the Central Fund's voting rights in pursuit of Environmental, Social and Governance (ESG) goals.
- In 2020, BMO conducted in-depth engagement with 61 companies, in 17 countries, on a wide range of issues. BMO recorded 51 milestones where engagement had direct impact on companies taking action to either protect or enhance long-term shareholder value. BMO is also involved in thematic engagement projects, involving multiple companies, on a range of topics spanning labour standards, human rights, climate change and corporate governance.

### Market facing

The Corporation of Lloyd's has a market oversight role with regards to climate related risks. It does this in a number of ways, examples are outlined in this section.

### Market oversight

Market oversight remains a strategic priority for the Corporation. We remain focused on our journey to return the market to a position of sustainable, profitable performance including consideration of Lloyd's solvency; operational risk; and our brand and reputation. The Corporation adopts a risk-based approach to managing

the market, which means our oversight is balanced and is proportionate to risks faced.

The Corporation aims to minimise any duplication of work undertaken by the Prudential Regulation Authority and the Financial Conduct Authority, and for the regulators to take comfort from the oversight undertaken at Lloyd's. The Corporation also considers managing agents' own group oversight activities, with a view to ensuring the right risks are receiving attention from the right people.

Strong oversight is about establishing a framework that enhances the ability of syndicates to do business, while ensuring good customer outcomes. We continue to evolve our risk-based approach, focusing efforts on matters of greatest concern and where our intervention can really make a difference.

By adopting this approach, the Corporation recognises the diversity and complexity of the many different practitioners in the Lloyd's market. Our account management structure also ensures that engagement with managing agents is structured, cohesive and commercially effective.

## 2021 Market Oversight Plan

The Market Oversight Plan, published at the beginning of each year, sets out Lloyd's oversight priorities for the coming year and how the Corporation plans to work with the market to deliver it.

Climate change is prominent in the 2021 plan<sup>f</sup>, requiring action in the following areas:

- Environmental, Social and Corporate governance – develop a framework to help managing agents integrate ESG within their own organisations, including guidance to support managing agents in the delivery against our sustainable insurance targets and development of their responsible investment strategies. Lloyd's will also work with the wider Lloyd's market to support their own implementation of net zero carbon.
- Regulatory – Lloyd's expects managing agents to be progressing against the action plans as required by the PRA Policy Statement. Managing agents should demonstrate an understanding of the distinctive elements of the financial risks from climate change and a sufficiently long-term view of the financial risks which can arise beyond standard business planning horizons.

- Catastrophe Risk – Thematic review to assess a selection of methodologies employed by managing agents to ensure that any changes in climate that have already occurred, or are expected to occur over the relevant period, are taken into account when Views of Risk are developed and validated.

## Minimum standards

The Minimum Standards contain requirements which represent the minimum level of performance required of any organisation within the Lloyd's market to meet the Minimum Standards.

Within these documents the standards and supporting requirements are set out in the blue box at the beginning of each section:

### GOV 8.1 Responsible Business

The managing agent recognises the impacts of their business on wider society and acts in a way that is responsible.

Managing agents shall demonstrate that:

- The Board and senior leaders establish and oversee the responsible business culture and ethos of their organisation, which includes guidance on ethical values and behaviours
- There is guidance and a process in place for employees to raise concerns and report misconduct
- Their governance and management structures acknowledge the importance of, and have processes in place, to address the social, environmental and ethical impacts of their operations
- They comply with all relevant legislation

The remainder of each section consists of guidance notes that explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them. For example, ClimateWise is included as an external framework that businesses can sign up to in order to benchmark their business practices, and we have also included the Taskforce for Climate Financial Disclosure (TCFD) as a further example of how managing agents might achieve this.

The guidance notes are intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with

<sup>f</sup> <https://assets.lloyds.com/media/d8bdde6b-ee2a-4734-a9f4-9adf45e1bb90/2021%20Market%20Oversight%20Plan.pdf>



the requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is acceptable for managing agents to adopt alternative procedures provided they can demonstrate the requirements to meet the Minimum Standards. In an area like climate related risks this is especially important as there are no set frameworks or processes available, and every managing agents risk appetite and exposure will be different.

The guidance notes to RM 3.1 (Risk Identification & Assessment) make reference and a link to the PRA's Supervisory Statement on climate change (SS3/19).

### Solvency Capital Requirement (SCR) process

In order to meet Lloyd's requirements, each syndicate is required to calculate its Solvency Capital Requirement (SCR) for the prospective underwriting year. This amount must be sufficient to cover a 1 in 200 year loss, reflecting uncertainty in the ultimate run-off of underwriting liabilities (SCR "to ultimate"). The SCRs of each syndicate are subject to review by the Society and approval by the Lloyd's Capital and Planning Group.

Climate change poses a range of risks to syndicates and will continue to do so over the coming decades. Although climate change is a long-term risk, it is having an impact now.

Lloyd's considers there to be three types of climate risks for syndicates:

- Physical risks: these risks relate to specific weather events (e.g. floods, wildfires, hurricanes) and the longer-term impacts of climate change (e.g. on sea levels, increased average temperatures)
- Transition risks: these cover the impact to syndicates of the move towards a low-carbon economy, via changes to policy/regulation, changes to society, or emergence of new technologies and business models. For example:
  - As electric vehicles are further developed and desired, financial assets in the automotive sector may lose value.
  - As governments promote sustainable energy, fossil fuel extractors and associated power generators will suffer financially (if they fail to adapt).
- Liability risks: parties who have suffered loss or damage from physical or transition risk factors may seek to recover losses from those they hold responsible; potentially affecting classes such as Directors & Officers, and Professional Indemnity.

Although climate risks inherently feature wide-ranging impacts with uncertain time horizons, they are

foreseeable, and the impact that they will have on syndicates depends on actions taken in the short term.

Lloyd's expects syndicates, and their Boards, to understand and monitor the financial risks from climate change that they are exposed to - this has become a regulatory requirement due to PRA SS3/19. Lloyd's expects the risks posed by the current climate to be adequately captured in syndicates' internal models. Lloyd's expects all syndicates to be performing internal model stress-tests to ascertain the potential impact of climate change in the future, over short- and long-term horizons.

Lloyd's expects all syndicates' views of Catastrophe Risk (as represented within capital models) to be appropriate for the current climate, and to reflect changes in climate which have already occurred and may be influencing hazard now and over the timeframe covered by policies underwritten. The Exposure Management team began a thematic review during 2021 to get better understand how this is being done in the market. Lloyd's does not expect syndicates to adjust their current view of risk (or level of capitalisation) to reflect future changes in climate.

Lloyd's also expects all syndicates to be considering how their business model and/or portfolio management strategies may need to change in the future as a result of climate change.

Further information can be found in the PRA's Supervisory Statement SS3/19.

### Underwriting function's oversight

In addition to the above processes, Lloyd's Underwriting team continually monitors press activity and discusses with Managing Agents all issues related to underwriting, including climate-related issues. This allows Underwriting to feed in expert judgment to business planning decisions and the Lloyd's Internal Model (LIM).

Property Lines specifically have exposure to Natural Catastrophe from Storm/Flooding. Underwriters will assess such risks typically using proprietary models to ensure they adequately assess and price such risks for end customers. Part of activities done by Underwriting within pricing reviews is to ensure pricing approaches on Property Accounts have included specific consideration of Cat exposures within recognised practices for pricing business. Underwriting experts maintain awareness of topic through general media and ad-hoc publications on the topic as well as attendance where applicable to specific presentations and associated thought leadership documents as they apply to property insurance.

Evidence also applies to principle(s): 1.1, 1.2, 2.1, 2.2, 3.1, 4.2, 4.3,

Source: *The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

As a specialist insurer, various classes of business we underwrite are subject to the effect climate change presents to the risk environment. We acknowledge and accept that over time climate change could impact the risks facing our insureds and this is reflected in our risk management framework

At Beazley, climate change is a strategically important issue. From business planning, investing, directing resources to regular communications with employees, it is embedded in our ways of working. Global warming is acknowledged as an important long-term risk due to the extensive impact it may potentially have on communities all over the world, the natural environment and economy. The implications of climate change for Beazley's business performance can be divided into three categories:

- 1 Underwriting risks, i.e. Supporting clients who have been affected by natural catastrophes, helping them return to pre-catastrophe conditions as soon as possible; as well as providing coverage for clients to protect Directors and Offices against litigation from all manner of items, including climate change.
- 2 Investments; i.e. using our investment decision making to influence businesses in their response to a variety of ESG and the Performance of Beazley internally metrics
- 3 Delivering improvements internally to drive Beazley's own response to climate change.

The delivery of matters to address climate change, is therefore, reflected within our overall business strategy, through several forms. These are:

- Responsible Business Strategy
- Annual Risk Review
- Individual underwriting focus groups business plan, which combine to create both Beazley's short term and long-term strategic plan

A combination of these plans form the long-term strategic vision for Beazley, with the annual risk review and individual underwriting focus group business plans setting out our approach across the short term, which we classify as one year. The Responsible Business Strategy sets out more of our medium-term vision for three years, providing clear direction of travel on all ESG matters including climate change. For the longer term, our five-year plan, sets out the strategy and vision for Beazley, and is used as a target for the business to aim for. More detail is provided on each of plans as follows:

## Responsible Business Strategy

Our first Responsible Business strategy aims to help us articulate and deliver our ESG ambitions and builds on Beazley's previous work in this space. We have set out within it measurable goals to 2023, to help embed Responsible Business as part of Business As Usual operations. In turn the achievement of these objectives will help pave the way for more ambitious targets beyond 2023. The strategy itself aligns with the UN's Sustainable Development Goals, and was informed by a materiality assessment we undertook to help prioritise our objectives. Through this materiality assessment and supporting research it was determined that tackling climate change is seen by stakeholders as one of our biggest priorities. The strategy has, therefore, been designed to deliver against this, as well as taking into account a number of wider ESG requirements. The strategy includes a commitment to:

- Embed the principles of TCFD into the business
- Reducing Beazley's own carbon emissions
- Utilising data gathered from our investments to drive a transition towards decarbonisation

## TCFD

The TCFD guidelines are essential for delivering a forward-looking sustainable business. In collaboration with the Head of Responsible Business, each underwriting team to identify relevant climate-related risks and opportunities that may occur with new products, additions to current products or offering new services. To date this work has been completed with 25% of the focus groups, with the remaining number to be reviewed by end of 2021. This process is key as a first line of appraisal for the business in respect to climate change. Both the risks and opportunities identified to date differ depending on the sector and insurance products we offer. As an example, many of our property insurance products are at risk of the change in physical impacts of climate change, whereas our Directors and Officers (D & O) liability cover is more at risk from the transitional risks such as litigation or reputational risk. Across many of our products i.e. energy, aviation, and marine, our insureds are also at risk from stranded assets as technology and the use of low carbon alternatives begin to become more common.

To date, many of the opportunities have been around the need for our insureds to understand the climate change data and thus the impact of in more detail. This stage of work is commencing, with outputs realised later in the year.

## Investments

Beazley's investment team recently made public its Responsible Business Investment Policy, with an aim to be more transparent with companies who we invest in, or may wish to invest in in the future. The purpose of the policy is to help incorporate ESG issues into our investment analysis and decision-making process. A fundamental part of this policy is using carbon intensity data to help prioritise investments which will help to contribute towards an accelerated transition to decarbonisation. At the beginning of 2021, we took a measurement of the carbon intensity of our insureds and will use the data to firstly determine the impact of their activities on climate change through their carbon emissions, but secondly begin to set targets. We have committed to report our figures within our 2021 annual report and accounts which will be published in February 2022. We will also, as part of our ongoing review of climate related risk, review the financial risks associated with our investments, using data provided by a number of third parties to help determine the impact. Again, this output will be reported within our annual report.

## Carbon Emissions

Beyond the influence of our underwriting and investment strategies, Beazley also wishes to lead by example. Our carbon footprint is our primary measure of our climate impact and the targets we have set have been included in our Responsible Business Strategy. In summary, we aim to reduce our carbon emissions by 30% by the end of 2021, and achieve a 50% reduction in greenhouse gas emissions by the end of 2023, across our Scope 1, 2 and 3 emissions. More details are provided in section 4.

## Risk Approach

Following on from the PRA climate related risk stress test in 2019, Beazley reran the scenarios at the end of 2020. These three scenarios included the modelling of sudden transitions on rapid global actions and policies; a long-term orderly transition in line with the Paris Agreement; and a failed improvements to climate policy resulting in temperatures exceeding 4 degrees Celsius. The scenarios modelled the claims cost arising from the impact of hurricane damage under each of the three scenarios. The exercise found that the underwriting percentages have reduced slightly since the 31 December 2019 assessment, as a result of changes in the Treaty portfolio which mean that more of the policies are already exhausted, whilst the investment percentages increased as a result of holding a higher proportion of sovereign bonds. Although the exercise demonstrated that the company was operating within risk appetite, it was acknowledged that further work is required in 2021. This includes the work to provide a response to the PRA's Climate Biannual Exploratory Scenario (CBES), as well as the TCFD workstream.

## Business Planning Process

As part of Beazley's annual business planning process, each department is required to set out their business plan for the following year. These plans are required to identify high level Climate Change risks and opportunities, and show strategies dealing with this during the year. The planning process provides a system on monitoring how the business is performing against its set goals. The development of these objectives will be driven by the further embedding of the TCFD guidelines within the organisation. Our five-year long-term plan is currently being updated and will reflect the longer-term requirements needed to deliver against climate related issues. From a climate change perspective, the work being undertaken over the coming months in order to meet our PRA requirements will be an essential part of this work. We have already committed that management actions arising as a result of the findings of scenario analysis will be incorporated into the business plan, and the opportunities which arise will of course be picked up and developed, where appropriate.

Beazley has recently become signatories to the UN Principles for Responsible Investment and UN Principles for Sustainable Insurance. Both of these principles provide a facility for engagement on, and encourage enhanced disclosure. Beazley will report against these principles in 2022. We have also committed as part of our Responsible Business Strategy to disclose in line with recommended reporting standards such as GRI or SASB at the end of 2022.

*Source: Beazley*

## Lloyd's / The Market / MS Amlin Underwriting Limited

### The Risk Framework

Activity performed in 2020-2021 has seen climate risk move from what has previously been considered an emerging risk to an integral part of the risk framework, with an Environmental, Social and Governance (ESG) risk being added to the Risk Register in Q4 2020. The next steps MS AUL has taken is to understand the actions needed to integrate climate considerations into everything the company does. This activity combines both the expectations of SS3/19, the PRA Supervisory Statement on the financial risk of climate, inclusion in the upcoming Bank of England Climate Biennial Exploratory Scenario (CBES) and our continued commitment to ClimateWise.

Taking this into consideration, MS AUL embarked on a scoping exercise in Q1 2021, working closely with key stakeholders over a 4 week period to:

- review compliance with SS3/19 and ClimateWise principles;
- deliver an overarching climate risk management strategy statement;
- deliver a pragmatic operational response including relevant measures of success, risk & opportunity statements and an ownership matrix aligned to the existing governance;
- align MS AUL's Climate Risk Strategy with its existing risk appetite and exposure management framework; and
- deliver a high level 12-24 month timeline which would support MS Amlin in delivering against the recommendations made in the operational response document.

A key outcome of the review was to identify the steps required to manage Physical (P), Transitional (T) and Liability (L) risks across the existing Risk Register. The attached diagram<sup>9</sup> outlines the areas of the risk register that require the most effort to identify the financial impacts of climate as outlined in SS3/19, with Insurance, Market and Strategic risks identified as high impact risk categories.

The roadmap has received approval from the whole Executive team and whilst the efforts will be co-ordinated by the Director of Strategy & Transformation, the risk owners will take ownership and accountability for the impacts across their respective Risk Categories. With regards to climate scenario analysis, MS AUL ran the ESG scenario as part of the General Insurance Stress Test (GIST) activity in 2019 and will do so again for the CBES activity due to commence in June 2021. Whilst there is no dedicated climate scenario in the most recent ORSA, MS AUL will draw on experience to date in this regard through the other stresses and will see climate related scenarios being incorporated into the 2022 document.

It is also worth noting that over the past few years MS AUL has exited a number of predominately non-CAT exposed business, leading to potentially greater volatility in the remaining book. In turn, this business would be more at risk from higher frequency of losses which may be a leading indicator of climate change. This further outlines the importance of understanding the impacts of climate on our financial exposures.

Next steps on the roadmap include the incorporation of the financial impact of climate risk within MS AUL's underwriting appetite at a class level, to be developed during the underwriting class reviews in H1 2021.

### Underwriting Risk

MS AUL has a well-established exposure management framework, used to measure and manage natural catastrophe loss probability. This framework includes a rigorous process of exposure data capture and governance related to insurance policies issued by MS AUL, including controls mitigating risk due to lack of data and/or data quality issues. The portfolio of exposed policies is then modelled by country and peril, to estimate loss probabilities from events such as cyclones, windstorms, severe convective storms, earthquakes, floods, bushfire, and other hazards. MS AUL is heavily exposed to North American perils due to business strategy decisions, adding to the imperative for the business in understanding the impact of climate change on the frequency and severity of natural catastrophe in this region. The contribution of individual policies in key exposure classes is modelled prior to underwriter acceptance of risk.

Modelling is undertaken using both externally supplied software (RMS, AIR, JBA, and RQE) and in-house expertise with the whole portfolio reassessed on a quarterly basis. The climate-related risks monitored in this way are windstorm, severe convective storm, flood, storm surge, tropical cyclone and related secondary hazards. The modelling assesses historic events, and models probabilistically extremes of events across relevant geographic regions. Climate signals are intrinsic to the parameterisation of the models used, and the Risk Analytics Research Manager has continuous dialogue with the model vendors and other external scientific and research groups to consider the appropriate methodologies for understanding the potential change in parametrisation as climate science develops.

The models are tested for sensitivity, and stress tested against MS AUL's historic claims experience. The models are licensed from firms staffed by scientific experts, and incorporate analysis of trends from hundreds of years of data on climate-related hazards. With increasing focus from Regulators on climate change, scenario testing against models is becoming more critical in understanding the robustness of the assumptions used for the modelled perils. MS AUL is one of the selected firms, chosen by the PRA, to participate in the Climate Biennial Exploratory Scenario (CBES) to explore the financial risks posed by climate change. A CBES

<sup>9</sup> See evidence 2a



Working Group meets to discuss and escalate actions arising in the production of the CBES. Outputs from this exercise feed in to the newly formed ESG forum and onto relevant Board Committees where relevant, helping to inform strategic decision making going forward.

MS AUL's Risk Analytics function produce a range of metrics to assess cat exposures ranging from the 1 in 30 to the 1 in 200 annual exceedance probability tail value at risk. These are tracked quarterly and monitored against tolerances used to manage the level of risk authorised by the Board. Understanding potential losses at the tail is imperative for a heavily exposed catastrophe Syndicate such as MS AUL, hence work is underway to further improve our understanding of the impact of climate change at the tail. The Risk function are also in the process of updating the Risk Management Framework to reflect the pervasiveness of climate change across the Risk Register, this falls under the ESG risk category that will be built up to include other relevant elements over time. Included within this will be a full assessment of controls and gaps to be mitigated for each risk, as well as the production of a set of metrics to regularly track, monitor and report on the impact of climate change.

MS AUL have set up the Environmental Social Governance (ESG) Forum covering a wide range of work streams. With climate change becoming a more material impact on the balance sheet, and a driver of changes to the risk profile, the ESG Forum ensures the appropriate members are in place to bring climate-related initiatives (alongside other workstreams) into being an integral part of management of business performance. Internally, MS AUL is aware that climate change related changes to the global environment, societies and economies will have a wide-ranging impact on its business, and these impacts can be viewed through a tripartite prism of transition risks, physical risks, and liability risks. MS AUL expects these impacts to be felt, albeit to different levels of materiality, across its seven risk categories and 37 sub-risk categories.

### Lloyd's / The Market / MS Amlin Business Services Investments

Within the three legal entities of MS Amlin's insurance and reinsurance business, MS Amlin has an investment portfolio in excess of GBP £6billion, consisting of Fixed Income (Bonds Duration and Absolute Return Funds), Equity, Real Assets and Cash. MS Amlin manages investments on a multi-asset, multi-manager basis, appointing external managers to implement security selection.

As long-term investors focusing on asset allocation, MS Amlin is aware of the importance of stewardship and sustainability alongside integrating ESG into the governance structure, which involves the inclusion of

Environmental, Social and Governance factors into investment analysis.

Whilst MS Amlin has a holistic approach to investing, it actively engages with external managers encouraging disclosures detailing their ESG activities and assessments of climate risks when choosing their investment strategy, which is monitored on a regular basis via annual and investment stewardship reports. There has been increasingly more information provided by MS Amlin's external managers, compared to previous years, on the extent to which ESG factors (and specifically climate risk) are integrated into their investment strategies. This is an area MS Amlin will continue to promote.

MS Amlin believes that climate risk is an extremely vital component within the wider ESG discussion. There is an initiative within MS Amlin Investments to acquire more detailed data and research in this area, with the view to integrating it into the front office portfolio monitoring architecture (leveraging our in-house expertise). The aim is to incorporate the analysis into the investment decision making process and improving communication on this important topic to MS Amlin's legal entity boards. The aim is to cement both climate risk and ESG factors into MS Amlin's governance structure and risk culture. This work builds on other regulatory submissions MS Amlin has made (i.e. PRA GIST).

Our observations lead us to define:

- **Short term** as 0-5yrs, where our immediate focus is on listed securities (equity and credit), where total returns will be reflective of immediate risks or opportunities from climate related factors (emissions, coal, low-carbon technology)
- **Medium term** – defined as 5-20yrs. Here, MS Amlin focuses on allocation to real assets which include Property, Farmland and Infrastructure investments (renewable energy)
- **Long term** – defined as 20yrs+. MS Amlin focus efforts on identifying long term shifts and trends, more likely characterised through broader government securities and associated yield movements (carbon neutral targets, green bonds)

The majority of MS Amlin's external managers are signatories to the UN Principles of Responsible Investment (PRI) which encourages managers to incorporate ESG issues, including climate change, into their investment selection process. MS Amlin's external managers believe that sustainable investing is synonymous with good fund management practice and that strategies incorporate changes in consumer views, investors' expectations and economic trends which all tend towards a more climate-aware and sustainable world (i.e. renewable energy, zero-carbon economy). MS

Amlin's parent company, MS&AD Insurance Group, is also a UNPRI signatory.

MS Amlin believes that the identification of these trends is crucial when considering its stance as a long-term investor. There is a focus on data acquisition alongside investment impacts with regards to short/medium-term effects from distinct meteorological events (such as hurricanes). These events are also thought of in the context of medium/longer term increased frequency and intensity as much as their immediate impacts.

MS Amlin have partnered with Sustainalytics, a leading independent ESG data and research provider, to further strengthen our ESG data ecosystem. This has facilitated the inclusion of composite ESG risk scores in our fund and entity board reporting.

MS Amlin continues to engage positively when meeting the increasing supervisory expectations and regulatory submissions in the area of climate risk. MS Amlin is an active participant in the 2021 Bank of England Climate Biennial Exploratory Scenario (CBES) which will greatly expand on our previous work with the inaugural climate scenario in the PRA 2019 General Insurance Stress Test (GIST).

Paul Amer, MS Amlin's Chief Investment Officer and member of ESG Forum, is leading and promoting further use of climate risk and ESG factors into the investment process.

*Source: MS Amlin*

## Lloyd's / The Market / QBE / Implications of climate change for business performance

Climate change is a material financial risk in and of itself, and it can also act as a risk multiplier. For example, prolonged droughts combined with stronger winds are making bushfires in Australia and wildfires in California, and elsewhere, more intense. Coastal windstorms, together with increasing sea levels, may multiply the scale and intensity of damage within a coastal region. Equally, the past may no longer be a good guide to the future; risk models based on historic experience need to be adjusted to allow for the impact of climate change over time. This represents a challenge where we provide cover for physical loss or damage to assets. It also increases the potential for third party injury and/or damage. Given this, we have spent considerable time in 2020 and 2021 analysing what the potential impacts of climate change may be from a physical, liability (i.e. litigation) and transition risk perspective and using this analysis to assess the resilience of our strategic responses and to improve our underwriting, pricing and business planning.

In 2020 and 2021, we have focused on identifying risks and opportunities and developing our strategic responses across both underwriting and investment management.

We have continued to focus on identifying climate-related risks and opportunities across some of our key underwriting portfolios. This work has been driven by our physical, transition and liability working groups. To raise awareness and support delivery of the roadmap, a townhall meeting was held in 2020 attended by over 100 underwriting staff in Europe. The session provided appropriate context regarding the UK PRA SS3/19 requirements and QBE's roadmap, and guidance on how to identify potential exposures and develop underwriting strategies in response. In early 2021, Climate change Underwriting strategies for the main EO insurance product areas were agreed and these strategies are refreshed annually.

### Physical risks

Extreme weather risk has a quantifiable impact on QBE's financial performance each year. QBE's incurred net claims for all catastrophe events, including weather-related events, were \$688 million, \$426 million and \$523 million in 2020, 2019 and 2018 respectively. QBE management devotes significant resources to assessing and managing the extreme weather risk we assume while protecting customers' assets. We use sophisticated computer simulations to quantify potential natural catastrophe claims, factoring in the current climate and weather (inclusive of the change in climate we have experienced since the start of the industrial revolution).

Claims experience and catastrophe modelling allow us to better understand the risks we are facing and to accurately price each property we insure. A significant portion of our extreme weather risk stems from perils including cyclones, convective storms, hail, windstorm and floods. While our customers have assets spread across the world, Australia, the United States and Western Europe account for the majority of our weather risk. To better understand how our extreme weather risk may evolve as the climate continues to change over the next 30+ years, we have partnered with catastrophe modelling vendors Risk Management Solutions, Inc. and AIR Worldwide, and with Aon to enhance our catastrophe models. For Australia, we have used scenarios developed by Australia's leading climate scientists at CSIRO and the Bureau of Meteorology through the Climate Measurement Standard Initiative (CMSI).

We have concentrated our analysis on the perils and regions representing over 80% of QBE's extreme weather exposure as measured by annual average losses. The perils and regions we have analysed are:

- cyclone – Australia, North America
- convective storm/hail – Australia, North America
- windstorm – Europe
- flood – Australia, Europe.

Our analysis has considered risks at 2030, 2050 and 2090.

Our analysis considered two potential scenarios of a temperature increase by 2100 relative to pre-industrial times of:

- less than 2°C, low emissions consistent with Representative Concentration Pathway (RCP) 2.6;
- an intermediate RCP assumption of 4.5 and
- greater than 2°C (3.2°C to 5.4°C), high emissions consistent with RCP 8.5

QBE is committed to supporting the objectives of the Paris Agreement; however, we recognise that the greater risk for our business is under a high emissions scenario and we want to understand the potential impacts of this pathway. We recalibrated our catastrophe models to reflect the potential change indicated by scientific literature in order to estimate annual average losses under each scenario. These scenarios do not represent forecasts of the impact of climate change, and instead are indicative of the potential outcomes assuming the scenario occurs. Our analysis assumes no changes to our portfolio of risks over time, no change in vulnerability of assets through improvements in resilience and no changes in cover provided.

Following the conclusion of the analysis, we integrated the results into our catastrophe accumulation management process to enable us to consider the impact of climate change on other areas related to catastrophe risk. In the short term, QBE will manage natural catastrophe claim volatility by considering a wide range of event frequency and severity scenarios in our capital planning, and by purchasing a comprehensive Group catastrophe reinsurance program. We are also able to integrate our underwriters' views of climate risks based on the analysis of different RCP impacts for exposed classes of business. Over the longer term, we will continue to engage with external stakeholders, including governments, to encourage adaptation including the

adoption of resilience measures against weather-related events.

In 2021, we intend exploring bushfire scenario analysis, particularly for Australia and the United States. We will further utilise the scenario analysis results in our strategic business planning and portfolio monitoring. In addition, we are able to assess at product- and portfolio-level the impacts of peril-region impacts under various RCP assumptions and address these in a business planning context with our underwriting teams and management.

### Transition risks

During 2020, we undertook scenario analysis to understand the impact of the transition to a low carbon economy on our business. We worked with Planetrics, a Vivid Economics company, to understand sectoral trends to 2030 and 2050, which we can use to inform our strategic positioning over the coming years. The analysis is based on the Network for Greening the Financial System Orderly and Disorderly scenarios (REMIND model) and the Inevitable Policy Response Forecast Policy Scenario. All three scenarios are consistent with keeping the increase in global temperatures to below 2°C. The scenarios are expressed relative to a baseline of current policies (3–4°C). The sectors most impacted by 2030 and 2050 by the transition to a low carbon economy include fossil fuel production and transport. As the economy decarbonises, demand for oil and gas, and internal combustion engine vehicles declines, and transport service providers face rising carbon costs on their emissions. The utilities sector experiences a high variation in impact, with low carbon utilities benefiting from rising demand for low carbon electricity and high carbon utilities facing rising carbon costs. Within the transport sector, air transportation is most affected, with passenger road and rail transportation least affected due to the relative availability of low-cost electric alternatives. Significant growth is expected in demand for green products and inputs such as electric vehicles, copper, battery materials and renewable energy equipment. For each scenario, we have focused on the impact on the most material sectors for our underwriting and investment portfolios.

The results show that transition risk is low for the majority of our business. Our exposure to high transition risk sectors is low. For some of the more affected sectors, we have started to respond through progressing our policy positions, engaging with our customers and undertaking due diligence.

The top three sectors that our underwriting business is exposed to (by gross written premium) are construction, real estate and professional services. Across all three scenarios, by 2030, the impact of the climate transition to these sectors is expected to be modest (up to -1%),

although individual corporates in these sectors could be more materially affected on both the upside and downside.

The top three sectors we are exposed to (by investment value) through our corporate credit portfolio are financial services, health and pharmaceuticals, and communications. Across all three scenarios, by 2030, the impact of the climate transition to these sectors is expected to be modest.

The work on Transition risks described above can also be integrated with our assessments of Physical risks, for example through common assumptions made in relating to warming and RCP pathways. This is a focus for our evolving assessment capabilities in 2021/22.

### Transition stress test

In 2020, as part of an independent review of the strategic asset allocation of our investment portfolio, we undertook a climate transition stress test. Two scenarios were considered – one consistent with a 2°C pathway and one consistent with a 4°C pathway. The results found that the investment portfolio, over a five-year timeframe, is likely to perform slightly better (less than 1%) under a 2°C pathway, and likely to experience minor negative returns (less than 1%) under a 4°C pathway, relative to the baseline. Overall, the portfolio is well positioned for climate transition.

### Paris Agreement Capital Transition Assessment

In 2020, we again completed transition analysis for our corporate credit portfolio at both the divisional and Group level using the Paris Agreement Capital Transition Assessment (PACTA) tool. We used the Sustainable Development Scenario, which is an economic transition scenario consistent with limiting global warming to 2°C above pre-industrial levels. The PACTA tool analysis focuses on the fossil fuel, power and automotive sectors. Currently, less than 3% of the Group's corporate credit portfolio is exposed to activities across these three sectors and this includes exposure to both high carbon (e.g. fossil fuels) and low carbon (e.g. renewables, electric vehicles) activities. We currently have no exposure to fossil fuel production.

### Premiums4Good

Launched at Lloyd's of London in March 2015, Premiums4Good is a unique initiative developed by QBE that enables targeted customers to invest a portion of their premium in securities with an additional environmental or social objective, such as green bonds and investments in infrastructure projects with environmental benefits. The initiative is free and there are no risks involved for the customer. This initiative has

stimulated the development of new investment products that offer risk-adjusted returns, as well as supporting beneficial social outcomes. As a result of the initiative, QBE has made impact investments across the globe.

In 2020, QBE extended the ambition to grow impact investments to \$2 billion by 2025. Premiums4Good has grown to 68 securities and \$1.1 billion in portfolio value as at 31 December 2020. Consistent with our commitment to positive opportunities in relation to climate risk, more than \$641 million is invested in environmental impact areas.

#### Current Premiums4Good investments: Impact area and location of impact as at 31 December 2020<sup>1,2</sup>

	GLOBAL	AUSTRALIA AND NEW ZEALAND	EUROPE AND UK	NORTH AMERICA	DEVELOPING MARKETS	TOTAL
<b>Environment</b>						
Food & Agriculture					1	1
Resource Efficiency, Recycling, Re-use & Conservation					1	1
Sustainable Energy	2	9	12	11		34
Water	1					1
<b>Total</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>11</b>	<b>2</b>	<b>37</b>
<b>Social</b>						
Education & Employment			1		2	3
Financial Inclusion	1		3		1	5
Health	2	1				3
Housing & Social Real Estate		6	1	2		9
Social Care & Provision of Community Services		1	1	3		5
Social Inclusion, Diversity & Gender				1	1	2
Urban & Community Development		1		3		4
<b>Total</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>9</b>	<b>4</b>	<b>31</b>
<b>Grand total</b>	<b>6</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>6</b>	<b>68</b>

1 Impact areas, geographies and SDGs are mapped and categorised by QBE in line with our impact investment definitions and classifications. Please note that individual investments or investees may classify these differently.

2 Our methodology to reconcile number of securities was updated from 2018 onward.

### United Nations Environment Programme ('UNEP') Finance Initiative ('FI') TCFD Pilot Project

QBE, along with 22 other global reinsurers and insurers, has been part of the UNEP FI's PSI Initiative to pilot the TCFD recommendations for insurance portfolios. The aim of the initiative is to contribute to the development of consistent and transparent analytical approaches that can be used to identify, assess and disclose climate change-related risks and opportunities. The initiative has covered physical, transition and liability risks and opportunities. QBE has been a member of the working group looking at transition risk in the property sector in



Australia, which developed a model to assess the risk which we aim to pilot in 2021. We have also been a member of the litigation working group, which complemented our internal analysis on climate-related liability risk.

Evidence also applies to principle(s): 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 4.2, 4.3,

Source: QBE Annual Report 2020 (p.28-35); Premiums4Good Investment Impact Report (available here: <https://www.qbe.com/premiums4good>); Group Environmental Policy; QBE Group Energy Policy.

## Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe has established robust global processes to continually assess how climate change could impact different segments of its business. RenaissanceRe considers ERM to be a key strategic objective and believes that its ERM processes and practices help to identify potential events that may affect it; quantify, evaluate and manage the risks to which it is exposed (such as climate change); and provide reasonable assurance regarding the achievement of corporate objectives. RenaissanceRe's embedment of climate change risk understanding into the core of its corporate strategy is highlighted in the 'Message from the Chair' section of its 2021 Annual Report, page 8:

*"An equally important role of the Board is overseeing the sustainability of RenaissanceRe's strategy, stewardship of capital, and our responsibility to our customers. Another year of elevated hurricane activity, wildfires and severe convective storms continued to demonstrate the impact of climate change. Management and the team of scientists at RenaissanceRe Risk Sciences worked closely with the Board to explain the industry-leading research they have conducted as well as their ability to incorporate their results into the Company's catastrophe modeling. No doubt, climate change is an important issue for the entire world, but it is one that the Board is confident the Company understands and is proactively addressing".*

RenaissanceRe conducts group-wide analysis of the financial risks of climate change across its business, working with representatives from investments, risk, underwriting, facilities, IT and strategy functions to review current activities and assess the financial risks arising from the group's operations. This continuous assessment allows RenaissanceRe to identify operational areas where the development of data, techniques and processes could enhance its risk understanding.

## Investments

RenaissanceRe's primary investment objective is to make informed investment allocation decisions that preserve capital, support its business obligations, and maintain its sustainable and diversified position across market sectors. To further the sustainability of its investment portfolio, RenaissanceRe considers environmental, social and governance factors within its investment strategy and actively engages with its asset managers to incorporate specific ESG criteria into their investment guidelines and compliance policies. RenaissanceRe considers ESG factors such as climate change to be an important and growing influence in its investment process that ultimately contributes to its assessment of value, sustainability and return. Management believes that incorporating these factors into its analysis makes RenaissanceRe better positioned to identify attractive and sustainable investment opportunities while also helping to identify potential long term downside risks related to ESG considerations such as climate and carbon transition readiness.

RenaissanceRe recognizes that the relevance and materiality of ESG-related factors such as climate change can vary across asset classes and sectors. In order to further the incorporation of ESG factors and principles and to enhance its process for identifying, assessing and prioritizing climate change risk, RenaissanceRe engaged third party provider MSCI in 2020. MSCI conducts analysis to highlight climate change and others ESG-related risks within investment portfolios, flagging companies that are rated CCC 'Laggards' under the MSCI methodology, as well as providing data insights such as carbon intensity to inform future investment decisions.

Reference sub-principle 3.1 for details of RenaissanceRe's measurement and disclosure of climate-related risks in its asset portfolio.

## Underwriting

RenaissanceRe believes that the reinsurance industry generally, and RenaissanceRe specifically, has an important role to play in keeping climate-impacted risks such as wildfire insurable, particularly as climate change continues to amplify the risk of natural catastrophes. RenaissanceRe seeks to do this in two ways: channeling risk away from those to whom it is harmful and toward the capital that is best capable of bearing it; and accurately quantifying and maximally diversifying that risk. This should result in the transfer of well-priced components of risk to willing investors who are paid sufficiently to bear it (and - critically - to continue doing so after a loss). RenaissanceRe's corporate strategy involves matching desirable risk with efficient capital through the application of its three competitive

advantages: Superior Customer Relationships, Superior Risk Selection and Superior Capital Management.

Consistent with this framework, RenaissanceRe has taken various measures to mitigate losses related to climate change through its underwriting process and by continuously monitoring and adjusting its risk management models to reflect the higher level of risk that it thinks will persist. RenaissanceRe's internal team of scientists at RenaissanceRe Risk Sciences Inc. ("RenaissanceRe Risk Sciences") builds nuanced views for climate change's impact on a range of perils. Each risk is classified using a framework for understanding climate impacts. Across this framework, RenaissanceRe recognizes that each region-peril combination is categorized to highlight relative differences in the urgency and likelihood of material changes in the risk.

RenaissanceRe periodically reviews the estimates and assumptions that are reflected in its internal analysis tools, driven either by new hazard science and understanding or by experience of loss events. For example, the movement in cedant loss estimates seen across the market in the months following Hurricane Irma prompted RenaissanceRe to perform, in conjunction with several partner companies, a detailed review of the nature of the claims made as a result of that and subsequent events. More generally RenaissanceRe's team of scientists at RenaissanceRe Risk Sciences has been tracking the impact of climate change and expanding urban development in both tornado/hail and wildfire risk over the last several years. The recent history of California wildfire events, and particularly the extreme outbreaks during 2017 and 2018, are being used to validate, and where necessary inform, RenaissanceRe's representation of this risk.

### UK Specific Activity

In accordance with Article 45 of the Solvency II Directive, RSML conducts an Own Risk and Solvency Assessment ("ORSA"). The ORSA is an internal assessment process which is embedded in the strategic decisions of RSML. It represents RSML's opinion of the risks, overall solvency needs, and own funds held. The overall goal of the ORSA is to provide a mechanism through which RSML's board of directors is able to assess the risks faced and the level of economic capital required to meet the strategic objectives of the business. RSML's board of directors is responsible for the review, challenge and approval of the ORSA. The process enables RSML to match its own funds to its risk profile. Any strategic decision that may affect the risk profile and/or own funds position of RSML is considered through the ORSA process before such a decision is taken. The annual frequency of the ORSA submission is deemed proportionate to RSML's current risk profile and the likely

volatility of its overall solvency needs relative to its capital position.

RSML was also invited to take part in the Bank of England's Climate Biennial Exploratory Scenario ("CBES") testing, which aims to understand the challenges faced by companies in trying to quantify, understand and mitigate their climate exposure. The CBES process for scenario modeling involves input from the majority of RenaissanceRe's business functions and requires an assessment of physical and transition financial costs under three scenarios. These scenarios outline how countries will transition to net zero emissions global economies by 2050.

Reference sub-principles 5.1 and 5.2 for further information on RenaissanceRe's leadership and collaboration efforts in relation to climate awareness and adaptation.

*Source: RenaissanceRe Syndicate Management Ltd*

### Lloyd's / The Market / The Hartford

The Hartford has led the insurance industry in recognizing that climate change is real and presents both risks and opportunities for our company, our customers, and the overall economy.

### Insurance Operations

#### Climate Change Risks:

As an insurer, we are at the forefront of understanding, managing and mitigating climate-related risks.

Our insurance operations expose us to claims arising out of catastrophes caused by various unpredictable natural events frequently attributed to climate change including, among others, earthquakes, hurricanes, hailstorms, severe winter weather, windstorms, fires, and tornadoes. The geographic distribution of our business subjects us to catastrophe exposure for events occurring in a number of areas. Any increases in the values and concentrations of insureds and property in these areas would increase the severity of catastrophic events in the future.

In addition, changes in climate and/or weather patterns may increase the frequency and/or intensity of severe weather and natural catastrophe events potentially leading to increased insured losses. Potential examples include, but are not limited to: an increase in the frequency or severity of wind and thunderstorm and tornado/hailstorm events due to increased convection in the atmosphere, more frequent and larger wildfires in certain geographies, higher incidence of deluge flooding, and the potential for an increase in frequency and severity of largest hurricane events.

In the event of one or more catastrophes, policyholders may be unable to meet their obligations to pay premiums on our insurance policies. Further, our liquidity could be constrained by a catastrophe, or multiple catastrophes, which could result in extraordinary losses. In addition, in part because accounting rules do not permit insurers to reserve for such catastrophic events until they occur, claims from catastrophic events could have a material adverse effect on our business, financial condition, results of operations or liquidity.

The amount we charge for catastrophe exposure may be inadequate if the frequency or severity of catastrophe losses changes over time or if the models we use to estimate the exposure prove inadequate. In addition, regulators or legislators could limit our ability to charge adequate pricing for catastrophe exposures or shift more responsibility for covering risk.

### **Climate Change Opportunities:**

Climate change also presents opportunities for our business. As changes in weather patterns emerge, The Hartford has the opportunity to better position our products in order to offer further protection to our customers. The Hartford already offers a full range of insurance products that help customers who want protection from weather events and their consequences, including protection from damage that could occur from fires brought on by drought, snow and ice, severe heat, changing weather patterns, wind and numerous other perils. Offering such protection, and then managing that risk, is at the heart of what insurers do.

To the extent that new regulations related to climate change drive insureds to more environmentally friendly products, The Hartford could experience an increased uptake in its offerings of insurance products that service this area. For example, the company's renewable energy practice offers end-to-end coverage for the wind, solar and biomass industries, from research and development through construction, to production. If future regulation encourages renewable energy use, this could present opportunities from which The Hartford could benefit.

Similarly, if regulation encourages commercial vehicle owners and individuals to drive hybrid or electric vehicles, The Hartford could benefit through its current product offerings in these areas. As the first insurer to offer coverage of garage EV charging stations in its homeowners' policies, this is also an area where regulation may assist.

To the extent that commercial entities are required or encouraged to build green buildings or replace equipment with more energy efficient equipment in order to limit contributions to climate change, The Hartford's products that offer these coverages could benefit.

Likewise, any regulations that encourage individuals to build greener houses or use hybrids or EVs could drive further uptake for the products that The Hartford offers.

Similarly, opportunities exist for The Hartford as public and private entities enter into construction projects to address changes in physical climate. Projects addressing these changes include, but are not limited to: infrastructure adaptability and improvements, flood control, shoring and erosion control, waterproofing, and green building. Insurance buyers looking to adequately transfer risks associated with these projects create business opportunities for The Hartford. Opportunities also exist for The Hartford as more construction projects implement Green Performance Contracting (GPC) standards. GPC changes the traditional construction approach with respect to materials, equipment, design, methodology, and energy efficiency. Underwriting GPC and developing insurance products to address its use is an inherent opportunity for The Hartford which has resulted from changes in physical climate.

Opportunities can also arise as carbon taxes are imposed. To the extent that carbon taxes result in growth for the wind, solar, fuel cell or other renewable energy sectors, The Hartford's Renewable Energy Insurance Practice could experience considerable growth. Also, to the extent that such taxes affect the behavior of small and medium-sized businesses and individuals regarding their purchasing decisions on hybrid or electric vehicles, The Hartford's current product line in these areas could experience increased growth. As The Hartford leverages its electric vehicle charging station infrastructure, we could benefit to the degree that carbon taxes lead to growth of the electric vehicle industry.

### **Investments**

During the past few years, The Hartford Investment Management Company ("HIMCO") has taken steps to develop a framework for assessing The Hartford's investment portfolios and the implications of climate change on its holdings. First, The Hartford and HIMCO developed the [ESG Investment Policy Statement](#) in 2018 as a guideline when making investment decisions. The Policies were posted on both The Hartford's and HIMCO's websites.

For day to day implementation, ESG factors have been incorporated into HIMCO's proprietary credit research platform where analysts provide assessments and commentary as applicable for each active portfolio holding. Analysts use a wide variety of information including company regulatory filings, ESG statements, third party reports, and discussions with management to consider the possible ESG-related risks or benefits of each investment holding to the extent applicable. HIMCO utilizes this information as an input into its assessment of

current value for each investment and in consideration for how investments are likely to perform in the future. HIMCO reevaluates ESG factors on a regular basis and a changing ESG risk profile could impact the time horizon of a given holding. The integration of ESG factors into HIMCO's proprietary research platform provides HIMCO with reporting capabilities to identify ESG attributes of the portfolios.

Finally, The Hartford announced a [Policy on Insuring, Investing in Coal, Tar Sands](#) in December 2019 stating that the Company will no longer insure or invest in companies that generate more than 25 percent of their revenues from thermal coal mining or more than 25 percent of their energy production from coal. The Company will also stop insuring and investing in companies that generate more than 25 percent of their revenues directly from the extraction of oil from tar sands.

After implementing the policy, The Hartford has since embedded it into the company's investing and underwriting guidelines. In 2020, The Hartford non-renewed 50 policies in response to the Coal and Tar Sands policy and as a result, the company has largely exited offering coverage in this area. In addition, \$622 million (book value as of December 31, 2020) of investment holdings were identified that are subject to restriction and will decrease over time, including \$253 million in publicly traded investments which will be divested by the end of 2023.

A comprehensive overview of The Hartford's climate-related risks and opportunities can be found in the company's TCFD report and [CDP](#) response.

#### **Support Links:**

- [TCFD Report](#) – p. 3-9
- [CDP](#) – C2.3a (Risks) and C2.4a (Opportunities)
- [ESG Investment Policy Statement](#)
- [Policy on Insuring, Investing in Coal, Tar Sands](#)
- [SASB Report](#)

Source: *The Hartford*

[Lloyd's / The Market / Tokio Marine Kiln / Implications of climate change for investment performance and shareholder value](#)

As a general insurer of varied lines of business including Property insurance and Reinsurance in natural catastrophe affected regions, Aviation, Liability, Cyber and Accident & Health lines, TMK faces a varied set of risks as a result of climate change.

TMK's Risk Management Team (RMT) has produced extensive evaluations of climate risk for Board review in the Annual ORSA Report over each of the previous two years. This has been driven by an awareness of climate risk as a material and little understood risk for the business, as identified by the RMT in previous years. This evaluation of climate risk has driven discussion at Board-level and will continue to be a core part of TMK's ERM Framework. Our evaluation will therefore be developed and iterated as we continue to build our understanding of the implications of climate change for our business performance.

The evaluation of climate risk in TMK's 2021 Annual ORSA Report focused on:

1. Examination of each risk category that TMK has identified within climate risks (Physical, Transition, Reputational, Strategic, and Litigation), assessing the materiality of each risk across the business planning horizon and for the longer term. We explored the various drivers of risk in each of these areas, the mitigation response in place at TMK, and opportunities and threats associated with those business areas.
2. A 'frequently asked questions' style exploration of key questions relating to climate risk at TMK, focusing on how it is likely to disrupt our business and what is likely to happen to our key exposures.

The following table sets out the materiality ratings of each risk area at each time period. The relevant risks have then been explored in the text below.



Risk	ORSA period rating	Longer term rating	Rationale
Physical	Med	High	Accurate modelling of climate risk remains a challenge. Current models are deemed appropriate for one-year contracts, but physical risk is expected to materially increase in the longer term and have large implications for our business. Vendors looking to release climate-conditioned models later in 2021.
Transition	Med	High	Transition risks are expected to increase in the ORSA period, accelerated due to likely policies under the Biden US administration. Transition risks for our underwriting book are material over the longer term.
Strategic	Med	Med	Actions taken now will increase our ability to respond appropriately in future, and support awareness and embedding in a timely fashion.
Reputational	Med	Med	Reputational risks are partly linked to being “out-of-line” with the wider insurance market. Strength of governance and controls are a key mitigant.
Liability	Unknown		Although TMK writes relatively low levels of liability business, this risk type remains highly uncertain. We are participating in a PRA exercise to better understand potential consequences for our business.

Ref	Recommendation	Owner	May 2021 Status	Dates
12	<b>Climate Change:</b> Implications of shifts due to climate risk should be explored, for example increased frequency of non-peak perils, considering both inward exposures and OWRI usage.	CRO (Head of CAEM)	<b>Reprioritised to end of 2021/ early 2022.</b> CAEM are supporting the Risk Intelligence team to analyse longer-term time horizon risk information (including claim costs and assets) through the PRA CBES work and this will help to understand what may be required in future. Therefore, this recommendation will be evaluated subsequent to the CBES exercise.	Early 2022

Physical risks of increasing windstorm damage factors have been identified as the key increased threat over the ORSA planning period and into the longer term. TM Group analysis has identified a broad consensus in climate models regarding the increase in severity of windstorms (alongside little consensus on any increase in windstorm frequency). With additional severity, perils such as inland flooding are likely to lead to increased losses for our natural catastrophe exposed lines of business, as exemplified by Hurricane Harvey in 2017. This may lead to certain customers being uninsurable in the long term if the risk of windstorm damage (e.g. flood) becomes too significant. This is likely to be especially material for TMK’s Property and Reinsurance lines. Similar effects may be felt on invested assets, particularly (for example) municipal bonds in affected regions.

As a result of the investigation of physical risks of climate change, as outlined in the above paragraph, there is an associated priority recommendation that is being tracked from the ORSA.

Transition risks from climate change are likely to affect TMK’s performance through effects across all of our stakeholders. Our invested assets and underwriting customers will (in many cases) require significant change as they adjust to a low carbon economy. This is likely to have effects on the returns that we receive from certain assets, particularly those that require high carbon

emissions in their existing business model. An exercise has taken place (reported in the Q2 2021 ORSA Lite Report) to highlight the materiality of transition risks to TMK’s underwriting divisions. It identified Motor, Aviation and Energy lines of business as facing the most material threat from transition risks. This work has led to limitations on our underwriting of high transition risk industries and the development of an ESG lens to our investment strategy.

Transition risks from climate change are also noted to provide a significant opportunity to the business, as outlined further in section 5.1/5.2. As sectors transition to low carbon, they will need to adopt new technologies which will themselves need to be insured. Furthermore, if we are able to align ourselves to customers that are effectively transitioning rather than those that are not, we are likely to have a more successful customer base in the medium to long term. Climate risk considerations such as these will form part of the work of the new underwriting strategy team that has been created at TMK.

As well as our customers and invested assets facing climate transition risks, this issue is also likely to be experienced by our stakeholders. This includes our parent company through their own investments and underwriting customers, the regulator, and wider society as it transitions.

In operational terms, TMK does not see its business strategy as being significantly affected by the physical risks of climate change. There is a minor flood risk owing to TMK's office position in the City of London, but we do not own the asset and have demonstrated an ability to work effectively from home during Covid-19.

Reputational Risk has been considered in the context of key stakeholders to TMK's business, including our customers, current and future employees, and the wider society that we are engaged in. Given the varied stakeholder interests and the difficulty in quantifying such a risk, we undertook a reputational risk scenario test in the 2021 Annual ORSA Report, which has subsequently been reported to the TMKS Board, the ESG Committee and the Climate Group. The scenario explored the impacts of TMK falling out of line with other market competitors and becoming known as an insurer of high carbon emitting projects. Activists raise concerns about TMK's approach and target several core customers, leading to their non-renewal of risks and a subsequent loss of premium. Similarly, Lloyd's and TMK's parent receive negative press attention and current and prospective staff see TMK as failing to live up to its values of being a 'Good Company'.

The scenario analysis led to the identification of several mitigations to be put in place to prevent such a scenario occurring, such as effectively developing and communicating an approach to the underwriting of carbon-intensive risks. This has begun to take place through the development of Board-approved Climate Risk Appetites for underwriting in Q2 2021.

As mentioned above, TMK have highlighted both the Physical and Transition risks that are likely to affect our Investment portfolio. The investment asset allocation strategy is considered and approved at the TMK Group Investment Committee, which is held on a quarterly basis. ESG-related metrics have been discussed and disclosed at this Committee since Q1 2021.

TMK use two main asset managers, BlackRock and New England Asset Management ("NEAM") to manage the

investment portfolios of TMK, subject to certain restrictions expressed in investment guidelines. The portfolios predominantly consist of short-dated, investment grade, government and corporate bonds, absolute return fixed income bond funds and no equities. The implications of climate change to these short-dated, investment grade investments (where the average duration is around 2 years), is likely to be minimal. However, appropriate ESG rating and KPIs are being generated by our external asset managers and monitored and discussed on a quarterly basis.

Through discussions that have taken place at the Climate Group and ESG Committee in particular, these evaluations of climate implications have led to strategic action to manage our risks. A limit has been introduced for underwriting premium in high transition risk areas, while actions have been identified to improve our understanding of the physical risks of climate change to our underwriting liabilities through scenario testing. Reputational risk evaluation has led to action to manage our underwriting of high emission products, as highlighted above, while a developed understanding of transition risks has led to the introduction of a limit on high and severe ESG rated assets in our portfolio, as well as a cessation of investing in certain high emission sectors e.g. coal, Arctic exploration and oil sands.

The opportunities that have been identified through transition risk evaluation has led to action to identify underwriting opportunities associated with green technology development (see section 5.1/5.2). Indeed, a target has been set to explore and develop a certain number of green-related products over a three-year period.

*Source: TMKS 2021 Annual ORSA Report; Q2 2021 ORSA Lite Report; TMKS 2020 Annual ORSA Report*

## 2.2 Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders

### Lloyd's / The Corporation of Lloyd's

#### Corporation facing

##### Climate risk metrics: KRIs

The Corporation is actively considering a number of climate Key Risk Indicators (KRIs) that will be embedded into the risk appetite framework before the end of 2021. During 2021, the Risk function facilitated workshops with teams across the Corporation that are managing risks that could potentially be heightened due to climate change. The aim of the workshops was to consider climate risk and how it impacts our existing risk categories.

If, following the workshops, it was agreed that climate change has the potential to materially impact a risk category, we committed to identifying metrics (new or existing) that allow the risk owner to monitor the risk.

Further quarterly reporting against risk appetite and KRIs will be improved later this year as climate specific metrics are embedded into the risk appetite reporting process.

More details around the Corporation's management of climate-related risks are provided under sub-principles 1.1, 1.2 and 3.1.

##### Environmental initiatives

Following the publication of Lloyd's Environmental, Social and Governance Report in December 2020, we have made clear commitments related to the most environmentally damaging activities as well positive commitments to support the transition to a greener economy. Progress towards meeting these commitments is being assessed.

The corporation recognises the environmental risks and impacts posed by its own operations, and accordingly has measured its operational greenhouse gas (GHG) emissions over the past 13 years (more detail on operational emissions is outlined under sub-principle 4.1-4.4). These measurements have enabled us to track historical trends over time. Lloyds' absolute carbon footprint has fallen by 27% year on year, and 127% since the 2013 baseline.

- 14,449 tCO<sub>2</sub>e in 2013
- 8,364 tCO<sub>2</sub>e in 2019
- 6,104 tCO<sub>2</sub>e in 2020

Carbon intensity per person has reduced from:

- 2013: 16.5 tCO<sub>2</sub>e/FTE
- 2019: 7.3 tCO<sub>2</sub>e/FTE
- 2020: 5.6 tCO<sub>2</sub>e/FTE

More details on the Corporation's environmental and greenhouse gas management initiatives are provided under principle 4.

##### Incorporating climate-related metrics into remuneration and practice

A risk underpin is performed each year, through which the CRO provides an opinion on notable risk issues to the Remuneration Committee, allowing the Committee to make any adjustments to the variable remuneration of staff. It is through this mechanism that adjustments to remuneration can be made, for example, if risk owners fail to take appropriate action to manage the risks from climate change.

#### Market facing

##### Responsible investment strategy

Future investment decisions will be supported by external ESG scoring, including climate-related metrics where available. This is done through the use of external ESG scoring platforms where available, and internal analysis to assess companies. Potential investments that are low scoring will be rejected unless assessment shows they have the potential for future improvement in terms of their forward looking guidance. ESG scoring is monitored regularly to identify if investments meet our standards. Lloyd's also monitors ESG approaches in the wider financial market to ensure best practices are adopted.

Over the reporting year Lloyd's has continued with its approach for screening investments based on the major sources of revenue, as part of our exclusion policy for assets that generate in excess of 30% revenue from fossil-fuel-based activities such as new investments in coal power plants or coal mines. Lloyd's has also begun work (along with 10 Managing Agents) on the Bank of England's CBES climate stress test on the Lloyd's chain of security.

It is also important to note that although the Corporation attempts to ensure that investments are made in line with these principles, incorporating other objectives remains key such as achieving return targets.

Evidence also applies to principle(s): 1.1, 1.2, 3.1, 4.2, 4.3.

Source: *The Corporation of Lloyd's*

### Lloyd's / The Market / Beazley

The Board sets the annual risk appetite for natural catastrophe risk, which takes into account a number of factors including the current rating environment, the expected profitability of the group, the amount of capital and the amount of risk from natural disasters. Realistic Disaster Scenarios are also used to calculate losses from natural disasters with the current suite of scenarios including a wide range of perils and regions including windstorms in the Gulf of Mexico, Florida, Europe. The annual business planning process and the Incubation and Product Development team help identify opportunities, new products and potential gaps in the market. Metrics are maintained to measure the number of new products and new ideas developed over the course of the year.

Monitoring of the natural catastrophe risk appetite is performed on a monthly basis by the Exposure Management Group (EMG) and reported to the Underwriting Committee and Executive Committee monthly and to the Board quarterly. Reporting is performed at an overall group level as well as by, legal entity, division and by peril to enable trends and performance to be identified and monitored. Natural catastrophe models are used to facilitate the estimation of losses from natural disasters, such as hurricanes. The models produce losses by calculating the hazard (by using factors such as wind speeds, the forward moving speed of the hurricane and storm surge), the assets insured (building type and use, the value of the assets), calculating the damage to buildings, contents and business interruption and estimating losses to insurers by applying the financial terms of the insurance contracts.

Beazley considers the impact of climate change on its asset portfolio by incorporating Environmental risks as part of its wider consideration of ESG metrics in its investment process. ESG ratings and research provided by a specialist supplier are integrated into our analysis to assess the degree to which enterprise value is at risk. A qualitative assessment is undertaken to determine the

Annual policy renewals allow underwriters the opportunity to regularly assess risks for short-tail business. In addition to the regular renewal process MS AUL conducts an annual strategic review for each class. In 2021 underwriters were required to complete a PESTEL analysis to gauge macro-environmental factors to assess how they influence the operating environment. The PESTEL analysis was deliberately chosen as it explicitly calls out the 'Environment' as one of the six factors for

extent of exposure to ESG factors and the strength of the company in the management of these risks. A minimum standard for ESG performance is defined and companies not meeting the required standard will be excluded from the approved list of issuers. The analysis also includes a consideration of the sustainability of each company with regard to the potential decline in demand in specific sectors. In 2020 we enhanced this process and now track the carbon intensity of our investments. We will report our progress against this baseline metric at the end of 2021 and use the information to help set targets for subsequent years.

Beazley completes a number ESG reports sent on behalf of shareholders/key stakeholders. One example is the Carbon Disclosure Project (CDP) report where we disclose data on climate change and ESG issues. Beazley were able to demonstrate year on year improvement in performance against the CDP criteria and aim to further improve the score in 2021.

Source: *Beazley*

### Lloyd's / The Market / MS Amlin Underwriting Limited

#### Underwriting

The increase in frequency and severity of claims (physical and liability) could cause deterioration of loss ratios, if not factored into pricing and risk selection, plus increased aggregation risk in particular sectors, geographies and asset classes.

MS AUL, operates through six underwriting departments, with each one hosting a variety of classes. Potential impacts from climate risk on the underwriting portfolio were assessed as part of the climate risk strategic review and are summarised in the table below. Factors contributing to the level of risk include increased physical damage claims, due to changes in frequency and severity of extreme weather, and liability claims as businesses are expected to meet new standards on corporate responsibility combined with pressures from governments and regulators.

Annual policy renewals allow underwriters the opportunity to regularly assess risks for short-tail business. In addition to the regular renewal process MS AUL conducts an annual strategic review for each class. In 2021 underwriters were required to complete a PESTEL analysis to gauge macro-environmental factors to assess how they influence the operating environment. The PESTEL analysis was deliberately chosen as it explicitly calls out the 'Environment' as one of the six factors for



review. Underwriters were asked to consider what environmental risks might influence their portfolios and determine mitigation strategies. This review has encouraged underwriters to develop an individual and careful assessment of the situation and how climate risk influences their specific class of business. Underwriters will harness this insight so that they are able to design a suitable strategic response.

Department	Potential impacts from Climate Risk	Climate risk type
Property	HIGH	Physical and Transition
Natural Resources	HIGH	Physical and Transition
Reinsurance	HIGH	Physical and Transition
Casualty	MEDIUM	Liability
Marine	MEDIUM	Physical, Transition and Liability
Crisis Management	MEDIUM	Physical & Transition

## Lloyd's / The Market / MS Amlin Business Services

### Investments

Driven by a wide range of investment stakeholders implementing new ESG criteria, asset valuations are expected to be volatile. Plus, physical risk will impact assets and business performance, resulting in a loss of asset value.

MS Amlin Investments have used the set of climate change impacts, supplied for the climate risk section of the 2019 PRA General Insurance Stress test (GIST), to form the basis for the development of a climate risk module that is being integrated into existing investment architecture and reporting. MS Amlin are also actively engaged in preparing for the Climate Biennial Exploratory Scenario (CBES). It is anticipated that the work done in completing this regulatory submission will prove invaluable in further shaping our investment architecture and reporting. MS Amlin expects its ability to disseminate a variety of climate related data sources to be of particular use with the CBES submission, given the indications that it will be a less prescriptive activity than the GIST with a greater emphasis on in-house climate risk analysis and data interpretation.

The infrastructure includes a database as well as several proprietary in-house tools and dashboards that provide an overview at a legal entity level, and asset class risk allocations alongside additional analysis. It is an area

under continual development and more metrics will be available in the coming year. More recently MS Amlin Investments have expanded the analysis to illustrate climate risk on a country and sector allocation basis, which can now isolate individual holdings. The analysis also encompasses monthly historical trend analysis for the past three years.

The "No Further Action" scenario (GIST 2019 Physical Scenario C) value is highlighted as a key climate risk metric to be monitored within our proprietary dashboards. This conservative "BAU" scenario reflects a failure to drive any worldwide improvements in climate policy, with the modelled result being a temperature increase in excess of 4°C (relative to pre-industrial levels) by 2100.

The results of applying the other Physical and Transition risk scenarios from the PRA GIST to MS Amlin's portfolios are also included in the dashboards along with further supporting climate metrics based on publicly available climate risk data and research from various sources. These additional metrics are typically given as exposure weighted absolute values.

The additional metrics include:

- **Country by country climate risk vulnerability analysis** based on the "Fragile Planet" climate research performed by HSBC. As well as a broad climate vulnerability score each country is assessed according to their likelihood to experience physical risk from climate change and their readiness to cope with it.
- **Water stress metric** calculated using data obtained from the World Resources Institute who publish yearly water usage figures as a percentage of the amount introduced into an individual countries water cycle. This is useful as a proxy measure of the ability of a country to deal with sudden drought conditions.
- **Coastal flood risk metric** calculated using data obtained from Climate Central (a non-profit organisation bridging the scientific community and the public). They provide an average displacement figure for each country per year in thousands of people. This provides a useful measure for the effects of rising sea levels.
- **River flood risk analysed** using data from the Deltares Aqueduct river flood model. This is also provided as a population affected figure for each country.
- **Wildfire risk** monitored using damage per country (in \$m) data obtained from the Centre for Research on Epidemiology of Disasters (CRED) "EM-DAT" database.
- **Carbon Emissions.** Calculated per country as a percentage of total global emissions.

In-house research continues not only into further supporting climate risk metrics suitable for inclusion into existing architecture, but also into how the existing data can be blended with additional economic and policy measures. This will allow our investment tools to reflect the climate risks facing companies and countries in our portfolios and their strategy in tackling them.

At present climate-related metrics are not explicitly incorporated into the remuneration policies of MS Amlin's external managers and are not a factor in major allocation/de-allocation decisions. Significant improvements in the coverage and consistency of data would be required before such policies could appropriately be introduced.

With the data analysis and policy formation still in its infancy, MS Amlin are not yet ready to describe associated performance and targets. Whilst it may be acceptable to set very high targets, they must not only be achievable, but also realistic. Once the data has been gathered and fully analysed, MS Amlin will be much better placed to respond.

Source: MS Amlin

## Lloyd's / The Market / QBE / Implications of climate change issues for business performance and key stakeholders

### Environmental and Social Risk Framework

Climate-related risks and opportunities influence our strategy, including our products and services strategy and appetite for exposure to some sub-sectors of the energy sector. This is evident through the development of our Environmental and Social (E&S) Risk Framework in 2020, which outlines our commitment to invest in business opportunities with positive environmental impacts and actively mitigate environmental risks.

Our commitments as outlined in our E&S Risk Framework and the time horizons we have set out include:

- not invest directly in thermal coal companies;
- no new direct insurance services for new construction projects for thermal coal mines or power stations or thermal coal transport infrastructure, except for statutory or compulsory insurance; and
- phasing out all direct insurance services for thermal coal customers by 1 January 2030, except for statutory or compulsory insurance.
- from 1 January 2022, no insurance to new construction of oil sands projects

- from 1 January 2022, for existing companies with 30% or more revenue from oil sands and Arctic drilling with 30% or more revenue from oil sands and Arctic drilling, QBE will only provide insurance where a company is on a pathway consistent with achieving the Paris Agreement
- no direct investments in oil sands and Arctic drilling project

As of 1 January 2030, for companies with 60% or more revenue from oil and gas extraction, QBE will assess whether the company is on a pathway consistent with achieving the Paris Agreement, and decline to provide insurance where this is not the case. The threshold will be reduced to 30% from 1 January 2040.

### Net zero commitment for Investments

In 2020, we committed to achieving net zero emissions by 2050 in our investment portfolio and became the first Australian-headquartered insurance business to join the UN-convened Net -Zero Asset Owner Alliance. Joining the Alliance means QBE will take into account the best available scientific knowledge and collaborate with other global institutional investors on developing standard industry frameworks.

Over the coming years, we will explore strategies and approaches to align our investment portfolio with the objective of the Paris Agreement to be net zero emissions by 2050, including setting and communicating our interim targets.

Our fixed income portfolio represents approximately 90-95% of our overall investment assets. Our guidelines apply to all assets under management, including our non-corporate and corporate fixed income investment process. We apply an ESG assessment to each corporate entity, considering independent external ESG ratings and portfolio manager assessment. Selection and monitoring include materially negative ESG developments. All issuers are subject to the Group ESG Risk Standard, Group Energy Policy and Global Sanctions Policy, while positive screening for leading ESG performance is applied to determine the investment universe for fixed income.

In 2020, QBE has continued to identify metrics and targets to measure and monitor climate-related risks and opportunities relating to our investments and underwriting activities.

In 2020 we reported on the following our performance against the following strategic targets:

Target	2020 performance
Investment portfolio emissions	N/A
Impact investing ambition - US\$2 billion by 2025	US\$1.1 billion million

We also include our operational targets in QBE's Annual Report and Sustainability Report, as shown in the extract below.

We are progressing well on our commitment to phase out all direct insurance services for thermal coal customers by 2030, at the latest. We continued to maintain zero direct investments in thermal coal and remain focused on our commitment to source 100% renewable electricity for our operations by 2025. Our Group Energy Policy has been integrated into our Environmental and Social Risk Framework as part of the broader suite of sector positions.

### Metrics and Targets

We continue to evolve our climate-related metrics and targets. Our aim is to establish metrics and targets that are relevant and reliable, and that will drive performance and transparency against our climate-related goals. During 2020, we have maintained our carbon neutrality and achieved our energy use, air travel and science-based emission reduction targets ahead of time. While COVID-19 had a substantial impact on our business operations and target performance, we expect to achieve our 2021 targets when we return to a more normal operating environment in 2021. In 2020 we committed to achieving net zero emissions by 2050 in our investment portfolio. Over the coming years we will set interim targets and progress against these targets will be included as part of our annual reporting. Please refer to section [4.2] of this report for further details of our climate-related metrics and targets.

In 2019 QBE also became the first Australian-headquartered insurer to join the RE100 initiative, committing to source 100% of our electricity requirements from renewable sources by 2025.

A component of our Group Executive Committee's (GEC) short-term incentive (STI) outcome is determined with reference to the achievement against strategic priorities. 75% of our Group Chief Risk Officer's STI outcome, and 35% of the outcome for all other members of the GEC, is determined in this manner. QBE's 2019 strategic priorities include managing risk (including implementation

of our Climate Change Action Plan) and operating sustainably (including the effective management of climate-related risks and opportunities). Specific roles within QBE that are responsible for integrating the identification and management of climate-related risks into business processes and developing, managing and implementing the strategy to address the environmental impacts of our operations include QBE's Head of ESG Risk and QBE's Head of Environment respectively. The performance objectives for these roles, and their achievement of those objectives, is a key reference when determining incentive outcomes.

Evidence also applies to principle(s): 1.1, 2.3, 3.1

Source: 'Our approach to climate change' presentation (available here: <https://www.qbe.com/about-qbe/sustainability/climate-change>); QBE Annual Report 2020; Group Energy Policy.

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe believes that understanding and pricing for climate change is critical to the long-term sustainability of the (re)insurance industry. This is not just the case for hurricanes, but also for precipitation events, flooding risk and wildfire frequency and severity. In each of these phenomena, RenaissanceRe believes there is a need to focus on physical simulations, applying numerical modeling techniques instead of past approaches that are solely informed by historical data.

The team of scientists, meteorologists, and engineers at RenaissanceRe Risk Sciences works closely with RenaissanceRe's underwriters and risk managers to build proprietary catastrophe models that capture the physics and future impact of climate change. RenaissanceRe's proprietary analyses can lead to large differences in its understanding of this risk compared to others. For example, the RenaissanceRe Risk Sciences team's view of risk of Northern California wildfires relative to leading vendor models is heavily differentiated due to climate change. RenaissanceRe believes the reinsurance industry can be a force for positive social change through its role in ameliorating the impact of climate change and encouraging reductions in the negative externalities it imposes. By pricing for climate change, RenaissanceRe reinforces what it believes is a need to think differently about climate risk and encourage prevention and protection against its impact.

RenaissanceRe has several initiatives to track key quantitative and qualitative metrics to measure and manage climate risk across the various business functions, including:

### Investments

- **Embedding:** RenaissanceRe engages with external vendors to continually develop its approach to ESG investing.
- **Financing the Transition to a Low-carbon Economy:** RenaissanceRe's investments team continues to seek new opportunities to decarbonize its portfolio, including becoming a seed investor in BlackRock's US Carbon Transition Readiness Fund in 2021, which was the largest ETF ever launched.
- **Exclusions:** RenaissanceRe has put in place selective exclusions on companies that can have a harmful impact on the environment or a negative impact from a broader ESG perspective.
- **Intensity Assessment:** RenaissanceRe utilizes MSCI's Climate Metrics tool to assess the carbon intensity of its portfolio, allowing it to identify carbon hotspots to inform future decision-making.
- **Scenarios:** RenaissanceRe utilizes MSCI's Climate Value at Risk ("CVaR") tool to assess climate risk under various scenarios.

Reference sub-principle 3.1 for details of RenaissanceRe's measurement and disclosure of climate-related risks in its asset portfolio.

### Underwriting

- **Assessment:** RenaissanceRe leverages multiple data sources to conduct research into various risks and is continually updating its data universe to measure the implications of climate change. Through its risk management framework, RenaissanceRe identifies areas of the portfolio that are exposed to enhanced physical, transition or liability risk that require additional analysis.
- **Impact Analysis:** As described in sub-principle 2.1, the RenaissanceRe's Risk Sciences team segments the impact of natural catastrophe perils to isolate the impact of climate change. Risks are continually tracked and updated for those perils. For natural catastrophes, the team has developed an innovative approach to managing the physical risks of climate change which tracks the scientific data for various perils. The team critically reviews data with a focus on identifying material perils where most scientific

thought suggests a current or future shift in the physical hazard and alters its risk view accordingly.

- **Claims Notifications:** RenaissanceRe's claims systems track climate notifications to provide further insight into exposures and emerging trends related to climate-related litigation.

*Source: RenaissanceRe Syndicate Management Ltd*

### Lloyd's / The Market / The Hartford

In addition to the climate-related risks described above, The Hartford also identifies, measures, and discloses the potential implications of climate-related issues on the enterprise and key stakeholders, as outlined in the Company's [Statement on Climate Change](#).

The Company closely monitors the scientific literature on climate change, such as the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) to help identify climate change risks with direct business implications as well as those with downstream effects by impacting public policy.

### Insurance Operations

#### Climate Change Risks:

Our insurance operations expose us to claims arising out of catastrophes caused by various unpredictable natural events frequently attributed to climate change including, among others, earthquakes, hurricanes, hailstorms, severe winter weather, windstorms, fires, and tornadoes. The geographic distribution of our business subjects us to catastrophe exposure for events occurring in a number of areas. Any increases in the values and concentrations of insureds and property in these areas would increase the severity of catastrophic events in the future.

In addition, changes in climate and/or weather patterns may increase the frequency and/or intensity of severe weather and natural catastrophe events potentially leading to increased insured losses. Potential examples include, but are not limited to: an increase in the frequency or severity of wind and thunderstorm and tornado/hailstorm events due to increased convection in the atmosphere, more frequent and larger wildfires in certain geographies, higher incidence of deluge flooding, and the potential for an increase in frequency and severity of largest hurricane events.

In the event of one or more catastrophes, policyholders may be unable to meet their obligations to pay premiums on our insurance policies. Further, our liquidity could be constrained by a catastrophe, or multiple catastrophes, which could result in extraordinary losses. In addition, in part because accounting rules do not permit insurers to



reserve for such catastrophic events until they occur, claims from catastrophic events could have a material adverse effect on our business, financial condition, results of operations or liquidity.

The amount we charge for catastrophe exposure may be inadequate if the frequency or severity of catastrophe losses changes over time or if the models we use to estimate the exposure prove inadequate. In addition, regulators or legislators could limit our ability to charge adequate pricing for catastrophe exposures or shift more responsibility for covering risk.

### **Climate Change Opportunities:**

Climate change also presents opportunities for our business. As changes in weather patterns emerge, The Hartford has the opportunity to better position our products to offer further protection to our customers. The Hartford already offers a full range of insurance products that help customers who want protection from weather events and their consequences, including protection from damage that could occur from fires brought on by drought, snow and ice, severe heat, changing weather patterns, wind and numerous other perils. Offering such protection, and then managing that risk, is at the heart of what insurers do.

To the extent that new regulations related to climate change drive customers to more environmentally friendly products, The Hartford could experience an increased uptake in its offerings of insurance products that service this area. For example, the company's renewable energy practice offers end-to-end coverage for the wind, solar and biomass industries, from research and development through construction, to production. If future regulation encourages renewable energy use, this could present opportunities from which The Hartford could benefit.

Similarly, if regulation encourages commercial vehicle owners and individuals to drive hybrid or electric vehicles, The Hartford could benefit through its current product offerings in these areas. As the first insurer to offer coverage of garage EV charging stations in its homeowners' policies, this is also an area where regulation may assist.

To the extent that commercial entities are required or encouraged to build green buildings or replace equipment with more energy efficient equipment in order to limit contributions to climate change, The Hartford's products that offer these coverages could benefit. Likewise, any regulations that encourage individuals to build greener houses or use hybrids or EVs could drive further uptake for the products that The Hartford offers.

Similarly, opportunities exist for The Hartford as public and private entities enter into construction projects to

address changes in physical climate. Projects addressing these changes include, but are not limited to: infrastructure adaptability and improvements, flood control, shoring and erosion control, waterproofing, and green building. Insurance buyers looking to adequately transfer risks associated with these projects create business opportunities for The Hartford. Opportunities also exist for The Hartford as more construction projects implement Green Performance Contracting (GPC) standards. GPC changes the traditional construction approach with respect to materials, equipment, design, methodology, and energy efficiency. Underwriting GPC and developing insurance products to address its use is an inherent opportunity for The Hartford which has resulted from changes in physical climate.

Opportunities can also arise as carbon taxes are imposed. To the extent that carbon taxes result in growth for the wind, solar, fuel cell or other renewable energy sectors, The Hartford's Renewable Energy Insurance Practice could experience considerable growth. And to the extent that such taxes affect the behavior of small and medium-sized businesses and individuals regarding their purchasing decisions on hybrid or electric vehicles, The Hartford's current product line in these areas could experience increased growth. As The Hartford leverages its electric vehicle charging station infrastructure, we could benefit to the degree that carbon taxes lead to growth of the electric vehicle industry.

Catastrophe modeling and other analytical tools incorporating climatic assumptions are significant inputs into pricing and underwriting that are part of our financial projections (1 to 3 year horizon). However, the analytical tools and catastrophe models which are significant inputs into pricing and underwriting are calibrated over a longer period of time (e.g. 5 to 10 years) recognizing historical experience over a longer period, as well as expectations regarding the impacts of climate change on future projections. In recent years, The Hartford has worked with catastrophe vendor modeling firms to reflect changing intensity and frequency of storms, including the inherent volatility of weather or climate pattern changes.

### **Investments**

During the past few years, The Hartford Investment Management Company ("HIMCO") has taken steps to develop a framework for assessing The Hartford's investment portfolios and the implications of climate change on its holdings. First, The Hartford and HIMCO developed the [ESG Investment Policy Statement](#) in 2018 as a guideline when making investment decisions. The policies are posted on both The Hartford's and HIMCO's websites.

For day to day implementation, ESG factors have been incorporated into HIMCO's proprietary credit research

platform where analysts provide assessments and commentary as applicable for each active portfolio holding. Analysts use a wide variety of information including company regulatory filings, ESG statements, third party reports, and discussions with management to consider the possible ESG-related risks or benefits of each investment holding to the extent applicable. HIMCO utilizes this information as an input into its assessment of current value for each investment and in consideration for how investments are likely to perform in the future. HIMCO reevaluates ESG factors on a regular basis and a changing ESG risk profile could impact the time horizon of a given holding. The integration of ESG factors into HIMCO's proprietary research platform provides HIMCO with reporting capabilities to identify ESG attributes of the portfolios.

As a diversified financial services company, The Hartford is also exposed to climate change-related risks in its capacity as an investor. The Hartford's general account investment portfolio holds predominantly fixed-income assets. Therefore, its primary risks are credit-related: corporate and sovereign debt obligations, commercial real estate mortgage loans, and a variety of other fixed-income securities. Nonetheless, the global and regional consequences of climate change play a role in our evaluation of the creditworthiness of specific issuers and industries.

Risk (and opportunity) factors include the following:

- Changes in regulatory regimes (e.g., emissions controls, technology mandates);
- Changes in supply/demand characteristics for fuel (e.g., coal, oil, natural gas);
- Advances in low-carbon technology and renewable energy development; and
- Effects of extreme weather events on the physical and operational exposure of industries and issuers.

Such risk factors may influence investment strategies and decisions in a variety of ways:

- Government regulation may have negative or positive consequences for certain industries. For example, increasingly stringent regulation on stack emissions of coal-fired technologies will increase the costs of existing technologies and affect coal economics. More generally, government legislation directed at polluting industries must be scrutinized for the impact on each industry's economics. As polluting industries become more expensive to

investment holdings were identified that are subject to restriction and will decrease over time, including \$253

finance, other low-carbon and renewable energy sources are expected to benefit from increased demand and potential government subsidies.

- Climate change may have a direct impact on certain investments. For example, commercial real estate in certain locations may become less desirable due to climate change effects (e.g., rising sea levels, increased hurricane severity), negatively affecting a property's value as collateral for a commercial mortgage loan. Similarly, climate changes of a regional nature can influence the inflation outlook and/or creditworthiness of specific emerging market issuers (e.g., reduction in rainfall can cause food prices to rise, increasing inflation).
- The Hartford recognizes that the combination of consumer demand, legislative and regulatory activity and technological advancement may create substantial opportunities to promote environmentally responsible activity while at the same time enhancing value for The Hartford's shareholders.

In addition to the implications of climate-related risks outlined above, HIMCO conducted a Scope 3 analysis of The Hartford's portfolio holdings. With over 12,000 CUSIPs held in the Company's portfolios, the exercise is a significant one. It is clear that certain asset classes and types of investments will not be covered by this Scope 3 process, either because there is no climate-change implication or there is no information with respect to a particular issuer. The results of this analysis will be published in The Hartford's CDP response published July 28, 2021 and will provide further insight into the climate-change implications of The Hartford's portfolios.

### Coal and Tar Sands Policy

The Hartford announced a [Policy on Insuring, Investing in Coal, Tar Sands](#) in December 2019 stating that the Company will no longer insure or invest in companies that generate more than 25 percent of their revenues from thermal coal mining or more than 25 percent of their energy production from coal. The Company will also stop insuring and investing in companies that generate more than 25 percent of their revenues directly from the extraction of oil from tar sands.

After implementing the policy, The Hartford has since embedded it into the company's investing and underwriting guidelines. In 2020, The Hartford non-renewed 50 policies in response to the Coal and Tar Sands policy and as a result, the company has largely exited offering coverage in this area. In addition, \$622 million (book value as of December 31, 2020) of

million in publicly traded investments which will be divested by the end of 2023.

**Support Links:**

- [TCFD Report](#)
- [CDP – C2.1b, C2.2, C2.4](#)
- [Statement on Climate Change](#)
- [SASB Report](#)
- [The Hartford's 10-K](#)

Source: *The Hartford*

**Lloyd's / The Market / Tokio Marine Kiln / Implications**

KPI metrics have seen a process of designing, discussion, and refinement at the Climate Group in 2020 – 2021. They are now agreed and reported through to the ESG Committee quarterly. These metrics form a key part of measuring TMK's position against climate-related issues, helping to drive action toward managing and lowering our exposure to the downside risks associated with climate change.

Following the designing of these metrics at the Climate Group's workstreams, the ESG Committee and TMKS Board have formally approved a wider set of risk appetite statements and metrics in relation to climate change. These risk metrics are being embedded in the Risk Appetite Framework at TMK. They will be reported and discussed by the Board quarterly, as well as the Climate Group and ESG Committee, with challenge given as appropriate and remediation actions to be agreed where necessary.

**Underwriting risk metrics:**

					Metrics and implied rating as at:			
Tier	Statement:	Green	Amber	Red	20Q3	20Q4	21Q1	
2	GWP limits on insureds with direct involvement in: (a) thermal coal mining, (b) thermal coal power plants, (c) tar sands or (d) arctic development	< 0.5% GWP	0.5% to 1.5% GWP	> 1.5% GWP	-	-	0.9%	
2	GWP limits on business considered to be carbon-intensive	< 35% GWP	35% to 40% GWP	> 40% GWP	12.6%	12.8%	14.1%	
3	We will not write new-to-Lloyd's risks in the following sectors: (a) thermal coal mining, (b) thermal coal power plants, (c) tar sands or (d) arctic development	No Breaches	Potential Breach	Confirmed Breach	n/a	n/a	n/a	
3	We will not write certain risks which have been agreed by the ESG committee as being out of appetite	No Breaches	Potential Breach	Confirmed Breach	n/a - mechanism not used to date			
Other	Scope 3 emissions from underwriting, through examination of carbon footprints of TMK insureds	This is under development (see Section 5.1/5.2)						
Other	Exploration and launch of innovative climate-related products	Explore 3-5 product opportunities per year and launch 2-5 over a 5-year period						

We have undertaken various other assessments of underwriting risks relating to climate, including looking at transition risks by:

- Identifying premium by sector across TMK's classes of business
- Examining sectoral contributions to CO2 equivalent emissions

This work has allowed us to identify the relative transition risks of TMK's varied lines of business, understanding how different customers will be likely to be affected by climate change.

We are also in the process of running scenario testing through the PRA's Biennial Exploratory Scenarios relating to climate change (see section 2.3).



**Investment risk metrics:**

Tier	Statement:	Metrics and implied rating as at:					
		Green	Amber	Red	20Q3	20Q4	21Q1
2	Our investments linked to companies which have greater than 30% of revenues in four areas: (a) thermal coal mining, (b) thermal coal power plants, (c) oil sands or (d) arctic development shall not exceed 3% of Total Global Assets.	< 2%	2% to 3%	> 3%	0.6%	0.5%	0.5%
2	Proportion of Total Global Assets for TMK which are ESG-rated as High or Severe by Blackrock or NAEM (or equivalent)	< 12.5%	12.5% to 17.5%	> 17.5%	3.8%	4.0%	3.1%
3	We will not make new investments linked to companies which have greater than 30% of revenues across the sum of the four areas: (a) thermal coal mining, (b) thermal coal power plants, (c) oil sands or (d) arctic development	No Breaches	Potential Breach	Confirmed Breach	n/a	n/a	n/a

TMK's asset managers integrate "ESG" factors into their decision-making process when selecting investments. They have continued to increase their efforts in this regard over the previous year. BlackRock are developing a proprietary system for scoring and measuring ESG factors and NEAM have embedded their use of Sustainalytics to provide extensive research and ratings on corporations.

**Operational Risk metrics:**

Tier	Statement:	2021 RA thresholds			2022 target relative to 2019
		Green	Amber	Red	
3	Reduction in Scope 1 & 2 carbon emissions	>5%	5% to 3%	<3%	10%
3	Reduction in paper usage	>25%	20% to 25%	<20%	50%
3	Reduction in airmiles	>12.5%	10% to 12.5%	<10%	25%
3	Reduction in food wastage	>5%	5% to 3%	<3%	10%

**Strategic and Reputational Risk Appetite statements:**

Tier	Existing Statement with updated text in red:
2	We will ensure we continuously address key strategic opportunities and challenges for our business. We commit to ensuring we recognise, understand, discuss, and develop a plan of action to address any significant strategic issues in a timely fashion. This includes specific action to address the risks of climate change to our strategy. We will also seek to bolster our strategic position relative to peers on an ongoing basis.
1	We aim to maintain our reputation as a “Good Company” by acting ethically and responsibly in all our business dealings, and by actively monitoring our reputation with customers, regulators (PRA, FCA, Lloyd’s, JFSA), investors and members agents, brokers, and staff, across all our entities, taking early action to address any reputational issues.

To score these risk appetites, qualitative RAG scores are gathered through discussion with the CRO regarding Strategic risk, and with several Heads of Department connected to key external stakeholders for Reputational Risk. For the reputational risk statement, no additional red text has been added to the high-level statement. Instead, the representatives from each of HR, Head Office, Communications, and Compliance will be asked to explicitly consider and refer to climate when providing their justifications of their RAG ratings. This will support embedding of climate considerations within the existing Reputational Risk Appetite scoring.

**Charity & Inclusion Metrics:**

Tier	Statement:
Other	Contribute at least 20% of our overall charity budget on to supporting initiatives relating to climate change
	Increase employee participation to at least 5% of employees in climate-related activities by 2022
	Hold at least two climate-related awareness events a year

At TMK, all CSR related activities are shared on the company’s intranet to ensure employees are fully engaged. Furthermore, an external environmental consultant is brought in annually to measure the Co2 emissions, water usage, energy usage of the company in the various operating locations and to provide recommendation on areas of improvement (see section 4.1).

**Future development**

TMK’s Climate Risk Metrics as detailed above remain in their infancy, having been developed during 2020-2021. For the metrics we’ve identified, threshold tightening is likely to take place in many areas as we improve our understanding of the risks that the business is faced with (e.g. our limitation of high / severe ESG-rated assets).

There were a number of other metrics that were considered but have not yet been implemented:

- Clash risk between TMK’s municipal bond investments and the physical risk exposures within underwriting.
  - o Rejected given the immateriality of municipal bond investments within certain geographies at this stage.
- A credit risk metric to monitor any reinsurance programmes that we have that refuse to provide cover for certain risks that we face.

- Rejected given the immateriality at this time, but will be considered as our understanding of this risk develops.
- A TMK-wide net zero target and milestones.
  - Not included at this stage owing to challenges in identifying net carbon emission positions of insureds. This is a key area of development within our underwriting, as detailed in section 5.1/5.2.
  - *Similarly, a net zero operations target has not been included at this stage as a result of concerns around the calculation of offsets and the preference at this stage for continuing to make actual emissions reductions.*

Source: Framework for the Climate Group; Climate Group Update to the ESG Committee Q2 2021; TMKS Board Risk Appetite Proposal (Q2 2021); TMK intranet

## 2.3 Incorporate the material outcomes of climate risk scenarios into business (and investment) decision making

### Lloyd's / The Corporation of Lloyd's

#### Internal climate change scenario

The Risk Committee discussed the Corporation's ORSA in October 2020, which for the first time contained a climate change scenario.

The scenario looked at the potential impact on solvency due to accelerated impacts of climate change. It assumed that the impacts of climate change begin to change weather patterns sooner than is widely anticipated, leading to larger expected catastrophe claims in the coming years. This was then exacerbated by impacts on assets from transition risk and additional liability claims through increased propensity to litigate. The results of the scenario were reported to the Executive Risk Committee and Risk Committee to support further development of the climate risk framework.

#### Participation in Bank of England's CBES

During 2021, Lloyd's along with 10 of its Managing Agents is taking part in the Bank of England's Climate Biennial Exploratory Scenario (CBES) exercise, which will provide a detailed climate change stress test for the banking and insurance industry. This exercise will stress-test the resilience of the UK financial system to the physical, litigation and transition risks related to climate change through use of three scenarios, which each consider different climate pathways that may arise as a result of climate change and resulting global government actions. Lloyd's Society is providing a submission to this exercise, with input from select Managing Agents within the market.

As specified by the PRA CBES guidance, the CBES exercise sets out three scenarios, which are described at a high level below.

1. Early Action: The transition to a carbon-neutral economy starts in 2021 and continues through to the end of the scenario in 2050. Global warming is limited to 1.8°C by the end of the scenario (relative to pre-industrial levels).
2. Late Action: The transition is delayed until 2031 and must be more sudden and substantial in order to ensure that the global warming is limited to 1.8°C by the end of the scenario (relative to pre-industrial levels).
3. No additional action: No new climate policies are introduced beyond those which have already been enacted. Thus, the global temperature levels continue to increase, reaching 3.3°C by the end of the scenario (relative to preindustrial levels) by the end of the century.

The CBES scenarios are broadly consistent with those produced by the Network for Greening the Financial System ('NGFS'), though not identical.

As part of the exercise, the performance of the Corporation's Central Assets over a 30-year forecast period is modelled under three scenarios, with macroeconomic, financial, physical and transitional variable forecasts. Central Assets performance is modelled by forecasting individual security valuations under the various scenarios based on the sector or country of the issuer or equity holding. Given there are some holdings that do not fall within the countries that have been provided by the Bank of England, some assumptions are made for grouping of these to USD-based products. The results of this Central Assets modelling will be combined with the results from the 10

participating Managing Agents, to provide an overall view of climate resilience.

The scenario analysis can be used to understand Lloyd's resilience to climate-related risks by observing the impact on the current Central Assets as forecasted value-added of particular industries fall over the forecast period under each of the climate scenarios.

The results from the CBES stress testing work are still being generated but these results can be used going forward to ensure that Lloyd's Central Assets are optimised from a climate perspective to support firms that are transitioning to a low carbon model and also balancing this with ensuring minimum return requirements are met.

To support those Managing Agents taking part in the exercise, Lloyd's has produced a handbook to provide an optional framework for completing the exercise and help improve consistency in our submission.

Results from the CBES exercise for both Lloyd's Central Assets and the 10 Managing Agents will be finalised in November 2021, to show the high-level impact of these three climate scenarios. This is a learning exercise that will help Lloyd's understand its climate exposures and help build out monitoring capabilities with regard to these risks. Together with Lloyd's broader ESG and climate initiatives, these results are likely to guide Lloyd's climate-related decision making in future.

[Evidence also applies to principle\(s\): 1.1, 1.2, 2.1, 3.1, 3.2, 5.1, 5.2.](#)

*Source: The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

The board identifies risk, assesses risk and sets risk appetite. The business then implements a control environment which describes how the business should operate to stay within risk appetite. The risk management team review and challenges these assessments and reports to the board on how well the business is operating, using a risk management report. Central to the process for undertaking scenario analysis is the use of catastrophe modelling.

Catastrophe model vendors have incorporated different versions of their models to reflect natural climate variabilities. These different views of risk are analysed to understand the impact on our underwriting portfolio and risk appetite. To date, Beazley's climate risk scenarios have been limited to stress tests being performed to understand the impact of an increase in the number and the financial impact of natural disasters on our overall portfolio, the performance and adequacy of Reinsurance purchased and solvency of the business. Beazley

conducted three stress tests (first reported in the 2019 General Insurance Stress Tests (GIST) issued by the PRA), with a subsequent rerun in 2020. The outcomes of these tests were reported to Beazley's Risk and Regulatory Committee and the board within the Own Risk and Solvency Assessment (ORSA) report and also included in the 2020 report and accounts.

Beazley also partnered with a third party consultancy to help understand climate change modelling scenarios on our Business. The purpose of this partnership was twofold, firstly to aid our partner to develop their modelling software in order to bring it to market, secondly it was for Beazley to understand the risks associated from Climate Change. 50 sites were assessed across the USA to enable physical damage to be determined under varying climate change models. The information gained from this model has enabled a better understanding of how to approach detailed scenario modelling, as well as increasing awareness of Climate Change issues within the business.

Through the climate related risk workstream being led by the Senior Risk Manager, our approach to scenario analysis will develop over the coming months. This partly to meet the PRA CBES requirements, but also to further our understanding and drive management change. The workstream is working to identify the financial impact of climate related risk, through the use of models which will appraise the physical, transitionary and liability risks to the business. The outputs of this work will inform management decision making and will be detailed in Beazley's long term business plan.

*Source: Beazley*

## Lloyd's / The Market / MS Amlin Underwriting Limited

### Business

In addition to the scenarios related to the 2019 PRA GIST, MS AUL is developing further scenarios as part of the 2021 PRA CBES exercise, and reviewing methodologies for applying these scenarios to our existing natural catastrophe modelling frameworks. As part of our response to the PRA Supervisory Statement 3/19 these scenarios will be appended to existing strategic class review and governance processes, to set underwriting guidelines and risk appetite. Discussion continues in the Technical Pricing Steering Committee about the methodology and parameters required to embed scenarios into the existing Technical Pricing Framework.



Lloyd's / The Market / MS Amlin Business Services

Investments

MS Amlin Investments has developed a series of climate change scenarios in-line with the 2019 PRA General Insurance Stress test. These scenarios were used to quantify the potential impacts of climate change on portfolios from both a transition risk and physical risk perspective. The three scenarios reflect varying response to the Paris agreement targets:

- Scenario A: Sudden disorderly transition. Temperature increase below 2 degrees Celsius.
- Scenario B: Long-term orderly transition. Temperature increase below 2 degrees Celsius.
- Scenario C: Failed future improvements in climate policy. Temperature increase in excess of 4°C.

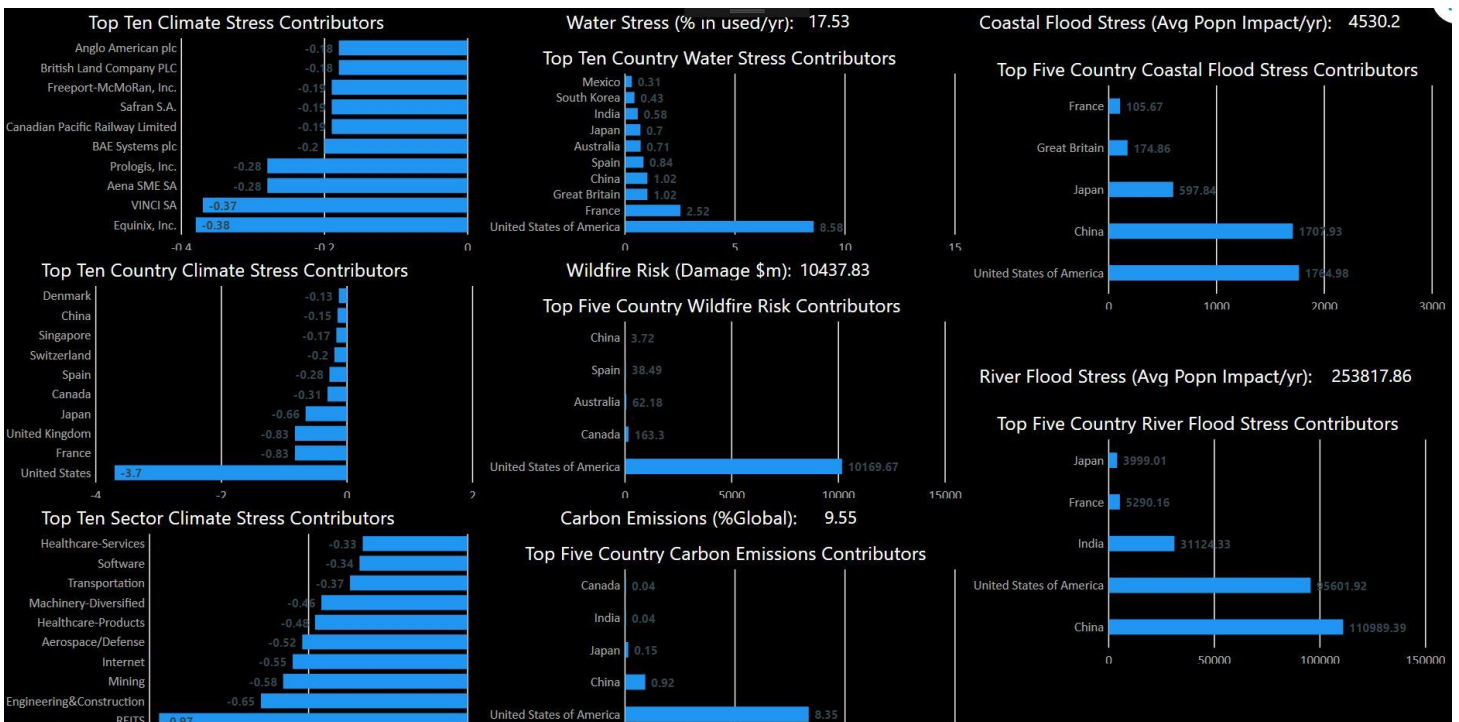
- Scenario C: Failed future improvements in climate policy. Temperature increase in excess of 4°C.

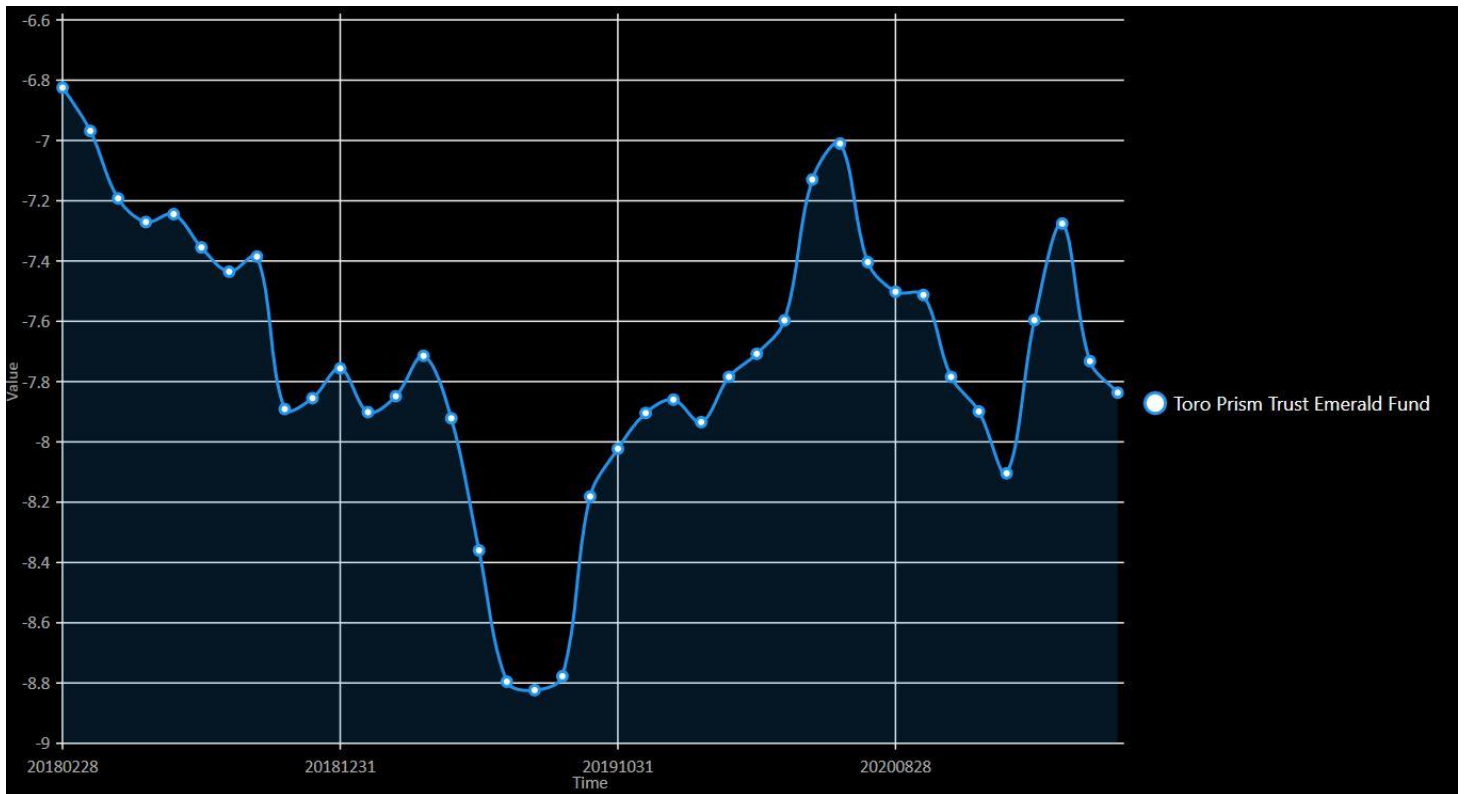
The scenarios have been used as the basis for the development of a climate risk framework that has been integrated into existing infrastructure. MS Amlin expects these scenarios to be further developed according to the findings from the CBES submission.

The physical risk figure from Scenario C is the main climate stress figure that has been incorporated (being potentially the highest risk outcome) and which is intended for inclusion into entity board reporting. It is understood that this metric is the most straightforward and conservative figure to use to communicate with boards.

The first screenshot below shows the climate risk module in one of our investment management tools, which illustrates the climate stress figures from the PRA GIST (and other supporting climate risk metrics) applied to our equity fund as of 01/06/21:

The second screenshot from the management tool presents a time series showing the changing impact of the Physical Risk Scenario C:





Source: MS Amlin

### Lloyd's / The Market / QBE / Climate risk scenario analysis

In 2019, in partnership with catastrophe modelling firm RMS, we assessed probabilistically the impact of hurricanes in North America and tropical cyclones in Australia, which represent some of our largest exposures to weather-related events. We considered impacts on our existing portfolio up to 2100 under scenarios consistent with a 2-3 °C global mean temperature rise. This initial analysis did not show material increases in our expected claims costs before 2050. During 2020, we continued to assess the impact, allowing for alternative emissions scenarios. We have also extended the analysis in partnership with RMS to other weather-related exposures in our portfolio, for example European Windstorm, and have assessed initially a liability scenario that looks at the consequences of climate change litigation on the Energy sector.

Our initial work supports the strong likelihood of a material increase in tropical cyclone-related claims under all scenarios. Annual claims cost related to hurricanes and tropical cyclones could go up by more than 50% in the second half of the century, with a wide variation in local impacts, and a rate of change that will depend on how the global community addresses this critical challenge. However, in the short to medium-term, the

impact on tropical cyclone claims will be difficult to assess due to the inherent volatility of cyclones, which have a relatively low frequency and large variability in cost driven by whether or not they make landfall and impact on population centres.

The output of the analysis was a report on the potential impacts to QBE from these perils for North America and Australia. We have started to adjust our catastrophe models to factor in the expected impacts of climate change until 2100. While we already have a robust quantification of QBEs exposure to weather events, this refinement of our models can provide insights into the magnitude and timing of the impact that climate change will have on our business. In the short-term, QBE will manage the high volatility of natural catastrophe claims by considering a wide range of event frequency and severity in our capital planning, and by deploying a comprehensive Group catastrophe reinsurance program.

Over the long-term we anticipate that the physical impacts of climate change - even under scenarios consistent with the achievement of the Paris Agreement - will result in our customers seeking increased insurance for the protection of their assets and the services they provide. We also recognise that over the longer-term, climate change will impact our customers and the communities that we serve. This may cause insurance

premiums to become unaffordable, especially for customers in areas more exposed to weather-related events, potentially resulting in a loss of revenue. In order to address this risk, QBE is engaging with external stakeholders, including national and local governments, to encourage adaptation and resilience measures against weather-related events.

During 2020, we continued to adjust our catastrophe models for a broader range of weather phenomena and geographies, and participate in the development of scenario analysis as part of the UNEP FI PSI TCFD Pilot project.

### General Insurer Stress Tests ('GIST')

The PRA's General Insurance Stress Test (GIST) is an exercise used to assess the market-wide impacts of specific scenarios, illustrating how losses would be borne by different firms, and explore individual firms' and market wide vulnerabilities. The 2019 assessments were exploratory in nature and helped inform QBE's methodological approach to quantifying Climate financial risks. Further work on climate change has taken place in 2020 and in 2021 in agreement with EO's Risk and Capital Committee. Please refer to section 2.1 for further detail.

Evidence also applies to principle(s): 1.1, 1.3, 1.4, 3.1

Source: QBE Annual Report 2020 (p.28-35).

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe believes that scenario analysis can be an effective tool to help size the financial risks of climate change. Scenario analysis requires assumptions about climate physical and transition variables that impact different company functions and exposures; these assumptions are about economic and sectoral impacts over time and require various data sets to provide accurate output. RenaissanceRe uses stress tests of risk representations, ceded decisions and capital adequacy to help understand uncertainty within its models and impact on key risk metrics, which RenaissanceRe believes will drive better informed risk decisions. RenaissanceRe laid the foundations for comprehensive climate change scenario analysis through its continuous monitoring and analysis of natural perils using its framework for understanding climate impacts (referenced in sub-principle 2.2). The framework considers the potential impacts of climate variables such as temperature rise, sea-level rise, extreme heat or precipitation levels and considers a range of outcomes for various economies, industrial sectors and climate variables.

As referenced in sub-principle 2.1, RSML was also invited to take part in the Bank of England's CBES to quantify, understand and mitigate climate exposure. The CBES uses three scenarios to explore the two key risks from climate change: the risks that arise as the economy moves from being carbon-intensive to net zero emissions (transition risks); and risks associated with the higher global temperatures likely to result from taking no further policy action (physical risks). The scenarios focus on predicted outcomes based on different future paths of governments' climate policies. Each scenario is assumed to take place over the period 2021–50 and the exercise considers two routes to net zero greenhouse gas emissions: an Early Action Scenario and a Late Action Scenario, as well a no-further action scenario.

Reference sub-principle 3.1 for further details of RenaissanceRe's use of Climate Value-at Risk to conduct scenario analysis on its asset portfolio.

Source: RenaissanceRe Syndicate Management Ltd

### Lloyd's / The Market / The Hartford

#### Insurance Operations

Climate-related scenarios are incorporated in our catastrophe risk models, which are significant inputs into pricing and underwriting. We utilize vendor catastrophe models to model natural catastrophe perils including hurricane, earthquake, wildfire, tornado, hail, winter storm, and flood, which incorporate climatic assumptions and probabilistic events sets into the loss modeling to produce loss distributions by peril, region, and product coverage. Furthermore, we monitor our historical loss experience, such as frequencies of hurricane, wildfire, tornado and hail catastrophe events. We apply the results of our research and work with the vendors in calibrating the output from hurricane, tornado and hail models to industry experience. We consider the average annual loss for pricing purpose, but we use multiple return periods (50-year, 100-year, and 250-year) to assess loss distribution for capital allocation.

Pricing is a key factor in our financial performance, while capital allocation is important for meeting rating agency and regulatory requirements for capital and required return on capital hurdles. Actual exposure and concentration by natural catastrophe peril and region are monitored relative to a defined hazard zone for each specified region and peril to ensure the company manages exposure within a defined risk appetite. The analysis is performed by our Insurance Risk Management unit, in consultation and collaboration with product and underwriting leaders and experts across the company in defining the company's risk appetite specific to both catastrophe perils and geographic areas. Analysis results indicate a distribution of loss results (expected

average loss, multiple return periods) by peril (hurricane, earthquake, tornado, hail, winter storm) by geographic region and product line. The modeled catastrophe losses and volatility impact pricing and capital requirements. The results are important factors and considerations for our strategies in pricing (in terms of pricing and capital allocation), underwriting management (in terms of concentration, building code, and terms and conditions), and risk management (in terms of reinsurance).

An example for how we use the analysis to ensure we manage our book of business responsibly is our continuous monitoring of our exposure to hurricane, earthquake, tornado, hail, and wildfire in various zones across the United States and a review of global exposures. This helps limit our exposure to catastrophe events and assures our ability to handle and pay claims as well as to ensure exposure is within the company's risk appetite. The potential loss is used in setting pricing and capital targets for each geographic area and line of business.

In addition to evaluating historical losses and estimated modeled losses to manage aggregation and concentration risk, The Hartford reviews other information such as exposed total insured value, risk characteristics of both the location and surrounding area, risk characteristics of the property and market share. Actual exposure and concentration by natural catastrophe peril and region are monitored relative to a defined hazard zone to ensure the Company manages exposure within a defined risk appetite. Hurricane concentrations are managed along the coastline from Texas to Maine and we manage risks between coastal and non-coastal areas. Wildfire concentrations are managed against established limits by monitoring exposure based on internally simulated wildfire paths that indicate areas that could possibly be affected by significant wildfires. Additionally, wildfire hazard exposures are monitored by business line based on internally developed risk categories that estimate the degree of exposure to wildfires by risk class. For tornado and hail events, we review modeled losses, exposure concentrations, historical loss data and market share information for both individual events and annual aggregates to identify areas within states with the most exposure to tornado and hail losses.

Increases in the values and concentrations of insureds and property located in geographic areas prone to catastrophe risk would increase the severity of catastrophe events in the future. In addition, changes in climate and/or weather patterns may increase the frequency and/or intensity of severe weather and natural catastrophe events potentially leading to increased insured losses. Potential examples include an increase in the frequency or intensity of wind and thunderstorm and tornado/hailstorm events due to increased convection in the atmosphere; more frequent and larger wildfires in

certain geographies; and the potential for an increase in the frequency and severity of hurricane events. If insured losses from catastrophe events were to increase due to changes in climate or weather patterns, we may have to increase the premiums we charge and, in turn, may have to either pay more in premiums for the reinsurance coverage we purchase and/or reduce the amount of per occurrence or aggregate losses we reinsure.

## Investments

HIMCO currently utilizes environmental assessments as part of the assessment of current value for each investment and in consideration for expectations around how securities are likely to perform in the future. The enhancements made in 2019 to HIMCO's proprietary credit platform have led portfolio managers and analysts to focus more particularly on environmental, social and governance attributes of each holding, where applicable. In addition, the ability to run reports about the portfolio as a result of analysts' ESG categorizations, provides HIMCO with tools to more fully understand the ESG attributes of portfolios. Further, the publication of [Policy on Insuring, Investing in Coal, Tar Sands](#) (the "Policy") in late 2019 indicates The Hartford's acknowledgement of the climate risks associated with usage of coal and tar sands products. The policy provides specific guidelines around investment activity in coal and tar sand related activities, including specific restrictions for new investments and required divestitures.

### Support Links:

- [CDP – C3.1b](#)
- [Policy on Insuring, Investing in Coal, Tar Sands](#)
- [TCFD Report](#)
- [SASB Report](#)

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln

TMK undertook the PRA's IST 2019 with results reported to Board-level Committee internally in December 2019. The scenario testing included different climate-related scenarios and helped TMK consider how different plausible futures could impact our business model in the medium to longer term. The scenarios ranged from a sudden disorderly transition, to an orderly transition, broadly in line with the Paris Agreement, and a scenario involving failed future improvements in climate policy. Each scenario considered the impact on current assets and liabilities at three-different time horizons (2022, 2050 and 2100). The frequency and severity parameters were stressed in our natural catastrophe models to assess the impact on our insurance liabilities. Our investments were



stressed by applying loss factors to different asset types by underlying industry/exposure.

The scenario analysis highlighted the potential impact of climate change through physical and transition risks to our balance sheet and capital requirements. Given the high losses anticipated from the scenario exercise, as well as the level of uncertainty in the results, the business recognised the need to develop improved climate risk management more generally. As such, the exercise was a key driver behind the decision to establish TMK's Environmental, Sustainability, and Governance (ESG) Committee and a Climate Group. These groups are now in place to oversee progress of TMK working toward a better understanding and more informed climate strategy.

In Q1 of 2021, we have undertaken scenario analysis for the arising of reputational effects relating to our underwriting of certain sensitive risks. As part of the scenario analysis, consideration was given to how TMK could respond to these risks both following the event and ahead of such a scenario occurring. Following the scenario, it was agreed that TMK should agree and set an approach to the underwriting of certain carbon-intensive risks. This was folded into broader climate strategy development aims.

As part of our development toward an improved understanding of climate change's broader future impacts to TMK, we have been looking to develop our tools and techniques for climate scenario analysis. This is being continued in 2021 through our scenario analysis for the PRA's Biennial Exploratory Scenario (C-BES). This exercise (currently in progress) is examining similar scenarios to the 2019 climate scenario exercise, but with further detail of losses for various perils at 5-year intervals between now and 2050. It will involve a range of teams throughout the business, ensuring that scenario analysis understanding and techniques are developed across (at a minimum) Catastrophe Analytics and Exposure Management, Risk Management, and Investments. The TMK Executive, Underwriting, Business Continuity Planning, and Legal teams are all providing extensive support for the scenario work.

Through the scenario tests, we are aiming to:

- 1) Understand the **magnitude of financial exposures** at TMK to climate-related risks:
  - Include physical risks across all regions with material premium income for TMK, such as Inland Flood, severe convective storm, storm surge, hurricane, and wildfire risks for the US.
  - Include all assets held by TMK to understand transition risks to our Investments.
  - Include exploratory litigation risk scenarios, considering TMK's relevant wordings in the Liability book and investigating to what extent there is coverage provided or clearly excluded.
- 2) Understand the **challenges to TMK's business model** from these risks, as well as to consider and identify responses and their implications.
  - The identification of management actions will be a key output of the process, as we consider how the business will respond to each scenario occurring.
  - We will be approaching this as a way of reflecting on our current approach and how we might develop that approach should / when one of the three scenarios arise.
- 3) **Assist TMK in enhancing our management of climate-related financial risks.**
  - This includes embedding these risks in business-as-usual risk management at TMK, for the business as a whole, with oversight from the Board, ESG Committee and the Risk Management Team.
  - We are approaching the C-BES as a cross-functional exercise, incorporating significant input from a number of teams around the business.
  - The RMT is facilitating the exercise. It will be challenging the responses and drawing the work together. Teams involved including Investments, Catastrophe Analytics & Exposure Management, Business Continuity Planning, Underwriting, the TMK Executive, and Communications.
  - It is expected to further encourage the Board to take a strategic, long-term approach to managing these risks.

The focus of our scenario analysis is on the lessons that we can learn about climate risk, where the gaps in our knowledge are, and what actions we might need to take to narrow those gaps. We are quantifying the impacts of the scenarios on our business wherever possible.

To support the analysis, TMK's market risk system, Aladdin, contains stress scenarios for the effect that new carbon taxes would have on the investment portfolio

returns. Due to the short-term nature of the assets, the impact on the investment performance is expected to be minimal – this will, however, be challenged as part of the C-BES exercise in 2021.

*Source: PRA's Insurance Stress Test 2019; IST 2019 and its Climate Risk Implications; PRA C-BES 2021 Internal 'Mobilisation Pack'; PRA Website*

## 3. Lead in the identification, understanding and management of climate risk

### 3.1 Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).

#### Lloyd's / The Corporation of Lloyd's

At Lloyd's, the risk profile originates from both syndicates and at central level.

Syndicates are the source of the majority of risks. They source all the insurance business; manage the bulk of the asset portfolios; hold the majority of the counterparty exposures; and conduct most of the day-to-day operational activity. The syndicate risks include: insurance risk (underwriting, reserving and catastrophe risk); market risk on syndicate assets (including credit risk on Premiums Trust Funds (PTF)); reinsurance and other credit risk; and syndicate operational risk.

At the central level, additional risks arise from central operational risk, pension fund risk; market risk on central assets; and the risk of member default.

#### Risk Management processes

Each year the Corporation identifies the key risks which could have a significant impact on Lloyd's business, and the mitigating actions required to reduce or eliminate the risk. See principle 1.1 and 1.2 for further information on Corporation risk management activities.

The Lloyd's Risk Management Framework ensures that the identification, assessment, monitoring and management of all material risks affecting the Society takes place on an ongoing basis.

The Council manages exposure to these risks by setting and monitoring a risk appetite framework – how much risk is acceptable and what actions should be taken when appetites are exceeded.

Alongside the risk appetite framework, Lloyd's adopts a consistent approach in managing its risks through a process known as the risk and control self-assessment process, which is conducted on a biannual basis. This process reassesses the existing risks and identifies any new risks. It evaluates the performance of key controls and also seeks to monitor the action plans in place to help manage risks. The process also enables Lloyd's to undertake a more forward-looking assessment of risk.

#### Climate-related risk management

Climate change creates a number of potential risks to the Lloyd's which are being considered in different ways. The physical, transition & litigation risks are considered to be cross-cutting risk types that manifest through many of the Corporation's established risk categories. For example, the potential for physical losses from climate change is captured within the 'Catastrophe Exposure' category, while transition risks are captured within 'Investments'. We recognise that these risks may have different time horizons (i.e. some physical risks may not materialise for many years, whereas transition risks can be more immediate) but this is considered in our response to each risk type.

The risk categories expected to be materially impacted by climate change are:

- Catastrophe Exposure: the frequency and/or severity of events changes for perils such as flood (pluvial, coastal and fluvial) or wildfire;
- Investments: assets that emit carbon may lose value as economies transition;
- Regulatory & Compliance: the need to comply with evolving standards as well as the potential for litigation against the market.

A number of other risk categories may be affected indirectly or, following an assessment, have been deemed to have relatively minor impacts.

During 2021, the Risk function facilitated workshops with teams across the Corporation that are managing risks that could potentially be heightened due to climate change. The aim of the workshops was to consider climate risk and how it impacts our existing risk categories.

If, following the workshops, it was agreed that climate change has the potential to materially impact a risk category, we committed to:

- Ensuring that a specific risk is added to the risk library along with any relevant controls
- Identifying metrics (new or existing) that allow the risk owner to monitor the risk
- Considering how these metrics can be included within the suite of risk appetite metrics (i.e. delivery or monitoring metrics)
- Include the risk category within the scope of stress and scenario testing on climate risk
- Include an assessment within the 2nd line Climate reporting being prepared in Q4 2021.

There have been individual workshops held in 2021 with Treasury & Investment Management, Underwriting, Portfolio Risk Management, Operations and Finance, considering a wide range of risks, including from different classes of insurance business.

With climate-specific risks included in the risk libraries of risk owners, these risks are now routinely assessed and will be escalated to the relevant Director or ERC where necessary. Further quarterly reporting of against risk appetite and KRIs will be improved later this year as climate specific metrics are embedded into the risk appetite reporting process.

As well as considering the downside financial risks from climate change, the Corporation is cognisant of the potential impact of its own activities that may, in various ways, be contributing to climate change. For example, this may be through the Corporation's operational footprint or the investments made in the Central Fund, as well as the activities of the market. In response, the Corporation is looking to establish a new risk category called 'Climate' with the aim of managing and monitoring this risk. This will also enable a focus on the risk of missing opportunities for supporting new or growing business as economies transition to being greener.

## Investment

The Corporation of Lloyd's believes that environmental, social and corporate governance (ESG) factors can have a material impact on long-term investment returns. We are therefore actively engaging with our existing external investment managers to understand how they assess these risk factors and to encourage better integration of these factors within their investment process where there is room for improvement.

We consider various metrics relating to Responsible Investment as part of our framework for assessing the

overall risk of existing managers on an ongoing basis. Likewise, when selecting a new investment manager, we consider any potential manager's approach to Responsible Investment and this feeds into our final selection decision (principle 2.1). We track overall Central Fund exposure to sectors that we perceive as high risk, for example those most at risk from assets becoming stranded. We monitor individual holdings within high risk sectors and ensure we understand managers' rationales for investing in these areas. LTIM has since allocated approximately US\$40mil to a dedicated responsible investment fund that limits exposure to areas deemed high risk from an ESG perspective (principle 2.1).

## Risk integration for in-house investments

The Corporation of Lloyd's Treasury and Investment Management (LTIM) have been working to better integrate Environmental, Social and Governance (ESG) risk factors into the investment process for the fixed interest assets managed in-house. ESG risk integration continues to be implemented for the fixed interest assets managed in-house by LTIM (principle 2.2).

As well as reviewing the ESG scores and controversies of new potential holdings, LTIM also monitors the stability of ESG scores on existing holdings and the overall ESG score of portfolios versus their respective benchmarks.

Prior to any purchase of a corporate bond, the ESG score of the issuer and other qualitative ESG information is considered together with the CDS spread and the spread of the bond itself, and also relative to other issuers in the peer group and this informs the decision over whether to buy at the prevailing price (principle 2.2).

## Green Bonds

LTIM directly manages the Central Fund's investment grade fixed income portfolio and took the initiative to invest in Green Bonds for the Central Fund at the end of 2015. LTIM has since added Social Bonds to the portfolio and recorded a total exposure to Green and Social Impact Bonds of approximately £50m (principle 2.1).

## Exclusion policy

Coal combustion is believed to be the largest single cause of global greenhouse gas emissions<sup>[1]</sup>. We implemented a coal exclusion policy in April 2018 as part of our Responsible Investment Strategy for the Central Fund, and this policy continues to be implemented. Lloyd's investment philosophy focuses on

<sup>[1]</sup> [Ecofys press release](#)



generating long-term, sustainable capital growth for Central Fund assets. Our approach to responsible investment is detailed in our strategy for the Lloyd's Central Fund and is built upon three core pillars; Protecting, Providing and Promoting (principle 2.1 and 2.2).

The policy applies to Central Fund assets held in segregated portfolios and commits to excluding any companies that meet at least one of the following criteria:

- Generate more than 30% of their revenue from producing coal.
- Produce more than 20 million tons of coal per year.
- Generate more than 30% of their electricity from burning coal.
- Operate at least 10GW of coal-fired power stations.

Evidence also applies to principle(s): 1.1, 1.2, 2.1, 2.2.

Source: The Corporation of Lloyd's

### Lloyd's / The Market / Beazley

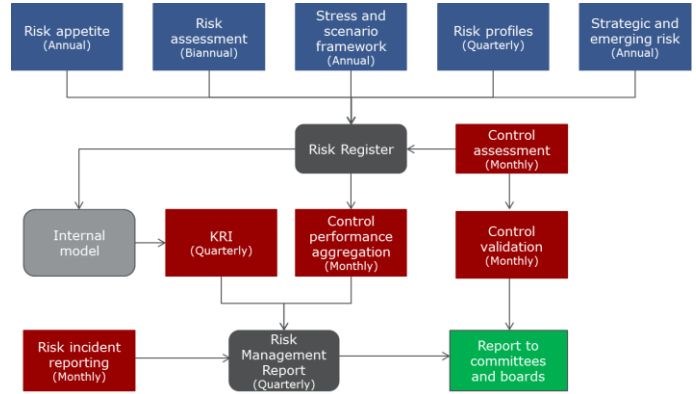
The changing global climate is recognised as an important emerging risk due to its widespread potential impact on the global population, environment and economy. A key aspect of Beazley's business model is to support our clients who have been affected by natural catastrophes, helping them return to pre-catastrophe conditions as soon as possible. As a specialist insurer, various classes of business we underwrite are subject to the effect climate change presents to the risk environment. As part of the underwriting process, we work with our insureds to understand the risks facing their organisations, including applicable climate-related risks and to tailor insurance coverages to mitigate the associated financial risks.

Beazley has a risk management framework to appraise risk. This framework which is embedded across the business, and covers all our risks, including climate change. The framework delivers the following:

- Enable Beazley to determine the risk management strategy, objectives, risk culture and risk language;
- Identifies risk categories and risk events and sets risk appetite to help achieve its vision and ambition;
- Allocates responsibilities for each risk event to a risk owner who is a senior member of staff, usually a member of the executive committee;
- Establishes the relevant overseeing committee for the reporting of risk and escalation of risk related issues;

- Establishes the process of identifying areas of heightened risk, new and emerging risk and removing risk events that are no longer relevant; and
- Introduces a common risk language across the Group.

The inputs and outputs from the risk management framework are as follows:



As detailed in the diagram, central to the risk framework is the risk register, providing details of the risk, and summarising the appraisal and appetite for the risk. The categories of risk we have defined have either a direct or indirect climate related risk associated with them, whether that be from a physical, transitional or liability perspective. These risks are follows:

- *Pricing risk:* This is the risk that current pricing levels do not adequately consider the prospective impact of climate change resulting in systemic under-pricing of climate exposed risks. The group's business planning process establishes how much exposure in certain classes of business or geographic area we wish to accept. We benefit from a feedback loop between our claims and underwriting teams to ensure that emerging claims trends and themes can be contemplated in the business planning process, the rating tools and the underwriter's risk by risk transactional level considerations. Our underwriters are empowered to think about climate risk during their underwriting process in order to determine the implication on each risk.
- *Natural catastrophe risk:* The risk of one or more large events caused by nature affecting a number of policies and therefore giving rise to multiple losses. Given Beazley's risk profile, such an event could be a hurricane, major windstorm, earthquake or wildfires. This risk is monitored using exposure management techniques to ensure that the risk and reward are appropriate and that the exposure is not overly concentrated in one area.
- *Non-natural catastrophe risk:* This risk is similar to natural catastrophe risk except that multiple losses

arise from one event caused by mankind. Given Beazley's risk profile, examples include a coordinated cyber-attack, global pandemic, losses linked to an economic crisis, an act of terrorism, an act of war or a political event. This risk is monitored using exposure management techniques to ensure that the risk and reward are appropriate and that the exposure is not overly concentrated in one area.

- *Reserve risk:* Beazley has a consistent reserving philosophy. However, there is a risk that the reserves put aside for expected losses turn out to be insufficient. This could be due to any of the three drivers of risk described above. The group uses a range of techniques to mitigate this risk including a detailed reserving process which compares estimates established by the claims team with a top-down statistical view developed by the actuarial team. A suite of metrics is also used to ensure consistency each year.
- *Market (asset) risk:* This is the risk that the value of investments could be adversely impacted by movements in interest rates, exchange rates, default rates or external market forces. The transitional climate related financial risks are an element of influence within this category. This risk is monitored by the investment committee.
- *Operational risk:* This is the risk of failures of people, processes and systems or the impact of an external event on Beazley's operations, and is monitored by the operations committee. An example would be a cyber-attack having a detrimental impact on our operations.
- *Credit risk:* Beazley has credit risk to its reinsurers, brokers and coverholders, of which the reinsurance asset is the largest. The underwriting committee monitors this risk.
- *Regulatory and legal risk:* This is the risk that Beazley might fail to operate in line with the relevant regulatory framework in the territories where it does business. Of the eight risk categories, the board has the lowest tolerance for this risk. This risk is monitored by the risk and regulatory committee.
- *Liquidity risk:* This is the risk that the group might not have sufficient liquid funds following a catastrophic event. The investment committee monitors this risk which, given the nature of the asset portfolio, is currently small.
- *Group risk:* The key risk is a deterioration in Beazley's culture which leads to inappropriate behaviour, actions or decisions. This is monitored through engagement surveys, staff feedback and

regular dialogue with senior management. As the structure of the Beazley group is not complex, the other main group risk is that one group entity operates to the detriment of another group entity or entities. The Beazley plc board monitors this risk through the reports it receives from each entity.

To ensure the risk register remains current, and is reflective of the work developing across the business, the risk register is influenced by a number of workstreams which again are embedded into business as usual processes. These workstreams occur throughout the year, as part of our approach to risk, before influencing the decision making process. A brief summary of these actions are as follows:

### Strategic and Emerging Risk

Beazley defines emerging risks as 'an issue that is perceived to be potentially significant and likely to affect strategy, but which may not be fully understood or allowed for in insurance terms and conditions, pricing, reserving or capital setting. An emerging risk can be an entirely new risk, such as the potential health risks of nanotechnology, or the modification of a known one, such as climate change affecting hurricane frequency and severity'.

Ongoing monitoring and assessment of emerging risks is undertaken through regular engagement with stakeholders from across the business, holding formal risk owner catch ups, the biannual risk assessment process, and office visits. In addition to this and on an annual basis, emerging and strategic risk is a standing agenda item during the board strategy day which takes place in May. The standard format for this day includes the risk team facilitating a process of identifying a list of emerging risk topics that could have an impact on Beazley's strategy, both from a threat but also an opportunity perspective. A long list (17 in 2021) of topics is presented to the Beazley plc Board for debate and a sub-set of those are agreed to be discussed at the strategy day. The topics that are not picked are included on the emerging risk register for monitoring and review purposes and where appropriate, further action. Once the sub-set is agreed, small working groups are formed (led by a senior risk manager) to investigate and interrogate the topic and provide views for discussion at the strategy day. Output including any actions arising from the process is included in the ORSA. In 2020, climate change was one of the topics the away day identified as requiring further consideration. This meant that in 2021, it has been prioritised as a key risk, with additional resources provided to deliver further knowledge and understanding of the issues and opportunities. To build on this, during the 2021 emerging risk review, one of the areas identified was determining the reverse stress testing an exit from certain classes, for

example, what would it take for us to decide to exit from climate exposed classes.

### Stress and Scenario Framework

Beazley runs a number of Realistic Disaster Scenarios (RDS), with natural catastrophe and cyber being run on a monthly basis and the remainder run on a quarterly basis, in order to determine the impact of different risks. This modelling process is overseen by the Exposure Management Team, who have developed a Complex and Emerging Underwriting Risks Protocol. This sets out the activity in place to review the potential / complex / or emerging risks relating to underwriting and there are circa 60 deterministic realistic disaster scenarios (D-RDS) used to monitor the most significant. Our recent focus has been on testing and stressing assumptions. Following this a series of activities has been initiated to embed good practices, ensuring that the risk landscape is frequently reviewed using claims trends, early flag, and external expert input. This includes:

- Challenging and stretching of risk assumptions that are documented and articulated to the relevant oversight committee.
- Regular review of all D-RDS.
- External expert intelligence and challenge.
- Consideration of Reserving Peer review trend analysis and observations.
- Test potential application of different policy wordings.

These scenarios are either modelled, using data drawn from third party modelling partners, or non-modelled, where experts from across Beazley collaborate to determine the impact. An example of our approach to non-modelled risks is our approach to wildfires, an increasing event due to the impacts of climate change. The modelling takes into account the impact of sector, geography and business segment, in order to determine Beazley's exposure. In turn this helps to drive decision making across the business.

Beazley is currently enhancing the number of scenarios its runs to ensure we further understand the financial impact of climate related risk on the business. At present work is being undertaken to identify the most appropriate scenarios we need to run, as well as improving data quality. This work will continue over the summer, with the outputs being fed back into the risk framework as they emerge.

### Risk Assessment

On a bi-annual basis, the risk team undertakes a review of Beazley's risk assessment. These assessments are a collaborative effort between each of the business functions, and are an opportunity to identify emerging risk, review existing risks, and provide appropriate mitigation measures to reduce/ manage the risk. This assessment is inward looking and primarily concentrates on operational processes, whilst helping to encourage open dialogue with risk owners. This assessment is where Beazley's own response to climate change is noted, with the appropriate action to deliver improvements detailed.

### Risk Appetite

Beazley's risk appetite is reviewed on an annual basis, and is informed by outputs from the RDS, capital view, and credit risk, as well as having input from each of the trading teams. This enables a view to be formed of what the trading teams can do in the following year, before being reviewed against the capacity available. This appetite is agreed and set by Board, before being tracked by the exposure management team on a monthly basis, who flag up to the business where we are close to the limits the business has set. The capacity is obviously impacted by the number of physical weather events which occur throughout the year, therefore, the impact of climate change is considered and felt within this risk appetite.

### Risk Profiles

Beazley uses risk profiles to take a deeper look at particular areas of the business. These are undertaken on a quarterly basis and subject matters include reviewing trading areas, or the impact of an emerging trends. These profiles are undertaken to provide additional assurance across the business.

### Outputs and Decision Making Process

The Board and risk committees have oversight of the risk function and so are responsible for reviewing and approving the risk plan on an annual basis. The main purpose of this review is to ensure that the strategic direction of the risk team function is appropriate and there are sufficient resources to operate the function. The outputs of the risk register are closely managed across Beazley, and are communicated across the business to ensure the management, but also potential opportunities arising from the risks are reviewed, and appropriate actions to taken, where required. This reporting takes several forms, firstly the Risk management team report to executive management committees to assist them perform their first line of defence oversight of the risk events for which they are responsible. Furthermore, they also report to the risk and regulatory committee to assist this committee perform its second line of defence oversight of the whole risk management framework from

an executive perspective. In addition to this, the risk team also provide both a quarterly and annual ORSA.

The ORSA can be described as the entirety of the processes and procedures employed to identify, assess, monitor, manage, and report the short and long term risks a company faces or may face and to determine the own funds necessary to ensure that the undertaking's overall solvency needs are met at all times. The risk and capital assessment and the conclusions arising are used in business decision making process. They are also used to confirm that the business plan is aligned with risk appetite. Climate change remains a common theme within our ORSA, therefore the use of this process is essential for both the management of climate related risks, but also keeping the business informed.

### TCFD Workstream

The TCFD guidelines are essential for delivering a forward looking sustainable business. In collaboration with the Head of Responsible Business, each underwriting team identifies relevant climate-related risks and opportunities that may occur with new products, additions to current products or offering new services. This workstream helps to support the risk framework. To date this work has been completed with 25% of the focus groups, with the remaining number to be reviewed by end of 2021. This process is key as a first line of appraisal for the business in respect to climate change. Both the risks and opportunities identified to date differ depending on the sector and insurance products we offer. As an example, many of our property insurance products are at risk of the change in physical impacts of climate change, whereas our Directors and Officers (D & O) liability cover is more at risk from the transitional risks such as litigation or reputational risk. Across many of our products i.e. energy, aviation, and marine, our insureds are also at risk from stranded assets as technology and the use of low carbon alternatives begin to become more common.

### Climate related risk workstream

Through the climate related risk workstream being led by the Senior Risk Manager, our approach to scenario analysis will develop over the coming months. This partly to meet the PRA CBES requirements, but also to further our understanding and drive management change. The workstream is working to identify the financial impact of climate related risk, through the use of models which will appraise the physical, transitional and liability risks to the business. The outputs of this work will inform management decision making and will be detailed in Beazley's long term business plan.

### Assessing Compliance with current and emerging regulation

Beazley's compliance team is responsible for tracking current and emerging regulation. These are tracked through the regular publication of information by the regulators, before disseminating the requirements across the business. Within the team different colleagues are responsible for the regulations emerging from different departments and jurisdictions. This ensures the team are able to track all relevant legislation, both current and emerging, and then work with the business owner to ensure delivery. The examples of delivery include the work currently being undertaken to deliver against the CBES, as well as the emerging requirements from MAS to embed processes within the business to appraise not just climate related risk, but also the impact of land use, pollution and biodiversity.

Alongside the compliance team, the facilities team also maintains a legal register to ensure Beazley meets all of its obligations from an environmental compliance perspective. This legal register is part of the Environmental Management System (EMS) which is currently being developed to provide more structure to the delivery of the Responsible Business Strategy.

[Evidence also applies to 2.1](#)

*Source: Beazley*

### Lloyd's / The Market / MS Amlin Underwriting Limited

During the 2021 annual Own Risk and Solvency Assessment (ORSA, a key reporting output of the Solvency II regulatory framework) process, MS AUL has identified climate change as a significant risk for the firm. Potential impacts to MS AUL's balance sheet is likely to manifest widely across insurance receivables, claims reserving practices, and financial assets held for investment. Furthermore, recent years' poor performance in terms of non-cat losses across the industry exacerbates the threat and elevates the need for (re)insurers to fully identify, assess and manage the financial impact climate change has on the balance sheet.

In response, the PRA has released SS3/19 which intends to guide firms in having a minimum standard in place to understand the impact of climate change on the company. Within MS AUL, Risk team members are regular attendees at the ESG Forum, carrying out both a second line oversight and a workstream delivery role. Through actions agreed upon at this forum, the Risk function are coordinating the risk management elements outlined in SS3/19 as well as supporting the other workstreams through real-time assurance.



In addition, regular discussions held between the first-line functions and the Risk function allows for the identification and consideration of potential emerging threats, including those related to climate developments. Emerging risks which have a sufficiently high likelihood of materialisation, and a high severity of impact if materialised, are escalated to the appropriate Committee for the business function concerned, and where necessary to the Board.

The Risk function undertakes regular updates to risk categories and risk drivers described within the Risk Register. This process also enables us as a business to capture and monitor risks associated with climate change. An immediate example of this in the last 12 months is that ESG Risk has been added as a distinct category to our Risk Register, which then facilitates the creation and formalisation of a set of metrics and controls to manage and mitigate this risk. These metrics, which are under ongoing development and refinement, will also include those that allow the business to monitor quantitative financial impact in line with SS3/19 guidance.

MS AUL licenses a number of sophisticated natural catastrophe risk models for a range of different region and perils, and the output from these models is used to assess the risk from the annualised climate-related perils to the insurance portfolio. As part of MS AUL's quarterly reporting, the most significant modelled perils and regions are ranked based on materiality. The materiality ranking is one of the ways the Company identifies the climate-related risks that are most relevant to the business.

MS AUL employs a 'fit for purpose' framework to decide whether a model needs to be reviewed and a number of areas are considered within this framework:

1. A review of the current external validation of a model is undertaken following a model version change. The extent of the validation will be based on proportionality of the model upgrade and the materiality of the peril/ region to MS AUL.
2. If the materiality of a region/ peril significantly increases for MS AUL as result of a changing portfolio (increasing exposures, riskier business etc.), a review of the catastrophe model external validation should be undertaken.
3. Re-validation of a model should occur if a natural catastrophe event for that peril/ region featured significant 'loss-causing factors' which are beyond the current model's scope.
4. A review of MS AUL's use and acceptance of a model will be triggered if expectation of the

materiality of a peril/ region fundamentally changes following post-event analysis.

5. Academic consensus is contrary to any of the vendor's model assumptions or there is significant challenge from the scientific/ academic community to the current catastrophe model, a review of the external validation will be triggered.

MS AUL's proprietary portfolio simulation model allows the flexibility of adjusting the frequency of events to align with current understanding of climate-risk and establish MS AUL's own view of risk. In 2021, MS AUL is participating in the PRA CBES exercise and aims to have assessed and embedded the scenarios by early 2022. Outcomes from the scenarios will be used to inform parameterisation changes to the model going forward. A working group has been established to oversee the CBES activity, with the final report due to undergo appropriate committee and board approval before submission to the PRA via Lloyd's.

The ability to make adjustments to its own view of risk allows MS AUL to react independently to external changes in current and future understanding of climate risk, rather than waiting for a third-party's model version change.

MS AUL's catastrophe modelling resource and processes are graded as "Established" under the Lloyd's Catastrophe Risk Operational Framework ranking, which is the second highest ranking, and reflects the maturity of the embedding of the resource and processes into all relevant aspects of the business and its management.

*Source: MS Amlin*

## Lloyd's / The Market / MS Amlin Business Services

### Investments

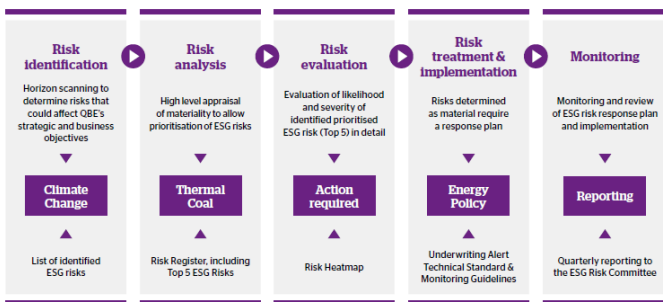
With such a rapidly evolving topic as climate risk, the influence of regulators in ensuring the embedding of the necessary governance oversight and data architecture is very important, and welcomed by MS Amlin. MS Amlin investments found the PRA GIST Climate Scenario extremely useful in beginning to shape its research and technical infrastructure capabilities, and believe the CBES to have even greater potential in this regard. The Assets section of the CBES submission will ultimately be the responsibility of the MS Amlin Investments team to complete.

*Source: MS Amlin*

## Lloyd's / The Market / QBE / Identifying, assessing and managing climate related risks

Climate-related risk is a type of strategic risk, which we identify, assess and manage using our Enterprise Risk Management (ERM) framework and ESG business practices. Climate-related risk is also implicitly considered within the insurance, credit, market, liquidity and operational risk classes.

In line with our membership of the UNEP FI, and our PSI signatory status, we continually work to embed sustainability and the consideration of current and emerging ESG risks and opportunities in our decision-making processes. We use a robust risk identification, measurement and mitigation process. As part of QBE's Risk Management Strategy, we categorise risks into eight classes, with ESG risks across underwriting and investments classified as strategic risks, as well as being integrated into other risk classes.



In 2019, we developed an ESG Risk Standard, as part of our Strategic Risk Policy, outlining the process of identifying and managing ESG risks across the business. Our ESG Risk Standard applies to indirect ESG risks (defined as risks which impact QBE from external sources). Direct ESG risks are addressed and managed by other functions of the business. Our Standard outlines governance and oversight, associated roles and responsibilities, and minimum requirements for managing ESG risks. ESG risks are reported to the Group Chief Risk Officer (CRO) quarterly, with our ESG Risk Committee focusing on any ESG risks that are deemed to be high risk. The Committee proposes actions to the ENFRC following such discussions. During 2019 and in 2020, the Group ESG Risk team has continued to analyse and manage ESG risks and to raise awareness of these risks. The diagram above illustrates the risk management process for an identified ESG risk.

In 2020 we undertook both transition and physical scenario analysis to understand the risks and opportunities associated with climate change in our priority portfolios and geographic regions.

Climate-related risks have been identified as risks arising from Climate-related Physical Risks, Transition Risks or Liability Risks. All three risks are currently at treatment

stage (step 4). The treatment plans include the creation of three working groups (one for each risk type) which have been set up to further manage and understand how these climate-related risks could impact QBE's strategic priorities and business objectives and also within the three main QBE geographical divisions e.g. International (Europe and Asia), North America and Australia Pacific. The Working Groups have been tasked with determining the significance of the climate-related risk to QBE e.g. priority underwriting portfolios as related to the climate-related risk type. In addition, working groups have been established in QBE's European Operations in order to progress with the implementation of EO's Roadmap for meeting the requirements of the PRA's SS 3/19.

The ESG Risk function is responsible for ensuring these business practices and processes are integrated into QBE's overall risk management framework. As discussed in section 1.1, the Group Board ensures climate-related risks are assessed and managed through the integrated risk management framework.

Evidence also applies to principle(s): 1.1, 1.2, 1.4, 2.1, 2.2, 3.1

Source: QBE Sustainability Report 2019 (p. 17) QBE Sustainability Report 2020 (p.25); QBE Annual Report 2020 (p.34).

## Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

### Underwriting

RenaissanceRe has taken various measures to mitigate losses related to climate change through its underwriting process and by continuously monitoring and adjusting its risk management models to reflect the higher level of risk that it thinks will persist. Before binding a (re)insurance risk, exposure data, historical loss information and other risk data is gathered from customers. Using a combination of proprietary software, underwriting experience, actuarial techniques and engineering expertise, the exposure data is reviewed and augmented, as deemed appropriate. RenaissanceRe uses this data as primary inputs into the REMS© modeling system as a base to create risk distributions to represent the risk being evaluated. A key advantage of RenaissanceRe's REMS© framework is its ability to include additional perils, risks and geographic areas that may not be captured in commercially available natural hazards risk models. As a result, RenaissanceRe believes that it is able to incorporate the risk of an increase in the frequency and severity of natural catastrophes due to climate change more comprehensively than commercially available models.

RenaissanceRe's underwriters and risk managers work closely with the internal team of scientists at RenaissanceRe Risk Sciences to build nuanced views for climate change's impact on a range of perils. Each risk is classified using a framework for understanding climate impacts. Across this framework, RenaissanceRe recognizes that each region-peril combination is categorized to highlight relative differences in the urgency and likelihood of material changes in the risk. RenaissanceRe's framework consists of four key categories that are used to classify each risk:

- 1) **Uncertain Evolution (Current View Remains):** Where there is no evidence of future impact or the impact is very uncertain.
- 2) **Future Change (Material to Risk):** Where research points to future change, a timeline is created to track when impacts are expected to be material for that peril, whilst monitoring trends in observations to calibrate the risk view appropriately.
- 3) **Change Likely Occurring:** Where change is likely occurring based on physical models but where observational data are sparse, models are updated based on the current scientific understanding.
- 4) **Clear Evidence of New Normal:** Where perils already show the effects of climate change, physical models and observational data are used to update the view of risk, and carefully refine that view as new events provide tuning opportunities.

RenaissanceRe's risk models are evaluated and updated in light of its evolving understanding of micro and macro trends, including climate change. Over the years many region-peril models have been reviewed and adjusted to account for changing climatology. In addition, many models have been reviewed and not adjusted if the science and data did not offer compelling evidence to do so. Recently reviewed region-perils where specific increases in risk have been implemented or are expected to be implemented in the near future, based upon climate change considerations include U.S. hurricane, California wildfire, Australia wildfire, European Union flood, and North American severe convective storms.

## Investments

RenaissanceRe considers environmental, social and governance factors (including climate change) within its investment strategy to further the sustainability of its investment portfolio. RenaissanceRe has recently engaged an independent ESG consulting firm to assist in the creation of a group-level ESG Investing Policy to facilitate further progression in this space, including the evaluation of prevailing ESG-related initiatives such as the UN Principles of Responsible Investment.

RenaissanceRe has a management committee that meets regularly and is responsible for decisions relating to both investment allocation and manager selection, including the consideration of impact investing opportunities and regular reviews of data on climate-related risks and opportunities. The Investment and Risk Management Committee of the Board of RenaissanceRe (the "IRMC") assists the Board with oversight of RenaissanceRe's investment activities and financial risk management. The duties and responsibilities of the IRMC, as outlined in its charter, are to advise the Board on all of RenaissanceRe's investment-related matters. Among other things, the IRMC oversees the development, and maintenance of, and compliance with, appropriate investment guidelines and objectives; RenaissanceRe's strategic asset allocations; the performance of RenaissanceRe's investment portfolio; assisting the Board with assessing RenaissanceRe's financial, non-operational risk management, in coordination with the Audit Committee; and overseeing the processes used to manage key financial risks, including risks related to climate change, liquidity, solvency margins, reinsurance program limits, third-party credit risk and foreign exchange exposure.

In order to further the incorporation of ESG factors and principles and to enhance its process for identifying, assessing and prioritizing climate change risk, RenaissanceRe engaged third party provider MSCI in 2020. MSCI conducts analysis to highlight climate change and others ESG-related risks of companies, issuers, governments and other entities which are then applied to the portfolio, flagging companies that are rated CCC 'Laggards' under the MSCI methodology, as well as providing data insights such as carbon intensity to inform future investment decisions. There are two key tools that RenaissanceRe leverages to further its continued assessment and understanding of climate risk in the asset portfolio: Climate Value-at Risk and Climate Change Metrics.

Climate Value-at Risk is used to provide a forward-looking and return-based valuation assessment to measure climate-related risks and opportunities in an investment portfolio. The fully quantitative model offers insight into how climate change could affect company valuations, providing actionable information to evaluate climate-related risks and opportunities, including alpha factors in low-carbon technology innovation. The tool offers understanding of sector-level risks found within a portfolio, as well as the potential warming trajectory against various scenarios, including the Paris climate target. MSCI's Climate Metrics is used to support a range of objectives, including measuring and reporting on climate risk exposure, support the assessment of low carbon and fossil fuel-free strategies, and factoring climate change research into RenaissanceRe's risk management processes. It provides carbon intensity,

carbon emissions, fossil fuel exposure, environmental impact (i.e. clean technology) data and screens, as well as climate-related risk exposure and management assessment on companies such as low carbon transition scores and categories.

During 2020, RenaissanceRe utilized the MSCI datasets to inform its decision to eliminate direct investments in mining companies that derive more than 30% of revenues from thermal coal, in addition to companies that are classified as CCC ESG 'Laggards' under the MSCI methodology. RenaissanceRe's investments team continues to seek new opportunities to decarbonize its portfolio, including becoming a seed investor in BlackRock's US Carbon Transition Readiness Fund in 2021. The fund had a total of \$1.25bn in assets, making it the largest exchange traded fund launch in history. RenaissanceRe was featured in BlackRock's press release announcing the ETF with its Chief Executive Officer remarking, *"As a global reinsurer, we are uniquely aware of the long-term risks of climate change due to our central role in protecting communities from its impact. Investing in transition-ready companies furthers our leadership in risk management, while advancing the sustainability of our own investment portfolio"*.

Source: RenaissanceRe Syndicate Management Ltd

## Lloyd's / The Market / The Hartford Insurance Operations

Active management of climate-related risk, including continuous assessment of prevailing science related to climate change and severe weather, is incorporated into various analytics and management practices to ensure adequately diversified portfolios and that we are insuring an acceptable level of climate-related risk. The Hartford closely monitors scientific literature on climate change, including the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) to help identify climate change risks impacting our business. In addition to the findings in this report, we use data from the scientific community and other outside experts including partnerships with third-party catastrophe modeling firms to inform our risk management activities and stay abreast of potential implications of climate-related impacts that we incorporate into our risk assessment. We regularly study these climate change implications and incorporate these risks into our catastrophe management strategy through product pricing, underwriting and management of aggregate risk to manage implications of severe weather and climate change in our insurance portfolio.

In addition to incorporating the latest science in our analytics, we also address the threat of climate change through underwriting management including risk

selection, establishing limits to loss on individual policies and limiting the authority of underwriters in our field offices. As discussed above, The Hartford actively monitors exposure to catastrophe events utilizing third party models to estimate our insured's exposure to potential loss and the financial impact those events would have on our financial position, results of operations and cash flows across our businesses.

Aggregations by peril and region are monitored and proactively managed through strategic growth and exposure management initiatives. Our approach to evaluating catastrophe risk is facilitated through regular review and oversight that cascades from The Hartford's executive team to business leaders, underwriters, investment managers and field leaders.

The Hartford's underwriting guidelines instruct underwriters to decline classes of business that constitute an unacceptable level of health hazard, moral hazard, environmental impact, pollution risk or dangerous operations. The Hartford also considers MSCI's ESG ratings when underwriting public company directors' and officers' coverage. HIMCO and Hartford Funds are engaged in ESG and sustainable investing, including investments in issuers from the renewable energy sector.

As discussed earlier, in analyzing investment securities we purchase, we assess the issuer's strategies and sustainability practices to ascertain long term investment return potential. We believe that incorporating ESG attributes, as published in our [ESG Investment Policy Statement](#), into investment analysis provides a more complete assessment of the risks associated with each investment decision. As part of the investment analysis, investment managers consider ESG factors such as climate change, use of natural resources, pollution and waste, use of human capital, product safety, social opportunity, corporate governance and ethics along with a range of other potential attributes to assess the expected performance and risk of our investments over time. To ensure all material risk considerations are incorporated into The Hartford's investment strategy, the Company regularly reviews investment and portfolio performance with HIMCO, our investment manager, including ESG related holdings.

As noted above, in December 2019, The Hartford issued a new [Policy on Insuring, Investing in Coal, Tar Sands](#) to limit insuring and investing in coal and tar sands companies.

Pricing and underwriting is a key factor in our financial performance, while capital allocation is important for managing required return on capital for each business line, as well as meeting rating agency and regulatory requirements for capital. The Hartford incorporates target return on capital in our underwriting decisions. Our target



return on capital is reflective of the enterprise required risk capital and capital adequacy.

The Enterprise Risk and Capital Committee (ERCC), chaired by the CEO and comprised of senior leaders, oversees the Company's risk profile, capital structure and risk management practices. The ERCC has oversight of significant Company-wide risk exposures. Responsibility for the development and oversight of the Company's policy on environmental stewardship at the executive level rests with the Office of the General Counsel. The General Counsel, through staff and in concert with representatives from the Company's underwriting, research, enterprise risk management and operations management departments, is responsible for periodically reporting to the Company's Executive Leadership Team and the Nominating and Corporate Governance Committee of the Board on the Company's progress in responding to the effects of climate change. The Board of Directors has ultimate responsibility for risk oversight including climate-related risks, exercised through standing committees, including the Finance, Investment and Risk Management Committee (FIRMCo).

## Investments

A HIMCO ESG Committee was established in 2020 to support the ongoing commitment to ESG principles by developing, implementing, and monitoring policies and initiatives related to ESG matters within HIMCO. The HIMCO ESG Committee, comprised of senior leaders in the investment management function, works in conjunction with The Hartford's Sustainability Governance Committee and meets regularly to provide oversight and control of investment risks, which includes a review of ESG related issues and reporting. The Hartford's [Policy on Insuring, Investing in Coal, Tar Sands](#) adopted in late 2019 provides specific guidelines around investment activity in coal and tar sand related activities, including specific restrictions for new investments and required divestitures. HIMCO's Compliance Group monitors adherence to this policy and the HIMCO ESG Committee also regularly reviews exposures subject to the policy as well as divestment activity.

ESG considerations are evaluated as part of HIMCO's investment process across asset classes, including for fixed income securities (investment grade, high yield, municipal, emerging markets, private placements, securitized assets) as well as for private equity, middle market loans, and real estate. Analysts identify and memorialize directional risk level and intensity of that risk for every investment with the exception of quantitative equity and index investments. ESG risk analysis is completed as part of the initial issuer review and for subsequent interim and annual reviews. The relevancy of the ESG factors vary based on their materiality to the

asset class of the investment as well as the industry sector in which the issuer operates. HIMCO has conducted a series of training sessions to provide investment staff with guidance on ESG related issues.

For day to day implementation, ESG factors have been incorporated into HIMCO's proprietary credit research platform where analysts provide assessments and commentary as applicable for each active portfolio holding. Analysts use a wide variety of information including company regulatory filings, ESG statements, third party reports, and discussions with management to consider the possible ESG-related risks or benefits of each investment holding to the extent applicable. HIMCO utilizes this information as an input into its assessment of current value for each investment and in consideration for how investments are likely to perform in the future. HIMCO reevaluates ESG factors on a regular basis and a changing ESG risk profile could impact the time horizon of a given holding. The integration of ESG factors into HIMCO's proprietary research platform provides HIMCO with reporting capabilities to identify ESG attributes of the portfolios.

HartfordFunds joined the Principles for Responsible Investment (PRI) in 2015 and publishes a [UNPRI Responsible Investment Transparency Report](#) annually.

The Hartford's policies and practices continue to evolve as ESG practices continue to develop across the investment community as well as amongst issuers.

### Support Links:

- [CDP – C3.1b](#)
- [ESG Investment Policy Statement](#)
- [Policy on Insuring, Investing in Coal, Tar Sands](#)
- [UNPRI Responsible Investment Transparency Report](#)

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln / Joint research on climate change with universities

### Embedding in the ERM Framework

The process for identifying, assessing, and managing climate-related risks and opportunities are embedded within the broader ERM Framework at TMK. There is a specific Climate Risk on the TMK Risk Register, managed by the RMT and owned by the CRO.

As part of their management of the risk register risk, the RMT have identified and assessed the varied ways in which climate risk is likely to materialise to affect the business. These broader risk areas are reported through

the TMK ORSA Report and have been discussed in section 2.1 of this Report. They vary from Physical Risks affecting exposures and investments, to Transition Risks, Strategic risks, and Reputational risks.

A variety of Physical Risks have been identified, including the risk of increased damage from windstorms (e.g. from increased rainfall), the risk of more frequent wildfires, and the risk of longer-term sea-level rises. The broad threats and opportunities are being monitored by RMT and strategic implications are being reported and have led to action around the setting of risk metrics to limit underwriting of high-risk areas (see section 2.2).

The Model Completeness Framework is in place to ensure that non-modelled risks are managed within the business. This has dual purpose in terms of climate risks:

1. It ensures that developing perils (such as wildfire and inland flood) and risks' effects on non-modelled lines of business are considered, with approaches to managing them developed.
2. It provides a framework from which climate risk's effects on existing models can be monitored and could highlight a need to look to climate models for solutions in future.

The RMT also considers climate risk in terms of numerous 2nd and 3rd order risks that have not yet been fully understood. These are known as 'Emerging Risks', such as Arctic Development opportunities that may arise or the identity and effects of various tipping points. They are a critical element of the risk identification and assessment process within TMK's ERM Framework.

To further embed climate risk into the ERM Framework at TMK, an update to all Risk Management Policies in the organisation has been agreed. This involves additional text within the Policies that highlight the responsibilities of each risk area in considering and managing climate risks as relevant to them.

### The Climate Group, ESG Committee, and Board

The identification of these risks and their prioritisation in terms of a rating was part of the motivation for the creation of the ESG Committee and Climate Group, which have themselves been well embedded at TMK during the previous year. The Climate Group membership includes staff from across different levels and departments within TMK, helping to support its embedding. The varied staff membership allows the Group to draw on diverse experience of climate risk as TMK develops its approach, and to ensure that there is consideration of effects of climate risk on all parts of the organisation. This is facilitated further by the setting up of several workstreams, focused on different parts of the

business in relation to climate change. Individuals have been assigned to one group each, with a lead role identified.

1. Underwriting and Innovation
2. Investments
3. Operations
4. Scenario Analysis
5. Charity & Inclusion

All stakeholders across TMK have been engaged in discussions regarding climate change. This has included all members of the Board, through extensive discussions regarding climate risk appetite. For the wider staff at TMK, two lunch and learn discussions have taken place since November 2020 (see section 6.2), and frequent reference is made to climate risks in the CEO's regular email updates to the business. This has helped to embed climate risk management throughout the business, including for identifying and addressing opportunities and threats that are arising.

As risk metrics around climate risk continue to be embedded, the management of climate risk is expected to become increasingly integrated into the business. From this point, key decisions will have the grounding that they require. As highlighted in section 2.2, the strategic and reputational qualitative risk appetite statements have been developed to specifically require consideration of climate risk in the scoring of TMK's position against risk appetites. This will, again, ensure that climate change is well integrated with the consideration of broader risks in the organisation.

### Plans to meet SS3/19

The regulatory requirements identified by the PRA within their SS3/19 supervisory statement have provided a useful framework for TMK in approaching the embedding of a climate risk management plan. The PRA set out guidance to be implemented by 2021-end across four areas of focus of: Governance; Risk Management; Scenario Analysis; and Disclosure.

TMK have set out a plan to meet the expectations, assigning responsibility for different aspects of the guidance to different staff within the Climate Group, as below:

Plan Area	Owner	Examples of scope in the plan area
<b>Risk Identification and Assessment</b>	Senior Risk Officer	<ul style="list-style-type: none"> <li>Developing an understanding of climate risks and their effect on our business model.</li> <li>Describing that understanding through reporting.</li> <li>Embedding of climate risk management in the business through risk policies.</li> </ul>
<b>Risk Monitoring, Appetite and Metrics</b>	Head of Risk Intelligence and Model Validation	<ul style="list-style-type: none"> <li>Development of risk appetites in the business</li> <li>Reporting of risk metrics and KPIs</li> </ul>
<b>Responsibilities</b>	Climate Group Chair	<ul style="list-style-type: none"> <li>Identifying and embedding responsibility for different aspects of climate risk throughout the business.</li> </ul>
<b>Board Understanding</b>	Deputy CEO	<ul style="list-style-type: none"> <li>Developing Board understanding of climate risk e.g. through Board Training and quarterly reporting.</li> </ul>
<b>Head Office</b>	Climate Group Chair	<ul style="list-style-type: none"> <li>Communication with TMK's parent company regarding climate risk, its effects and our approach.</li> </ul>
<b>Scenario Analysis</b>	Head of Risk Intelligence and Model Validation	<ul style="list-style-type: none"> <li>Planning and execution of scenario analysis to improve our understanding of climate risk and to consider and prepare mitigating actions.</li> </ul>
<b>Disclosure</b>	Climate Group Chair	<ul style="list-style-type: none"> <li>Planning and execution of our approach to disclosure of climate-related information, including the production and reporting against TCFD guidelines, through ClimateWise.</li> </ul>

Each quarter, a RAG rating is assigned to these different areas of the plan, with an Amber rating indicating that we are behind plan but are confident that we will catch up, while a Red rating indicates that escalation is required to the Board to ensure that we make corrective action to meet the SS3/19 requirements. Actions are set each quarter to ensure that the plan remains on track or catches up where it may have fallen behind.

This process has allowed us to monitor our progress against the SS3/19 requirements through the Climate Group and ESG Committee quarterly, and up to the TMKS Board. The RCCC has also had progress reported

to it through the ORSA Report and within quarterly ORSA Lite reports during 2020. This has led to effective challenge regarding our progress against the plan.

Internal Audit are evaluating TMK's progress against the SS3/19 requirements during Q3 of 2021. This will allow sufficient time for remediation, where required.

*Source: Tokio Marine Kiln; TMK ERM Framework; TMK 2021 Annual ORSA Report; Climate Risk Plan Update (ESG Committee Q2 2021); Model Completeness Framework*



## 3.2 Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.

### Lloyd's / The Corporation of Lloyd's

The Corporation of Lloyd's believes that sharing the research we generate strengthens the industry. The Corporation of Lloyd's continues to work towards improving the analysis and quantification of less or non-modelled regions and risks, including climate and environmental issues.

The Corporation aims to drive innovation in the market by focusing on thought-leadership, best practice and efficient use of data to support risk understanding. Additional data collection, tools and research are important to identify future trends and anticipate future risks (principle 6.2). The Corporation supports this by making our thought leadership publicly available (principle 6.1). We work with research partners to reduce the uncertainty surrounding these risks, and we collaborate with practitioners in the Lloyd's market and in the wider insurance market to understand the challenges and opportunities for insurance.

### Innovation

Lloyd's innovation team is responsible for researching emerging market risks, trends, and areas of market interest; supporting the development of insurance products, and; promoting a culture of innovation and removing barriers to innovation. The team is working towards improving the analysis of upcoming risks like climate change and environmental issues. The Corporation supports this by making our action leadership research publicly available. Lately, Lloyd's Innovation team has focused on climate and environmental issues by looking at the below report:

- *Cities at risk – Building a resilient future for the world's urban centres* explores future cities' trends. The report analyses the key main threats cities will face in the coming years including natural catastrophes and climate change. It also looks at how cities could protect themselves from these threats.

### Innovation Lab

Lloyd's Lab is the home of InsurTech at Lloyd's, it is a global centre for insurance innovation. Over ten weeks programmes, called cohorts, start-ups are given the unique opportunity to work with Lloyd's market experts to shape the next big innovation.

The sixth cohort of the Lloyd's Lab innovation accelerator programme ran earlier in 2021, focused on creating simpler products for customers, including building solutions related to decarbonisation climate risks.

Through a global application process, we sought companies who thought they could help the Lloyd's market:

- Offer insurance products to transfer decarbonisation risks,
- Respond to the increasing threat of climate events – either through traditional insurance response or through provision of services,
- Understand the changing nature of climate risks – from live forecasting services to longer term modelling of natural processes or their economic and social impact, or
- Understand the carbon footprint of the clients that they cover.

The programme received 177 applications from around the world, from which eleven successful teams were selected to join Lloyd's Lab. These included:

- **Tesselo**, a geospatial intelligence firm delivering solutions to monitor natural resources (trees, soils, crop) and reduce climatic risk,
- **Jupiter Intelligence**, a global leader in climate risk analytics, and
- **CarbonChain**, a modelling company helping companies automate the accounting of their carbon emissions.

### Innovation: Future Plans

There are a number of ways in which Lloyd's will support our customers in transitioning their businesses to more sustainable models.

We will continue to support innovation for the development of products to support resilient infrastructure, low carbon economies and more resilient cities and communities through the Future at Lloyd's, Lloyd's Lab and the Product Innovation Facility.

We will provide guidance to all managing agents in our market to support our planned 2% of annual premiums on innovative and sustainable products by 2022.

We will work with our MA's to help them play a leading role in our sector to promote the Green Industrial Revolution and move towards Net-Zero.

We will develop guidance to support all managing agents in our market to deliver their Net Zero ambitions from 2022. This will include helping managing agents to put in

place robust governance processes to support their own underwriting decision making in relation to sustainable insurance.

Earlier this year Lloyd's launched Futureset, a new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks. Futureset has been developed in response to the world's rapidly changing risk landscape and the urgent need to begin a new, connected conversation with customers, insurers, and government to tackle the challenges these risks bring.

By bringing together diverse perspectives, and through cutting-edge risk insight, intelligence, and cross-industry dialogue on the most complex and fast-changing risks faced by communities, businesses and countries, Futureset aims to build greater societal understanding and collaboration to find solutions and support greater preparedness, protection and resilience to the growing and interconnected risks that customers face today, and into the future.

Throughout 2021, Futureset will focus on the landscape of systemic risks, including exploring lessons learned from the COVID-19 pandemic, as well as examining the growing and global risks brought about by climate change. Established as an openly accessible platform, Futureset will convene global experts and partner with world class research organisations, creating new and pioneering insights to drive sustainable solutions to current and future threats around the world.

Futureset launched with a six-part Systemic Risk Masterclass series, developed in partnership with the Chartered Insurance Institute (CII) and Lloyd's Market Association (LMA). The masterclass series brought together experts across industry, academia and government to help insurance and risk professionals develop their knowledge and expertise in systemic risk.

We will also develop a framework to help managing agents in our market integrate ESG within their own underwriting and risk management procedures.

### Sustainable Markets Initiative (SMI)

The Sustainable Markets Initiative Insurance Task Force, convened by HRH The Prince of Wales and chaired by Lloyd's, is comprised of executives from many of the world's largest insurance and reinsurance companies, providing an influential platform for the sector to collectively advance the world's progress towards a resilient, net-zero economy.

The SMI Insurance Task Force has committed to provide climate positive financing and risk management solutions to support and encourage individuals and businesses

around the world to accelerate their transition to a sustainable future through a number of key initiatives:

#### 1. Driving insurance product and services

**innovation** to empower commercial customers to develop, invest in and scale their sustainability initiatives, supporting green innovation across multiple sectors and geographies. As part of this initiative, the Task Force will launch at least two new insurance products to protect priority industries, such as nuclear energy, hydrogen and offshore wind, against an evolving risk landscape, in order to enable their accelerated growth.

**2. Implementing sustainable processes across the insurance supply chain** to encourage and incentivise individuals to take positive actions to live more sustainably. This will include launching an industry-wide framework to drive sustainable outcomes for customers, for example through introducing "build back better" claims clauses in home insurance policies to encourage customers to rebuild damaged properties with more sustainable materials in support of a net-zero transition.

**3. Establishing a public-private disaster resilience, response, and recovery framework** to help protect developing nations from the evolving economic and societal impacts of climate change, including the effects of increasingly frequent and severe weather events. The framework will leverage the insurance industry's unique ability to combine an insurance product with risk management and loss recovery services, in order to increase preparedness for and limit the impacts of these events. Once developed, this solution will be rolled out across vulnerable countries to support better disaster response and recovery, with a pilot being initiated in 2021.

**4. Developing a framework for accelerating and scaling sustainable investment** to help unlock the global (re)insurance industry's more than \$30tn in assets under management, increasingly directing capital towards investments that drive climate-positive outcomes in both developed and developing nations. As part of this initiative, an investment proposal will be developed through collaboration between public and private sectors, with a particular focus on renewable energy and climate transition assets to enable the transition towards a low-carbon economy.

### Futureset

Futureset was launched in February 2021 and it is Lloyd's new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks.

The global platform was developed in response to the large and complex challenges and impacts that arose

from the COVID-19 pandemic and the urgent need to begin a new connected conversation with customers, insurers, and government tackle the challenges these risks bring.

Through Futureset, Lloyd's aims to build greater societal understanding and collaboration to find sustainable solutions and support greater preparedness, protection and resilience to the growing and interconnected risks that customers face today, and into the future.

Throughout 2021, Futureset will focus on the landscape of systemic risks, including exploring lessons learned from the COVID-19 pandemic, as well as examining the growing and global risks brought about by climate change.

More information about the Futureset initiative and how this supports Lloyd's research, development and leadership into responding to climate-related risk is provided under sub-principle 5.1.

## Climate Financial Risk Forum

Lloyd's has played an active role on the Climate Financial Risk Forum, whose objective is to build capacity and share best practice across the financial services industry. Lloyd's has helped draft guidance and has presented at industry workshops during the reporting year.

## Charity partnerships

The Corporation has made a strategic decision to fund charity partners through our community involvement programme. Insurance plays a valuable role in creating a more confident and secure world and the Corporation believe that our charitable funding should extend this role in relevant ways.

As part of launching our ESG strategy in 2020, we made 7 specific commitments to our communities including our charity partnerships. These include:

1. We will continue to work with all insurance businesses in our market to engage them with our community work by the end of 2021, and support our network of more than 200 community champions.
2. We will strengthen our relationships with our charity partners to help them raise more funds, provide business support and increase their risk management skills.
3. We will support our charity partners to develop new remote virtual engagement opportunities and services.
4. We will offer further learning and development opportunities to all our charity partners.
5. We will further invest in our community volunteer programme to ensure we are prioritising high impact,

skills-based initiatives, including our financial literacy and charity trusteeship programmes.

6. We will look at expanding the career opportunities that are available in the Lloyd's market in order to support our social mobility programmes.

7. We will increase Corporation employee engagement with our community initiatives to 25%

Community involvement is one of the key pillars of Lloyd's responsible business approach and is at the heart of our values. Over the next five years, our ambition is to create measurable positive outcomes by running one of the leading community engagement programmes in the insurance industry. To work towards achieving this aim, we use our global network of some 200 countries and territories worldwide to build resilient communities, manage risk and promote innovation, and empower individuals to reach their potential.

We will continue to support the communities we work in through our charity partnerships, fundraising and grant giving, awareness raising, pro-bono support and donation of goods.

We will also continue to empower and encourage our people to support their communities, fundraise for good causes, and share their knowledge and experience through volunteering, and maintain our support for organisations that provide emergency relief for people affected by disasters.

The Responsible Business team support three independent charities and a community volunteer programme supported by the Lloyd's market in London (principle 5.2). All three charities have their own trustees made up from professionals across the Lloyd's market and academia, however the day to day running is managed by the Responsible Business team at the Corporation. These include:

## Lloyd's Charities Trust

Lloyd's Charities Trust (LCT) builds resilient communities by supporting causes relevant to the market and our people. For more than 60 years, Lloyd's Charities Trust has helped to build resilient and sustainable communities where it matters most. The Lloyd's market is recognised for supporting global economic growth, and helping businesses and communities recover after disasters (see [Lloyd's Strategy](#)).

This is supported by Lloyd's Charities Trust, which has two clear objectives:

- As the Lloyd's market responds to emerging risks and the challenges that these pose to communities around the world, it becomes increasingly important

that Lloyd's Charities Trust supports projects that aim to reduce the risk of devastation to the people who need it most. Through our charity partnerships, we work with organisations who help the most vulnerable groups with disaster risk reduction globally (principle 5.2).

- Lloyd's Charities Trust also supports causes close to the hearts of our people in the Lloyd's market in London. Recognising the voluntary and fundraising efforts of individuals from across the market through our Lloyd's Market Charity Awards, we reward their chosen charities with unrestricted grants to help maintain stability and resilience in a changing world.

The day to day running of Lloyd's Charities Trust is undertaken by the Responsible Business team at the Corporation of Lloyd's, and is overseen by [trustees from across the Lloyd's market](#). Partner charities are required to establish work plans with targets and timelines, and present these to the trustees (principle 1.2).

Lloyd's Charities Trust supports organisations and projects that strengthen the resilience of vulnerable communities around the world. Its current charity partner is Habitat for Humanity Great Britain.

### Our achievements

In 2019, the Corporation supported community activities in the countries in which we operate. In 2020 we focused on helping charities respond to the immediate and long-term needs of communities dealing with the impacts of COVID-19 by committing £15m to charitable organisations and funds.

This included £5m to the Association of British Insurers' COVID-19 Support Fund, which is providing £100m to the National Emergencies Trust in the UK; a £3m fund for charities nominated by Corporation staff globally; £2m to support charities in the UK; £2m for local organisations supported by the Corporation's global offices; and £1m to Lloyd's Charities Trust's Market Charity Awards that recognise and celebrate the voluntary and fundraising work of individuals from across the Lloyd's market. We have held £3m in reserve to support future needs. So far, the money has helped 197 charities and their beneficiaries.

As part of our community work, we manage three independent charities and a volunteer programme. These include: Lloyd's Charities Trust, Lloyd's Patriotic Fund, Lloyd's Tercentenary Research Foundation. We also work with the Lloyd's Benevolent Fund, established in 1829, which provides financial assistance to individuals working in the market who have faced exceptional circumstances.

In 2019, Lloyd's Charities Trust launched a new partnership with Habitat for Humanity GB with the aim of helping the most vulnerable in society - women, children, the elderly and those with disabilities – become more resilient to disasters, particularly in Malawi. Lloyd's Patriotic Fund launched its new partnership with Combat Stress and RFEA (the Forces' employment charity) in March 2020 and over the next three years will help military families adjust to civilian life.

We also extended some of the training and development available to insurance businesses in our market to our charity partners meaning seven organisations received free training on how to put in place inclusive hiring practices.

During 2019, we added to our suite of volunteer programmes by launching new initiatives across the market, including charity trusteeships and virtual employability programmes for young people. To formalise the benefits of volunteering, we created a Volunteering Skills Matrix which highlights the transferable skills participants can develop from each volunteer placement. This is helping people identify the right opportunity for their professional development as well as helping them find rewarding and enjoyable volunteer activities.



## What we will do in 2021

Across the market:

- We will continue to work with all insurance undertakings in our market to engage them with our community work by the end of 2021, and support our network of more than 200 community champions.
- We will strengthen our relationships with our charity partners to help them raise more funds, provide business support and increase their risk management skills.
- We will support our charity partners to develop new remote virtual engagement opportunities and services.
- We will offer further learning and development opportunities to all our charity partners.
- We will further invest in our community volunteer programme to ensure we are prioritising high impact, skills-based initiatives, including our financial literacy and charity trusteeship programmes.
- We will look at expanding the career opportunities that are available in the Lloyd's market in order to support our social mobility programmes.

Within the Corporation:

- We will increase Corporation employee engagement with our community initiatives to 25%.

### Case study:

#### Building sustainable communities: Edutainment in Africa

Those most affected by climate change are often the most vulnerable. As part of our work to build more resilient communities, Lloyd's Africa partnered with global humanitarian and development organisation Mercy Corps to raise awareness of the benefits of insurance for smallholder farmers in East Africa. Taking an "edutainment" approach (education delivered in an engaging way), key messages about the value of insuring crops and livestock were delivered through the farm makeover TV show Shamba Shape Up. The show is popular with smallholder farmers and their families, with each episode reaching 2.5m households in Kenya alone, with 60% of the viewers female. The show also aired in Tanzania, increasing the initiative's outreach.

### Case study:

#### Empowering individuals to reach their potential

"What I like about Abacus is that they talk about how to be safe with, save and borrow money because when we get older and get a wallet, we should know everything," says one student who recently took part in Lloyd's financial literacy programme. Abacus is aimed at 9-10-year olds at primary schools in the London Borough of Tower Hamlets, UK – one of the most deprived parts of

the UK - and their parents. Research shows that money habits are generally formed by the age of seven, and that financial behaviours are heavily influenced by family, so the programme aims to form good practices early. In 2019, 28 volunteers from our market delivered workshops to more than 60 pupils on topics including how to manage money, the value of insurance and what different financial products are for. As a result of the programme, the teachers involved felt their pupils increased their understanding about money and financial products.

### Lloyd's Tercentenary Research Foundation

LTRF was established to mark the tercentenary of Lloyd's in 1988 with the objective of funding research in the fields of medicine, science, safety, the environment, engineering and business. Through its partnerships with specifically commissioned academic institutions and research organisations, Lloyd's Tercentenary Research Foundation funds academic research by supporting new research on risk related issues and offering scholarships to study in the US.

Recent funding around climate related risks included:

- A 6-month research project led by the Smithsonian Tropical Research Institute (STRI). The STRI and partners conducted research aimed at reducing the protection/resilience gap by promoting the success of Smart Reforestation® options that reduce climate-risk and support climate-resilient development. The safest and most efficient way to sequester atmospheric carbon dioxide is to plant trees in the tropics. Smart Reforestation® is about planting the right trees in the right place at the right time and for the right reason. This pilot project will reduce the uncertainty and associated risk of reforestation.
- A 6-month research project led by the Grantham Research Institute on Climate Change and the Environment (GRI), London School of Economics and Political Science. This project aimed at promoting just and sustainable dividends of resilience investments at the local level in the Philippines.
- A Fulbright scholarship for Dr Freya George, conducting research aimed to provide insight into the vital influence of plate tectonics on the volatile cycle, and has implications both for the development and evolution of Earth's atmosphere and habitability, and our understanding of subduction zone earthquakes along regions such as the western seaboard of the Americas.
- A project researching and modelling the physical loss and social vulnerability arising from tsunami events across all islands of Indonesia. The project partners will co-develop, with local stakeholders and experts, a catastrophe model of Indonesian tsunamis

comprising of an event set and vulnerability curves on the open platform Oasis. The project will create regional models of all major sources of tsunamis generated by earthquakes over the entire coast of Indonesia, including potential combinations with landslide sources triggered by earthquakes and volcanoes since these can have severe local impacts. The project will produce stochastic hazard footprints for all these events by developing, and applying, bespoke statistical tools of Uncertainty Quantification. New vulnerability functions for the resilience of infrastructure such as ports and for livelihood of populations will be produced. The output will be of use to both Government and the insurance industry and enable modern disaster risk financing for Indonesia.

### Lloyd's Patriotic Fund

Founded in 1803, Lloyd's Patriotic Fund is the oldest military charity of its kind. Today, it helps veterans' and their families' transition to civilian life. Launched in 2020, LPF's new charity partners are Combat Stress and RFEA (the Forces Employment Charity).

### Lloyd's Community Programme

Lloyd's Community Programme helps individuals achieve their full potential through support from the Lloyd's market. The programme currently works with more than 70 managing agents and brokers, and attracted 2,800 volunteers in 2019. It also supports students from across London with a bursary to study at universities outside the capital.

Evidence also applies to principle(s): 1.2, 3.2, 5.1, 5.2, 6.1, 6.2

Source: *The Corporation of Lloyd's*

### Lloyd's / The Market / Beazley

Beazley recently announced its launch of the ESG consortium. The purpose is to help set an underwriting strategy that supports and encourages clients to continue focusing and developing strong ESG credentials. By exclusively focusing on clients with strong ESG strategies, Beazley is providing a new insurance solution while being a powerful influence for active climate-related change. The Responsible Business team will support the consortium through providing internal assessments and using an external ESG scoring specialist to help evaluate clients on their ESG efforts. The consortium will be multiline, initially focusing on shorter tail business, specifically Marine, Cyber, Terrorism and Property.

The launch of this consortium has enabled Beazley to develop a number of machine learning data systems, through the use of BI and other data matching systems. This algorithm based approach has allowed us to gain a better handle on data, enable the enhancement of the

data quality and prepare the business for future research projects.

Beazley has also begun discussions with a number of academic and non-government institutions to determine the opportunities for collaboration on research and development. With opportunities emerging from the TCFD workstream, as well as the development of ideas from across the business, we expect to be able to begin to commission research over the course of the next year. The outputs from this work, and the emerging new products/ services which result will be taken forward by Beazley's Incubation team. This team was created in 2020, with the objective of bringing new products to market. A target has already been set for this team, that one in three new products will focus on climate change opportunities which will aid the development of the long term business strategy for the company.

One area, where Beazley has developed a product for the market is Redicova. Launching later in 2021, the offering is a retail parametric wind product, for cyclone 3 (+165 MPH wind) and above, to fill post cyclone insurance protection gap for Northern Australia.

This development demonstrates Beazley's commitment to providing innovative solutions to customers who could be adversely impacted by climate change. Furthermore, the product provides a social benefit to communities. Firstly through providing access to cover which traditionally would have been either too costly, or not have been written due to the risks, secondly by speeding up payment so communities can recover quickly following an event.

The cover includes all consumers in Northern Australia (Cresta 4-21) and is sold in units of AUD \$1k for affordable fixed rates. These rates are affordable due to the "light touch" nature of the product. There is a graduated settlement based on proximity to the Destructive Windzone, with electronic settlement within 72 hours of the event.

Source: *Beazley*

## Lloyd's / The Market / MS Amlin Underwriting Limited

### Risk Analytics

Nature Climate Change journal published in April 2021 a comment article by three members of the Risk Analytics team, titled "Normative approach to risk management for insurers".<sup>h</sup> The article debated whether exploratory scenarios, particularly those concerned with climate change, are best suited for business strategies and decisions, and instead proposed the use of normative scenarios relevant to impact thresholds chosen by an insurer as important for the adaptation of its business. The article has attracted significant comments from the scientific and insurance community. MS AUL will continue to develop the normative scenario approach, and is actively engaged with two modelling firms to establish projects to bring quantification to such scenarios in the business context.

The MS AUL Risk Analytics team is engaged with the MS&AD group research company, InterRisk, in their project with Jupiter Intelligence to produce localized climate change impact data for use in risk planning, for strategic and underwriting purposes. Jupiter Intelligence (<https://jupiterintel.com>) is part-funded by MS&AD Venture Capital and is one of the leading climate risk analysis companies working across many sectors.

InterRisk has also carried out a collaborative project with Tokyo University, to produce a global flood map designed to analyse and display the changing frequency of flood events globally as impacted by climate change. This web-based map is free to use [https://www.irric.co.jp/risksolution/sustainability/prediction\\_map/index.php](https://www.irric.co.jp/risksolution/sustainability/prediction_map/index.php)

MS AUL is currently undertaking research into climate change scenarios for use in the PRA 2021 CBES exercise. The Research Manager leading this project is a glaciologist and has previously worked at post-doctoral level in climate change projects at Oxford University.

The MS AUL Research team will publish later in 2021 a chapter in a book,<sup>i</sup> titled Hurricane Risk in a Changing Climate, which is also sponsored by MS AUL and the modelling firm RMS. The book has replaced a symposium with the same title which was due to be held in Miami, for which the organizing committee contains several of the world's leading meteorologists and climate scientists. The main objective of the symposium is to support communication among scientists, engineers, and insurers in order to increase understanding of and better

ways to deal with tropical cyclone risks, and this objective will be continued with the book publication. The MS AUL chapter (see appendix) is titled "Downwards Counterfactual Analysis in Insurance Tropical Cyclone Models: a Miami case study", and this looks at new techniques to explore historic events in "worse-case" mode for better risk management and business planning.

MS AUL is a member of the ClimateWise Net Zero Underwriting Taskgroup, which has the objective to investigate the suitability of vendor tools to support the achievement of net zero underwriting. The Taskgroup will produce a report on its findings to be published around COP26.

In conjunction with the Lighthill Risk Network, MS AUL is sponsoring two research projects to provide data to support business strategies:

1. Tom Philp: A Decision Theoretic Framework for writing Intra-Annual Reinsurance Backup Covers: A NAHU Test Case.
2. Steve Jewson: Converting the Knutson et al. (2020) Tropical Cyclone Climate Change Projections to a Format the Insurance Industry Can Use.

These projects are due to complete in 2022, and are both intended to produce data which can be directly applied to modelling, risk frameworks, and business planning.

Additionally, Risk Analytics has undertaken a number of initiatives previously reported to ClimateWise and noted here for completeness:

- December 2019: MS Amlin CUO participated in roundtable discussions with UK Research and Innovation, covering research needs of the insurance industry including climate change.
- March 2020: supported research report on Scenario Analysis in collaboration with the Lighthill Risk Network and the University of Cambridge.
- June 2020: held Academic Advisory Panel on impacts of climate change on catastrophe modelling.
- 2020: review of RMS European Windstorm model and AIR US Hurricane model, for impact of current climate conditions, leading to an EU WS model adjustment.

<sup>h</sup> See evidence 3a

<sup>i</sup> See evidence 3b

2020: hosted Lighthill Risk Network workshop on climate change to discuss research initiatives and the development of a climate change data hub for the insurance market.

## Lloyd's / The Market / MS Amlin Business Services

### Investments

Within the Investments team at MS Amlin there is an ongoing initiative to obtain and assimilate alternative datasets to inform and enhance the investment process. For reasons of efficiency and transparency, this generally consists of utilising free, publicly available research and data. Climate risk data has been an important recent addition in this area as part of our wider ESG data initiative.

MS Amlin has obtained datasets and research from various sources including the World Resources Institute, HSBC, Climate Central and CRED. The team is in the process of integrating them into the governance framework and investment decision making process. In addition, MS AUL is also working with our custodian to further develop our understanding of the full climate risk research landscape and data market place.

One of the main data challenges that MS Amlin has faced is, while possible to obtain country-level data readily for a wide variety of metrics, it has proven to be considerably more challenging (and costly) to obtain company specific data. There is also a need to overlay the raw climate risk data with appropriate economic data and other measures that permit critical analysis of a company or countries ability to respond to the risks and opportunities of climate change. Extensive resources are needed to discern the broad forward-looking individual climate risk strategies of the full investment universe of worldwide entities.

*Source: MS Amlin*

## Lloyd's / The Market / QBE / Climate risk related research & development

In 2020, we undertook a detailed analysis of climate change litigation including considering climate liability risk from two different perspectives: we analysed US-based climate-related litigation cases to better understand our potential exposure, and we commenced analysis of specific liability scenarios in relation to our liabilities. We completed a detailed analysis of all climate-related litigation cases in the United States (from 1986 to 2020), with a particular focus on industry, defendant, jurisdiction and damages sought. Based on these criteria, the analysis helped to identify our potential exposure, how our policies may respond and how we might mitigate this

exposure to prospective future litigation. In 2021, we plan to complete analysis for non-US litigation and we will continue to monitor new cases and types of coverage we offer. The litigation landscape continues to evolve as plaintiffs find new and innovative ways to bring climate-related litigation cases to the courts. This analysis will therefore be an ongoing consideration, with interpretation varying by policy wordings in place. During 2020, we also engaged an external modelling consultant, Arium, which has developed a casualty analytics platform. This platform contains a large database of casualty scenarios which is being used to specify scenarios to quantify our exposures to remote yet plausible climate scenarios. To support this analysis, QBE has grouped liability exposures, for example by industry sector and by product, and a working group has been formed to identify and develop these scenarios for testing to increase our understanding of liability related climate risks.

In 2019 and 2020 QBE has continued its partnership with Jupiter, an emerging leader in predicting and managing climate risk. Jupiter's "ClimateScore" is a comprehensive, cloud-based platform that incorporates environmental factors in an integrated, dynamic model to deliver risk-focused solutions. The platform comprises data that analyses and predicts climate risk from one hour to 50 years in the future. Jupiter currently predicts the probability of extreme weather in select North American cities and the company is steadily expanding to service global markets.

QBE also invested in Jupiter via its venture capital arm, QBE Ventures, which partners with the world's best and brightest start-ups to deliver new technologies and competencies. QBE's partnership with Jupiter is in line with our commitment to managing climate-related risks and opportunities.

Another example of supporting research and innovation of climate-related issues is QBE's agreement with the Climate Corporation. On 5 March 2019, a platform agreement was announced between Climate Corporation's industry-leading Climate FieldView™ digital agriculture platform and NAU Country Insurance Company, a QBE Insurance Company. The new agreement between Climate and NAU Country enhances the digital reporting capabilities for farmers.

First launched in the United States in 2015, the Climate FieldView digital agriculture platform is on more than 60 million paid acres across the United States, Canada, Brazil and Europe. It has quickly become the most broadly connected platform in the industry and continues to expand into new global regions. As innovation in the digital agriculture space continues to accelerate rapidly around the globe, Climate Corporation continues to explore opportunities to provide farmers with the insights they need to improve their productivity.



Specific products and services developed by QBE to support innovation for climate mitigation and adaptation are discussed in section 6.2 of this report.

Evidence also applies to principle(s): 1.2, 3.2, 5.1, 5.2, 6.1, 6.2

Source: QBE press releases  
(<https://www.qbe.com/us/newsroom/press-releases/qbe-partners-with-jupiter-to-take-on>);  
(<https://www.qbe.com/us/newsroom/press-releases/the-climate-change-corporation>)

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe has a long track record of leadership in applying its risk expertise and leveraging its partnerships to seek to increase the economic resiliency of vulnerable communities impacted by climate change. Reinsurance plays an important role in helping communities recover after a natural disaster, and RenaissanceRe has made significant commitments to reduce the protection gap and mitigate the impact of natural disasters on populations and economies in the developing world. RenaissanceRe has a dedicated global team focused on public sector partnership activities to support its continued work in this space, and has cultivated several external partnerships to conduct research and develop new solutions in the face of climate change:

#### Insurance Development Forum – Sri Lanka Flood Model

Through its role in the Insurance Development Forum (“IDF”), RenaissanceRe was the project lead on the development of a comprehensive initiative that was specifically aimed at lowering the barrier to risk understanding in the face of natural disasters. The Sri Lanka Flood Model, which was the first probabilistic flood model for the country, helps analyze potential flood losses to provide greater understanding of risk to both the impacted communities and the broader international reinsurance market. RenaissanceRe’s Group Chief Risk Officer commented, *“One of our founding tenets is improving the understanding of natural hazard risk through robust catastrophe models”,* he added *“We hope our efforts to improve analysis of risks like Sri Lankan floods will help to enhance disaster risk financing and community resilience in low and middle-income countries while lowering barriers to high-quality hazard and risk information”.*

#### Lloyd's Disaster Risk Facility - Redicova

Alongside three other Lloyd's Disaster Risk Facility members, RenaissanceRe supported the launch of an autonomous parametric insurance product to enable

communities to rebuild quickly following natural disasters in the face of climate change. The product will initially be available in Northern Australia to help close the protection gap for small to medium businesses and agricultural enterprises. By collaborating with the Australian Bureau of Meteorology, Redicova uses operational tracking maps which follow cyclones and plot their journey when they reach land. Due to the parametric nature of the policy, the new product will pay out immediately when ‘Very Destructive Winds’ are identified as a result of a ‘Severe Tropical Cyclone’ occurring at an insured location. RenaissanceRe’s involvement in the development and execution of this new product aligns closely with two core pillars of its ESG strategy: Promoting Climate Resilience and Closing the Protection Gap.

Source: RenaissanceRe Syndicate Management Ltd

### Lloyd's / The Market / The Hartford

#### Insurance Operations

The Hartford’s policies and procedures for managing natural catastrophe risks include disciplined underwriting protocols, exposure controls, sophisticated risk-based pricing, risk modeling, risk transfer, and capital management strategies. The Company has established underwriting guidelines for both individual risks, including individual policy limits, as well as risks in the aggregate, including exposure limits by geographic zone and peril for natural catastrophe perils. Significant risks to the company or emerging risks that could be significant in the future are monitored to evaluate how they could affect the properties and people we insure.

The Company also continually examines industry publications and analysis for guidance on best practices such as the Task Force for Climate Related Financial Disclosures (TCFD) and scientific consensus on climate change. The Company uses both internal and third-party models to estimate the potential loss to insured exposure resulting from various catastrophe events and the potential financial impact those events would have on the Company’s financial position and results of operations across its businesses. The Company calibrates its analytical tools to recognize both historical experience and expectation regarding the impact of climate change over the short, medium, and long term including climatic conditions and catastrophe modeling firms’ proprietary research. The dynamics of climate change and severe weather impact various underwriting and pricing activities across the enterprise. Catastrophe modeling and other analytical tools incorporating climatic assumptions are significant inputs into pricing and underwriting the insurance policies issued by the enterprise, as well as capital requirements. Risks identified with the potential to have a substantive financial or strategic impact on our

business (described above) are risks having a financial impact of \$1 million or more.

The Board has ultimate responsibility for risk oversight, exercised through standing committees. The company's formal risk appetite framework is reviewed by the Board at least annually and includes an enterprise risk appetite statement, tolerances, and limits by risk type. Risk is managed at multiple levels, including the company and asset level. The Finance, Investment and Risk Management Committee (FIRMCo), comprised of all Board members, oversees investment, financial and risk management activities of the Company and oversees risks falling outside the responsibility of any other committee. FIRMCo meets at regular Board meetings and is updated on risk management activities by the Enterprise Chief Risk Officer (ECRO) and the Chief Executive Officer (CEO).

The Enterprise Risk and Capital Committee (ERCC), chaired by the CEO and comprised of senior leaders oversees the risk profile, capital structure and risk management practices. The ERCC has oversight of significant company-wide risk exposures. ERM is independent of business units and provides risk analysis on an individual and aggregated basis to ensure the Company's risks remain within its risk appetite and tolerances. ERM is led by the ECRO who reports to the CEO and is responsible for maintaining and enforcing ERM's program and policies. With assistance from ERM, business units share risk-related information with senior management and Board committees. Business risk self-assessments are conducted periodically by each business unit and functional area to identify and disclose their most material risks to senior management and the Board Audit Committee. Emerging risk councils identify, assess, measure and monitor emerging risks and the Emerging Risk Steering Committee reviews and reports significant emerging risks to the ERCC and the FIRMCo.

The Company's SVP of facilities management and procurement is responsible for identifying and prioritizing activities to reduce our carbon footprint as well as requiring supplier compliance with The Hartford's [Vendor Code of Conduct](#). The Company monitors its major risks at the enterprise level through a number of enterprise reports, including but not limited to, a monthly risk dashboard, which tracks the return on risk-capital across products, and regular stress testing. ERM reviews risk exposures, key business performance metrics, risk indicators, audit reports, risk/control self-assessments and risk event data with senior management and the Board.

The Company quantifies its risk exposures using multiple lenses including statutory, economic and, where appropriate, U.S. GAAP. ERM leverages various modeling techniques and metrics to provide a view of the

Company's risk exposure in both normal and stressed environments at the company and asset level. ERM regularly monitors the Company's risk exposure and provides regular reporting to the ERCC. The Company defines insurance risk as its exposure to loss due to a range of perils and risks covered under its policies including loss due to catastrophes.

Over the past five years, The Hartford has rolled out a company-wide program called The Hartford Way, which is a Lean-based management system that is focused on building a strong and sustained culture of continuous improvement at The Hartford. Through a common set of management practices, tools and behaviors, all levels of the organization are actively engaged in driving a continuous improvement culture and solving problems, big and small, to positively impact our business outcomes and strategies (e.g. customer experience, efficiency, revenue growth, sustainability, etc.).

The Company also relies on its internal work on climate change to help guide the prioritization process. The Hartford's Environment Committee, which was created in 2007 as part of our public commitment to climate change, is made up of company leaders from across the enterprise, including risk management, operations, representatives of the company's Personal Lines and Commercial Markets businesses, and our investment company, as well as Actuarial, Sales, HR, Strategic Sourcing and Real Estate, Marketing and Communications, Government Affairs, as well as representation from our employee environmental action team (HEAT). This Committee also updated the Company's statement on climate change based on the 5th assessment of the IPCC.

In 2017, The Hartford formed an ESG Sustainability Governance Committee comprised of senior management to set and help drive execution of the Company's sustainability strategy, including environmental stewardship. This committee prioritizes opportunities aligned to the Company's sustainability strategy and reports progress to The Hartford's Board of Directors at least annually. In 2019, the Sustainability Governance Committee met six times. Members from both The Hartford's ESG Sustainability Governance Committee and the Environment Committee helped to create The Hartford's new [ESG Investment Policy Statement](#) in early 2019 and helped to drive the company's [policy on insuring and investing in Coal / Tar Sands](#) announced in December 2019.

In addition to the actions described above, a full assessment of The Hartford's Scope 3 emissions inventory was completed in 2021 and will be published in the company's CDP response on July 28, 2021. This evaluation has helped determine the relevant categories

contributing most to the company's scope 3 emissions and identifies the greatest reduction opportunities.

## Investments

HIMCO has developed and instituted a policy for assessing every active investment in the portfolio and this assessment is part of the analysis made in the investment decision process. ESG considerations are evaluated as part of HIMCO's investment process across asset classes, including for fixed income securities (investment grade, high yield, municipal, emerging markets, private placements, securitized assets) as well as for private equity, middle market loans, and real estate. Analysts identify and memorialize directional risk level and intensity of that risk for every investment with the exception of quantitative equity and index investments. ESG risk analysis is completed as part of the initial issuer review and for subsequent interim and annual reviews. The relevancy of the ESG factors vary based on their materiality to the asset class of the investment as well as the industry sector in which the issuer operates. HIMCO has conducted a series of training sessions to provide investment staff with guidance on ESG related issues.

For day to day implementation, ESG factors have been incorporated into HIMCO's proprietary credit research platform where analysts provide assessments and commentary as applicable for each active portfolio holding. Analysts use a wide variety of information including company regulatory filings, ESG statements, third party reports, and discussions with management to consider the possible ESG-related risks or benefits of each investment holding to the extent applicable. HIMCO utilizes this information as an input into its assessment of current value for each investment and in consideration for how investments are likely to perform in the future. HIMCO reevaluates ESG factors on a regular basis and a changing ESG risk profile could impact the time horizon of a given holding. The integration of ESG factors into HIMCO's proprietary research platform provides HIMCO with reporting capabilities to identify ESG attributes of the portfolios.

Hartford Funds also publishes educational materials focused on climate-related investment risk considerations. Examples include:

- [Hartford Global Impact Fund Brochure \(3/31/21\)](#)
- [Sharper focus on Sustainability \(12/2020\)](#)
- [The DOL Regulates ESG . . . or Did It? \(1/2021\)](#)
- [What Does Biden's Election Victory Mean for the Energy Transition? \(12/2020\)](#)

Our policies and practices continue to evolve as ESG practices continue to develop across the investment community as well as amongst issuers.

### Support Links:

- [CDP – C3.2](#)
- [TCFD Report](#)
- [SASB Report](#)
- [Policy on Insuring, Investing in Coal, Tar Sands](#)
- [ESG Investment Policy Statement](#)

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln / Disaster modelling and climate change

As has been detailed in section 2.1, the majority of risk identification and assessment on broad risks of climate change has been focused within the Risk Intelligence Team. This has helped to inform business strategy across underwriting, investments, and operations. Through our research, reporting of that research, and subsequent discussions and challenges at Board level, we have been effectively informing the business of the risks and hence supporting the setting of risk appetites by the Board (see section 2.2).

The work of the Risk Intelligence Team has been supplemented with research taking place by underwriting teams and the TMK Future Minds programme, engaging TMK graduates in research and development regarding topics related to innovation – including climate change. For example, the Future Minds programme has, in 2021, informed business strategy through research into:

- a) How various sectors of the global economy are likely to be challenged and affected by a transition to low carbon
- b) How different lines of business at TMK are going to be affected by emerging risks including climate change over the next ten years

These research projects have led to enhancement of our understanding of climate risk's effects on our business strategy, as well as identifying opportunities for future product development or line of business strategy.

There has been further research and development focused in the areas of disaster modelling and in the development of insurance products to date. These have been outlined below.

## Disaster modelling and climate change

The scenario testing discussed in section 2.3 has highlighted the challenges with quantification of the risk and led to TMK further engaging with climate risk modelling solutions during the last year. TMK have undertaken exploratory work with a range of vendors looking at ways in which climate risk modelling can be embedded into our business strategy.

Through collaborative work within the Group, TMK have been able to benefit from extensive physical risk modelling development by Tokio Marine. This has involved research into an extensive range of climate models to identify the range of views regarding hurricane frequency and severity changes to be expected in a warming world. This has led to an improved understanding of physical risks of climate change at TMK, and allowed us to share this understanding within the varied discussion forums that we participate in.

## Insurance products innovation in response to climate change

Tokio Marine Kiln has been providing insurance support to new technologies which serve to work against climate change, as exemplified below for different classes of business.

In addition, TMK's Head of Innovation is a leading member of the Lloyd's Product Innovation Facility (PIF), which looks to explore risks that might not fit the traditional market such as risks relating to intangible assets or new technologies. TMK's strategy is to initiate and look to support external initiatives that come to the PIF and would benefit our ESG strategy. We continue to independently develop products for areas that we don't see development of at the PIF, including around opportunities for climate-positive products.

## Intellectual Property

Our Intellectual Property underwriters have naturally supported several innovations that align with our ESG goals, including around sustainability. For example, we provided IP insurance to a client who had successfully developed a traceable substance for marine container ships in order to help identify the ship responsible when there is oil spill in the ocean. TMK's efforts to continuously research and develop risk transfer in this area have enabled clients to move forward with environmentally sustainable technologies that otherwise would overburden their balance sheets with contingent liabilities, restricting their ability to pursue development of innovations that support the transition to a low carbon economy.

## US Wildfire

TMK has had a recent focus on our underwriting of, and exposure to, US wildfire risk. TMK has developed an internal wildfire scoring and accumulation tool based on data from the USDA Forestry Service, that allows underwriters to assess property-level risk and overall accumulation in key geographical areas.

## NZ Forestry

TMK insures clients that own forestry through a product in New Zealand. The forestry is left as standing timber, and therefore not cut down. In doing so, the forestry is eligible for carbon credits that provide an income stream for the forestry owner. We protect the owner if there was a change in the law that would remove this income stream. The risk coverage enables the client (and their bank) to remain confident that their decision to not cut down the forests is upheld with insurance that would indemnify them for lost income, should the law change.

## Carbon Credit Eligibility

TMK insures a client for the risk that a Certified Emission Reduction (CER) would not be convertible into an EU Allowance. There is risk that this might not occur on a 1:1 ratio, thus devaluing the CERs that have been collected by the client.

## Flood

TMK via WNC, its wholly owned subsidiary in the US, offers expertise in private flood program administration to meet specific coverage needs of single-family homeowners, commercial property owners and tenants, residential condominium associations and hard-to-place risks such as those located in a designated CBRA zone.

## Unmanned Aerial System (UAS)

The UAS industry indirectly provides solutions that help counter climate change as they provide a greener alternative to operating a conventional aircraft, with many UAS systems operating via batteries and solar power rather than the usual polluting fuels used in manned aircraft. With its leading expertise, TMK is supporting the increase usage of UAS through the coverages it provides.

In May 2015, TMK successfully launched the first comprehensive insurance product of its type for Unmanned Aerial Systems (UAS) in the Lloyd's market. The product, "One Unmanned" offers clients, ranging from UAS operators, manufacturers and service providers, protection under a single wording featuring multiple coverages, which the client can tailor to best suit the needs of their business.



In recognition of TMK's contribution to the industry, the "One Unmanned" product was shortlisted for the category "most innovative product" in the inaugural Lloyd's Innovation awards in 2015.

In 2017, TMK won an award at the inaugural Tokio Marine Group CSR initiative for all the group companies globally. The award recognised the UAS policy as a

greener insurance product in various commercial sectors. The submission highlighted how carbon heavy practices such as helicopter flights are being replaced by UASs in various commercial sectors, reducing carbon emissions. TMK's product supports the increase in usage of UASs.

*Source: Tokio Marine Kiln*

## 4. Reduce the environmental impact of our business

### 4.1 Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.

#### The Corporation of Lloyd's / Working across our supply chain

In our first ESG report published in 2020, we committed to engaging widely with stakeholders across the Lloyd's market to further develop and operationalise our ESG strategy, policies and processes. We will develop a framework to help insurance businesses in our market integrate ESG principles into their business activities over the next 18 months.

Year on year the Corporation of Lloyd's seeks to build on its commitments to fully embed sustainable procurement practices with internal stakeholders and across its supply chain. *The mission of the Group Procurement team at Lloyd's is:*

"To deliver an effective and sustainable approach to all third-party sourcing and supplier management, with a clear purpose to support Protect, Promote and Provide principles while achieving maximum value, minimising risk and driving efficiencies to invest in the future applying Lloyd's principles around:

- i) Sustainable procurement
- ii) Responsible Business
- iii) Living Wage
- iv) Anti-bribery & Corruption
- v) Diversity & Inclusion
- vi) Modern Slavery

Through 2020-21 the focus of Group Procurement has been to continue to build on commitments to embed sustainable procurement practices both internally and across the supply chain.

There are several projects and activities underway to support the team in delivering this mission and to help drive efficiencies and process-improvements, including;

1. Continued development of 'Lloyd's Group Procurement Strategy' which aligns to our ESG statement and includes objectives such as:
  - o Ensure that purchasing and contracting activities are **ethically, environmentally and socially responsible**
2. Continued development of 'Lloyd's Group Procurement Policy' which sets out policies and procedures concerning all third-party supplier expenditure, with a clear vision:
  - To demonstrate continuous improvement and the achievement of value for money through the effective procurement of goods and services to ensure the Corporation of Lloyd's needs and those of the Lloyd's Market.
  - To have a clear framework of accountability and responsibility that adopts legally compliant, best practice procurement procedures and techniques.
  - To build a diverse and competitive market that can supply the Corporation of Lloyd's and its service user's requirements and provide value for money.
  - To encourage communication and interaction with local and national suppliers to understand their views and what enables and encourages diverse parts of the market to bid for work with the Corporation of Lloyds.
  - To develop a relationship between the Corporation of Lloyd's and the business community and the broader voluntary and community sector that creates mutually advantageous, flexible and long-term relations based on continuous improvement of quality of performance and financial savings.

- To ensure that our purchasing and contracting activities are ethically, environmentally and socially responsible; applying 'Lloyd's' principles around sustainable procurement, Responsible Business, Living Wage, Anti-bribery & Corruption, Diversity & Inclusion, Modern Slavery and other applicable ethical sourcing and environmental considerations.
  - To ensure that our suppliers promote an inclusive culture for all and embrace diversity in the workplace.
3. Continued development of the Supplier Risk framework which sets out Lloyd's approach to supplier risk management.
  4. Supplier rationalisation continues in an effort to optimise the Corporation of Lloyd's UK supplier base, bringing both financial and business improvement benefits to Lloyd's and its' suppliers, as well as enhancing the supplier/customer relationship; the supply base has been consolidated from approx 1,400 suppliers in 2017 to 520 suppliers in 2021.
  5. We have commenced a review of our sustainability questions in the 'Lloyd's Tender Documentation' which is used to assess suppliers wishing to work with us. See point 9.
  6. We recently launched our [Supplying Lloyd's](#) site on [lloyd.com](#) which sets out how we work with our suppliers and includes information on our Supplier Code of Conduct, the Lloyd's ESG Report and the Fintech Pledge.
  7. A review of our 'Supplier Code of Conduct' was started in 2021 in order to ensure alignment with the Lloyd's ESG and meanwhile continues to be utilised to communicate and set out the standards of business conduct which all suppliers are required to comply with; our goal is to work collaboratively with our supply chain partners towards a responsible business approach. The Code includes:

## Environment

Recognising that sustainable businesses should acknowledge the planet's finite resources; the Corporation of Lloyd's expects its suppliers to support sound environmental management principles and reduce their impact on the environment within which they operate:

- Suppliers must have a written environmental/sustainability policy or equivalent, appropriate to the size and nature of the supplier's operations that, where applicable, addresses preventing, mitigating and controlling serious environmental and health impacts from operations including raw material usage, greenhouse gas emissions, water, waste, air quality and biodiversity

- Suppliers must have effective internal environmental management programmes with adequately trained staff responsible for managing the organisation's environmental performance. Suppliers must abide by all legislation and regulations related to the protection of the environment and the handling of dangerous and hazardous materials
- Suppliers must endeavour to use products which can be re-used, recycled, used in an energy efficient manner and which cause minimal environmental damage at all stages of the supply chain

## Economic

Economic sustainability focuses on bringing economic benefit to the workers, businesses and communities in which a company operates. From an ethical perspective, commercial transactions should be economically beneficial to all parties involved and relationships should be based on the principle of fair and honest dealings, and sustainable development:

- Suppliers must embed basic business principles in their activities and conduct e.g. in a Code of Business Standards or equivalent. This should include acknowledgement and commitment to adhere to local laws and regulations
- The Corporation of Lloyd's expects suppliers to have policies and controls in place to mitigate financial crime i.e. anti-bribery & corruption and anti-financial crime policies
- Suppliers must ensure that they comply with UK, EU and all other applicable sanction regimes and obligations
- Suppliers must have and adhere to reasonable and lawful payment policies with their own suppliers and subcontractors
- Where suppliers are acting for and on behalf of Lloyd's, they must not engage in any form of bribery, including making facilitation payments or in any way facilitate tax evasion
- Where suppliers outsource aspects of their deliverables or processes, they must ensure that their supply chain or subcontractors comply with the requirements set out in this Code

## Labour

The Corporation of Lloyd's is committed to the protection of human rights and is guided by fundamental principles such as the United Nations Universal Declaration of Human Rights, the International Labour Organisation (ILO) Core labour standards and the Modern Slavery Act 2015; the Corporation seeks to ensure there are:

- No human rights abuses throughout our supply chains by encouraging behaviours and practices that are consistent with these principles, including:
- A commitment to anti-slavery and compliance with the requirements of the Modern Slavery Act 2015, or equivalent
- Provision of a safe working environment, abiding by local Health and Safety laws
- Compliance with all applicable local wage and working hour laws
- A mechanism to enable individuals to raise concerns relating to wrongdoing or malpractice at work i.e. a Whistleblowing or Speaking Up policy

## Diversity & Inclusion

The Corporation of Lloyd's supports the belief that a diverse workforce and inclusive organisation is intrinsically linked to improved business outcomes. As an employer it recognises the importance that equality legislation must play in promoting equality and eliminating unlawful discrimination; in striving for excellence it seeks to create an inclusive environment globally for all regardless of their gender, marital/civil partnership status, race, religion or ethnicity, disability, age, sexual orientation, gender reassignment or nationality.

The Corporation's suppliers will support and reinforce its commitment to providing an inclusive environment for its workforce. Suppliers are expected to provide the same inclusive opportunities to their workforce and we require commitment to the following:

- Compliance with all applicable local equality laws
- Zero-tolerance of any form of unlawful discrimination: promoting a workplace free from bullying, harassment, victimisation, racism or any other form of abuse
- Demonstrate a commitment to inclusion: drafting an equal opportunities policy that covers gender, marital/civil partnership status, race, religion or ethnicity, disability, age, sexual orientation, gender reassignment and nationality.

- Provide staff training covering equality, diversity and inclusion principles
- Provide evidence where requested, of how services are inclusive and accessible to all intended users, such as people with disabilities as well as people from all diversity groups

## Wellbeing

The Corporation of Lloyd's takes a proactive approach to wellbeing; it plays a key part in building an inclusive culture. Organisations taking this approach can also benefit from improved employee retention and productivity.

We expect our suppliers to support the Corporation's commitment to wellbeing and to take a proactive approach by implementing:

- Policies and initiatives to support wellbeing, including a healthy work and family balance
- the provision of employee benefits designed to enhance wellbeing; such as an Employee assistance programme
- mental health core standards as detailed in the Stevenson / Farmer review of mental health and employers

## Information Security & Data Protection

The Corporation of Lloyd's recognises that Information Security is a business matter, not just an IT matter, and that it must reflect changes from several sources, notably organisational design, technology adoption, culture and regulatory and legal change.

Corporation suppliers must demonstrate compatibility with 'Lloyd's Information' security policies and standards. The details of this section are less relevant to reporting but are available to the reviewers on request.

## Account Governance and Compliance

The Corporation encourages active engagement, strong account governance and open communication with its supplier throughout the term of the engagement; suppliers are expected to:

- Actively support eProcurement, e-Invoicing, including as a minimum to accept PDF Purchase Orders and provide PDF Invoices via email. This allows a reduction in paper, drives security, accuracy and efficiency, and requires consideration about information and data security to be included to provide a full view of our supplier expectations.



- Take responsibility for ensuring that they keep the Corporation up to date with any changes to details including; VAT registered number, bank account details and address.
- Notify the Corporation of any changes to authorisations, company ownership, investigations and material risks and any other development that may impact their ability, capacity and authorisation to deliver.
- Sign and comply with the Corporation of Lloyd's Non-Disclosure Agreement (NDA).

8. Scout, our new e-procurement tool, was launched in June 2020; this system has facilitated enhanced collaboration across the Corporation and its suppliers helping to simplify and expedite sourcing, contract approval, and supplier management processes. It has improved access to quality data and enhance third-party risk management increasing transparency and oversight through greater visibility. This tool enables us to communicate and update suppliers on changes to Lloyd's policies and processes i.e. Supplier Code of Conduct, RFP documents and replace the requirement for hard copy contacts as stated below in point 12.

9. The Group Procurement team operates a continuous improvement and review programme which includes reviews of all supplier sourcing documentation and policies. The 'Lloyd's Tender' documentation is continually updated to reflect best practice; suppliers are asked to respond to a series of questions via Scout and to provide supplementary evidence on key sustainability issues, including Environmental Protection, Diversity and Inclusion, and as outlined above in the Supplier Code of Conduct.

10. During post-tender supplier evaluation, the Corporation continues to consider and score suppliers on responses to sustainability questions; the weighting used when scoring sustainability factors at this stage depends on the products/services being procured; as an average the weighting is 0-10-15%.

11. In instances where sustainability factors have more of an impact on the products and services being procured, it may be necessary for the Corporation to follow up with a supplier site visit or request further clarification at presentation stage.

12. As above we have developed an electronic contract management system (Scout) to store all supplier contracts. Utilisation of this system has removed the requirement for hard copy contracts which were previously stored in a vault.

13. Centralised ownership of the Corporation of Lloyd's Travel policy and Stationery provider; employees are continually encouraged to make use of video and tele-conferencing facilities. Lloyd's has seen a significant reduction year-on-year in the number of flights taken and

a reduction in the Corporation's carbon footprint. The outbreak of Covid-19 has resulted in virtually no business air travel being permitted since February 2020.

14. The Corporation of Lloyd's seeks to involve its in-house suppliers in the development of annual environment action plans where appropriate. The full plans have been shared with the reviewers and contain 22 headline initiatives with associated environmental impact targets across energy management, Group Technology, employee engagement, travel and suppliers; some of the key highlights for this reporting year include:

- Despite the significant effect the Covid-19 crisis had on our catering team that resulted in the closure of the main food hall for most of the period, the Lloyd's in-house catering provider in London has still been working hard to reduce our footprint through two key initiatives:
- Participating in an 8-week programme to reduce waste in the kitchens through the 'Guardians of Grub' scheme. This was a Government led CSR initiative and involved. The modules on this course were designed to help colleagues to understand the food waste problem, how to set a food waste reduction target, how to measure wasted food and to understand how to take action.
- Producing 165,000 meals for 17 charities over 15 months with a cost to Lloyd's of £267,963.87.

We work hard to reduce our energy consumption and associated carbon emissions through the course of each year. Given the majority (91%) of our emissions are from the UK, our energy and carbon reduction activities are focussed on our London headquarters. During 2020 we have:

- Execution of water saving projects – Installation of sensor taps in toilets during refurbishment works.
- Installation of LED lighting – This has been completed throughout the ground floor (underwriting room) and on Galleries 5 and 12.
- Upgrade of chiller and boiler controls.

The cleaning team are extremely aware of the importance of reducing our carbon footprint and have introduced a number of initiatives to support this goal.

- Introducing [Stabilized Aqueous Ozone to Chatham to reduce the chemical use](#). This process reverts to water and oxygen and can be disposed of via drains without negatively impacting our waterways. It is also harmless to the environment when disposed of and is 'Green Seal' certified
- Our waste supplier has introduced electric RCVs (refuse collection vehicles) that provide zero emissions waste collection.

- Evidence Based Cleaning – ATP testing – has been introduced which focuses on the need to clean areas of high occupancy and demand more frequently.
- Reducing delivery service from all suppliers.
- Increased cleaning specifications to provide a Covid-secure environment.

In October 2020 Lloyd's achieved certification to ISO 14001 (International Environmental Management Standard). This involved a complete overhaul of our environmental management system and included a revision of our Environmental Policy, the development of an aspects and impacts register, and the formulation of a compliance (internal) audit programme.

Examples of our current environmental targets, which are overseen by the Health, Safety and Environmental Coordination Group (HSECG) are:

- Maintain certification to ISO 14001.
- BMS project and floor tracking and balancing throughout the building.
- Continue to reduce the amount of one time use plastic materials used by Lloyd's.
- Energy procurement – Obtain renewable gas energy supply.

The Covid-19 situation has continued to create some challenges for Lloyd's; however, we are still seeing a reduction in the total building electrical consumption, as well as a reduction in both gas and water consumption.

## Forward planning

Lloyd's has set a target to achieve net zero carbon emissions by 2025, which has placed significant focus on the need to reduce our carbon footprint through the development of a number of environmental initiatives.

Lloyd's is in the process of carrying out an extensive review of the engineering plant and associated equipment in the London building, which will result in a proposal to upgrade the existing systems for energy improvement and includes the potential for a light energy saving project. The principle areas being focused on are:

- The replacement of the existing MTHW boiler with a mixture of condensing and water to water heat pumps. This will reduce energy consumption together with emissions significantly. This would also encompass revised HWS generation solutions.
- Upgrade the air handling unit motors and fans to reduce energy consumption of the largest MEP electrical consumer within the building.

- Continue with the excellent work of converting the existing luminaires from fluorescent to LED lamp technology and the associated intelligent controls.
- Rationalisation of existing systems to introduce simplicity, more efficient operation and enable these to only operate when required at an appropriate level. This can be implemented for instance when the remainder of Gallery floor on the upper and or lower stacks enable the usage of each floor to be tuned to suit occupancy. More extensive CO2 sensing will assist this process.

As part of this process, the Health, Safety and Environmental Coordination Group (HSECG), which meets every four months, will help to oversee the development and monitoring of progress against an environmental action plan for the Corporation.

Meetings in 2021 are scheduled at the beginning of the year, and the group met in February and April, with further meetings scheduled for July and October. Activity, minutes, and all documentation is shared within the group. The full list of activities has been provided to the reviewers and details will be shared in the next reporting year when they become public.

*Source: The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

Beazley's Environmental Policy, signed by our CEO Adrian Cox, outlines our commitment to continued improvement of our environmental practices. This includes reducing our greenhouse gases from our operations, investigating the impact of climate change has on our businesses and investments, improving our environmental management system and communicating our progress. The policy is communicated to all employees through the company's intranet and external site, employee induction and training. Where appropriate, our internal and external stakeholders are required to acknowledge and adhere to the Beazley Environmental Policy and relevant operating procedures. Our Procurement Policy supports our environmental policy and requires potential service providers to supply information on programs or policies to improve their environmental performance when responding to RFPs. As with many financial companies, our supply chain is primarily focused on the goods and services to operate our offices, deliver services to insureds and facilitate our travel. This means the majority of our suppliers are, therefore, serviced based, with minimal opportunities for intervention or improvement of their sustainability performance.

Through work led by our Facilities Team, Responsible Business Team and Environmental Working Group we have been able to drive significant improvements in our

supply chain which will have a direct impact on our carbon footprint. We have used the outputs from our GHG calculations to help guide decision making.

In 2020/ 2021 we undertook two initiatives to help reduce our energy consumption from the locations we operate. Firstly we relocated our data centres from an internal data centre in our London Office to data racks within a dedicated and newly built data centre. To inform the decision to relocate our server room, we took into account the energy consumption of the in house unit, compared to that of the racks within the dedicated data centre. Both carbon emissions and costs savings were a significant driver for this switch. This work also coincided with the relocation of Head office in London, where we have recently moved to our new offices at 22 Bishopsgate. When choosing a new office location, we specify that buildings we occupy must be certified to either BREEAM or LEED standard in order to promote sustainable building practices. We have used this certification process over a number of years, as we can rely on outputs to deliver office spaces which reflects our responsible business ethos. 22 Bishopsgate has been built to a BREEAM 'Excellent' standard and will also achieve a WELL certificate for wellbeing. The standards incorporate a number of technologies and initiatives i.e LED lighting, and minimisation of waste which we consider essential for a responsible business. As a result we are able to better manage and reduce our environmental impact associated with our office environment.

In addition to this, when fitting out the new office space, we also prioritised sustainability as part of the criteria when selecting materials in our fit-outs and furniture choices. We used local suppliers who could provide sustainable products, to ensure we can contribute to the communities in which we are based. The interaction with our suppliers during the delivery of 22 Bishopsgate was led by our Facilities Team, with our specifications driving engagement with our suppliers .

Beazley's global Environmental Working Group has also played a significant role in the selection of more sustainable products being used in our offices. To date we have worked with food suppliers for our London office to encourage a successful transition from non-recyclable to recyclable packaging, as well as switching our milk bottles from plastic to glass. Alongside this action, they have also delivered a number of internal initiatives to encourage behaviour change amongst our staff. To build on the success of these interventions, they are currently working on two initiatives, in conjunction with the Responsible Business Team, the first is to ensure that all

Beazley branded items come from sustainable sources, avoid the use of single use items and have a certified supply chain which supports human rights. In conjunction with our Marketing Team, a new policy has been drafted to formalise the work which has already been delivered. This will be finalised by the Executive Committee shortly.

The second is to facilitate further engagement within the whole of 22 Bishopsgate, in order to improve sustainability performance. The multifunctional building has not just office space, but also food outlets, gyms and entertainment facilities. Through meetings with the Building Management Team, we are challenging the sustainability performance of all operations within the building. This includes clear and transparent communication on energy savings, the processing of waste, and the use of sustainable products and reduction of single use plastic in the food courts. This work will continue as the occupancy of the building grows and we identify further opportunities for sustainable improvements.

Work has also commenced to determine how best to influence the value chain associated with the paying of claims. The nature of our insurance policies either result in the paying out to replace assets or covering litigation costs. The nature of determining litigation costs usually requires a number of meetings whether for court attendance or mediations. The main sustainability impact of meeting these claims, is therefore, the travel associated with them. Prior to Covid-19, these meetings were conducted in person, however, are currently conducted via video conferencing facilities. This approach is working well and is one we will look to continue, where suitable, once travel restrictions are relaxed. From the replacement of assets perspective, more work is required to firstly determine the true sustainability impact, as well as the opportunities to improve our sustainability approach to this work. This work will continue across the rest of the year, with further updates being provided as part of our annual report.

*Source: Beazley*

### [Lloyd's / The Market / MS Amlin Business Services](#)

MS Amlin aims to work with suppliers that have sound environmental principals and during the past 12 months has enhanced its procurement policy<sup>j</sup>, standards and processes to develop that aim. The MS Amlin Procurement Policy and Standard contains requirements to include environmental considerations when selecting

<sup>j</sup> See evidence 4a and 4b

suppliers to provide goods and services. MS Amlin have also enhanced the due diligence process to consider environmental issues in tender activities and are reviewing material supplier's environmental statements and policies to ensure they align to expectations.

MS Amlin Procurement has a supplier code of conduct<sup>k</sup> which is put in place with important suppliers as they are on-boarded into the organisation. The code of conduct includes a statement on Environmental Standards, requiring suppliers to comply with applicable laws and regulations.

MS Amlin's supplier due diligence process includes questions about a supplier's compliance with environmental laws and regulations and a review of supplier's environmental policy. Should this due diligence highlight any concerns, MS Amlin would address these with the supplier with a view to resolving or potentially selecting an alternative supplier.

In addition, MS Amlin continues to align its climate and ESG work through its conscious selection of charitable partners. A key partner is ShelterBox, who work with disaster-hit families around the world, offering emergency shelter and other essential items to support them in rebuilding their lives.

Source: MS Amlin

### Lloyd's / The Market / QBE / Supply chain engagement on environmental sustainability

QBE is committed to conducting our operations in a responsible and sustainable manner. We understand that our purchasing decisions don't only affect our performance, reputation and risk profile, they affect the economy, environment and communities in which we operate. Therefore, as part of our broader approach to sustainability, we seek to engage suppliers and partners who share this understanding and commitment, and who can work with us to achieve our objectives.

In 2018, we introduced our Supplier Sustainability Principles. Our Principles set out our minimum expectations of suppliers doing business with QBE.

- Implement and maintain an industry appropriate Environmental Management System and/or relevant processes to support compliance with any applicable environmental protection laws, regulations and/or standards.

- Set measurable targets to manage and reduce material environmental impacts of your operations products and services (e.g. greenhouse gas emissions, energy use, water, waste) where appropriate.
- When employing primary materials or commodities be able to demonstrate these have been sourced sustainably through appropriate certifications.

In line with our principles, we continue the process of integrating sustainability considerations as part of procurement. The Supplier Sustainability Principles are referenced as part of our supplier agreement templates (including our Global Services Agreement template). In North America, our 'Request for Proposal' process includes questions for the supplier on environmental initiatives and metrics that they track.

Our procurement team aims to deliver value for money in a responsible and sustainable manner, with a focus on minimising operational risk when negotiating and interacting with suppliers. We are doing this by developing third party risk management practices that include considerations for suppliers' ESG practices.

In 2020, we engaged our value chain in a range of sustainability initiatives to increase engagement on environmental topics.

- In Australia Pacific, we have encouraged our customers who have had a relevant claim to opt for environmentally friendly upgrades. When replacing damaged white goods, home insurance policyholders may receive up to an extra A\$500 to upgrade that product to one with a better environmental rating. For customers who have experienced damage to their building rendering it a total loss, QBE's building insurance covers some additional costs to make the replacement building more environmentally friendly.
- QBE's Global Credit and Surety team launched a new Global Underwriting Pricing Tool for our Trade Credit business. The new tool includes pricing benefits for businesses with strong ESG rating, an idea that came out of our Global Challenge last year where employees across the business came together to present solutions to support customers' current and emerging risks and opportunities. By offering pricing benefits for businesses with strong ESG ratings, customers that make environmentally and socially conscious choices are rewarded, and

<sup>k</sup> See evidence 4c



other customers are encouraged to strengthen their ratings.

- We have continued our remote claims adjustment program helping to reduce our carbon footprint through reduced fleet use across our North American Operations.
- In Hong Kong, QBE is participating in the Green Finance Association Insurance Task Force arranged by the Federation of Insurers. This is an initiative made up of executives from various insurance companies in Hong Kong working to drive a coordinated response to green insurance offerings. QBE chairs the Green Product Development group, giving us the opportunity to influence and contribute to this important initiative. The key topics discussed by the task force include market and product development, investment in environmentally friendly products, ESG-related disclosures and cultivation of a green-focused corporate culture.
- We continue to collaborate with regulators, banks, insurers, reinsurers, asset owners and other stakeholders to develop open-source standards for reporting on physical climate risks for assets such as properties, buildings and infrastructure. The Climate Measurement Standards Initiative (CMSI) will help the industry better understand the financial risks on underwriting from increasingly extreme weather events. QBE is a funder and active leader in the CMSI, which published recommendations in two major reports, the first of which provides guidance to the financial services industry on disclosing scenario analysis under the recommendations of the Task Force on Climate-related Financial Disclosures

In 2019, QBE European Operations undertook a Baseline Environmental Review in order to:

- identify the key aspects and impacts associated with the physical assets under our control;
- identify relevant environmental performance metrics;
- and inform the development of our approach to environmental sustainability performance management and reporting.

EO continues to monitor its environmental performance on an on-going basis using a range of metrics aligned with our key environmental aspects and impacts.

EO considers environmental sustainability during procurement. In addition to consideration and engagement during procurement, EO also engages with suppliers and service providers associated with our environmental performance metrics on an at least

quarterly basis to collect and collate activity data to support our on-going environmental reporting. We regularly and routinely remind our suppliers of the importance of sustainability performance during quarterly activity collection e.g. environmental and sustainability credentials of paper purchased, information to support calculation of GHG emissions associated with business travel etc.

Key areas where we engaged with our suppliers to implement operational sustainability initiatives during 2020 include:

#### – **Office environmental performance**

In EO, we are working towards 100% renewable energy sourcing for operations. In 2020, we made strong progress towards this goal.

#### – **Energy efficiency**

Across our European offices, we have installed energy efficient lighting and air-conditioning in office buildings as well as infrared sensor light switching systems. We have also sourced high energy rated appliances (dishwashers, fridges, microwaves) for our offices.

#### – **Waste Reduction**

We have introduced electrostatic water in our UK offices to reduce the amount of plastic bottles (cleaning chemicals) used. QBE considered environmental performance / sustainability during its selection, specifying a minimum BREEAM excellent rating.

#### – **Energy Consumption**

During 2020, in line with QBE's global commitment to 100% renewable electricity (see Q.4, the RE100 initiative) we implemented a policy of transferring our electricity supply contracts to 'green tariffs', using electricity from certified renewable sources. Four of our UK offices (accounting for 40% of EO's 2020 UK electricity consumption) are currently on 'green tariffs' with our other UK offices scheduled to transfer by April 2021.

In addition to using electricity from renewable sources we have also undertaken audits of energy consumption by our offices and transport fleet to identify opportunities to reduce consumption or improve energy efficiency.

#### – **Reducing Waste**

EO implemented several initiatives to reduce the amount of waste generated by our offices.

Staff at our London offices were issued with a reusable plastic cup and a reusable stainless steel water bottle to replace single use / disposable cups were removed from the offices. QBE engaged with the manufacturer of the reusable cups to discuss various aspects of their sustainability including; the source of the materials used in their construction (recycled), the cups expected functional life, the manufacture's policy for repairs and replacement of faulty cups and their end of life management. A product life cycle assessment was also requested, however, this was not available at the time of purchase.

Evidence also applies to principle(s): 1.2, 4.2, 4.3, 4.4

Source: QBE EO Environmental Report 2019; QBE's 2020 Sustainability Report, available on the internet at: <https://www.qbe.com/about-qbe/sustainability/>; Our Approach to Climate Change, available on the internet at: <https://www.qbe.com/about-qbe/sustainability/climate-change>

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe has published an Environmental Policy on its external website outlining its commitment to a long-term, sustainable approach to protecting the environment. The policy outlines that RenaissanceRe looks for effective ways to minimize its impact on the environment, monitoring and analyzing operations and facilities to determine how they can be more efficient and environmentally friendly. RenaissanceRe's activities include replacing equipment and technology with more efficient versions, identifying and implementing measures to reduce waste and conserve natural resources, and conducting assessments with utility providers and vendors to better understand and consider its environmental impact.

In 2020, RenaissanceRe engaged a third-party provider to offset its operational carbon emissions. RenaissanceRe chose to more than offset its calculated operational footprint, resulting in a negative carbon impact. RenaissanceRe has been pro-active in sharing this carbon financing with key external stakeholders to promote the methods by which companies can reduce global emissions and increase community resilience in the face of climate change. RenaissanceRe recognizes that this is a positive first step, providing a foundation for further opportunities to manage its impact in the future. The three projects it supported are detailed as follows:

1. **Rainforest Protection in Sierra Leone:** The Gola Rainforest in south-east Sierra Leone is one of the world's most important biodiversity hotspots. This project is working with local communities to protect the forest through agroforestry, education and health programs.
2. **Community Afforestation in Uganda:** This community-led afforestation project uses advanced technologies to plant trees, cut carbon, tackle poverty and empower women and communities.
3. **Reforestation in Chile:** This project supports communities in Chile to restore degraded land through innovative biotechnologies, which increase biomass growth in planted trees by up to 119%.

Source: RenaissanceRe Syndicate Management Ltd

### Lloyd's / The Market / The Hartford

The Hartford has implemented several initiatives to ensure our supplier partners share our commitment to environmental stewardship.

- An enhanced supplier request for proposal process includes a series of sustainability questions each supplier under consideration must address that are used to measure each potential supplier's sustainability practices. The data collected helps to guide sourcing decisions informally. The Hartford is currently building a more formal process that weights these sustainability questions and influences the "supplier score" that ultimately impacts The Hartford's supplier selection.
- For suppliers with a contract currently in place, The Hartford partners with strategic suppliers with the largest spend to better understand their sustainability practices, including climate related initiatives.
- Information sharing sessions with strategic supplier partners occur at various points throughout the year, both as in-person working sessions as well as collaboration calls. Relationship managers, members of corporate sustainability teams and other subject matter experts based on the topic(s) covered join these discussions from both organizations. These meetings serve as an opportunity to learn from each other and share best practices regarding program success, implementation challenges, reporting requirements and other ESG-related topics as appropriate.

The Hartford also collects information and documentation related to the sustainability practices of our top suppliers

with more mature sustainability programs (annual sustainability report, [Vendor Code of Conduct](#), ESG Scorecard, etc.).

#### Support Links:

- [CDP – C12.1a](#)
- [Vendor Code of Conduct](#)

Source: *The Hartford*

### Lloyd's / The Market / Tokio Marine Kiln / Sustainable procurement

TMK considers environmental sustainability as one of the factors in our procurement process. The procurement team has established a 2-stage process in screening all our suppliers, which incorporate detailed questionnaires and interview process prior to onboarding.

In the first stage of the screening process, all new suppliers are required to provide details on third party certification with regards to the products and services that they are providing to TMK. This third-party certification comes in the form of ISO 14001 - Environmental Management, ISO 26000 - Social Responsibility, ISO 50001 - Energy Management, ISO 9001 - Quality Management, SA800 - Social Accountability.

In the second stage of the screening process, the suppliers are asked to provide details of their environmental policy, governance around the environmental management around climate risks, board and senior management responsibilities, details around the measurement of the environment impact, their plans to reduce environment impact (eg. carbon, waste, water, energy, recycling, packaging) and disclosure especially around Scope 3 emissions and their overall carbon footprint. The responses will be discussed through interviews to ensure that they are robust and meet our selection criteria prior to onboarding. Where possible we maintain a Preferred Suppliers List of pre-vetted suppliers meeting environmental and other standards. If there are suppliers who do not meet our selection criteria for environmental reasons, these will be discussed by the Products and Operations Committee rather and / or ESG Committee where required. This will help TMK consistently maintain their standard and impact towards our business.

TMK collects and collates environmental performance statistics from its suppliers on a regular (at least bi-annual basis) to monitor their performance and ensure standards are maintained (e.g. environmental and sustainability credentials of paper purchased, information to support calculation of GHG emissions associated with business travel).

We regularly remind our suppliers of the importance of this data and its purpose to TMK.

*Key areas where we engaged with our suppliers during 2020 include:*

#### Office environmental performance

TMK has been working with the Building Management for 20 Fenchurch Street to reduce its office space. We have closed one of our four floors, reducing our overall space by 25%. We are also implementing dynamic flexible working in Q4 2021 and we believe this will help to further reduce our carbon footprint.

#### Energy Consumption

Our electricity at 20FS is from a renewable source from April 2021. We are especially excited about this change as we have been able to affect this in a large building.

#### Paper Consumption

- All copier and printer paper was purchased by TMK during 2020 was from FSC certified sources.
- All headed paper purchased by TMK during 2020 was from FSC certified sources.
- All paper used to produce our Annual Reports and brochures by a design agency, was from FSC certified or recycled sources.
- We plan to reduce the numbers of printers we deploy in 2021 across all remaining floors to reduce paper and energy wastage.

#### Waste Management

Our overall waste production was down by 80% on 2019 due to the impact of homeworking through the pandemic, but, of the waste we produced, more than 74% of this was reused or recycled during 2020.

Our waste management involves working with a range of different companies each managing one of the following:

- Office waste (Mixed Dry Recyclables, Food, Glass, Residual)
- Large Cardboard
- Paper
- Time served archive material
- Electrical equipment

- Printer cartridges
- Computer keyboards
- Batteries
- Renovation (fit-out) materials

Where possible we require confirmation of action eg. All paper waste is treated as confidential waste. A company collects the confidential waste for secure destruction (pulping) and recycling and issues Certificates of Destruction (COD).

We have recently introduced a software application, Feedr, which enables staff to pre-order food from our kitchen, with the aim of further reducing food waste.

## Travel

All flights for UK employees are booked through a single travel agency that provides information on passenger distance flown and associated greenhouse gas emissions. TMKG 2020 air travel is based on information provided by the travel agency. Distances are calculated automatically by the agency's flight reservation system on the basis of origin and destination.

TMK has a single taxi / car service provider, which maintains records of journeys made and distance travelled. TMK has a cycle to work scheme where employees are encouraged to cycle in.

*Source: Tokio Marine Kiln: TMK Facilities Management and Procurement.*



## 4.2 Disclose our Scope 1 and Scope 2 GHG emissions and Scope 3 GHG emissions using a globally recognised standard.

### Lloyd's / The Corporation of Lloyd's

2020 marks the eighth year in which the Corporation of Lloyd's is reporting the GHG emissions inventory of international offices in addition to that of the UK, and sees those hubs continuing to engage with their resource consumption. These are supported by activities forming the responsible business strategy, with tracking in the Health, Safety, Environmental Coordination Group (HSECG) (principle 1.2).

These figures are reported publicly in the Corporation of Lloyd's annual and strategic reports, and made available online in the [environmental section](#) of the public website.

### Methodology

The GHG accounting and reporting follows principles of relevance, completeness, consistency, accuracy and transparency. Avieco applies these principles when collecting, reviewing and performing the GHG emission calculations as part of: defining organisational and operational boundaries, verifying the integrity of data, checking the data audit trail and finally performing the calculations.

The Corporation of Lloyd's continues to use the operational control approach for defining the scope of its GHG emissions inventory and calculate total direct Scope 1, 2 and major Scope 3 emissions. Reported environmental data covers 100% of contracted staff worldwide; the review includes all the Corporation's entities that meet the criteria of being subject to control or significant influence of the Corporation.

As 2020 is only the eighth year the Corporation is reporting on emissions from its international offices, data on some emissions sources remains challenging to obtain, and therefore was excluded from the Corporation's overall GHG emissions summary for 2018: refrigerants, company owned/leased vehicles and national rail from non-UK offices.

### Consistency

In order to ensure comparability, Avieco has continued to use the same calculation methodologies used in previous years. The Corporation has dual reported for scope 2 emissions in 2020, in line with changes with the WRI Greenhouse Gas Protocol, for the third time. The location-based scope 2 total has been used to report the Corporation's total GHG emissions to ensure a consistent approach with previous years.

The data for 2020 was collected, verified and calculated in accordance with the requirements of the following standards:

- World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol (revised version)
- ISO 14064 part 1, and
- Defra's Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance, June 2013

The emissions have been calculated using the Defra 2020 conversion factors. This work is partially based on the country-specific CO<sub>2</sub>e emission factors developed by the International Energy Agency, © OECD/IEA 2019 but the resulting work has been prepared by Avieco and Lloyd's and does not necessarily reflect the views of the International Energy Agency.

For more insight into the quality and reliability of the Corporation of Lloyd's GHG emissions inventory please visit the [opinion statement issued by Avieco on the Lloyd's website](#).

### Results

The Corporation of Lloyd's total reported (location based) GHG emissions from all business activities in 2020 were 6,104 tonnes of CO<sub>2</sub>e consisting of:

#### GHG emission tracking

	Scope 1 (tonnes CO <sub>2</sub> e)	Scope 2 (tonnes CO <sub>2</sub> e)	Scope 3 (tonnes CO <sub>2</sub> e)	Lloyd's total 2020 GHG emissions (tonnes CO <sub>2</sub> e)	Lloyd's total 2019 GHG emissions (tonnes CO <sub>2</sub> e)
UK	1,300	3,493	841	5,633	7,630
International offices	11	409	50	470	734
				6,104	

As in 2019, the Corporation of Lloyd's continue to dual report scope 2 emissions emanating from electricity consumption. Location-based scope 2 emissions are calculated using a conversion factor based on the average grid mix in each location (issued by Defra in the UK).

Market-based scope 2 emissions are calculated using a conversion factor specific to the electricity purchased by the Corporation. Scope 2 location-based and market-based emissions are shown in the table below:

Scope 2 location-based emissions<sup>1</sup>

	Scope 2 – location- based (tonnes CO <sub>2</sub> e)	Instrument type	Scope 2 – market- based (tonnes CO <sub>2</sub> e)	Instrument type
UK	3,493	National grid average emission factor (issued by Defra)	0	Supplier emission factor (100% renewable energy used)
International offices	409	Various national grid average emission factors (issued by Defra & International Energy Agency)	432	Various national grid average emission factors (issued by Defra & International Energy Agency)
Total	3,902		432	

The Corporation's total location-based scope 2 emissions are 3,902 tCO<sub>2</sub>e whilst market-based scope 2 emissions are 432 tCO<sub>2</sub>e.

95% of electricity consumed globally, all of which is used in the UK, is sourced renewably as a result of KPIs from 2016 where the supplier contract has been renewed, and therefore has an associated conversion factor of zero.

To avoid confusion and ensure a consistent approach with previous years, the Corporation has chosen to report location-based emissions, which is the methodology used to calculate historical scope 2 emissions since 2007.

For our 2020 report we have not included any estimation of the carbon emissions of employees working from home as a result of the COVID-19 pandemic. During 2021 and beyond if the trend for homeworking remains, we will endeavour to calculate and report the carbon emissions of employees working from home.

<sup>1</sup> All totals have been rounded to the nearest whole number

<sup>m</sup> 2020 performance refers to reported location-based totals, which are the summation of the UK emissions and Global emissions (ex UK)

This year we are proud to announce we have reduced our emissions for the sixth consecutive year on a total global<sup>m</sup> basis from 8,363 tCO<sub>2</sub>e in 2019 to 6,104 tCO<sub>2</sub>e in 2020 – a reduction of 27%. In addition, we have reduced our total global emissions per FTE by 24% from 7.3 tCO<sub>2</sub>e/FTE in 2019 to 5.6 tCO<sub>2</sub>e/FTE in 2020. Other notable trends for each scope include:

- **Scope 1** – our scope 1 emissions have remained largely constant between 2019 and 2020. We have seen a 7% fall in natural gas usage in boilers year on year, driven by reduced staff occupying our London headquarters as a result of the COVID-19 pandemic. The natural gas reduction has been offset however by top-up of HVAC systems with refrigerants, and a modest increase in other fuels (gas oil) used for our boilers and backup generators as a result of an increased testing cycle of the generators is in line with industry standard recommendations for testing generator functionality.
- **Scope 2** – the reductions in our scope 2 emissions are primarily driven by a 24% decrease in electricity usage at our London headquarters, driven by reduced employee occupancy throughout 2020.
- **Scope 3** – our emissions from employee commuting and business-related travel have reduced in 2020, falling by an average of 80% across all categories - an anticipated consequence of COVID-19 restrictions in the UK and worldwide. In addition, electricity emissions from our data centre and in transmission and distribution losses reduced by 14% as a result of lower electricity demand.

For more insight into the quality and reliability of our GHG emissions inventory please access the opinion statement issued by Avieco on the Lloyd's website.

Evidence also applies to principle(s): 1.2, 4.3

Source: *The Corporation of Lloyd's*

Lloyd's / The Market / Beazley

Beazley has developed its GHG reporting processes over the last three years. Our 2020 emissions was our most extensive date and was expanded in 2020 from the 7 locations reported in 2018 and 2019 (London (UK),

displayed. The data is displayed in this manner to comply with the requirements of the Streamlined Energy and Carbon Reporting regulations

Birmingham (UK), Dublin (Ireland), Atlanta(USA), Farmington (USA) , New York (USA)) to 13 sites covering London (UK), Birmingham (UK), Dublin (Ireland), Munich (Germany), Paris (France), Barcelona (Spain) and Atlanta, Boston, Chicago, Dallas, Farmington, New York and San Francisco (USA). This equates to 86% of Beazley employees including contractors. Reporting is based on operational control. Beazley Group does not have operational control over the building infrastructure and plant at its offices due to the presence of facility management companies and shared tenancy; as a result, emissions primarily fall within Scope 2 and 3 of the Greenhouse Gas Protocol. The extended nature of our reporting was to be as transparent as possible.

The Greenhouse gas (GHG) emissions are calculated and in accordance with the Greenhouse Gas Protocol, Corporate Reporting and Accounting Standard and HM Government, Environmental Reporting Guidelines, using the applicable UK Government's (BEIS) GHG Conversion Factors for Company Reporting. Beazley Group's (hereafter Beazley) GHG emissions are, where possible, calculated using emission factors for 'kgCO<sub>2</sub>e' (i.e. the sum of emission factors for carbon dioxide, methane and nitrous oxide).

The 2020 GHG emissions are published on our website and in our annual report and accounts, they have also been verified to ISO14064 by an independent third party. In summary we have disclosed our Scope 1, 2 and 3 GHG emissions, defining our scope as being limited to the following:

Scope 1 – diesel from back-up generator, company car use and refrigerant from air conditioning systems;

Scope 2 – electricity consumption arising from office use

Scope 3 – air, rail, taxi, private car, hire car, hotels and transmission and distribution losses associated with energy consumption.

Within our GHG report Beazley has provided a detailed breakdown of the emissions generated, providing narrative for the trends in emissions we saw in 2020, as opposed to the previous years. This includes the citation of the percentage reduction in emissions, both in real terms and when calculated as an intensity metric i.e per full time equivalent employee. Given the nature of 2020, and the impact of Covid-19 on our emissions, we saw a 71% reduction in carbon emissions, against a baseline year of 2019. This continues the trend of year on year reductions across the last three years. We have also reported both market and location based emissions to take into account the procurement of energy for some of our offices from renewable sources.

As detailed in responsible business strategy the 2019 baseline year is our starting point for reducing our emissions across the next three years, with a target to reduce emissions by 30% in 2021, 40% in 2022 and 50% in 2023 based on an intensity metric per FTE.

These targets have been set based on our appraisal of the savings we will deliver across IT equipment upgrades, the relocation of our onsite server rooms to brand new dedicated data rooms, and relocation of colleagues to brand new office facilities which have the latest energy saving devices incorporated within the build. The targets also predict that travel patterns will not return back to pre-Covid-19 patterns, once travel restrictions have been lifted. We fully expect that much of our business will continue to be conducted over video conferencing, therefore, negating the need for as much travel.

As we improve our data collection methods, Beazley will work to enhance the reporting of its wider Scope 3 emissions. This will include emissions generated as a result of staff commuting to the office, those associated with our investments, and where possible those generated by our biggest suppliers.

Source: Beazley

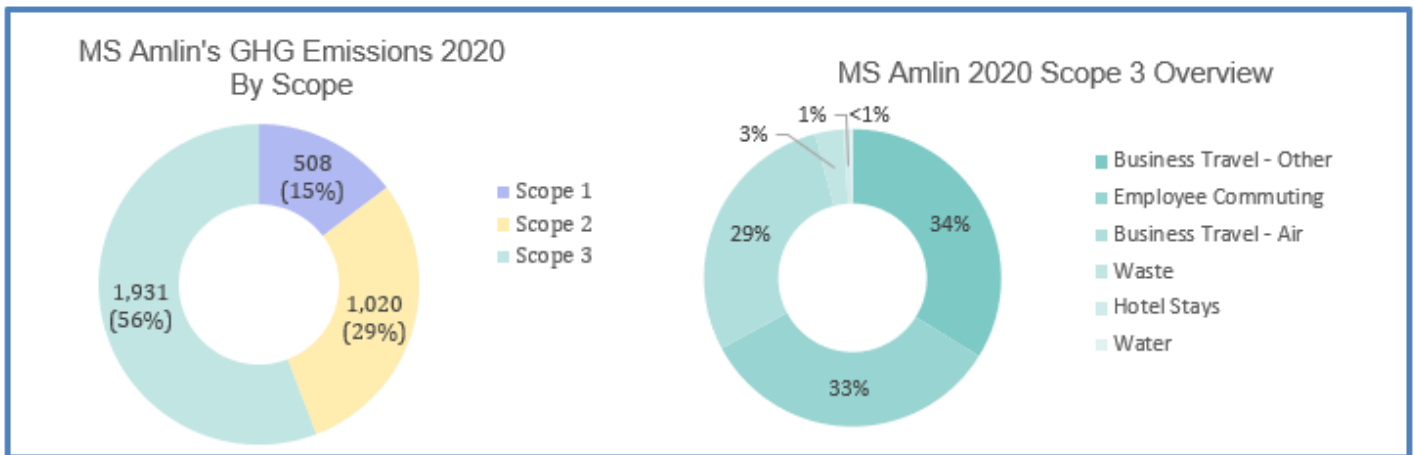
## Lloyd's / The Market / MS Amlin Business Services

### 1. MS Amlin's 2020 greenhouse gas emissions

Responsibly managing the environmental impact of MS Amlin entities' global office portfolio is one of the key pillars of our operating approach, recognising that the operation of offices includes the generation of carbon emissions, in addition to other key environmental impacts.

MS Amlin quantifies and reports its greenhouse gas emissions (GHG) according to the *Greenhouse Gas Protocol Corporate Standard*, the International Energy Agency (IEA) emission factors, and the *UK Government 2019 Environmental Reporting Guidelines*. The organisational boundary is consolidated according to the operational control approach. In cases where data was not available, this has been estimated using either extrapolation of available data using floor area from the current reporting period or data from the previous year as a proxy.

This year for the first time, MS Amlin complied with the UK Streamlined Energy & Carbon Reporting (SECR) regulations 2019. This legislation requires quoted and unquoted UK-based organisations to publish annual energy consumption and emissions in the director's report on an annual basis.



The graphs above indicate the emissions categories included in the Scope 1, 2 and 3 carbon emissions and our performance during the reporting year ended 31<sup>st</sup> December 2020<sup>n</sup>. In 2020, MS Amlin's total Scope 1, 2 and 3 emissions were 3,458 tCO<sub>2</sub>e. Of this:

- Scope 1 emissions (direct emissions from the combustion of fuels and through fugitive emission releases from the portfolio) equated to 508 tCO<sub>2</sub>e (15%);
- Scope 2 emissions (electricity purchased for our own use) equated to 1,020 tCO<sub>2</sub>e<sup>o</sup> on a location-based approach and 179 tCO<sub>2</sub>e on a market-based approach;
- Scope 3 emissions from our purchased goods and services, business travel and employee commuting amounted to 1,931 tCO<sub>2</sub>e.

Compared with 2019, our total Scope 1 and 2 emissions reduced by 24%, whilst our combined Scope 1,2 and 3 emissions reduced by 59%. Much of these savings come as a result of the disruption to our operations by the ongoing Covid-19 pandemic. MS Amlin's office portfolio was fully closed between March 2020 - July 2020; facilities teams were still accessing the offices during this time, but all staff were based at home. As a result, activities were significantly curtailed, especially international business travel, hotel stays and employee commuting.

Key trends in 2020 were driven by the following:

Scope 1 and 2

- A significant reduction in the consumption of natural gas (-17%) and electricity (-22%), especially in Singapore, France and Switzerland;
- Reduced emissions from electricity consumption across our global portfolio, using in-country decarbonised electricity sources and benefitting from decreased grid emission factor intensity.

Scope 3

- 70% decrease in emissions from employee commuting;
- 40% reduction in total waste generated;
- 83% reduction in emissions from air travel;
- 89% reduction in paper consumption.

Portfolio

- Consolidation of our floorspace to mirror our operational requirements across the portfolio, including the disposal of office space in London resulted in total floor area decreasing by 15% compared with 2019, whilst employee headcount remained relatively stable.

<sup>n</sup> Scope 1 includes direct carbon emissions from our use of energy from fuels and refrigerant gas refills of office HVAC systems.

Scope 2 include indirect emissions from the use of purchased electricity across our own buildings in the portfolio.

Scope 3 includes indirect emissions from business related travel (incl. air, rail, vehicle and hotel stays), employee work-related commuting, waste generation, paper and water consumption.

<sup>o</sup> Represents location-based emissions.



- Reduced demand for energy in-turn led to successful reductions in these reported intensity metrics.

Table 1 below highlights MS Amlin's progress on minimising overall carbon impact from the global office portfolio.

MS Amlin continues to closely monitor carbon emissions

**Table 1: Historical carbon emission performance – absolute and intensity metrics**

	2020	2019	2018	2017	2019 Scope 1, 2 & 3, as % of Total emissions	2020 vs 2019 change
Scope 1 emissions (tCO <sub>2</sub> e)	508	591	558	499	15%	-15%
Scope 2 emissions (tCO <sub>2</sub> e)	1,020	1,418	1,503	2,076	29%	-28%
<b>Scope 1 &amp; 2 emissions (tCO<sub>2</sub>e)</b>	<b>1,528</b>	<b>2,009</b>	<b>2,061</b>	<b>2,575</b>	<b>N/A</b>	<b>-24%</b>
Scope 3 emissions (tCO <sub>2</sub> e)	1,931	6,340	7,549	10,930	56%	-70%
<b>Total Scope 1, 2 &amp; 3 emissions (tCO<sub>2</sub>e)</b>	<b>3,459</b>	<b>8,349</b>	<b>9,610</b>	<b>13,505</b>	<b>N/A</b>	<b>-59%</b>
<b>Employee Headcount – FTE</b>	<b>2,025</b>	<b>2,132</b>	<b>2,780</b>	<b>2,761</b>	<b>N/A</b>	<b>-5%</b>
<b>Floor Area – m<sup>2</sup></b>	<b>31,786</b>	<b>37,211</b>	<b>37,742</b>	<b>43,555</b>	<b>N/A</b>	<b>-15%</b>
<b>Scope 1 and 2 intensity FTE/CO<sub>2</sub>e</b>	<b>0.75</b>	<b>0.94</b>	<b>0.73</b>	<b>0.93</b>	<b>N/A</b>	<b>-20%</b>
<b>Scope 1 and 2 intensity m<sup>2</sup>/CO<sub>2</sub>e</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06</b>	<b>N/A</b>	<b>-11%</b>
<b>Scope 1, 2 and 3 intensity FTE/CO<sub>2</sub>e</b>	<b>1.71</b>	<b>3.92</b>	<b>3.44</b>	<b>4.89</b>	<b>N/A</b>	<b>-56%</b>
<b>Scope 1, 2 and 3 intensity m<sup>2</sup>/CO<sub>2</sub>e</b>	<b>0.11</b>	<b>0.22</b>	<b>0.25</b>	<b>0.31</b>	<b>N/A</b>	<b>-52%</b>

performance annually to track future performance against strategic reduction targets set to benchmark and support the management of its environmental impact.

Source: MS Amlin

Lloyd's / The Market / QBE / QBE Group Reporting

QBE Group Reporting

QBE Insurance Group Limited reported gross global greenhouse gas emissions of 15,369 tonnes carbon dioxide equivalent (tCO<sub>2</sub>e) for 2020, a 49% reduction from 2019 (28,931 tCO<sub>2</sub>e). During 2020, we have

had a substantial impact on our business operations and target performance, we expect to achieve our 2021 targets when we return to a more normal operating environment in 2021.

The following tables summarising QBE's GHG emissions reporting are taken from the QBE 2020 Sustainability Report, pages 60 and 61.

Emissions profile by source (tCO<sub>2</sub>-e)



Emissions profile by region (tCO<sub>2</sub>-e)



Key performance indicators - GHG emissions intensity

tCO <sub>2</sub> -e GHG EMISSIONS	% CHANGE FROM PRIOR YEAR	2020	2019	2018	2017	2016
Scope 1+2 GHG emissions per GEP US\$M	○ -56%	0.42	0.96	2.11	2.20	2.30
Scope 1+2 GHG emissions per FTE <sup>ii</sup>	○ -54%	0.52	1.13	2.45	2.25	2.38
GHG emissions per GEP US\$M	○ -51%	1.10	2.25	3.54	3.83	4.01
GHG emissions per FTE <sup>ii</sup>	○ -49%	1.35	2.64	4.09	3.91	4.15

Carbon offset by project type (%)



Electricity use by region (%)



1 GHG emissions data is calculated based on QBE business activities and includes emissions from CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>. Emissions from HFCs, PFCs, SF<sub>6</sub> and biogenic activities are not applicable to QBE's operations and therefore have not been reported.

2 Estimates have been made for certain office locations and activity data streams where actual activity was not available, and were based on comparable offices/activities in the same region.

3 Our market-based emissions derive emissions factors from our contractual instruments, including green electricity purchased through our electricity retailers and renewable energy attribute certificates sourced via brokers.

4 Our location-based emissions reflect the average emissions intensity of grids on which our electricity consumption occurs (our location-based emissions do not take into account the contractual instruments we have used to reduce our emissions footprint).

5 This year, we have disclosed the carbon intensity of our corporate credit investment portfolio in the "Climate Change - our approach to risks and opportunities" section of our 2020 Annual Report. Employee commuting is not included in our Scope 3 inventory due to unavailability of data.

6 Scope 3 emissions from business air travel include DEFRA's required distance uplift and exclude radiative forcing due to the significant scientific uncertainty surrounding the quantification of the effect of radiative forcing.

7 Due to COVID-19, the majority of our global workforce has been working from home for most of 2020. We have estimated the emissions relating to energy use by our employees while working from home.

8 In 2020, as part of our ongoing focus on improved data quality, we moved from using DEFRA's waste emission factor to calculate office paper purchased emissions to using DEFRA's 'cradle-to-gate' emission factor. This has resulted in higher reported emissions and we have restated prior years' emissions for comparative purposes. Our underlying reported paper purchased volume remained unchanged.

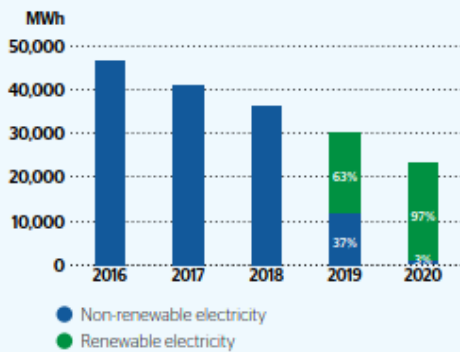
9 In 2020, as part of our ongoing focus on improved data quality, we moved from using DEFRA's waste emission factor for Australian waste emissions to using NGA's lifetime waste emission factor. This has resulted in higher reported emissions and we have restated prior years' emissions for comparative purposes. Our underlying reported waste volume remained unchanged.

10 The carbon offsets purchased in 2018 and 2019 were sufficient to cover the increase in emissions due to the restatements of office paper purchased and waste emissions mentioned in Footnote 8 and 9 above and we remained carbon neutral.

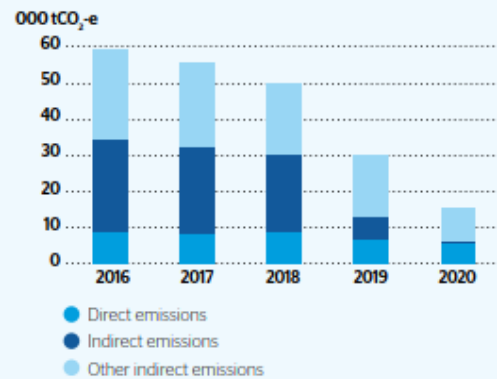
11 The emissions intensity indicators for 2018-2020 are per FTE. Indicators for 2016-2017 are per number of employees.

maintained our carbon neutrality and whilst COVID-19

**Electricity use by source**



**Direct and indirect emissions**



In 2019, we joined some of the world’s most influential companies in the RE100 initiative, committing to target 100% renewable electricity across our global operations by the end of 2025. We were the first Australian-headquartered insurance business to do so. We have made considerable progress towards this target, with 97% of our global electricity use coming from renewable sources (63% in 2019). We have achieved our scope 1 and 2 science-based emissions reduction target and aim to maintain this going forward. We continue to evolve our climate-related metrics and targets. Our aim is to establish metrics and targets that are relevant and reliable, and that will drive performance and transparency against our climate-related goals. During 2020, we maintained our carbon neutrality and achieved our energy use, air travel and science-based emission reduction targets ahead of time. While COVID-19 had a substantial impact on our business operations and target performance, we expect to achieve our 2021 targets when we return to a more normal operating environment in 2021.

In 2020 we committed to achieving net zero emissions by 2050 in our investment portfolio. Over the coming years we will set interim targets and progress against these targets will be included as part of our annual reporting.

Our climate-related metrics and targets are presented below:

MEASURE	TARGET	2019	2020	STATUS
Energy use (GJ)	15% reduction by 2021 (from 2018 levels)	153,296 (-14%)	122,115 (-32%)	Achieved
Scope 1 & 2 emissions (1.5°C trajectory aligned science-based target) (tCO <sub>2</sub> -e)	30% reduction by 2025 (from 2018 levels)	12,772 (-57%)	5,881 (-80%)	Achieved
Renewable electricity use (MWh)	100% by 2025	18,876 (63%)	22,529 (97%)	On track
Air travel (tCO <sub>2</sub> -e)	20% reduction by 2021 (from 2017 levels)	12,160 (-31%)	2,717 (-85%)	Achieved
Impact investing ambition	\$2 billion by 2025	\$663 million	\$1.1 billion	On track
Investment portfolio emissions	Net zero emissions in investment portfolio by 2050	N/A	N/A	Ongoing

Our reporting on environmental data follows the guidelines / standards / protocols outlined in:

- the Global Reporting Initiative (GRI) Standards’ requirements for Emissions Disclosures 305-1, 305-2 and 305-3;
- the Greenhouse Gas Protocol’s Corporate Accounting and Reporting and Corporate Value Chain (Scope 3) Accounting and Reporting Standards; and
- QBE’s Greenhouse Gas Reporting Framework which governs our data collection and reporting process.

**QBE European Operations**

QBE European Operations Corporate Real Estate (CRES) has primary responsibility for identifying, monitoring, reducing and reporting environmental impacts from QBE European Operation’s physical assets and internal activities.

CRES has, since 2007 developed and implemented reporting procedures and infrastructure for monitoring and reporting Environmental Key Performance Indicator (EKPI) data and has, over the last decade, made significant progress in reducing EO’s office footprint (m<sup>2</sup>), associated energy consumption (kWh) and GHG emissions (tCO<sub>2</sub>e).

CRES collates and reviews European offices EKPI data on a quarterly basis. This information is used to support monitoring and disclosure of EO’s corporate ‘carbon footprint’.

In 2020, EO can report greenhouse gas emissions of 2,250.82 tonnes carbon dioxide equivalent (tCO<sub>2</sub>e),

continuing the downward trend in annual emissions since 2015. It is however, noted that 2020 was atypical with offices closed from March 2020 and minimal business travel after Q1 2020 due to the Covid pandemic. Emissions are expected to increase in 2021 as the business returns to 'normal', however QBE CRES is working to continue the underlying trend of year-on-year reduction in GHG emissions and QBE has set a science-based target to reduce our corporate GHG emissions (See section 4.3 below).

Electricity consumption and air travel continue to be the main sources of reported GHG emissions.

2020 Scope 1 emissions = 229.31 tCO<sub>2</sub>e

Scope 1 emissions decreased 6% from 2019, primarily due to reduced business travel by car.

2020 Scope 2 emissions = 1,105.84 tCO<sub>2</sub>e

Scope 2 emissions increased 7% from 2019, due to the expansion of the scope of reporting to include an estimate of central HVAC natural gas use ('imported heat and steam') at our leased offices.

2020 Scope 3 emissions = 915.67 tCO<sub>2</sub>e

Scope 3 emissions are down 78% from 2019, primarily due to minimal business travel by air and rail from March 2020 due to Covid.

EO calculates greenhouse gas emissions associated with our offices in accordance with the World Business Council for Sustainable Development / World Resources Institute Greenhouse Gas Protocol and applicable UK Government guidance for company reporting. GHG emissions associated with the activities of EO are, where possible, calculated using the 2020 UK Government conversion factors for carbon dioxide, methane and nitrous oxide reported as carbon dioxide equivalent emissions (tonnes CO<sub>2</sub>e). The exceptions to this are emissions associated with electricity supply to non-UK offices, which are calculated using International Energy Agency emission factors (2019) for carbon dioxide, methane and nitrous oxide reported as carbon dioxide equivalent emissions (tonnes CO<sub>2</sub>e) and refrigerants which are reported as tCO<sub>2</sub>e.

EO's reporting is based on operational control. The scope of reporting covers direct environmental impacts associated with 27 QBE offices / sites located in 12 countries, with c2,600 QBE employees. EO 2020 GHG emissions exclude emissions associated with employees working from home (consistent with previous years), however, an estimate of these emissions is included in QBE Group level reporting.

QBE's European offices are generally leased with shared tenancy; building services such as boilers, back-up generators and centralised cooling systems are generally managed and controlled by the landlord or landlord's agent under a service contract. As noted above, the scope of reporting has been expanded for 2020 to include an estimate of central HVAC natural gas use ('imported heat and steam') at our leased offices. Landlord gas use is estimated to have resulted in an additional c385 tCO<sub>2</sub>e emissions being reported across the EO portfolio during 2020.

[Evidence also applies to principle\(s\): 1.2, 4.3](#)

*Source: QBE Sustainability Report 2020 (p.59-61).*



## Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

In 2020, RenaissanceRe launched a group-wide initiative to capture, analyze and report its Greenhouse Gas ("GHG") emissions in line with the GHG Protocol. The Company committed to tracking its operational carbon footprint in an effort to understand its operational sustainability and identify opportunities to manage its impact.

RenaissanceRe reports its GHG emissions data retrospectively for the prior year, therefore the latest

figures were disclosed in December 2020 and represent the Company's best estimates of emissions data for the year ended December 31, 2019. Scope 1 emissions estimates were calculated using internal Company logs of fixed asset use; Scope 2 emissions estimates were calculated using receipts received from energy service providers at each of the locations listed, and Scope 3 emissions estimates were calculated by analyzing employee flight data records and estimating emissions per flight based on distance. As a Bermuda headquartered Company, certain global corporate air travel costs were allocated to that location.

Listing of RenaissanceRe's global Scope 1, Scope 2 and Scope 3 definitions and emissions:

<b>Global Greenhouse Gas (GHG) Emissions (metric tonnes CO<sub>2</sub>e)</b>	
<b>Scope 1</b> – fixed assets	63
<b>Scope 2</b> – purchased electricity	1,267
<b>Scope 3</b> – air travel	9,465
<b>Total (all scopes 1, 2 and 3)</b>	<b>10,795</b>

Listing of RenaissanceRe's Scope 1, Scope 2 and Scope 3 definition and emissions by location:

<b>Local Greenhouse Gas (GHG) Emissions – Bermuda Operations (metric tonnes CO<sub>2</sub>e)</b>	
<b>Scope 1</b> – fixed assets	63
<b>Scope 2</b> – purchased electricity	650
<b>Scope 3</b> – air travel	5,450
<b>Total (all scopes 1, 2 and 3)</b>	<b>6,163</b>

<b>Local Greenhouse Gas (GHG) Emissions – US Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	268
<b>Scope 3</b> – air travel	679
<b>Total (all scopes 1, 2 and 3)</b>	<b>947</b>

<b>Local Greenhouse Gas (GHG) Emissions – UK Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	186
<b>Scope 3</b> – air travel	1,000
<b>Total (all scopes 1, 2 and 3)</b>	<b>1,186</b>

<b>Local Greenhouse Gas (GHG) Emissions – Ireland Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	110
<b>Scope 3</b> – air travel	221
<b>Total (all scopes 1, 2 and 3)</b>	<b>331</b>

<b>Local Greenhouse Gas (GHG) Emissions – Switzerland Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	36
<b>Scope 3</b> – air travel	598
<b>Total (all scopes 1, 2 and 3)</b>	<b>634</b>

<b>Local Greenhouse Gas (GHG) Emissions – Singapore Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	7
<b>Scope 3</b> – air travel	143
<b>Total (all scopes 1, 2 and 3)</b>	<b>150</b>

<b>Local Greenhouse Gas (GHG) Emissions – Australia Operations (metric tonnes CO2e)</b>	
<b>Scope 1</b> – fixed assets	0
<b>Scope 2</b> – purchased electricity	10
<b>Scope 3</b> – air travel	1,375
<b>Total (all scopes 1, 2 and 3)</b>	<b>1,385</b>

Source: RenaissanceRe

## Lloyd's / The Market / The Hartford

The Hartford has a proud history of environmental stewardship including reducing the company's energy dependency. Since 2007, the company has reduced its greenhouse gas emissions (GHGe) by 83.9%.

	2014	2015* (base year)	2016*	2017*	2018*	2019*	2020
<b>Scope 1 GHGe</b> (mT CO <sub>2</sub> e)	19,516	19,609	16,695	15,307	14,230	13,251	<b>8,602</b>
<b>Scope 2 GHGe</b> (mT CO <sub>2</sub> e)	41,737	33,363	27,828	23,008	21,063	18,964	<b>16,583</b>
<b>Scope 3 GHGe</b> (mT CO <sub>2</sub> e)**	52,480	56,920	49,019	49,308	49,913	47,303	<b>12,198</b>
<b>Total Scope 1, 2, and 3 GHGe</b> (mT CO <sub>2</sub> e)	122,666	109,892	93,542	87,624	85,206	79,518	<b>37,383</b>

\* In alignment with the recommended approach of the Science Based Target Initiative, The Hartford's baseline and subsequent data was adjusted to incorporate GHGe impacts resulting from the acquisition of Aetna's Group Benefits business in 2018 and the acquisition of Navigators in May 2019.

\*\* The Hartford's Scope 3 emissions included in reported data are those generated from employee commuting and business travel. Results of a comprehensive review of all relevant scope 3 emissions categories will be published in The Hartford's CDP response July 28, 2021.

The Hartford's GHG emissions data is verified by Apex Companies, an independent third party in accordance with the ISO 14064-3 Second Edition 2019-04 Standard.

The standards, protocols, and methodology's used to collect activity data and calculate The Hartford's emissions include:

- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- US EPA Center for Corporate Climate Leadership:
  - Direct Fugitive Emissions from Refrigeration/ Air Conditioning/ Fire Suppression/ and Industrial Gases
  - Direct Emissions from Stationary Combustion Sources and Mobile Combustion Sources
- US EPA Mandatory Greenhouse Gas Reporting Rule

### Support Links:

- [CDP –C5.2 and C6](#)
- [2020 Sustainability Highlight Report](#), p. 13

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln /

Our scope of reporting encompasses TMK's head office at 20 Fenchurch Street (20FS) and electricity consumption at two UK data centres. The 2020 scope of reporting is consistent with that for prior years back to and including 2017.

GHG emissions are calculated and presented in accordance with the 'GHG Reporting Protocol – Corporate Standard'. GHG emissions are calculated using UK Government's conversion factors (2020) for company reporting, for carbon dioxide, methane and nitrous oxide and reported as tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).

Reporting of energy use and greenhouse gas emissions is based on operational control. TMK does not have operational control over the building infrastructure and plant at its office due to shared tenancy and the presence of a facilities management company, consequently reported emissions primarily fall within Scope 2 and Scope 3 of the Greenhouse Protocol.

Scope 1 sources are: fugitive refrigerant losses from AC systems and Building Infrastructure. Scope 2 emissions are emissions associated with electricity used in TMK office and data centres, and natural gas used in the core building functions at 20 Fenchurch Street (managed by the landlord's agent and allocated against tenants on the



basis of floor area occupied). Scope 3 sources are: water supply and waste water treatment and emissions from transmission and distribution of imported electricity, business travel by air, hire cars, and personal car use for business travel.

TMK's 2020 GHG emissions are reported as 1,510.15 tCO<sub>2</sub>e, 55% lower than 2019 emissions (3,371.37 tCO<sub>2</sub>e). Despite a significant reduction in air travel during 2020, business travel by air (a Scope 3 emission) continues to be the largest source of TMK's corporate GHG emissions.

TMK's 2020 Greenhouse Gas Emissions are reported as follows:

- Scope 1 Emissions = 0.00 tCO<sub>2</sub>e (unchanged from 2019)
- Scope 2 Emissions = 735.07 tCO<sub>2</sub>e (down 8% from 2019) – Location based reporting
- Scope 2 Emissions = 285.45 tCO<sub>2</sub>e - Market based reporting
- Scope 3 Emissions = 775.08 tCO<sub>2</sub>e (down 70% from 2019\*)

\*Comparison made to re-stated 2019 GHG emissions with emissions associated with natural gas moved from Scope 3 (as originally reported) to Scope 2.

TMK report a range of environmental metrics to our parent company Tokio Marine Holdings, for aggregation at global level and disclosure via the company's Annual Report. The 2019 Tokio Marine Group Sustainability Report is published at: [https://www.tokiomarinehd.com/en/sustainability/pdf/sustainability\\_web\\_2019.pdf](https://www.tokiomarinehd.com/en/sustainability/pdf/sustainability_web_2019.pdf) with a supporting Sustainability booklet available from <https://www.tokiomarinehd.com/en/sustainability/>

TMK will also disclose its 2020 corporate energy and greenhouse emissions via its Director's Report in accordance with the requirements of UK's Streamlined Energy and Carbon Reporting.

*Source: Tokio Marine Kiln: TMK Facilities Management; Tokio Marine Group Sustainability Report.*

## 4.3 Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.

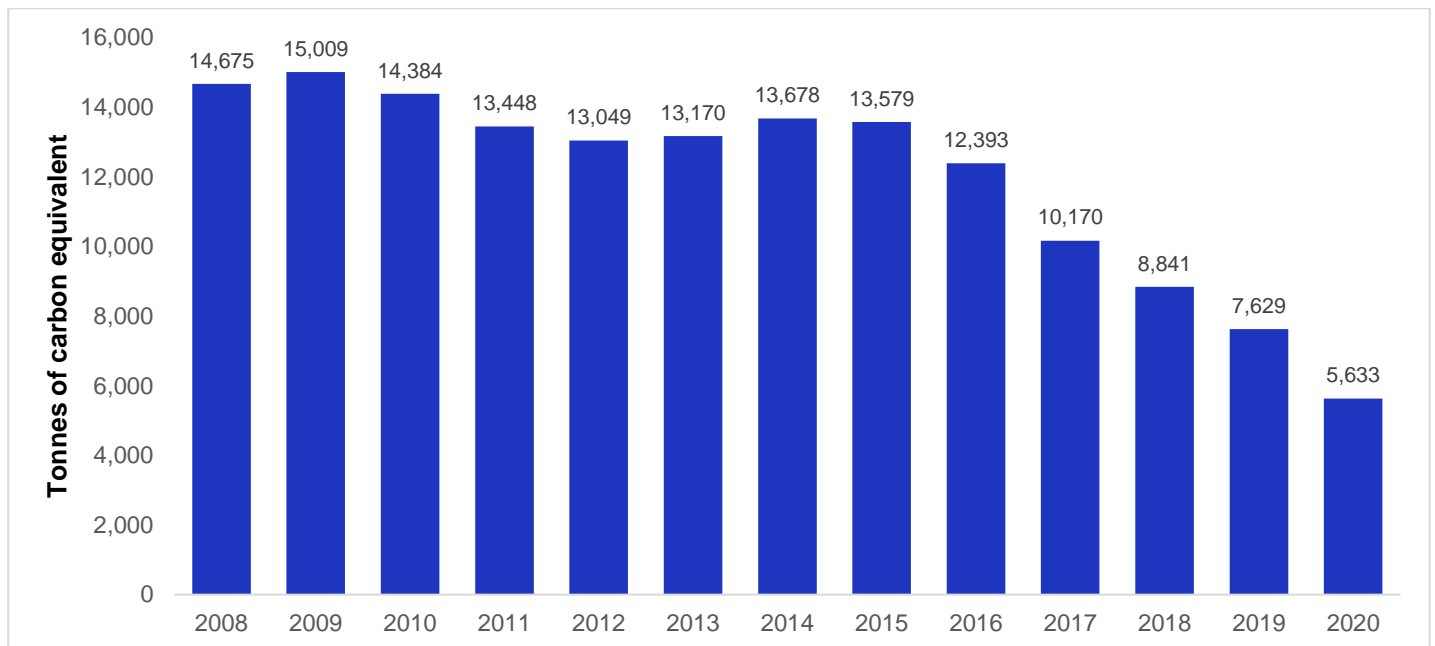
### Lloyd's / The Corporation of Lloyd's

#### Environmental measurement

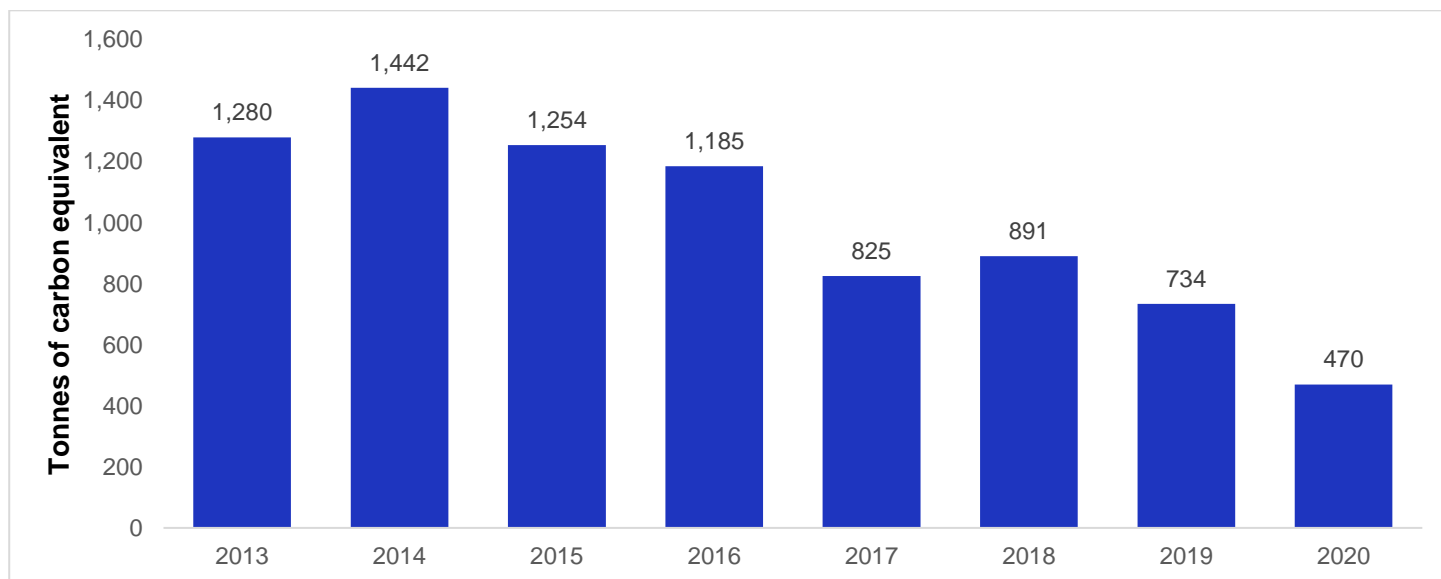
The Corporation of Lloyd's works in partnership with Avieco – environmental consultants contracted by the Corporation – to calculate the GHG emissions of the Corporation's global operations. These figures are disclosed publicly each year in Lloyd's annual report and are made available [on a dedicated page on Lloyds.com](#). They are also shared on the Corporation intranet – MyLloyd's – as part of staff engagement on environmental initiatives throughout the year such as World Environment day (principle 4.4).

2020 marks the eighth year in which the Corporation has reported the Green House Gas (GHG) emissions inventory for Lloyd's global offices in addition to that of the UK, and sees those offices continuing to engage with their resource consumption. Examples of environmental management initiatives are covered in principle 4.1 and 4.4.

#### 13-year UK carbon footprint trend



Eight-year international carbon footprint trend



Lloyd's energy and carbon disclosures for reporting year 1 January – 31 December 2020

		Total scope 1	Total scope 2 (location based)	Total scope 2 (market based)	Total scope 1 + 2 (location based)	Total scope 3	Grand total scope 1, 2, 3 (location based)	Grand total scope 1, 2, 3 (market based)	Carbon intensity location based (tCO <sub>2</sub> e/FTE)	Total energy usage (kWh)
2020 (tCO <sub>2</sub> e)	UK emissions	1,300	3,493	-	4,792	841	5,633	2,141	6.6	22,847,153
	Global emissions (ex. UK)	11	409	432	420	50	470	493	1.9	932,695
2019 (tCO <sub>2</sub> e)	UK emissions	1,312	4,578	-	5,890	1,739	7,629	3,051	8.4	26,248,211
	Global emissions (ex. UK)	-	642	670	642	92	734	762	3.0	1,511,863

Commentary

In 2020, we continued to reduce our emissions on a total global basis from 8,363 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) in 2019 to 6,104 tCO<sub>2</sub>e in 2020 – a reduction of 27%. We have reduced our total global emissions per full time employee (FTE) by 24% from 7.3 tCO<sub>2</sub>e/FTE in 2019 to 5.6 tCO<sub>2</sub>e /FTE in 2020. COVID-19 has impacted our carbon emissions due to significantly reduced flights, business travel and staff commute (falling by an average of 80% across all three categories), reduced use of Lloyd's office space (reducing our electricity usage at One Lime Street by 24%) and a reduction in demand for electricity through our data centres (emissions reducing by 14%). Estimations of the carbon emissions of employees working from home as a result of COVID-19 have not been included. During 2021 and beyond, we will review this if the trend of increased homeworking continues. We will also minimise the impact of our air travel emissions

by offsetting them to fund community projects that remove greenhouse gas emissions.

Environmental management initiatives

In 2020, we set a target for the Society to be net zero carbon emissions by 2025 and we will work with the Lloyd's market to support their own pathways to achieving net zero. We have identified a carbon management plan to decarbonise Lloyd's operations to meet our net zero ambitions. We are exploring developing a Lloyd's market-wide carbon offset project as part of our 2025 net zero ambitions.

We have continued the focus on reducing our energy consumption and associated carbon emissions from our London headquarters, given the majority of our emissions are from the UK. During 2020 we have:

- Reduced our office space through our refurbishment;
- Fully installing LED lights and recycling 98% of the office waste removed through the refurbishment;
- Upgraded the boiler and chiller controls;
- Completed a sustainability assessment of all new office space acquired;
- Implemented the environmental management system ISO 14001; and
- Engaged our staff in a biodiversity campaign as part of World Environment Day.

Examples of our current environmental targets, which are overseen by the Health, Safety and Environmental Coordination Group (HSECG) are:

- Maintain certification to ISO 14001.
- BMS project and floor tracking and balancing throughout the building.
- Continue to reduce the amount of one time use plastic materials used by Lloyd's.
- Energy procurement – Obtain renewable gas energy supply.

The Covid-19 situation has continued to create some challenges for Lloyd's; however, we are still seeing a reduction in the total building electrical consumption, as well as a reduction in both gas and water consumption.

The Corporation of Lloyd's has a cross-directorate Environmental Working Group that drives forward our environmental agenda through an annual action plan. This working group was merged with the Health and Safety Coordination Group to form the Health, Safety, Environmental Coordination Group (HSECG).

The Lloyd's Responsible Business team also work with global sustainability champions to encourage them to take practical action to make their offices more sustainable as well as encouraging personal action outside of work. This culminates with World Environment Week in June each year. See principle 4.4 for further details.

## Waste management

The Corporation of Lloyd's is supportive of the landfill tax (£82.6/tonne of waste disposal to landfill) and we are proud to have a "zero to landfill" policy. 82% of the waste from UK offices is recycled and the remaining general waste is used as fuel for power generation.

The Corporation's catering team in the UK is working hard to reduce our carbon footprint and has eliminated

single use plastics from our restaurants by changing our disposable products. See principle 4.1 for further details.

We are proud that the Corporation of Lloyd's commitment to waste management was recognised in 2018 when we were given a Platinum Award in the City of London's annual Clean City Awards.

## Sustainable buildings

The Corporation of Lloyd's puts the environment at the centre of its office planning. LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world, providing a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognised symbol of sustainability achievement.

Four of Lloyd's offices have been given LEED status and two more have local accreditation.

## Carbon offsetting

The Corporation offsets all its employees' air travel emissions by buying carbon credits for projects through Natural Capital Partners. One of these initiatives provides better cookstoves to communities in India which reduces indoor pollution and improves public health. Another project provides clean drinking water to small rural communities primarily in Uganda, Malawi, Rwanda and Eritrea by repairing old boreholes and drilling new ones. This gives people access to water even during dry seasons, and means they no longer need to purify water by boiling it, alleviating pressure on local forests – the main source of firewood – and reducing greenhouse gas emissions.

In addition to the above, during the reporting year, the Corporation of Lloyd's has extended its carbon offsetting program from offsetting business travel only, to fully offsetting all its scope 1 and 2 emissions as well, covering the calendar years of 2019 and 2020. The offsets have been achieved through buying carbon credits generated from preventing deforestation in China's Jiangxi Province.

The 'Jiangxi Province Le'an County Forest Farm Carbon Sink' project has been designed to transform 7,747 hectares of previously logged land into a protected forest. The area, which includes two species: Chinese Fir and Slash Pine, will remain undisturbed for at least 30 years. As such, the forest will act as a carbon sink for the 30-year duration and is estimated to trap over 2.6 million tCO<sub>2</sub>e in total. The project is anticipated to have a range of biodiversity benefits as the woodland naturally develops. These have not been formally evaluated or quantified however. The project has been verified in accordance with the Verified Carbon Standard by Bureau Veritas.



## Forward planning

The Corporation will work with the Lloyd's market in 2021 to support their own implementation of net zero carbon emission plans and will explore the potential to develop a Lloyd's market wide carbon offset project.

Lloyd's has set a target to achieve zero carbon emissions by 2025, which has placed significant focus on the need to reduce our carbon footprint through the development of a number of environmental initiatives.

Lloyd's is in the process of carrying out an extensive review of the engineering plant and associated equipment in the London building, which will result in a proposal to upgrade the existing systems for energy improvement and includes the potential for a light energy saving project. The principal areas being focused on are:

- The replacement of the existing MTHW boiler with a mixture of condensing and water to water heat pumps. This will reduce energy consumption together with emissions significantly. This would also encompass revised HWS generation solutions.
- Upgrade the air handling unit motors and fans to reduce energy consumption of the largest MEP electrical consumer within the building.
- Continue with the excellent work of converting the existing luminaires from fluorescent to LED lamp technology and the associated intelligent controls.
- Rationalisation of existing systems to introduce simplicity, more efficient operation and enable these to only operate when required at an appropriate level. This can be implemented for instance when the remainder of Gallery floor on the upper and or lower stacks enable the usage of each floor to be tuned to suit occupancy. More extensive CO2 sensing will assist this process.

As part of this process, the Health, Safety and Environmental Coordination Group (HSECG), which meets every four months, will help to oversee the development and monitoring of progress against an environmental action plan for the Corporation.

Meetings in 2021 are scheduled at the beginning of the year, and the group met in February and April, with further meetings scheduled for July and October. Activity, minutes, and all documentation is shared within the group. The full list of activities has been provided to the reviewers and details will be shared in the next reporting year when they become public.

[Evidence also applies to principle\(s\): 4.1, 4.2, 4.4](#)

Source: *The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

Beazley operates from leased offices, therefore, the opportunities to reduce our environmental impacts is limited. Key to measuring and reporting against KPIs is the availability of accurate data. To date, we have therefore focused on the reporting of energy consumption, as well as the proportion coming from renewable energy sources. This is detailed in our annual responsible business report, with Beazley sourcing 55% of our energy from renewable sources in 2020. As detailed in the report, we have come a significant way on this in the past year, acknowledging both a reduction in overall energy consumption for the business and secondly increasing the use of renewable energy. We have also set a target within our responsible business strategy to increase the procurement of renewable energy over the coming years. Our approach for detailing energy consumption is in line with the approach to calculating GHG emissions. This includes gathering energy data from our landlords and direct from suppliers where appropriate. We have declared renewable energy use where our landlords/ suppliers have provided us with Renewable Energy Guarantees Origin (REGO).

We have also set an objective to widen the number of environmental KPI's we report on, again the ability to achieve this target is impacted by the availability of accurate data from our landlords. This is due to many of our environmental impacts i.e. waste, water use etc, being a shared resources with other tenants in the buildings we occupy. In 2020, we reported the amount of printing the business had undertaken, having identified paper consumption as a key environmental KPI, and one where we could influence behavioural change to deliver improvements. With our relocation to 22 Bishopsgate, we are now able to track our water and waste consumption for this building, and are working to set a baseline from which targets can be set.

Despite the lack of quantifiable and accurate data available to us, Beazley works to reduce its environmental impact. It does this through engagement with colleagues and suppliers, noting that the lack of data does not prevent positive action from occurring. Further details on our approach is outlined in section 4.4.

Source: *Beazley*

## Lloyd's / The Market / MS Amlin Business Services

### 1. Internal governance

MS Amlin's ESG Forum has senior management representation from across the business. This group, which meets monthly throughout the year provides executive oversight of:

- The impact that climate-related issues may pose to the risk profile of operations, insurance and re-insurance businesses, and
- The corporate response to enhance the resilience of business to related environmental risks.

During 2020, MS Amlin performed an in-depth review of its environment reporting programme. This review sought to solve the challenges faced with growing environmental reporting obligation, greater recognition of the important role that environmental stewardship has in reducing climate risk in the insurance industry, along with enhanced external scrutiny of environmental performance.

A key step identified that was missing in MS Amlin's environmental reporting programme was an effective management information platform, which meant there was limited ability to trend data, monitor performance against targets, benchmark against peers and the industry.

MS Amlin went to the market to identify possible software solutions and commissioned the Building OS platform, which features a secure cloud-based portal, managed by our facilities management partners Cushman & Wakefield, that can be accessed by authorised personnel anywhere – on laptop, tablet and mobile. It is a fully bespoke, user-friendly platform that makes it easier and faster to turn building data into actionable insight, which leads to cost and carbon savings, through optimising performance.

### 2. Environmental performance in 2020

As show in Table 2, key highlights of our performance include:

- *Energy usage:* Total energy usage was down across the vast majority of properties in the portfolio – in addition to improving data oversight and prioritising energy efficiency where possible, this reduction should be viewed in respect to the fact that majority of our offices was closed between March-July 2020 due to Covid-19.

- *Paper usage:* In 2020, MS Amlin continued to roll out digital document and communication solutions to support the responsible use of paper across our offices and to support colleagues to reduce their overall paper usage;
- *Water:* There was a significant reduction in the volume consumed across our portfolio and whilst improving data visibility and promoting water saving where we can, this reduction should be viewed in respect to the fact that the majority of our office portfolio was closed between March-July 2020 due to Covid-19.
- *Waste management:* In 2020, on average, over 85% of waste generated across our portfolio was diverted from landfill, up from 55% in 2019. Total waste arisings have fallen; however, this reduction should be viewed in respect to the fact that majority of our office portfolio was closed between March-July 2020 due to Covid-19 and therefore most MS Amlin staff were working from home.
- *Employee commuting:* Between May-June 2021, MS Amlin administered an employee commuter travel and homeworking survey to our employees globally. The survey garnered 562 responses (a response rate of 28%), with the aim of understanding behaviors pre-, during and post-pandemic. Key insights identified include:
  - A marked shift in primary working location and commuting frequency – >90% of staff respondents used offices more than three times per week prior to the pandemic, which fell to zero or less than once a week during;
  - Pre-pandemic, walking (33%) and rail journeys (26%) represented our employee's most popular mode of travel to work;
  - The shift seen in commuter habits is likely to remain as staff opt for a more hybrid working approach, using the office only several days per week going forward. Cycling has become more popular as people avoid rush hour public transport.

This insight will enable us to monitor the return to the office and where possible promote more sustainable behaviours brought about by the pandemic.

	2020		2019		2018		2020 vs 2019 change
<b>Energy</b>							
Energy use from combustion of gas and other fuels (kWh)	2,434,974		2,925,275		Unknown		-17%
Energy use from consumption of electricity purchased for own use (kWh)	4,319,334		5,549,479		Unknown		-22%
<b>Paper</b>							
Total paper usage (kgs)	4,024		32,030		36,442		-89%
<b>Waste</b>							
General waste to landfill	30	16%	111	33%	78	28%	-39%
Waste diverted from landfill – Incineration	31	16%	65	19%	81	29%	-52%
Waste diverted from landfill – Recycled	127	68%	161	48%	117	42%	-73%
<b>Total waste disposed of (tonnes)</b>	<b>188</b>		<b>337</b>		<b>277</b>		<b>-40%</b>
<b>Water</b>							
Total water consumption (m <sup>3</sup> )	13,872		21,452		24,774		-35%

**Table 2: Historical environmental performance metrics<sup>P</sup>**

### 3. Emissions reductions and environmental targets

In-line with MS Amlin's commitment to support society's response to the impact of climate-related issues, the company undertook a strategic evaluation of the global office portfolio in 2020 to identify opportunities in support of reducing the company environmental impact, and strengthen alignment with the sustainability ambition of our parent company MS&AD. These were developed in consultation with internal MS Amlin stakeholders.

The outcome of the exercise was the development of a suite of draft short-, medium- and long-term energy and carbon emission targets up to 2030. These aim to guide our efforts to reduce emissions through the efficient operation of our estate and adapting the workplace behaviour of our employees across MS Amlin's global portfolio. At this stage of our sustainability journey, MS Amlin aims to set achievable short-term targets aligned with industry best-practice through the development of an internal sustainability programme overseen by MS Amlin's Group Property Services. Material environmental impacts have been reviewed and efforts made to set key targets across a wide range of environmental metrics within our direct control.

These draft environmental targets are summarised in Table 3 below. These draft targets have been issued to MS Amlin Entity Boards and are currently under review for approval. Throughout 2020, our priority has been to develop a process of measuring performance against

these draft short-term targets on an annual basis and rollout corresponding initiatives across our office portfolio.

The draft short-term reduction targets include a 5% reduction in our overall energy consumption across our portfolio by the end of 2021. MS Amlin also recognises that business-related travel represents a significant source of emissions associated with our business. Consequently, a draft short-term travel focused target to achieve a 10% reduction in air travel emissions by end of 2021 has been prepared. This reduction target is complemented by MS Amlin's commitment to support employees to reduce emissions associated with their work-related commuting.

The medium- and long-term draft targets build on the aspiration of the short-term targets to achieve the following reductions:

- A 20% reduction in energy consumption across portfolio by end of 2025.
- Further aiming to reduce the impact of our air travel, with a 20% reduction in air travel emissions by end of 2025.
- Support Amlin employees to achieve a 10% reduction in emissions associated with commuting to work by end of 2025, and
- Our long-term aspiration to achieve a 40% reduction in Scope 1 & 2 carbon emissions

<sup>P</sup> See appendix 4d specific to MS AUL

across portfolio by end of 2030, whilst setting of a net-zero emissions reduction target up to 2030.

MS Amlin anticipates rolling out these targets out across our portfolio over the next two years. The development of our draft long-term Scope 1 & 2 emission reduction target was informed by the Science Based Targets initiative (SBTi) methodology and is aligned with the decarbonisation pathway required for the well below 2°C climate scenario. MS Amlin will explore the submission of our emission reduction targets to the SBTi for approval within the next two years.

Even though not all the targets have been fully adopted, MS Amlin has still seen progress made against them in 2020. Table 3 provides our annual progress update for 2020. The objectives underlying our long-term response to manage our environmental impacts are captured in Table 4 below.

**Table 3: Draft environmental targets, designed to manage the environmental impact of our global portfolio and 2020 progress update.**

#	Target timeframe	Draft environmental targets	Progress in 2020	Achieved/on track
1.1	Short-term, up to 2021	By end of 2020, aim to source at least 90% of paper consumed from recycled or sustainable sources, where a supply contract is in-place.	Complete	Achieved
1.2		Remove single-use plastics from offices across portfolio by end of 2021.	Underway	On track
1.3		Ensure office-based recycling amenities available across all portfolio assets, by end of 2021.	Underway	On track
1.5		Establish internal network of sustainability champions across portfolio by end of 2021 to drive sustainability performance across the assets.	Workstream to be initiated in Q3 2021	On track
1.6		Commit to ensuring that 100% of portfolio assets to have dedicated environmental sustainability plan by end of 2021.	Workstream to be initiated in July 2021	On track
2.1	Medium-term, up to 2025	20% reduction in energy usage across portfolio by end of 2025	-20%	Achieved
2.2		20% reduction in air travel emissions by end of 2025	-83%	In planning
2.3		Support Amlin employees to achieve a 10% reduction in emissions associated with commuting to work travel by end of 2025.	-70%	In planning
2.4		Commitment to achieve at least 75% waste diversion from landfill rate, through primary disposal route, by 2025	-84%	Exceeded
2.6		Achieve 10% reduction in absolute water consumption by end of 2025	-35%	Exceeded
3.1	Long-term, up to 2030	40% reduction in Scope 1 & 2 carbon emissions across portfolio by end of 2030	-24%	On track
3.2		Set net-zero emissions reduction target up to 2030		In planning
3.3		Adopt paperless approach across all portfolio assets by 2030		In planning
3.4		Achieve at least 90% waste diversion from landfill, through primary disposal route, by 2030	-84%	On track

**Table 4: Long-term environmental sustainability objectives**

Pillar	Objectives
<b>Leadership</b>	Investigate the feasibility of developing a pathway for MS Amlin to 'net-zero' by the end of 2050
<b>Benchmarking &amp; Disclosure</b>	Continue to voluntarily disclose our environmental performance to key stakeholders annually against industry benchmarks, where applicable
<b>Compliance</b>	Manage our compliance risks, going beyond minimum requirements
<b>Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>- Ensure our staff are engaged and appropriately trained on strategic environmental priorities, with clear accountability to do the right thing.</li> <li>- Ensure our supply chain partners clearly understand our sustainability priorities.</li> <li>- Ensure our customers are engaged on climate-related issues that may present risks &amp; opportunities for consideration.</li> </ul>
<b>Asset improvement</b>	Rollout action plans to enable a robust programme of environmental initiatives across the portfolio with environmental impact reported and monitored.

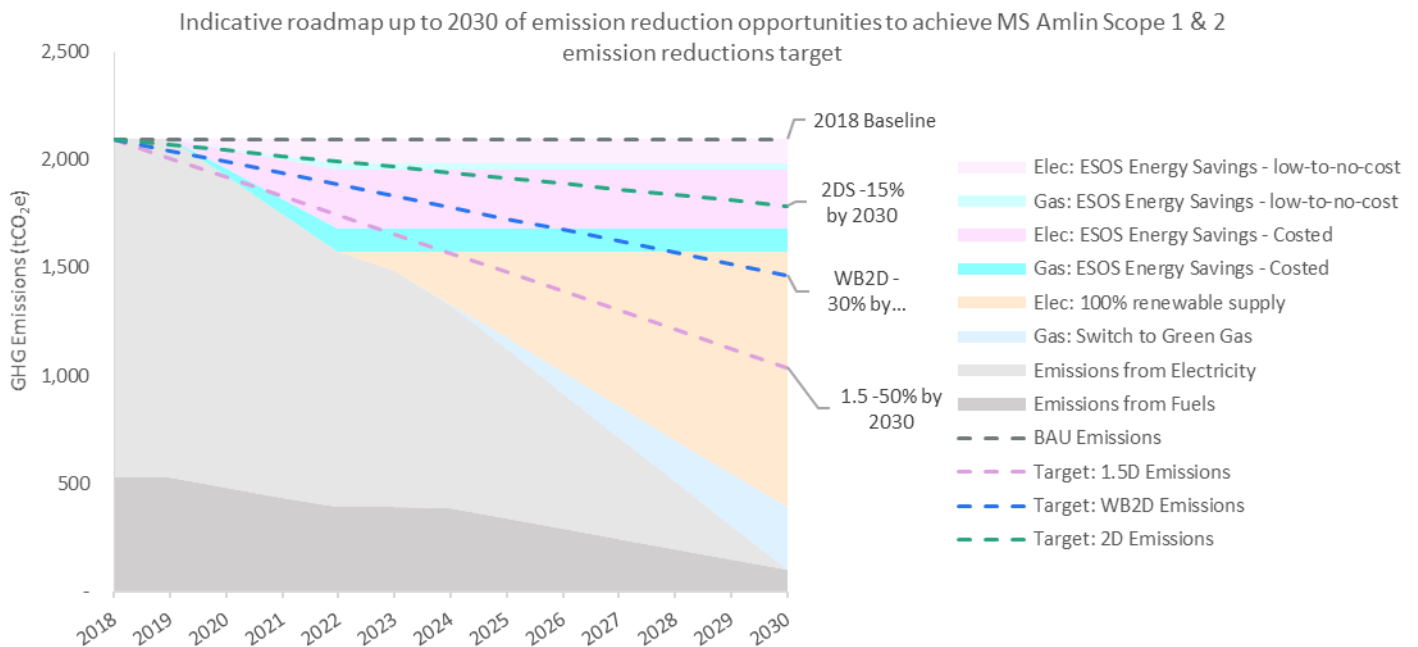
#### 4. Roadmap to guide progress and achieve emissions reductions

To support the realisation of our draft short, medium, and long-term energy & emission reduction targets, MS Amlin has begun developing a clear roadmap that will guide the proposed actions needed to achieve these commitments.

The roadmap for our draft long-term Scope 1 & 2 emission reduction targets considers:

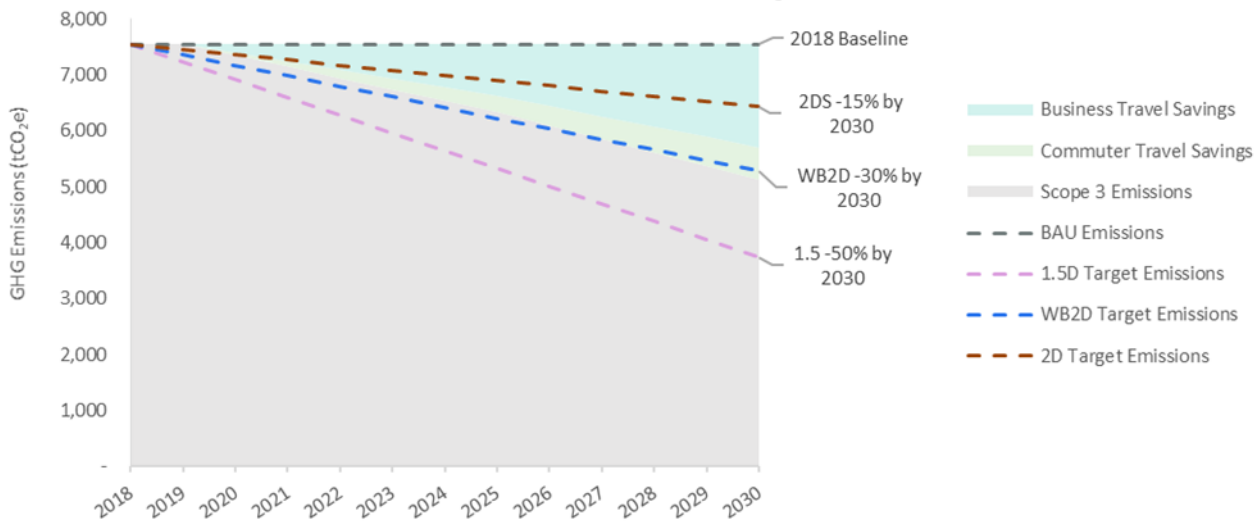
- Implementing all energy savings opportunities identified through compliance with the EU's Energy Efficiency Directive; and
- Exploring energy decarbonisation opportunities across our portfolio.

The graph below demonstrates some of the suite of opportunities that could be adopted to reduce our Scope 3 travel-related emissions from business travel and commuter travel. The indicative roadmap will be complemented by a series of initiatives to support our employees to reduce emissions from their business travel and employee commuting.





Indicative roadmap up to 2030 of emission reduction opportunities to achieve MS Amlin Scope 3 emission reductions target



This will be complemented by the active implementation of our travel policy for business travel, through a centralised travel partner. This policy mandates the selection of lower carbon-intensive flight modes for business travel and restricts Business Class flights to journeys of more than 8 hours. In parallel, MS Amlin also continue to invest in and roll-out of standardised digital and video conferencing technologies across the office portfolio. This ensures employees have the tools to adapt their approach to engage colleagues and clients.

Employee commuting remains an on-going focus. MS Amlin will continue to address this through regular internal engagement to encourage the reduction of commuting and adoption of alternative travel options. These include, for example:

- Promoting flexible working arrangements through our “Work Life Better” initiative.
- Where commuting journeys are essential, employees are encouraged to adopt alternative modes of transport (e.g. greater use of public transport and maximising off-peak travel commuting).

In-line with the Greenhouse Gas Protocol Scope 3 Standard, MS Amlin will continue to review the activities of the business on an on-going basis to identify additional Scope 3 emission categories that may be relevant. MS Amlin will determine how to appropriately include these as part of on-going climate-related disclosures, and target setting.

Source: MS Amlin

### Lloyd’s / The Market / QBE

QBE Group monitors a number of environmental indicators around resource consumption (energy, water,

office paper, business travel etc.) in order to identify opportunities to improve performance and support decision making to manage climate-related risks and opportunities within its internal operations. The environmental indicators measured can be seen in the table summarising QBE’s GHG emissions in section 4.2, which is included in QBE’s annual Sustainability Report.

### QBE European Operations

#### Measuring Environmental Impacts

QBE European Operations, Corporate Real Estate (QBE EO CRES) has primary responsibility for the management and maintenance of QBE’s European office infrastructure – physical assets and internal operations. CRES also has primary responsibility for identifying, monitoring, reducing and reporting adverse environmental impacts from EO’s physical assets and internal activities.

QBE EO CRES has, since 2007 developed and implemented procedures and infrastructure for monitoring and reporting of Environmental Key Performance Indicators (EKPIs) for QBE’s European offices. EO monitors a range of EKPIs including resource consumption (energy, water, paper), business travel, waste generated and greenhouse gas emissions in order to identify opportunities to improve performance, support decision making and also to provide the data for internal and public disclosure of EO’s corporate ‘carbon footprint’.

CRES EO produces quarterly Environmental Inventories that collate EKPI data for QBE’s European offices to improve environmental management through an on-going

'rolling programme'. Activity information is collated and reported on an annual basis. The reports identify data gaps, limitations and actions required to develop and maintain robust sustainability reporting. Our Environmental Inventories include calculation of greenhouse gas emissions associated with EO's offices in accordance with the World Business Council for Sustainable Development / World Resources Institute Greenhouse Gas Protocol; and provides an 'audit trail' for environmental reporting to QBE Group Environmental, Social and Governance .

QBE Group introduced a worldwide Environmental and Social Governance (ESG) System at the end of 2016, which provides a framework to improve global data quality. EO aligned its pre-existing data management system with the requirements of the ESG system during 2017, with global environmental activity data audited and verified by Deloitte.

The following table summarising QBE's environmental indicator performance and reporting.

Other environmental indicators			2020	2019	2018	2017	2016
	UNITS	% CHANGE FROM PRIOR YEAR					
<b>Stationary energy use<sup>1</sup></b>							
Non-renewable electricity	MWh	-93%	771	11,304	35,916	40,691	46,500
Renewable electricity <sup>2</sup>	MWh	19%	22,529	18,876	-	-	-
Electricity use per FTE <sup>3</sup>	MWh/FTE	-23%	2.05	2.67	2.96	2.88	3.27
Gas - direct	GJ	-7%	18,234	19,513	26,231	25,962	20,772
Gas - indirect	GJ	-20%	20,000	25,133	23,446	31,218	37,460
Gas use per FTE <sup>3</sup>	GJ/FTE	-15%	3.37	3.95	4.09	4.00	4.09
Working From Home - electricity and gas <sup>4</sup>	GJ		26,287	DNR	DNR	DNR	DNR
<b>Business travel</b>							
Air travel	'000 km	-72%	26,070	93,074	110,499	132,851	124,195
Road travel <sup>5</sup>	'000 km	-80%	15,787	77,958	95,775	118,192	114,928
Rail and bus travel	'000 km	-21%	9,406	11,876	11,623	11,831	5,882
Business travel per FTE <sup>3</sup>	'000 km/FTE	-73%	877	3,240	3,101	2,828	3,385
Office paper purchased <sup>1</sup>	tonnes	-72%	2,30	8.23	9.10	9.40	8.73
Office paper purchased per FTE <sup>3</sup>	kg/FTE	-56%	109	248	339	618	505
Water use <sup>1</sup>	kL	-55%	10	22	28	44	35
Water use per FTE <sup>3</sup>	kL/FTE	-44%	102,325	182,502	178,731	218,156	183,906
Waste and recycling <sup>1</sup>	tonnes	-44%	9	16	15	15	13
Waste to landfill	tonnes	-37%	1,411	2,235	2,522	3,266	2,734
Waste per FTE <sup>3</sup>	kg/FTE	-42%	877	1,512	1,536	1,770	1,764
Paper recycled	tonnes	-37%	124	198	208	231	192
Other recycled waste <sup>6</sup>	tonnes	-26%	438	589	844	1,340	833
Recycling rate	%	-28%	96	134	142	156	137
		19%	38	32	39	46	35

**How we account for the numbers**

Our reporting on environmental data follows the guidelines outlined in:

- the Global Reporting Initiative (GRI) Standards: requirements for Emissions Disclosures 305-1, 305-2 and 305-3;
- the Greenhouse Gas Protocol's Corporate Accounting and Reporting and Corporate Value Chain (Scope 3) Accounting and Reporting Standards; and
- QBE's Greenhouse Gas Reporting Framework which governs our data collection process.

The Group's GHG emissions reporting is driven by our global insurance operations across the world. We calculate emissions using the energy content and emission factors considered most relevant to each region, based on information sourced from:

- Australian Government's Department of Industry, Science, Energy and Resources National Greenhouse Accounts Factors 2020 (NGA);
- United Kingdom Government's Department for Environment Food & Rural Affairs (DEFRA) GHG Conversion Factors for Company Reporting 2020;
- United States's Environmental Protection Agency (EPA) Emission Factors for Greenhouse Gas Inventories: Direct Emissions from Stationary Combustion 2020;
- United States's EPA, Emissions & Generation Resource Integrated Database (eGRID) 2018 (released in 2020); and
- International Energy Agency CO<sub>2</sub> Emissions from Fuel Combustion, 2019 edition.

1. Estimates have been made for certain office locations and activity data streams where actual activity was not available, and were based on comparable offices/activities in the same region.  
2. 2019 was the first year QBE started sourcing renewable electricity. The renewable electricity includes both renewable energy contracts with energy retailers and renewable electricity certificates purchased.  
3. Indicators for 2019-2020 are per FTE. Indicators for 2016-2017 are per number of employees.  
4. Due to COVID-19 the majority of our global workforce has been working from home for most of 2020. We have estimated the energy usage by our employees while working from home.  
5. Road travel includes business travel by car, hire, taxi and private car.  
6. Includes recycled IT asset waste and mixed plastics and glass.

QBE's Corporate GHG Emissions and progress against environmental targets are subject to external assurance by Deloitte.

SUSTAINABILITY PERFORMANCE INDICATORS (‘SUBJECT MATTER INFORMATION’)	REPORTING CRITERIA
Diversity breakdown of workforce – part-timers by gender (headcount) and % of total workforce, <a href="#">page 55</a>	QBE 2020 Sustainability Reporting Framework
2020 performance against targets (excluding baseline); Greenhouse gas (GHG) emissions (tCO <sub>2</sub> -e) by activity (excluding carbon offsets); Key performance indicators – GHG emissions intensity (tCO <sub>2</sub> -e); Other environmental indicators, <a href="#">pages 59 to 61</a>	GRI standard 305-1, 305-2, 305-3, 305-4 (2016) QBE 2020 Sustainability Reporting Framework
10 selected material claims or assertions from the 2020 QBE Sustainability Report (‘Selected Assertion Assurance’)	GRI’s Reporting Principles for defining report content and report quality.

2020 is as follows

### Reduce adverse environmental impacts

EO has a rolling programme of initiatives to reduce our adverse environmental impacts and is able to demonstrate 2019 – 2020 improvement in a number of key environmental impact areas including:

- Reduced consumption of electricity (MWh/year) from non-renewable sources
- Reduced electricity consumption (kWh/FTE/year)
- Reduced business travel per Full Time Equivalent employees (km/FTE/year)
- Reduced office paper purchased (kg/FTE/year)

Please refer to the table above for the numerical metrics and additional metrics.

QBE has established a number of targets to reduce adverse environmental impacts, these are summarised in our Sustainability Report:

## Operational environmental performance

We continue to drive improvements in our environmental performance by integrating resource efficiency considerations into our strategic and operational business decision making, transitioning to renewable energy sources and inspiring our employees to take action.

### Our targets

Reduce energy use by  
**15%** by 2021

Reduce Scope 1 and 2  
carbon emissions by  
**30%** by 2025

Transition to  
**100%**  
renewable electricity by 2025

Reduce air travel by  
**20%** by 2021

### Metrics and targets

We continue to evolve our climate-related metrics and targets. Our aim is to establish metrics and targets that are relevant and reliable, and that will drive performance and transparency against our climate-related goals. During 2020, we have maintained our carbon neutrality and achieved our energy use, air travel and science-based emission reduction targets ahead of time. While COVID-19 had a substantial impact on our business operations and target performance, we expect to achieve our 2021 targets when we return to a more normal operating environment in 2021.

In 2020 we committed to achieving net zero emissions by 2050 in our investment portfolio. Over the coming years we will set interim targets and progress against these targets will be included as part of our annual reporting.

Our climate-related metrics and targets are presented below:

MEASURE	TARGET	2019	2020	STATUS
Energy use (GJ)	15% reduction by 2021 (from 2018 levels)	153,296 (-14%)	122,115 (-32%)	Achieved
Scope 1 & 2 emissions (1.5°C trajectory aligned science-based target) (tCO <sub>2</sub> -e)	30% reduction by 2025 (from 2018 levels)	12,772 (-57%)	5,881 (-80%)	Achieved
Renewable electricity use (MWh)	100% by 2025	18,876 (63%)	22,529 (97%)	On track
Air travel (tCO <sub>2</sub> -e)	20% reduction by 2021 (from 2017 levels)	12,160 (-31%)	2,717 (-85%)	Achieved
Impact investing ambition	\$2 billion by 2025	\$663 million	\$1.1 billion	On track
Investment portfolio emissions	Net zero emissions in investment portfolio by 2050	N/A	N/A	Ongoing

Evidence also applies to principle(s): 4.1, 4.2, 4.4

Source: QBE Sustainability Report 2020 (p.59,70-71).

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

Although RenaissanceRe has not set fixed targets for greenhouse gas emissions reductions at this stage, it is pro-actively seeking innovative methods to reduce the environmental impact of its internal operations and physical assets. RenaissanceRe does not own any of its buildings and is enhancing its disclosures to highlight the various methods by which it has improved the

environmental sustainability of its offices, including the following:

- Implementation of Electric Vehicle Scheme in the UK office to promote the use of electric & hybrid vehicles;
- Installation of electric charging stations in Bermuda office to support green transport options;

- Installation of recycling bins across all offices to encourage positive waste management;
- Installation of LED and automated lighting to reduce energy usage;
- Removal of plastic bottles, and introduction of reusable bottles to discourage single-use plastic usage;
- Monitoring of food ordering efficiencies to reduce food waste;
- Recycling or repurposing of IT equipment to charitable organizations;
- Removal of desktop printers and replacement with multipurpose, energy-efficient shared printers;
- Implementation of 'follow-me printing' technology to reduce paper waste; and

- Implementation of Wake-on-Lan to allow machines to switch off remotely to save energy.

Source: RenaissanceRe

### Lloyd's / The Market / The Hartford

In 2017 The Hartford set a goal to continue to reduce our total Scope 1, 2, and select categories of scope 3 GHGe, achieving a reduction of at least 2.1% of GHGe each year, resulting in a minimum decrease of 25.7% by 2027 and 46.2% by 2037 (using 2015 as a base year).

To help drive these emissions reductions and demonstrate The Hartford's commitment to environmental stewardship, The Hartford's CEO, Chris Swift publicly announced several additional environmental goals in The Hartford's [2017 Sustainability Highlight Report](#) published in July 2018 (p.4). The company measures and reports the progress made toward these goals annually.

The Hartford reported the following progress toward achieving these goals as of 12/31/2020:



Goal	Target	2020 vs. Base Year (2017)
<p><b>Reducing facilities energy use by 15% through energy efficient building management by 2022</b></p> <ul style="list-style-type: none"> <li>In-Scope: Owned and leased offices in the U.S. and abroad (metered scaled up)</li> <li>Exclusions: Business travel, fleet vehicles, employee commuting</li> </ul>	<p>15% reduction</p>	<p><b>Goal Achieved!</b></p> <p>Facilities energy use is down 23.6% from the baseline year</p>
<p><b>Reducing water usage by 15% by 2022</b></p> <ul style="list-style-type: none"> <li>In-Scope: All metered U.S. offices</li> <li>Exclusions: Non-metered U.S. offices; international sites</li> </ul>	<p>15% reduction</p>	<p><b>Goal Achieved!</b></p> <p>A 24% decrease in water usage</p>
<p><b>100% renewable energy by 2030</b></p> <ul style="list-style-type: none"> <li>In-Scope: Self-generation, RECs, offsets and credits in owned and leased offices in the U.S. and abroad</li> <li>Exclusions: Business travel, fleet vehicles, employee commuting</li> </ul>	<p>100%</p>	<p><b>Goal Achieved!</b></p> <p>100% of our facilities' energy consumption came from renewable energy sources in 2020</p>
<p><b>Reducing our non-recyclable, non-biodegradable solid waste from our facilities by 20% by 2022</b></p> <ul style="list-style-type: none"> <li>In-Scope: Waste that can't be recycled or composted such as prepackaged food and other plastic products in owned and leased offices in the U.S. and Canada</li> <li>Exclusions: Landlord managed waste removal; international sites; construction waste, decommissioned furniture, computer hardware</li> </ul>	<p>20% reduction</p>	<p><b>Goal Achieved!</b></p> <p>Waste reduced by 80% from baseline, aided by a new centralized waste management program including composting</p> <p><i>(Trash decreased 51% during the first four months of the program, remote work materially impacted waste streams through remainder of 2020)</i></p>
<p><b>Eliminating the use of Styrofoam by 2020</b></p> <ul style="list-style-type: none"> <li>In-Scope: Connecticut fully managed sites</li> <li>Exclusions: Prepackaged food, computer packaging, partially managed (leased) locations</li> </ul>	<p>Eliminate</p>	<p><b>Goal Achieved!</b></p> <p>Successfully eliminated the use of Styrofoam and plastic food containers in our Connecticut offices in 2019</p>
<p><b>Doubling the percentage of hybrid fleet vehicles and moving to 100% electric campus shuttles and security vehicles by 2022</b></p> <ul style="list-style-type: none"> <li>In-Scope: Entire fleet; shuttles and security vehicles in Connecticut</li> <li>Exclusions: None</li> </ul>	<p>Double percentage and move to 100%</p>	<p>We doubled the percentage of hybrid vehicles in our fleet, successfully achieving our goal and in 2019, we introduced the first 100% electric shuttle to our Connecticut fleet</p>

This progress is achieved through a variety of actions and initiatives including those highlighted in The Hartford's 2020 Sustainability Highlight Report, p. 13-18.

**Support Links:**

- 2020 Sustainability Highlight Report, p. 13-18
- 2017 Sustainability Highlight Report, p. 3-7

Source: The Hartford

**Lloyd's / The Market / Tokio Marine Kiln /**

TMK engages an independent external consultant, AECOM, to support and document our environmental reporting on an ongoing basis. TMK's environmental activity data is collected and collated bi-annually, with this information used to calculate and report our corporate environmental metrics, including GHG emissions.

We monitor our sustainability performance on an ongoing basis using a range of metrics aligned with our key environmental impacts. Our data shows year on year improvements for most metrics and the anomaly which is the impact of the pandemic:

The external consultant reports that 13 of our 19 measurements are RAG rated green for data confidence, meaning that they are judged accurate and a clear audit trail is in place. We are seeking wherever possible to improve the confidence level of the remaining six by reducing the level of assumption involved.

**Resource reduction going forward**

During 2019, TMK commissioned Energy Savings Opportunities Scheme (ESOS) audits of our offices at 20 Fenchurch Street and our IT infrastructure at the Sungard Data Centre (Guildford). From April 2021, we have successfully lobbied for a change in our energy supply to a fully renewable basis.

TMK were highly successful in moving the business rapidly to remote working under lockdown. At the direction of the Board, the company is now seeking to incorporate the experience gained into a 'best of both worlds' approach to future working patterns as staff gradually return to the office. We expect this dynamic approach will have a significant positive impact on the sustainability of the business with less energy usage, travel, and reduced office space, along with paper and other resource savings, whilst balancing the needs of the business and the individual employee.

However, some of this reduction will be offset by the domestic impact of homeworking and we will continue to work at measurement to understand these trade-offs and where we are achieving genuine and sustainable impact.

The Climate Group are charged by the Board with measuring and monitoring the relevant EKPI's against these expectations.

Targets for reduction of environmental impacts in 2022 against the 2019 baseline are as follows:

- Carbon dioxide emissions reduction 10%
- Air miles flown by TMK staff 25% reduction
- Food waste at 20FS 10% reduction
- Paper usage 50% reduction

Source: AECOM Environmental Reporting KPI Data for 2020, March 2021

Tokio Marine Environmental Metric	Reported Performance		Change 2019 to 2020	Notes for 2020
	2019	2020		
20FS Electricity Consumption / kWh	1,259,693	1,075,070	-15%	20FS and data centre electricity consumption has fallen significantly relative to 2019.
Data Centre Electricity Consumption / kWh	1,039,602	853,447	-18%	
Electricity Consumption / kWh	2,299,295	1,928,517	-16%	
Cost of electricity / £ excluding CRC and VAT	241,426	242,672	+ 0.5%	Potential savings associated with reduced consumption have been offset by the increased cost of electricity (£/kWh).
Electricity from renewable sources / kWh	1,259,693	1,928,517		Electricity used at the data centres during 2019 is assumed to be from non-renewable sources.
Natural Gas Consumption / kWh	1,882,269	1,552,473	-18%	Gas consumption reflects heating requirement and use of gas in a fuel cell at 20FS to generate electricity.
Natural Gas Consumption / m <sup>3</sup>	178,414	147,154		
Water consumption / m <sup>3</sup>	7,113	6,773	-5%	Reported water consumption is the sum of direct consumption (181 m <sup>3</sup> ) and indirect consumption estimated as 6,592 m <sup>3</sup> , giving total consumption of 6,773 m <sup>3</sup> .  No data is available for indirect consumption since 2018 - it is assumed to be unchanged in 2019 and 2020.
Business Travel by Company Car / km	0	0	n/a	Company vehicles disposed of in 2016.
Business Travel by employee's own car / km	110,647	2,092	-98%	2019-20 Reduction due to the impact of the corona virus pandemic.
Air Travel total / pkm	6,826,900	1,804,292	-74%	
Business Travel by air Short Haul (SH) / pkm	1,056,413	118,576	-89%	
Business Travel by air Long Haul (LH) / pkm	5,770,487	1,685,716	-71%	Reduced business travel due to the Corona virus pandemic.
Business Travel by Rail / pkm	34,759 pkm	No data		
Business Travel by Taxi / pkm	3,312	534	-84%	2019 rail travel pkm is estimated.
General Waste (Excluding waste paper) / kg	71,505	14,972	-79%	Reduced travel due to the corona virus pandemic.  Reduced office use / activity due to the corona virus pandemic.
General Waste Recycled (Excluding waste paper) / kg	48,390	10,274	-79%	
Paper Waste / kg	20,967	3,470	-83%	
Paper Waste Recycled / kg	20,967	3,470	-83%	
Copier & Printer Paper, purchase volume, recycled paper / kg	7,154.7	3,470	-52%	
Copier & Printer Paper, purchase volume, non-recycled paper / kg	0	0	-/-	
Office Paper (except Copier Paper), purchase volume, recycled paper / kg	1,166.04	0	-100%	
Office Paper (except Copier Paper), purchase volume, non-recycled paper / kg	0	0	-/-	

## 4.4 Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.

### Lloyd's / The Corporation of Lloyd's

The Corporation of Lloyd's Responsible Business team lead engagement in this area, and are supported by various teams across the Corporation including but not limited to catering, corporate real estate, comms team, and the international offices.

The engagement process starts before an employee joins Lloyd's:

- Lloyd's Code of Conduct sets out our expectations of our employees and is included as part of the induction process for new joiners.
- Lloyd's has a Speaking Up policy which provides a mechanism to enable employees to voice any concerns they may have in a responsible and effective manner. It also periodically carries out a Speaking Up policy survey to assess awareness and views towards speaking up on issues of concern such as suspected crime, discrimination or ethical issues.
- Authors of all Lloyd's Council papers are required to outline any material social, ethical and environmental implications of their proposals to the Council.
- Lloyd's is a member of the Institute of Business Ethics.
- Lloyd's is an accredited Living Wage Employer. Our pay levels for direct employees and on-site contractors meet or exceed the living wage requirements set out by the Living Wage Foundation.

In addition to these examples, Corporation staff are engaged through a number of avenues in addition to those listed throughout this report.

These include:

1. The induction process: new employees are introduced to the strategic priorities from the very beginning as part of their e-learning induction process.

Within the Responsible Business section of the e-learning module the content describes the Corporation's history with ClimateWise, and provides links to the pages on Lloyd's.com for staff to find out more.

2. Corporation of Lloyd's employees (including contractors) are entitled to three days voluntary leave over a calendar year to take part in volunteer activities.

This includes assisting community organisations with the up-keep and maintenance of public spaces with opportunities ranging from giving a hall a deep clean or fresh coat of paint to creating a new community space.

One example of a voluntary opportunity during the reporting year is on 9 and 14 July 2021, employees were invited to support BLESMA veterans at the Historic Chatham Dockyards. This involves teaming up with injured or limbless veterans to help reduce the social isolation that has been exacerbated by the pandemic. Staff had the opportunity to chat to Members, walk round the dockyard and end the morning by having lunch together.

3. To celebrate World Environment Day (5 June 2021), communications were shared with employees in all 23 of Lloyd's international offices which included centralised messaging around the main area of focus for the year – restoring our ecosystems.

Due to the Covid-19 pandemic and with many staff working from home, activities to celebrate this event were more limited than in previous years. However, the Corporation of Lloyd's invited UK-based employees to engage on this WED theme by volunteering on 8 July in Tower Hamlets Cemetery Park to help maintain a nature reserve.

Evidence also applies to principle(s): 1.2

Source: *The Corporation of Lloyd's*

### Lloyd's / The Market / Beazley

With the appointment of a Sustainability Officer in June 2020, and the subsequent creation of a dedicated Responsible Business team, Beazley has taken the opportunity to use sustainability and climate change matters as a mechanism by which to add value to the business. This means the program of engagement on climate change and wider ESG matters has been designed to deliver two objectives, firstly to communicate our thinking on how we will work with stakeholders i.e. clients, brokers, investors etc to use these areas to bring opportunities to the business, secondly continue the work already commenced to enhance the knowledge of our

colleagues so they can make informed climate related choices. Key workstreams in the program of engagement have been as follows:

- Communicating existence of new dedicated role within Beazley for Responsible Business matters;
- Launching the Responsible Business Strategy
- Collaborating with different teams across the business to understand their impact from a climate change perspective and identify the opportunities it may present
- Providing opportunities for colleagues to collaborate and be part of internal responsible business initiatives across the business

Since the Sustainability Officer role was in position, a number of key sessions were delivered across the business at all levels. The content of these sessions was to provide an introduction to ESG, which of course includes climate change, outline initial plans and expectations over the course of the first year, and answer any initial questions. This engagement included a specific session with the Executive Committee and wider SPG as part of the business planning process. The content of this session was focused on getting the group to think about how we could apply ESG matters across the business, help determine the short term priorities for the business and understand how Beazley compared to our peers. An introduction to sustainability session was also held, as part of Beazley's global engagement week 'How We Are Doing Live'. This event was to disseminate down the information discussed within the business planning process, as well as provide more information to colleagues on our emerging Responsible Business Strategy. The session was conducted as a round the table Q & A, involving colleagues from across Underwriting, Investments, Corporate Development and Responsible Business. This enabled us to effectively communicate how sustainability and climate related matters related to all parts of the business, build buy in amongst colleagues and help demonstrate the value to the business.

The launch of the Responsible Business Strategy in May 2021 was a culmination of all this engagement by the Sustainability Officer. The strategy has enabled Beazley to provide a clear commitment to address climate change and clearly communicate to our stakeholders our approach and expectations going forward. Supporting the launch of the strategy, senior management have worked to engage employees on its content through a series of weekly communications, presentations and workshops across the business. Central to this communication has been the delivery of tailored presentations by the Head of Responsible Business to

our underwriters, claims teams, and broker relations teams, as well as more general overviews being provided to a number of business lines and committees. A common theme across all sessions has been colleagues wanting to know how they could further get involved with the delivery of the strategy. This has, therefore, enabled further sessions to be set up in order to explore these requests in more detail and determine how the strategy could be applied to their business area. Regular meetings are also held with all those responsible for delivering the strategy to ensure progress in line with the targets set are being achieved.

The undertaking of the TCFD workstream, led by the Responsible Business Team is also helping to drive engagement amongst the underwriting focus groups on climate related issues. Not only does this work enable Beazley's aims and ambitions in this area to be communicated, but also enables the focus groups to consider the financial impacts of climate change on their business lines, whether these impacts be physical, transitional, or as a result of litigation. The workshops have enabled us to begin to determine both the opportunities to reduce the potential risk of climate change on our business lines, but also allow potential opportunities to be identified. These opportunities include additional communication on the matter, mechanisms by which to appraise our clients progress on climate related risk, the potential for the provision of additional services, or the potential for new insurance products. This work will continue, with a target to have delivered collaboration across all 56 focus groups by the end of 2021.

From the perspective of influencing colleagues in their personal decision making outside of work, Beazley has a network of volunteers who work to co-ordinate initiatives across charity, community and environment workstreams. These workstreams are hugely important to reflecting the company ethos and demonstrating we act as a responsible business. As part of the Responsible Business Strategy, we undertook a materiality assessment to help prioritise which areas of ESG we should focus on first. Climate change, human rights, inclusion and diversity and health and wellbeing were identified as our biggest priorities by both colleagues and external stakeholders. These priorities therefore include reducing our carbon footprint, reducing the impact of the products we buy, whether that be reuse or recycle, and enhancing our due diligence to ensure our supply chain works to protect human rights. Central to the delivery of these initiatives is the Environmental Working Group. Whilst their focus has always been on running in office events to promote behaviour change on sustainability matters, the last year of remote working has resulted in them enhancing their communications channels. This has included setting up collaboration pages within Microsoft Teams to promote initiatives and encourage



behaviour change, provide a source of the latest Environment-related news, and highlight emerging trends. They have also worked to improve coverage of the group, now having representatives in all of Beazley's offices.

As travel restrictions have lifted and attention has moved away from just focusing on Covid-19, the group organised a series of engagement pieces to coincide with Earth Hour, as well as running Q&A panels for Earth Day. This enabled the group to raise awareness about our impact on the planet, and identify opportunities by which individuals could reduce their footprint. At the beginning of July we also commenced our first themed month of the year - Plastic-free July. This focus has included inviting colleagues from across the business to make pledges around reducing their use of single use plastics, given the impact plastic has not just on wildlife in our oceans, but also from a climate change perspective.

The group have also commenced a project to determine the impact of working from home on carbon emissions, with the aim to collect sufficient data to track colleagues energy consumption on days they are working at home, compared to days they are in the office. This project has come about following a challenge by a Non-Executive Plc Director on our carbon emissions performance in 2020, and the significant reductions achieved through offices being closed. The value of this research is twofold, firstly it will help to improve the reporting of Beazley's GHG emissions, and secondly will also provide an opportunity for Beazley to share its methodology and approach with our peers. In turn it is hoped that they will adopt similar methodologies so we can all work to reduce business related carbon emissions, wherever they may be generated. Currently, the project is within the data collection phase, with colleagues from across the business are collating energy data. We hope to publish our findings in our annual report and accounts next February.

Later in the year, the EWG, is going to co-ordinate a series of events as part of How We are Doing Live. The theme for these sessions will be focused around energy, with plans to invite our charity partner Renewable World in to deliver further presentations on how colleagues can support renewable projects. Furthermore, we envisage highlighting the ease with which employees can switch their home energy tariff to renewable providers, thus helping to reduce the impact of GHG generated from fossil fuels. We also wish to spend time focusing on the impact of data on the carbon footprint of both the company and individuals. This includes the energy used to power data centres which support cloud networks, encouraging good data governance and process to minimise the duplication of files and folders within multiple locations.

Beazley is currently in its second year of its global charity partnership with Renewable World. The charity focuses on working in developing nations to deliver small scale renewable projects to enhance the lives of rural villagers. This relationship not only raises vital funds for people in developing nations, but also helps raise awareness of how the transition to a low carbon economy can benefit communities. Through a joint approach through charity and community committees, Beazley has delivered a number of fundraisers which to raise money for this cause. To reflect the material issue identified around health and wellbeing, many of the activities provided have included a physical aspect to them in order to tie in a common theme. This has included promoting in person cycle events, peloton sessions and at desk meditation and yoga sessions. We have also hosted an event by our charity partner Renewable World to learn more about their work, understand the impact of climate change on the communities they support and fundamentally raise money for them. Beazley also funds the Using Renewable Energy to Kick-start Agriculture (UREKA) project. This is a three-year project that aims to instant access to water for at least 495 households in Nepal's poorest districts. Both of these initiatives create further awareness of climate change, enabling colleagues to determine how they can help support a transition to decarbonisation.

For all engagement, we measure the impact of these sessions through a combination of traffic through the teams chat panel, attendance at the events we have hosted and money raised for renewable world. To enhance the measurement of impact, we have adopted the well respected B4SI methodology which will enable us to further quantify our outputs. We expect to report this metric within our 2021 annual report and accounts, using it as a baseline to set targets for progression against in subsequent years. This is detailed in our Responsible Business Strategy, with the expectation that we can set longer term targets in 2022.

*Source: Beazley*

### [Lloyd's / The Market / MS Amlin Underwriting Limited](#)

Based on MS Amlin's parent group mission "Contributing to the development of a vibrant society and help secure a sound future for the planet, by enabling safety and peace of mind through the global insurance and financial services business. ", the MS&AD Insurance Group has set a goal of Net Zero CO2 emissions by FY 2050 to resolve the global risk of climate change. In order to achieve the goal, the parent group has also set 2030 interim targets for CO2 emission reduction and renewable energy to be achieved across the group.



It is only with the support of the company's employees, who play a vital role in addressing climate change in the workplace and by making informed broader lifestyle choices, that this commitment can be achieved.

Ongoing activities to engage employees and help them play their role in meeting climate change commitments include:

### Communications

Internal channels such as the intranet, email and Yammer are used for employee communications<sup>9</sup> and information sharing on climate related events, research, reports and stories. The senior leadership team also host quarterly Townhall meetings and 'Connect with the Exec' sessions, where sustainability and MS Amlin's response to climate change are a regular agenda item and discussion topic.

The communications team are currently working to develop a comms and engagement plan to support the evolving ESG strategy and engage employees.

### Remote working

MS Amlin has communicated to all employees that the future approach to office/homeworking will be a hybrid model. This means each employee has a choice about how, when and where they work. The benefits to employees is a better work/life balance and with less time spent commuting and for the company, scope 3 emissions will be reduced.

### Technology

MS Amlin continues to invest in and roll-out digital and video conferencing technologies across the office portfolio. During 2020-2021 all employees also received new, more efficient, laptops to ensure they have the tools to adapt to new working practices, including conducting remote meetings without the need to travel.

### Waste and paper

MS Amlin continues to promote the adoption of digital working methods and has begun to cut down the number of printing/photocopy machines to discourage unnecessary printing. Paper currently used is sourced from sustainable sources. MS Amlin also continues to rollout a recycling programme across all offices, encouraging staff to separate materials for recycling and therefore divert waste from landfill. Disposable plastics

such as cups, straws and cutlery have all been removed with employees encouraged to use water taps and reusable bottles/coffee cups to reduce waste.

Source: MS Amlin

### Lloyd's / The Market / QBE / Employee climate change engagement

In 2020, the Group Sustainability function engaged with teams across the business to raise awareness of sustainability, including climate change. The function also published a range of intranet articles and created dedicated internal Yammer groups to provide frequent updates on sustainability trends, insights and news for our international business. In addition, the several external speakers were invited to present at lunch-and-learn sessions on a range of sustainability topics.

Other engagement mechanisms employed include:

- Employee engagement survey (e.g. QBE Voice);
- Roadshows, meetings and events;
- QBE Ethics Hotline;
- Employee focus groups; and
- The annual Sustainability Report

A big focus for us in 2020 was finding new and engaging ways to keep our people connected in our sustainability agenda and informed about actions they can take in their personal lives to live more sustainably. Engagement activities included:

- Launching a global intranet site that guides our people to becoming sustainability champions and helps identify ways to manage sustainability-related risks and opportunities.
- Hosting Plastic Free July 'lunch and learn' sessions leveraging our partnerships with Taronga Zoo in Australia and the World Wildlife Fund in the Philippines to educate employees on the effects of plastic on the environment and wildlife, and to share tips on reducing single-use plastics.
- Running employee competitions, campaigns and idea-sharing in celebration of World Environment Day to encourage our people to reconnect with nature during the pandemic.

<sup>9</sup> See 4e Communication examples

QBE continues to collaborate with external partners, including the Qantas Future Planet program and the Earthwatch Institute, to build internal awareness and capability on environmental issues. This has helped establish a strong network of environmental champions across our global operations. In 2019, employees across our offices, including Adelaide, Brisbane, Dusseldorf, Italy, Madrid, New York, Paris, Parramatta, Stockholm, and a few offices in the United Kingdom, have formed sustainability working groups with an initial focus on pressing environmental issues.

### QBE European Operations

EO Quarterly Environmental Reports, listing a range of environmental metrics including GHG emissions, are posted on our intranet for our employees. The reports are also submitted to QBE Group, where the environmental KPI data is aggregated and consolidated with comparable data from other regions for reporting via the Company's online Annual Report.

EO CRES hold lunch and learn sustainability sessions with both internal and external speakers, including our supplier partners. In these sessions the EO CRES team provide updates on initiatives they are implementing around the offices in EO and also share information and advice on what employees can do at home.

Evidence also applies to principle(s): 1.2

Source: *QBE Sustainability Report 2020 (p.58-61)*.

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe proactively engages its employees on the topic of climate change. RenaissanceRe's internal marketing team arrange education sessions and regular communications to share information about RenaissanceRe Risk Sciences' view of climate risk, as well as the Company's broader ESG efforts to Promote Climate Resilience. In 2021, to celebrate Earth Day, all employees were provided with practical tips to promote resilience and protect the planet, as well as a summary of the key activities that RenaissanceRe has already undertaken at a corporate level.

RenaissanceRe also leverages its generous charitable giving program to support environmental causes, including volunteering with Keep Bermuda Beautiful, who are focused on community action to draw public attention to the issue of climate change. In addition, RenaissanceRe has a long-term corporate donation to the Bermuda Institute of Ocean Sciences, who are focused among other topics on the catastrophic impact of climate change on coral reefs. RenaissanceRe leverages these corporate relationships to provide employees with

updates and education sessions by external experts on key climate-related topics.

In addition to the electric vehicle services referenced in sub-principle 4.3, RenaissanceRe is also reviewing pension investment funds with an aim to provide socially and environmentally focused benefit options to its employees. In 2021, RenaissanceRe added the Vanguard FTSE Social Index Fund to the investment line up of its 401(k) Retirement Plan, allowing its employees to embed climate-related choices into their personal retirement planning. RenaissanceRe's Ireland and UK offices are also in the process of reviewing alternative fund options for its employees and are utilizing the annual presentations to educate its employees about how their pension fund choice can have a meaningful impact.

Source: *RenaissanceRe Syndicate Management Ltd*

### Lloyd's / The Market / The Hartford

The Hartford engages our employees on our commitment to address climate change and helping them play their role in meeting this commitment in and outside the workplace in many ways:

- The successful launch of our new waste management program with composting included providing employees educational information on the importance of sorting waste as well as how to sort it appropriately. To support sustained recycling efforts among its employees The Hartford publishes the locations of local recycling centers on its intranet site.
- A company-wide program called The Hartford Way is focused on building a strong and sustained culture of continuous improvement at The Hartford. Through a common set of management practices, tools and behaviors, all levels of the organization are actively engaged in driving a continuous improvement culture and solving problems to positively impact our business outcomes and strategies (e.g. customer experience, efficiency, revenue growth, sustainability, etc.).
- We conduct an annual "Alternative Commuter Challenge" to encourage employees to find less carbon-intensive ways to commute to work.
- Employees who carpool into Hartford are rewarded by ability to park in a specially designated parking lot that is particularly convenient in an otherwise tight parking environment.
- Employees who own Electric Vehicles may charge their cars for free using one of 30 chargers provided

at our Connecticut locations, including ten charging stations.

- The Hartford offers a Commuter Benefit Program allowing employees to use pre-tax dollars to pay for qualified parking and public transit costs.
- Employees also may use gym and shower facilities for free, removing disincentives for those who commute by bike or running.
- An internal website provides employees information about our environmental sustainability efforts as well as opportunities to volunteer.
- The Hartford's Environmental Action Team (HEAT) saw continued growth in membership in 2020, with 976 employees participating from across the company, participating in a number of virtual environmental activities throughout the year including:
  - Educational webinars and bi-monthly discussion groups on a variety of climate change issues
  - Engaging group discussions highlighting inequity in environmental decision-making for people of color
  - Two Eco-Challenges through *ecochallenge.org* including one challenge focused on plastic reduction as well as the Annual Eco-Challenge where active employee participation resulted in The Hartford's 4<sup>th</sup> place finish
  - Monthly environmental and nature-based virtual education for children participating in ConnectiKids, a nonprofit youth development organization

#### **Support Links:**

- [CDP – C4.3c](#)
- [2020 Sustainability Highlight Report](#), p. 13-18

Source: *The Hartford*

### [Lloyd's / The Market / Tokio Marine Kiln / Employees engagement](#)

TMK aspires to be a global "Good Company", consistent with the Group business strategy. We have embedded the key pillars of the Good Company culture within the annual performance reviews of our employees. This encourages and rewards employees in their positive engagement on these values and employees who demonstrate these values are nominated and publicly

recognised annually in our Annual Lunch event in January. The recognition is also supported by the Tokio Marine Group where each subsidiary will nominate an employee to receive the Good Company Award in Tokyo each year.

TMK has implemented a wide range of charitable activities where the company and our employees can get involved at several different levels: company donations, personal donations, and volunteering. In 2020, TMK contributed GBP 1.2M to our core charity partners including MIND (mental health), Kidney research, IMPACT (homeless), Romildamor (human trafficking), Street Child (Sierra Leone children education), Lloyd's Community Programmes, White Chapel food kitchen, Carbon Footprint and NHS related fundraising. Despite Covid-19, employees continue to volunteer for the charities where possible.

Since 2019, TMK has arranged, as part of a wider commitment to reducing our environmental footprint, to plant trees in the UK to counteract our carbon dioxide usage levels by staff business flights. The trees are being planted by the Carbon Footprint charity at locations in London and the South East on our behalf. The calculation is based on the tonnage of carbon dioxide we generate as a business. The tree varieties vary from season to season, but all the trees are native broad leaf varieties including: Hawthorn, Sessile Oak, Hazel, Downy Birch, Guelder Rose, Field Maple, Rowan, English Oak, Blackthorn, Wild Cherry along with some Common Alder, Crab Apple, Silver Birch, Spindle Bush and Goat Willow.

In Q4 2020, the TMK Climate Group has also been allocated an additional GBP 50K budget dedicated solely for Climate related charities. This represents 20% of our normalised annual charity budget allocation of GBP 250,000. A range of charities ranging from food waste, marine, wildlife, biodiversity to climate technology themes have been researched and considered by the TMK Climate Group. An employee voting system was held in Q1 2021 for the employees to select their charity of choice and we have since shortlisted 3 charity partners that we will be working with this year. They include the Blue Marine Foundation, the National Trust and Fareshare (food waste). We expect to organise employee volunteering activities in H2 2021, subject to Covid-19 restrictions. We set ourselves a target of at least 5% of company employees participating in charity related volunteering opportunities by 2022.

Since 2020, TMK has hosted several online webinars and panel events led by senior executives across the business with significant participation from our employees. These events aim to bring awareness on general market trends with regards to climate change issues in our industry, implications on TMK and our response to the risks and opportunities caused by climate

change. These events have generated significant interest from the employees where we now have over 20 employees who are volunteering to be part of the TMK

Climate Group. For some of these events, we have hosted external experts such as McKinsey to provide their views on the industry and competitive landscape.

*Source: Tokio Marine Kiln: List of charity donations, Tokio Marine sustainability report available online.*

## 5. Inform public policy making

### 5.1 Promote and actively engage in public debate on climate-related issues and the need for action. Work with policy makers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.

#### Lloyd's / The Corporation of Lloyd's

In previous reporting the Corporation of Lloyd's has provided evidence of the commitment to effect positive change by being seen as a leader in its responsible business approach. This is reflected in the Corporation of Lloyd's business practices as well as its work with community and charity partners.

Over the reporting year there have been a range of examples. A selection has been included below to reflect the extensive activity that has occurred.

#### FutureSet

FutureSet was launched in February 2021 and it is Lloyd's new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks.

The global platform was developed in response to the large and complex challenges and impacts that arose from the COVID-19 pandemic and the urgent need to begin a new connected conversation with customers, insurers, and government tackle the challenges these risks bring.

Through FutureSet, Lloyd's aims to build greater societal understanding and collaboration to find sustainable solutions and support greater preparedness, protection and resilience to the growing and interconnected risks that customers face today, and into the future.

Throughout 2021, FutureSet will focus on the landscape of systemic risks, including exploring lessons learned from the COVID-19 pandemic, as well as examining the growing and global risks brought about by climate change.

#### What are the FutureSet Systemic Risk Masterclasses?

The Systemic Risk Masterclass Series was a six-part series launched in February 2021 in partnership with the Chartered Insurance Institute (CII) and Lloyd's Market

Association (LMA). The masterclasses brought together experts across industry, academia and government to help insurance and risk professional develop their knowledge and expertise in systemic risk. This was done with the purpose of supporting Lloyd's customers around the world demonstrating and delivering on Lloyd's purpose – sharing risk to create a braver world. Notable speakers included: Andrew Bailey (Governor of the Bank of England), John Doyle (Marsh CEO), John Neal (Lloyd's CEO), Greg Case (Aon CEO), Sian Fisher (CII CEO), and many more.

Masterclass 1: Beyond the limit

Masterclass 2: Insuring the uninsurable

Masterclass 3: Understanding the vulnerabilities of global supply chains

Masterclass 4: Simplifying insurance products

Masterclass 5: Recognising risk: the systemic effects of internet and utility outages

Masterclass 6: The insurance response – helping customers build resilience

#### What are the FutureSet workshops?

They are workshops ran by the Cambridge Centre for Risk Studies, with support from EY.

- The initial prioritisation workshop took place in April – we developed a view of 20 priority risks, from Cambridge's risk register of c.170 risks. The risks were categorised as: financial, geopolitical, technology, environmental, social and governance. This workshop included members from the FutureSet working group and Technical Advisory Group, as well as some key contacts from Cambridge.
- Prioritisation workshops also took place in May – we had 2 workshops with different stakeholder groups to further rationalise the priority risks to 10 key risks. Audiences included Cambridge's



- corporate contacts (providing a customer lens), exposure management and the PIF / underwriting community.
- Consensus workshop taking place in June – this is a final workshop to approve the list of 10 priority scenarios, which be subsequently modelled during phase 2 of the research.

- Promote action within the Lloyd's market and global (re)insurance industry to support priority sectors in accelerating decarbonisation, by committing to a holistic roadmap of activity to support decarbonisation efforts and the transition to a low carbon economy, across the broader insurance ecosystem.

### What is the Futureset Climate Action Paper?

The Climate Action Paper is aimed to get Lloyd's brokers and underwriters, risk managers and government policy writers to recognise that climate change is one of the biggest issues facing the world in the near future, and understand the urgency of industry decarbonation. The paper aims to provide these stakeholders with varied, bitesize, visually arresting content that offers tangible actions that demonstrate how the insurance industry can help in decarbonisation efforts.

The Paper is set to be released at the end of July 2021, with 3 focus areas: 1. Greener Industry, 2. Greener Transport and 3. Greener Energy.

- In the 'Launch Phase' at the end of June, we plan on launching a short film and a web hub
- In the 'Build Phase' from July to October, we plan on doing x3 distinct 'content drops', organised by our focus areas. We also plan on doing a Roundtable event pre COP26
- In the 'Sustain Phase' from November through to December, we plan on doing a multi-asset x1 'drop' and extend and amplify exposure to date

### Futureset Climate Action Campaign

Lloyd's is developing a climate campaign focusing on how the insurance industry can support its clients with decarbonisation. The campaign will focus on a selection of priority sectors, aligned with the UK Government's 10-point plan for a Green Industrial Revolution. It will articulate the decarbonisation pathway for each priority sector, key obstacles to success, and how the global (re)insurance industry may be positioned to support. The campaign, launching later this year, aims to:

- Enhance understanding of the decarbonisation pathways for priority sectors, providing a consumable overview of the current global landscape, anticipated decarbonisation trajectory, and key obstacles to success. for each priority sector.
- Highlight success stories from the global (re)insurance industry aligned to priority sectors, demonstrating how the Lloyd's market and the global (re)insurance industry is currently supporting priority sectors on their dicarbon futuresetsation pathways, through product proposition and innovation.

### Futureset systemic risk research

Futureset is commissioning new research on the landscape of systemic risk, to develop a body of knowledge to raise the overall awareness, confidence and capability of our market and our customers. The research will highlight the potential impacts of systemic threats to the global economy, including extreme weather as a result of accelerating climate change, and provide insights into preparation and mitigation for businesses, governments and the (re)insurance industry.

The research will develop 10 systemic risk scenarios, each developed out with 3 variants, leading to a total of 300 systemic risk scenarios for use by Lloyd's stakeholders. These scenarios will inform a definition of systemic risk that is comprehensive, versatile, and useful across multiple business sectors.

Importantly the project will highlight actionable and practical steps which businesses, governments and the (re)insurance industry to prepare for, mitigate and improve their resilience against potentially systemic threats.

[Evidence also applies to principle\(s\): 1.1, 1.2, 3.1, 3.2, 5.1, 5.2](#)

*Source: The Corporation of Lloyd's*

### Lloyd's / The Market / Beazley

As defined within our Responsible Business Strategy, our key material issues from sustainability matters are encouraging the transition to a decarbonised future, reducing carbon emissions and enhancing ESG performance of our clients. We also want the whole market to move with us, as opposed to being an outlier on these issues. To achieve this, our strategy has been to work, at all levels, with peers both within the Lloyds market and CLimateWise. Beazley actively participates within the Lloyds Market Association groups for ESG matters and Climate Risk. These are attended by the Head of Responsible Business, as well as key risk personnel to ensure our views are represented. These views are then shared with Lloyds to help shape policy and decision making. Alongside this our underwriters also sit on a number of industry working groups which work to create consensus across the sector. An example of this Beazley has an underwriter from the energy team, sitting on the ESG sub committee of the Joint Rig

Committee. This sub committee has been created to determine how ESG metrics can be applied to the underwriting of the energy sector, acknowledging the impact the sector has on contributing to climate change. To date, the sub committee are working on proposals to create a common framework to help appraise ESG metrics and to encourage a transition to decarbonisation.

We are also a founding member of the Lloyd's Disaster Risk Facility, a consortium of Lloyd's syndicates working to address underinsurance and promote resilience in countries vulnerable to natural disasters. Through this forum we are engaging with governments and organisations around the world to develop insurance solutions and are also represented at the Insurance Development Forum.

At a senior level, our CEO also is a member of two initiatives within Lloyds. The first is the Sustainable Markets Initiative, The SMI Insurance Task Force, convened by HRH and chaired by Lloyd's, is comprised of executives from many of the world's largest insurance and reinsurance companies, providing an influential platform for the sector to collectively advance the world's progress towards a resilient, net-zero economy. To support the rapid growth of green projects and innovation, the SMI Insurance Task Force will develop a framework to help unlock the more than \$30 trillion in assets under management, increasingly directing capital towards investments that drive climate-positive outcomes in both developed and developing nations. The delivery of the work set out within this group will be achieved over the coming months in the run up to COP 26. The second initiative is the Lloyds ESG Advisory Group which was set up by senior leaders within Lloyds, again in the run up to COP 26. This group has already been responsible for reviewing and approving the forthcoming exclusions set by Lloyds for no underwriting of new thermal coal, new arctic energy exploration, and oil tar sands from 1<sup>st</sup> January 2022. These restrictions are outlined in the ESG strategy Lloyds published in December 2020.

Beazley has a seat on the Managing Committee of ClimateWise, and plays an active role in the initiatives which CLimateWise deliver on behalf of the market to help inform public debate and influence policy. We are working as part of the Net Zero Underwriting initiative which is firstly looking to examine the concept of net zero in respect to underwriting and determine a definition which can be applied to the industry. The group is also working with industry partners to review emerging tools in the space in order to assess both individual insureds and portfolio's in their transition to decarbonisation. This work is ongoing and it is expect that a report will be produced by the working group by the end October 2021. Throughout the project, Beazley is working to identify how we can best apply the emerging concepts, as we feel many of the principles and tools will help us to further

our commitment to be a responsible business and lead by example.

Beazley colleagues also get involved in a number of sector initiatives, whether that be related specifically to underwriting or across the sectors they underwrite. Members of our Marine team are currently supporting the delivery of the Oceans of Knowledge Conference, hosted by the Institute of Marine Engineering, Science and Technology. The two day conference is to address themes which include; climate change and sustainable use of the ocean and ocean resources, the role of the ocean in natural and engineered climate mitigation, and rising sea levels and coastal vulnerability. The conference includes keynotes and discussions held to highlight current scientific understanding of ocean related aspects of climate change, as well as appraise current policy responses at both a national and international level. It is already planned for at least one speaker to present from Beazley on climate related risk.

At the beginning of 2021, Beazley formed part of the pilot study run by the Bank of England (BOE) to help test and provide feedback on the scenarios set for assessing litigation risk, for the forthcoming Climate Biannual Exploratory Scenario (CBES). Through collaboration across the business, a small team of personnel from the risk and underwriting teams reviewed the scenarios. This process was invaluable as it enabled Beazley to firstly quantify the financial impact of such scenarios on our business, whilst also providing valuable insight on how to improve the scenarios set. This included feeding back a number of requests for further clarifications as part of the scenario outlines. This feedback was taken on board during a session with the BOE, ahead of them publishing the CBES requirements.

Going forward, Beazley wishes to make a greater contribution to the public debate on climate related issues. Beazley have recently become signatories to the UN Principles for Sustainable Insurance (UN PSI) and UN Principles for Responsible Investments (UN PSI) to support this ambition, and use the opportunities the membership affords us to achieve this. We expect this engagement to be led by the Head of Responsible Business, with key input required from additional colleagues as and when required, or the skill set demands. Further to this, we also expect opportunities will arise for further influence as we begin to develop products and services which support and encourage our insureds to become better performers from both a climate and wider ESG perspective. The conception of these ideas will emerge through our TCFD and climate risks workstreams which are ongoing at present.

*Source: Beazley*

## Lloyd's / The Market / MS Amlin

MS Amlin is a member of The Reinsurance Association of America (RAA), one of the leading trade associations of property and casualty reinsurers doing business in the United States. The RAA is an active advocate for reinsurance interests before state regulators and legislators, who directly regulate the insurance business. At the federal level, the RAA actively lobbies on insurance and reinsurance regulatory issues, engaging in a variety of activities that serve its members and affiliates by representing their collective interests, as well as providing information and analysis to audiences outside the industry.

MS Amlin is a member of the Insurance Development Forum which aims to optimise and extend the use of insurance and its related risk management capabilities to build greater resilience and protection for people, communities, businesses, and public institutions that are vulnerable to disasters and their associated economic shocks.

In addition to the main IDF Steering Committee, MS Amlin is represented on the IDF Risk Modelling Steering Group, giving practical advice to the RMSG development of a non-profit Risk Modelling Alliance, including commentary on operations, strategy, research, governance, and data. The Risk Modelling Alliance is intended to fast-track the availability of newly developed hazard models for developing and "protection gap" countries (ie where insurance penetration is very low), enabling governments in these regions to respond rapidly to climate change impacts by arranging risk transfer products where traditional insurance is unavailable. In the last century, the development path for new models and risk transfer products was beset with intellectual property ownership issues, conflicts of interest, and lack of operating structure, which meant, in some cases, that it could take more than a decade for the first practical outcome on a particular project. The Risk Modelling Alliance as a non-profit group is able to remove or substantially reduce these barriers, and reduce the development path to years or even months.

MS Amlin is a member of The Disaster Risk Facility (DRF) consortium, a group formed of Lloyd's syndicates, which offers insurance and reinsurance capacity against natural catastrophe for protection gap countries and regions. The consortium provides access to the collective underwriting expertise of Lloyd's members to help developing economies build resilience to disaster, climate and weather risks.

The key benefits of the facility:

- Up to \$445m of capacity on a per risk, per region basis

- Ease of access to the pooled knowledge, expertise and resources of the consortium members
- Local contacts through Lloyd's global platforms

MS Amlin is represented on the Lloyd's Market Climate Risk working group (CRWG). The primary aim for the CRWG is to coordinate stakeholder groups that contribute to the Lloyd's market's ability to demonstrate an understanding of the facets of the financial impacts that may arise from climate change and to liaise with the other applicable LMA Committees and Working Groups to encompass key market issues. These include regulatory disclosure, scenario development and best practice guidance, where appropriate, in relation to climate change-related issues. The CRWG also acts as a conduit with LMA's ESG Working Group and the Corporation of Lloyd's to facilitate market input into Lloyd's market guidance and external stakeholder engagements and public positions.

The MS AUL Research Manager is a member of the Cat Risk Climate Change Group established in 2021, which is a group of Insurance Research Managers and Risk Managers dedicated to research initiatives and engagement with the industry and the scientific community.

Additionally, Risk Analytics has undertaken a number of initiatives previously reported to ClimateWise and noted here for completeness:

- December 2019: MS Amlin CUO participated in roundtable discussions with UK Research and Innovation, covering research needs of the insurance industry including climate change.
- March 2020: supported research report on Scenario Analysis in collaboration with the Lighthill Risk Network and the University of Cambridge.

MS Amlin is also represented on key Lloyd's Market Association (LMA) committees with high engagement in climate change challenges. Our purpose on the LMA committees is to actively contribute to the ongoing conversation and help identify and resolve issues facing the market. This work is very much done in partnership with Lloyd's and the other market associations to influence initiatives and outcomes. Julian Samuel (Head of Natural Resources) is a member of the Lloyd's Sustainability sub-committee working group, which is seconded to the Joint Rig Committee, representing the interests of insurers writing offshore energy risks in London, but looking to find solutions suitable to a multi class audience. Matthew Radbourne is currently the Deputy Chairman of the LMA Joint Power Committee and

a member of the LMA Renewable Energy Sub-committee. He also sits on the Sustainable Underwriting Group Committee which is working with other Lloyd's members to put a framework around the Corporation's future strategy.

Source: MS Amlin

### Lloyd's / The Market / QBE's climate partnerships for impact

Climate change is a global challenge requiring the collaborative efforts of a range of stakeholders to minimise economic disruption and deliver an orderly transition to a lower carbon economy. We engage and work with a range of partners in the value chain on climate-related topics, including governments, regulators, broker partners, other participants in the financial services sector and employees. Examples of engagement include:

#### Sustainability memberships and initiatives

Actuaries Institute Climate Change Working Group • CDP • ClimateWise • Investor Group on Climate Change • RE100 • UN Global Compact • UN-convened Net-Zero Asset Owners Alliance • UNEP FI PSI • UNEP FI PR

#### Insurance Council of Australia – Climate Change Action Committee

QBE is a member of the Insurance Council of Australia's Climate Change Action Committee (CCAC). The CCAC initiated a number of projects to address the challenges of climate change in Australia in relation to developing standards for energy efficient homes, improving building standards for floods and cyclones, and community resilience to sea level rise.

#### Australian Sustainable Finance Initiative

In Australia, QBE has funded and been an active participant at all levels of the Australian Sustainable Finance Initiative (ASFI). ASFI has developed a roadmap that recommends pathways, policies and frameworks to enable the financial services sector to contribute more systematically to transition to a more resilient and sustainable economy, consistent with global goals such as the SDGs, the Paris Agreement on climate change and the Sendai Framework on Disaster Risk Reduction 2015–2030.

#### Disaster relief resilience partnerships

Our three-year global disaster relief and resilience partnerships with Red Cross and Save the Children enable the rapid mobilisation of support for disaster relief activities in response to catastrophic events, and support

disaster preparedness and climate resilience initiatives for vulnerable communities around the world. Our partnership vision is to work with communities to build their resilience and save lives by improving their capacity to prepare, anticipate, respond and recover from disasters.

### QBE European Operations

EO participates in industry groups on an ad-hoc basis to provide feedback to regulatory work on climate change where appropriate. For example, EO provides feedback on the PRA consultation paper in relation to enhancing banks' and insurers' approach to managing the financial risks from climate change, via the ABI.

Evidence also applies to principle(s): 1.1, 1.2, 3.1, 3.2, 5.1, 5.2

Source: QBE Sustainability Report 2020 (p.28-29).

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

#### Industry Forums & Engagement

- RenaissanceRe is involved in The IUA Climate Risk Committee and the LMA's Climate Risk Working Group, which are both London market forums to discuss the industry response to the changing regulatory landscape around climate risk. In 2021, the LMA issued a TCFD pulse survey, which RenaissanceRe completed to inform the general understanding of the market's progress against climate reporting.
- Following its investment in BlackRock's US Carbon Transition Readiness Fund in April 2021, RenaissanceRe's Chief Financial Officer participated in a virtual media panel with BlackRock, CalSTRS and Sura Asset Management to promote the Company's views on climate change, ESG and the importance of sustainable investing.
- RenaissanceRe is on the Advisory Board of the Natural Hazards Center of the University of Colorado to promote research in the climate space.
- RenaissanceRe also pro-actively shares its climate change perspective in climate questionnaires and surveys with corporate raters Moody's, S&P and Fitch.
- RenaissanceRe was a co-sponsor of the Aon Protection Gap conference which encouraged collaboration beyond the market by working with



governments, humanitarian organizations and NGOs to protect communities before and after catastrophes, including those impacted by significant climate risk.

- Senior members of RenaissanceRe staff attend various forums including The Geneva Association, which is an industry thinktank that detects early ideas and emerging debates on political, economic and societal issues concerning the insurance industry, with research programs including themes dealing with risk management and climate change issues.

### The Association of Bermuda Insurers and Reinsurers (“ABIR”)

ABIR represents the public policy interests of Bermuda’s international insurers and reinsurers that protect consumers around the world. RenaissanceRe’s SVP Underwriting & Head of Global Public Sector Partnerships chairs the ABIR Climate Risk Committee to support the Bermuda Business Development Agency’s efforts to establish and promote Bermuda as the world’s climate risk finance capital. The committee has arranged a series of webinars to provide education and promote public debate on climate-related topics, including ‘Climate Regulation & the US Federal Reserve’ with a guest speaker from the Federal Reserve’s Board of Governors, and an overview of ‘Climate Change Liability’ from Clyde & Co’s Climate Change Risk Practice. RenaissanceRe’s Chief Risk Officer – Europe also chairs the ABIR Policy Committee, which reviews public policy and (re)insurance regulation, including European policy proposals relating to climate change. As an ABIR member, RenaissanceRe regularly provides input in various methods, such as its Climate Change Survey through the Bermuda Monetary Authority in 2020.

### Federal Housing Finance Agency (“FHFA”)

The FHFA was established by the [Housing and Economic Recovery Act of 2008](#) and is responsible for the effective supervision, regulation, and housing mission oversight of [Fannie Mae](#), [Freddie Mac](#) (“the Enterprises”) and the [Federal Home Loan Bank System](#), which includes the 11 Federal Home Loan Banks and the Office of Finance. RenaissanceRe plays an active role in providing input to the FHFA to inform its view of climate risk. In 2021, RenaissanceRe provided detailed input on ‘Climate and Natural Disaster Risk Management at the Regulated Entities’ to help develop its climate change position. The FHFA requested information on the current and future risk of climate change and natural disasters, in addition to input on strengthening its supervision and regulation of how to manage risks arising from climate change and natural disasters. The request set out a series of 25 questions for commenters to consider,

focused on identifying and assessing climate and natural disaster risk and enhancing FHFA’s supervisory and regulatory framework. RenaissanceRe also presented to the FHFA to outline the reinsurance perspective on climate change and its impacts on flooding.

### The Reinsurance Association of America (“RAA”)

RenaissanceRe is a member of the RAA, one of the leading trade associations of property and casualty reinsurers doing business in the United States. RenaissanceRe Risk Sciences’ President chairs the RAA Extreme Events Committee, whose role is to review information to inform policy on extreme weather events. The RAA is an active advocate for reinsurance interests before state regulators and legislators, who directly regulate the insurance business. At the federal level, the RAA actively lobbies on insurance and reinsurance regulatory issues, engaging in a variety of activities that serve its members and affiliates by representing their collective interests, as well as providing information and analysis to audiences outside the industry. RenaissanceRe also serves on the RAA’s Climate Committee, which is responsible for reviewing proposals from various government sources, with an aim to help the reinsurance industry be a leader on climate issues.

### Institute of Building Home Safety (“IBHS”)

RenaissanceRe has long been part of the IBHS, an insurance industry trade group that focuses on reducing the social and economic effects of natural disasters and other property losses by conducting research and advocating improved construction, maintenance and preparation practices. The President of RenaissanceRe Risk Sciences has served on both the Executive Committee and the Board of IBHS. The organization works to promote resiliency from natural disasters and other property losses by developing an infrastructure that is damage-resistant, and through personal and corporate action to help minimize disruption to normal life and work patterns. During 2021, RenaissanceRe worked closely with the Working Group on Climate Adaptation sponsored by IBHS to develop the first Climate Change Adaptation Principles, which have been signed by representatives of the property insurance industry to support the Biden-Harris Administration, Congress and local governments’ efforts to enact smart climate adaptation policies.

### Insurance Development Forum (“IDF”)

RenaissanceRe plays an active role within the Insurance Development Forum. The IDF initiative grew out of the climate change underpinnings of the UN Sendai Framework and aims to incorporate insurance industry risk measurement know-how into existing governmental disaster risk reduction frameworks, and build a more



sustainable, resilient insurance market in a world facing growing natural disaster/climate risk.

RenaissanceRe co-chairs the IDF's Risk Modeling Steering Group ("RMSG"), which aims to expand access to credible and consistent natural hazards risk data, models, and expertise. The RMSG has been recognized by the IDF as having a central role in the IDF's priorities on climate and natural hazard resilience. It involves approximately thirty organizations and aims to achieve methods and practices which are repeatable, scalable, and efficient, thereby reducing duplication of activity. A key project that RenaissanceRe was heavily involved in was providing risk financing solutions for the Sri Lankan government to help finance recovery following a natural hazard. The Sri Lanka project aims to improve exposure and claims management of the Sri Lankan National Natural Disaster Insurance Scheme. The high-resolution exposure model has been developed using model expertise from within the IDF RMSG member companies and external consultants, with the model released onto Simplitium's ModEx platform. The model, which is the first probabilistic flood model for the country, helps analyze the potential flood losses to the scheme and in doing so provides greater understanding of risk to the international reinsurance market.

### First Street Foundation

The First Street Foundation is a science and technology non-profit organization dedicated to making climate risk easy to understand and actionable for citizens, governments, and industry. The First Street Foundation uses transparent, peer-reviewed methodologies to calculate current and future climate risks facing individual properties across the United States, empowering Americans to protect themselves and their homes. The First Street Foundation built the [First Street Foundation National Flood Model](#), the first publicly available, [peer-reviewed model](#) to consider changes in the environment in determining flood risk to individual properties. Current and future homeowners can access property-specific flood risk information, including its financial impact, through Flood Factor, a free online tool built by the Foundation. RenaissanceRe is a supporter of First Street Foundation's initiatives, and in addition to licensing their high-quality flood maps to further inform its view of flood risk, RenaissanceRe is partnering with First Street Foundation to work on multiple projects that look at the effect of climate change on flood and other factors across America.

### SmarterSafer

RenaissanceRe is a founding member of SmarterSafer, a national coalition that is made up of a diverse membership united in favor of environmentally responsible, fiscally sound approaches to natural

catastrophe policy that promote public safety. The coalition has a focus on climate change and believes that the US Federal government has a role in encouraging and helping homeowners to undertake mitigation efforts to safeguard their homes against natural disasters. The coalition opposes measures that put people's lives at risk at the expense of taxpayers, such as measures subsidizing artificially low rates for homeowners' insurance policies which may help to encourage construction in environmentally sensitive and unsafe areas. The coalition is working to ensure that US Congress does not incentivize people to live in harm's way in places prone to hurricanes and floods.

### RenaissanceRe Risk Sciences Foundation

RenaissanceRe has a dedicated nonprofit corporation, RenaissanceRe Risk Sciences Foundation Inc (the "Foundation"), which was created to support advanced scientific research in natural catastrophes, the development of risk mitigation and adaptive techniques to safeguard communities, efforts that reduce the economic turmoil following disasters, and organizations that preserve coastal and other risk-exposed habitats. The Foundation promotes education, preparation, adaptation, and mitigation of catastrophic risks. As a component of these activities, RenaissanceRe also established an award-winning series of Risk Mitigation Leadership Forums, featuring world-renowned speakers. Since the forum series began in 2008, over 4,000 individuals and over 400 speakers and political leaders have attended the events hosted by RenaissanceRe. These free events bring together emergency responders, scientists, policymakers, academics, and private sector representatives to advance natural hazards risk mitigation efforts and awareness. Due to the Covid-19 pandemic, RenaissanceRe did not hold a forum in 2020. The most recent Leadership Forum was held in New York City in November 2019 to discuss the impact of today's natural disasters, what one can learn from them, and how Government can help in preparing for future catastrophic events. RenaissanceRe's next forum will take place virtually in September 2021 and will be focused on 'Protecting Communities from Climate Change' through in-depth, results-focused discussions exploring the science behind climate change, what can be expected from its impact over time, and actionable ways to safeguard communities for the future.

### InsuResilience

Through its IDF membership, RenaissanceRe is part of InsuResilience, a global partnership for Climate and Disaster Risk Finance and Insurance Solutions. The vision of the InsuResilience Global Partnership is to strengthen the resilience of developing countries and to protect the lives and livelihoods of poor and vulnerable

people from the impacts of disasters by enabling faster, more reliable, and cost-effective responses to disasters.

Source: *RenaissanceRe Syndicate Management Limited*

## Lloyd's / The Market / The Hartford

In early 2021, The Hartford joined other business leaders and investors to publicly thank the incoming Biden administration for re-entering the Paris Agreement and to request that the U.S. adopt an ambitious target of cutting GHG emissions by at least 50% below 2005 levels by 2030 in order to catalyze a zero-emissions future and spur a robust economic recovery. This action follows The Hartford's support as a signatory to the "We Are Still In" commitment to the Trump administration in November 2016 and May 2017.

The Hartford also advocates directly and through its trade association such as the American Property Casualty Insurance Association (APCIA) in states for price adequacy in the property and casualty products it sells, and also for price adequacy in the states that maintain residual markets for property insurance for homeowners. This effort covers many states, in particular coastal states that are most prone to severe weather events. For example, in the past The Hartford participated in industry efforts in Florida to advocate for provisions in proposed legislation that would have accelerated the glide path to rate adequacy for residual market property rates and would also lower limits of liability, thereby moving higher value properties to the private market. The legislation passed, though without the provision that would have accelerated price adequacy.

At the invitation of the Connecticut Governor, The Hartford joined the Governor's Climate Change Council as one of only two private sector representatives in 2015. The General Counsel continues to represent the company on the Council. In addition, The Hartford accepted an invitation to join the new city of Hartford Climate Stewardship Council in 2016.

### Support Links:

- [CDP – C12.3c and C2.3a](#)
- [2020 Sustainability Highlight Report](#), p. 18

Source: *The Hartford*

## Lloyd's / The Market / Tokio Marine Kiln / Social contribution through participation in international initiatives

As part of our membership at ClimateWise, TMK member has participated in a range of discussion groups, including the Policy Engagement Task Force and the Net

Zero Underwriting Tool Project. Membership from TMK includes the CRO (who sits on the ClimateWise Insurance Advisory Council), the Climate Group Chair, the Head of Innovation and other attendees include members of the Risk Intelligence team.

TMK has active membership on two London Market Association (LMA) groups regarding leadership in climate response in the London Market. The Sustainable Underwriting Group (SUG) is examining how to embed climate risk management into underwriting of risks in the market, particularly around ensuring management of the Lloyd's four areas of focus (thermal coal mining, thermal coal energy production, oil sands, and Arctic energy development). In addition, the TMK CRO will co-chair the LMA Climate Risk Group.

TMK participates in webinars organised by ClimateWise, Cambridge University, Cass Business School, Independent Woman Insurance Network and ABI on climate risk related industry research.

The TMK Chief Executive Officer has presented to TM Group's US CEO Conference in 2020, focused on driving discussion on addressing the risks of climate change. The presentation focused on the following:

1. The multiple drivers for address climate change now;
2. How we are approaching management of climate risk at TMK;
3. Our goal of a climate-aware business.

As TMK has led the way among TM Group Companies (GCs) regarding climate risk management, the presentation served to promote debate and challenge around the approaches to be taken by other GCs.

The TMK CEO is also a member of the 'Sustainable Markets Initiative', set up by HRH Prince Charles. This group is looking to "lead and accelerate the world's transition to a sustainable future by putting Nature, People and Planet at the heart of global value creation."

Within the Sustainable Markets Initiative, TMK's CEO sits on the Insurance Taskforce, while we have members on both the *Innovation* and the *Disaster Resilience Response* workstreams. The Sustainable Market Initiative is in its early stages of development, but we expect it to be a valuable forum in promoting public debate on climate-issues, as well as in our staff members being able to influence policy makers and drive action.

Internally, TMK has held discussion surrounding the following:

- All company Climate Sessions, including one with a guest speaker from McKinsey & Co to

– speak and share views around the financial sectors' approach to climate change.

- Attending conferences such as BLUE Marine Foundation.

TMK is investigating various R&D initiatives related to this area, in conjunction with other Tokio Marine Group companies. This has been progressed through TM's intra-group innovation framework and externally with other syndicates at Lloyd's through the Lloyd's Product Innovation Facility.

- TMK specifically donating charity budget to organisations which fight against the effects of climate change.

We have a specific TM London Lab initiative considering the developing insurance needs of new 'Green Tech' start-ups helping to accelerate the transition to a low carbon economy. We are looking to develop products to support such businesses, as part of our strategic goal of supporting the global transition.

*Source: Tokio Marine Kiln*

## 5.2 Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.

### Lloyd's / The Corporation of Lloyd's

Since joining ClimateWise we have produced a number of influential reports ("Adapt or Bust"; "Climate change and security"; "Food system shock"; "Catastrophe Modelling and Climate Change", all available on Lloyd's website) to advance the debate by providing practical context to considerations in the financial services sector (principle 3.1 and 3.2).

Over the reporting year, examples of Corporation led research, include:

- *Cities at risk – Building a resilient future for the world's urban centres* explores future cities' trends. The report analyses the key main threats cities will face in the coming years including natural catastrophes and climate change. It also looks at how cities could protect themselves from these threats.
- The Futureset Climate Action Paper, released at the end of June 2021. The paper is aimed at raising awareness around the urgency of industry decarbonation, among Lloyd's brokers and underwriters, risk managers and government policy writers. It will contain tangible actions to show how the insurance industry can contribute towards decarbonisation efforts.

Other examples of recent reports include:

- 'Renewable Energy: Risk and Reward': Energy systems across the world are experiencing fundamental shifts driven by climate change policies and rapid technological changes. Over the past 10 years or so, renewable energy sources have expanded to such an extent they are now the dominant source of new power capacity additions in many countries. Unquestionably, the rapid growth in the renewables industry, the changing nature of risks in the sector and the fact that insurance is often a pre-requisite for provision of project finance mean that there might be a growing need for insurance. This series of three reports on the renewable energy sector by Lloyd's, in association with researchers from Imperial College London's Centre for Energy Policy and Technology (commissioned via Imperial Consultants) analyses the implications of the

changes to the energy generating landscape for insurers, risk managers and brokers.

- 'Below 2°C: Insurance for a low carbon economy': This report provides a strategic overview of the potential effects of the low carbon transition on the general insurance market. Vivid Economics and experts from the London School of Economics Grantham Research Institute were engaged by Lloyd's to review the effects of decarbonisation scenarios on sectors and regions of the global economy, and the attendant opportunities and challenges this poses for the insurance sector. The work focuses on the impact of the transition and liability risks on general insurance, seeking principally to understand sectoral trends up to 2030, which will inform risks and opportunities over the next 3-5 years.

The impacts of decarbonisation on the insurance sector are analysed in this report through three 'impact channels', consistent with the risk and opportunity framing developed by the Taskforces on Climate-related Financial Disclosure (TCFD). These are: activities within sectors; relationships between sectors; and, interactions between sectors and the legal system.

### Sharing our research

Climate change is a key issue for everyone, and recent natural disasters show the very real cost that climate change could cause insurers in the future. Lloyd's recognises the effects of climate change and the direct impact on the business community and we are in regular dialogue with insurers, businesses and policy makers to address the challenges of climate change, both for our industry and for the wider world.

### Government and regulatory engagement

The Corporation believes that it is important that supervisors, insurance undertakings and others in the global insurance market have a good understanding of the nature and scale of the risks arising from climate change and look to provide responses in support of the work occurring globally in this area.

Over the reporting year the Corporation engaged with regulators on climate risk and ESG:

### 1. Regulatory engagement on climate-related risks

Throughout 2020/21 Lloyd's has responded to and engaged with a number of international regulatory consultations regarding climate-related financial risks facing the insurance sector. These include providing written responses to the International Association of Insurance Supervisors, the Canadian regulator OSFI, the South African Prudential Authority, the Australian regulator APRA.

### 2. Communicating Lloyd's ESG commitments to regulators

Lloyd's has and will continue to engage constructively with both UK and international regulators on its ESG strategy. Following the publication of Lloyd's first ever ESG report at the end of 2020, Lloyd's aims to support the insurance and reinsurance sector in the transition to a more sustainable market place.

For example, we will continue to support and work with governments and the global insurance industry to explore how our open source frameworks (*ReStart*, *Recover Re and Black Swan Re*), detailed in our report [Supporting global recovery and resilience for customers and economies](#), could be leveraged and applied globally to offer customers greater protection against future systemic risks.

#### FutureSet: Climate Action Campaign

Lloyd's is developing a climate campaign focusing on how the insurance industry can support its clients with decarbonisation. The campaign will focus on a selection of priority sectors, aligned with the UK Government's 10-point plan for a Green Industrial Revolution. It will articulate the decarbonisation pathway for each priority sector, key obstacles to success, and how the global (re)insurance industry may be positioned to support. The campaign, launching later this year, aims to:

- Enhance understanding of the decarbonisation pathways for priority sectors, providing a consumable overview of the current global landscape, anticipated decarbonisation trajectory, and key obstacles to success. for each priority sector.
- Highlight success stories from the global (re)insurance industry aligned to priority sectors, demonstrating how the Lloyd's market and the global (re)insurance industry is currently supporting priority sectors on their decarbonisation pathways, through product proposition and innovation.
- Promote action within the Lloyd's market and global (re)insurance industry to support priority sectors in accelerating decarbonisation, by committing to a holistic roadmap of activity to support decarbonisation efforts and the transition to a low carbon economy, across the broader insurance ecosystem.

Broader initiatives being undertaken as part of the FutureSet program are outlined under sub-principles 3.2, 5.1 and 6.2.

Evidence also applies to principle(s): 3.1, 3.2

Source: *The Corporation of Lloyd's*

#### Lloyd's / The Market / Beazley

Beazley's commitment to launch an ESG consortium is driving our approach to acting as a responsible business. Through the incorporation of climate change risk into the wider ESG messaging, we want to facilitate our insureds to not only reduce their impact on climate change, but further embed the principles of being a responsible business. Beazley provides a program of thought leadership pieces throughout the year. A recent example is a piece published by our Directors and Officers (D&O) Focus Group and available through our website, highlighting the research undertaken to determine what link exists between ESG performance and claims. This finding of the research is in line with the team's hypothesis, that is companies with better stewardship of climate and ESG matters (and a better ESG rating) are a better a risk for Beazley as they generate less claims.

This link required more exploration, therefore, over the coming year Beazley will take this research forward and build on it to explore how the different components of ESG impact on claims performance. Where opportunities arise, we will also look to undertake research projects which focus specifically on climate change. We expect to identify potential subject matters for research projects as part of the scenario analysis work we are currently developing as part of our response to the CBES. The findings of any research conducted will of course be shared amongst wider shareholders to help advance common interest in the subject matter.

Beazley's involvement within the CLimateWise Net Zero Underwriting initiative is also helping to drive forward research which will help shape strategy. The group is examining the concept of net zero in respect to underwriting and determine a definition which can be applied to the industry. The group is also working with industry partners to review emerging tools in the space in order to assess both individual insureds and portfolio's in their transition to decarbonisation. This work is ongoing and it is expect that a report will be produced by the working group by the end October 2021. Throughout the



project, Beazley is working to identify how we can best apply the emerging concepts, as we feel many of the principles and tools will help us to further our commitment to be a responsible business and lead by example.

Source: Beazley

## Lloyd's / The Market / MS Amlin Underwriting Limited

As outlined in Section 3.2, MS Amlin is involved in a number of climate change research activities including:

- Supporting and funding climate change research via the Lighthill Risk Network (<https://lighthillrisknetwork.org/>)
- Supporting academic research and collaboration via the MS Amlin Academic Advisory Panel.
- The development of bespoke view of catastrophe (and climate) risk through the evaluation and adjustment of catastrophe models
- Publication in leading scientific journals and books.

Highlights from the last 12 months and ongoing projects include:

- Nature Climate Change journal published in April 2021 a comment article by three members of the Risk Analytics team, titled “Normative approach to risk management for insurers” (see appendix). The article debated whether exploratory scenarios, particularly those concerned with climate change, are best suited for business strategies and decisions, and instead proposed the use of normative scenarios relevant to impact thresholds chosen by an insurer as important for the adaptation of its business. The article has attracted significant comments from the scientific and insurance community. MS AUL will continue to develop the normative scenario approach, and is actively engaged with two modelling firms to establish projects to bring quantification to such scenarios in the business context.
- The MS AUL Research team will publish later in 2021 a peer-reviewed chapter in a book, titled Hurricane Risk in a Changing Climate, which is also sponsored by MS AUL and the modelling firm RMS. The book has replaced a symposium with the same title which was due

to be held in Miami, for which the organizing committee contains several of the world's leading meteorologists and climate scientists. The main objective of the symposium is to support communication among scientists, engineers, and insurers in order to increase understanding of and better ways to deal with tropical cyclone risks, and this objective will be continued with the book publication. The MS AUL chapter (see appendix) is titled “Downwards Counterfactual Analysis in Insurance Tropical Cyclone Models: a Miami case study”, and this looks at new techniques to explore historic events in “worse-case” mode for better risk management and business planning.

- In conjunction with the Lighthill Risk Network, MS AUL is sponsoring two research projects to provide data to support business strategies:
  - Tom Philp: A Decision Theoretic Framework for writing Intra-Annual Reinsurance Backup Covers: A NAHU Test Case.
  - Steve Jewson: Converting the Knutson et al. (2020) Tropical Cyclone Climate Change Projections to a Format the Insurance Industry Can Use.

These projects are due to complete in 2022, and are both intended to produce data which can be directly applied to modelling, risk frameworks, and business planning.

Additionally, Risk Analytics has undertaken a number of initiatives previously reported to ClimateWise and noted here for completeness:

- December 2019: MS Amlin CUO participated in roundtable discussions with UK Research and Innovation, covering research needs of the insurance industry including climate change.
- March 2020: supported research report on Scenario Analysis in collaboration with the Lighthill Risk Network and the University of Cambridge.
- June 2020: held Academic Advisory Panel on impacts of climate change on catastrophe modelling.
- 2020: review of RMS European Windstorm model and AIR US Hurricane model, for

impact of current climate conditions, leading to an EU WS model adjustment.

- 2020: hosted Lighthill Risk Network workshop on climate change to discuss research initiatives and the development of a climate change data hub for the insurance market.

Source: MS Amlin

## [Lloyd's / The Market / QBE / Research on climate change](#)

### **Climate Measurement Standards Initiative ('CMSI')**

QBE has been actively involved in the CMSI, which has developed standards for assessing climate physical risk projections of damage to property in Australia. We have collaborated with a range of stakeholders including other Australian general insurers, reinsurers and banks, and the Earth Sciences and Climate Change Hub (a partnership of Australia's leading climate change research institutions, including the CSIRO and Bureau of Meteorology), Climate-KIC Australia (a 'Knowledge Innovation Community' comprising a range of public and private entities), catastrophe modellers, hazard scientists and financial reporting professionals.

The CMSI delivered a report with recommendations on disclosure and a report by CSIRO, Bureau of Meteorology and University of NSW on the expected impact of climate change on cyclones, storms, floods, sea-level rise and bushfires in Australia. The conclusions from this work have been referenced within QBE's internal assessments of exposure and modelling.

### **Natural Catastrophe Modelling of Climate perils**

In 2019 and 2020, an analysis of physical climate risks was performed by the Cat Risk Management team in collaboration with our external modelling partners. This work made several findings in relation to material peril-region exposures, referencing the IPCC's representative concentration pathways ('RCP') scenarios for timeframes extending to 2090. The analysis concluded that QBE's exposure to risks in these peril-regions are projected to increase, albeit over multi-decade time periods.

For this work, greenhouse gas concentration projections were converted into climate variables (rainfall, windspeed, temperature) using Global Climate Models (GCMs) and downscaled to higher resolution using Regional Climate Models (RCMs). QBE's modelling partner used results from large climate model ensembles referencing literature, including the IPCC's Assessment Reports and the European Environment Agency 2017 report.

In 2021 QBE has continued to engage with our external partners in order to identify and update our views based on additional academic research and findings. This is being done in the context of the Bank of England's Climate Biennial Exploratory Scenario work and the ongoing internal development of our research and modelling capabilities.

### **UNEP FI Insurance Pilot**

QBE, along with 22 other global reinsurers and insurers, has been part of the UNEP FI's PSI Initiative to pilot the TCFD recommendations for insurance portfolios. The aim of the initiative is to contribute to the development of consistent and transparent analytical approaches that can be used to identify, assess and disclose climate change-related risks and opportunities. The initiative has covered physical, transition and liability risks and opportunities. QBE has been a member of the working group looking at transition risk in the property sector in Australia, which developed a model to assess the risk which we aim to pilot in 2021. We have also been a member of the litigation working group, which complemented our internal analysis on climate-related liability risk.

Specific products and services developed by QBE to protect customers' and other stakeholders' interests are discussed in section 6.2 of this report. Additional examples / case studies can be found in the QBE 2020 Sustainability Report.

[Evidence also applies to principle\(s\): 3.1, 3.2](#)

Source: QBE Annual Report 2020 (p30-34); QBE Sustainability Report 2020 (p30-31),

## [Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd](#)

### [RenaissanceRe Risk Sciences](#)

RenaissanceRe, through its wholly owned subsidiary, RenaissanceRe Risk Sciences, seeks to assist in the understanding of natural hazards and evolving risks. RenaissanceRe Risk Sciences' mission is to integrate science and technology to deliver meaningful business solutions for its clients, and its advanced scientists leverage its deep expertise to elevate RenaissanceRe's understanding of loss exposures and gain actionable risk intelligence.

The RenaissanceRe Risk Sciences team is made up of 17 advanced scientists with, on average, 20 years' experience in the industry, actively working on research in to 11 perils across 35 countries. The team engages actively in research of natural hazards and evolving risks and released both an Insurance Insider article on US

severe convective storm activity in 2012, and a paper on understanding the California Wildfire events of 2017 which highlight the impact of climate change and the higher propensity for significant weather conditions as a result of climate change. RenaissanceRe Risk Sciences has close partnerships with the following global scientific and mitigation organizations to enhance its risk intelligence:

- Earthquake Engineering Research Institute;
- Florida Coastal Monitoring Program;
- Insurance Institute for Business & Home Safety;
- National Hurricane Center;
- National Oceanic and Atmospheric Administration;
- Pacific Earthquake Engineering Research Center;
- Risk Management Center at the Wharton School, University of Pennsylvania; and
- University of Rhode Island, Graduate School of Oceanography.

### The Natural Catastrophe Data and Analytics Exchange (“NatCatDaX”) Alliance

RenaissanceRe was a founding member of the NatCatDaX Alliance, which was launched at the 7th International Symposium on Catastrophe Risk Management and is an industry-led catastrophe data and analytics platform for Asia. The Alliance is a partnership with Nanyang Technological University (Singapore’s Institute of Catastrophe Risk Management), Aon Benfield, Mitsui, Risk Management Solutions and PERILS, with support by the Monetary Authority of Singapore. The aim of the Alliance was to generate a rigorous database by tapping into national and industry data. Such high-quality data, market analytics and product innovations are currently lacking in the region, and the output of this Alliance could be used to help analyze key cities and regions within Asia to understand both the insurance exposure to a loss as well as the economic exposure more generally as a result of an event.

### Institute of Catastrophe Risk Management (“ICRM”)

RenaissanceRe’s SVP Chief Underwriting Officer in Singapore served on the International Advisory Board (“IAB”) for the ICRM at Nanyang Technical University in Singapore for a two-year period ending April 2020. The mission of the ICRM is multi-disciplinary research

projects in science, engineering, finance, technology, economics and socio-political aspects related to catastrophe risk and to help the community to better understand the fundamental characteristics of risks related to natural and non-traditional disasters such as earthquakes, tsunamis, typhoons, volcanic eruptions, floods and droughts. The IAB is comprised of globally leading academics, researchers and representatives from the industry, academia, research organizations and government agencies to guide the ICRM’s strategic plans.

Reference sub-principle 5.1 for further details of RenaissanceRe’s engagement in research-focused industry forums.

*Source: RenaissanceRe Syndicate Management Limited*

### Lloyd’s / The Market / The Hartford

In addition to the engagement cited in section 5.1, we have also taken the following actions in support of climate change research that informs our business strategies and helps to protect our customers’ and other stakeholders’ interests:

In 2017, The Hartford joined The Geneva Association. Founded in 1973 by the CEOs of global insurers, The Geneva Association is an international insurance think tank that produces and distributes high-quality research and analysis on global strategic insurance and risk management issues. The objective of the Geneva Association is to develop and promote a wider understanding on the unique role and importance of insurance in economies and for societies through publications, conferences and active discourse with policymakers, regulators, supervisors, academics and other key constituents. The socioeconomic risks associated with weather-related events and other natural catastrophes are on the rise, exacerbated by climate change and urban development patterns. The adoption of the Sendai Framework for Disaster Risk Reduction, the Agenda for Sustainable Development and the COP21 Paris Agreement promotes the need for a comprehensive approach to managing extreme events and climate risk. The (re)insurance industry can play a key role in public-private partnerships that take these commitments forward as integral components of national to local development planning. The Geneva Association conducts research focused on two key pillars: (i) building resilience to extreme events and climate risk; and (ii) the transition to a low-carbon economy. It also facilitates high-level dialogue engaging C-level executives of the insurance industry and authorities from policymakers, standard-setting and regulatory bodies, governments, the United Nations and development organizations.

Hartford Funds was accepted into the UN Principles for Responsible Investment (UNPRI) protocol in the second quarter of 2015. Under the terms of the protocol, Hartford Funds publishes an annual PRI Transparency Report.

The Hartford partners with the Insurance Information Institute. For over 50 years, this non-profit organization has provided information to help consumers, reporters, insurance companies and researchers understand how insurance works. It communicates on climate change and severe weather events and their implications for the insurance industry and society at large.

After acquiring Navigators in May 2019, The Hartford assumed the existing membership of ClimateWise.

**Support Links:**

- [CDP – C12.3c](#)
- [2020 Sustainability Highlight Report](#), p. p. 13-18
- [GRI – Disclosure #102-13](#)

*Source: The Hartford*

**[Lloyd's / The Market / Tokio Marine Kiln / Insurance Advisory Council](#)**

The primary forum for research on climate change to inform our business strategy has been through risk

identification and assessment performed by TMK's Risk Management Team.

This research work has drawn on a range of external sources including from the Insurance community, the ERM community, the actuarial community, and the scientific community. It has led to a development of understanding around the ways in which stakeholders are being and will continue to be affected by climate change (see section 2.1). This research has been shared with the wider TMK community through various internal presentations, as well as to external stakeholders through forums as outlined in section 5.1 (e.g. ClimateWise and the Sustainable Markets Forum).

We are currently working with CarbonChain, who were a successful applicant to Cohort 6 of the Lloyd's Lab. We are looking to identify a way in which TMK and the Lloyd's market can utilise CarbonChain's expertise in measuring carbon footprint to build a solution to measure the carbon output of our portfolio of insured clients.

Such a solution would allow us (and the wider Lloyd's market) to understand the Scope 3 climate risk exposure we have through our underwriting portfolio. We would then be able to utilise this measure as a benchmark against competitors and to implement more advanced portfolio level net carbon targets in the future.

*Source: Tokio Marine Kiln*

## 6. Support climate awareness amongst our customers / clients

### 6.1 Communicate our beliefs and strategy on climate-related issues to our customers/ clients.

#### Lloyd's / The Corporation of Lloyd's

This document constitutes 'Lloyd's' response to the ClimateWise principle for the period covering 1 July 2020 – 30 June 2021. The Corporation of Lloyd's collates and submits this document on behalf of the Corporation of Lloyd's and the Lloyd's market members outlined in the front matter of the document, to provide an overview of activities undertaken by 'Lloyd's'.

Similar information is also available in the annual report, across Lloyd's.com and social media accounts, and internally to Corporation employees for transparency. This report goes into substantially more detail that can realistically be expected from the other sources.

#### Responsible business strategy

In 2020 we published our first Environmental, Social and Governance Report. The introductory letter from Bruce Carnegie-Brown, Chairman, read:

As we publish our first Environmental, Social and Governance Report, we do so with an ambition to integrate sustainability into all of Lloyd's business activities; from playing our part in the global transition to net zero through the risks we share and the investments we make, to the way in which we support societal progress more broadly.

Whilst this our first ESG Report, Lloyd's has a long track record in contributing to the communities in which we operate, and crucially, helping them to recover from disaster. As a market made up of more than fifty insurance undertakings, we underwrite some of the most exciting innovations, and protect against the impacts of the most devastating catastrophes. We are proud of the enduring role we play in protecting society from some of the greatest threats, and in doing so supporting economic growth and societal prosperity; over the last decade we have provided £145bn in claims payments to our customers in their time of need, as well as the insurance

and reinsurance critical to propelling the advancement of clean energy and resilient infrastructure around the world.

In recent years, Lloyd's has also made significant progress in driving culture change across our market and the industry – that includes setting publicly accountable gender and ethnicity targets, as well as committing to meaningful and measurable actions to build a more inclusive environment for the many thousands of talented people working in our marketplace.

However, we can and will do more. The events of 2020 have accelerated critical conversations, commitments and actions across businesses, economies and society to tackle some of the most challenging and urgent issues we collectively face. As the world slowly emerges from the impacts of the COVID-19 pandemic, it does so with an enormous opportunity to take positive action to build back better. This report sets out how Lloyd's will build on the critical role we play, in alignment with the United Nation's Sustainable Development Goals and in support of the principles set out in the Paris Agreement.

Already underway across Lloyd's are activities that actively support more sustainable businesses, communities, and nations. We will continue to work closely, and to consult with the Lloyd's market and our customers as we make the transition to a more sustainable future. To strengthen our governance and to support our ambitions and targets we have also set up an ESG Advisory Group which I am chairing and which comprises Lloyd's market leaders alongside external advisors who will provide robust challenge, together with expert advice, as we forge a greener path for our market and our customers.

We are trusted by millions of people around the world to seize the opportunity to drive societal transformation where we have the ability to do so, and, in so doing, to play our part in building a braver, more resilient world.



## Responsible Investment Strategy

The Corporation of Lloyd's believe that we should use our shareholder power to influence the behaviour of the companies in which we invest – and persuade them to respond more effectively to the impact of climate change.

The Corporation has a responsible investment strategy that has been communicated publicly. Details are available as part of the annual report, Responsible Business webpages, and in outputs throughout the year, such as regulatory responses and media requests.

The Corporation's investment philosophy focuses on generating long term, sustainable capital growth for Central Fund assets. The approach to responsible investment is built upon three core pillars;

- Protecting the Central Fund assets by considering environmental, social and governance risks;
- Promoting responsible business practices in companies through activities such as corporate engagement and shareholder action; and
- Providing capital to support a sustainable future, through investments in green and social impact bonds and by excluding investments in coal focused companies.

*Source: The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

Beazley uses a number of different communication approaches to ensure our stakeholders are updated on our beliefs and strategy on climate-related issues. Our stakeholders are not just our customer/ clients, but also our brokers, investors and colleagues. To ensure full transparency on the matter, the publication of the annual report and accounts, and the supporting Responsible Business Report on our website, clearly indicates our progress on these matters. Further to this, we have also published our Responsible Business Strategy in May 2021, which again helps to further communicate our beliefs and strategy on ESG matters, including climate related issues to our customers / clients, as well as wider stakeholders. We have a prominent Responsible Business section on our website, which contains a number of policies and reports detailing our beliefs, minimum expectations of the business and progress on climate related issues. This is also supported by the use of social media to highlight key Responsible Business takeaways.

The details contained within these reports, as well as the ongoing progress we are making are briefed to members of our Executive Committee and Boards. This ensure these members can then discuss our beliefs and strategy on the subject during the regular meetings we hold with

clients, brokers and investors. The program of engagement for these stakeholders is managed by our Broker Relations team, Head of Investor Relations, as well as the Marketing and Communications team. The organisation and delivery of these meetings is a business as usual function as part of our approach to good stakeholder relations.

Going forward, Beazley will continue plans to further the level of communication with our external stakeholders, keeping them abreast of the progress against the strategy, as well as identifying opportunities to support them mitigate and adapt to the impact of climate change. In turn this will help to create better relationships, thus providing added value for all stakeholders.

Beazley recently announced the creation of a following ESG consortium. The consortium will be launched from the 1<sup>st</sup> January 2022 and will provide additional capacity for insureds who perform well from an ESG perspective. The appraisal of ESG metrics by the third party ESG data providers includes scrutiny of the climate change impact of the insured. We will, therefore, be able to drive change and improvement across both climate impact as well as the wider ESG agenda. The consortium further demonstrates to our insureds and investors our commitments in this area, as well as encouraging our insureds to focus on ESG matters in order to generate more capacity in the future.

*Source: Beazley*

## Lloyd's / The Market / MS Amlin Underwriting Limited

MS AUL's parent group, MS&AD, announced an initiative in May 2021 to achieve Net Zero by 2050 for the Group. The initiative refers only to MS&AD's direct carbon footprint, while the definition and practical implications surrounding a Net Zero Underwriting commitment remain part of an ongoing assessment. The initiative does however seek a "Reduction in CO2 Emissions in Society working with Stakeholders". With a commitment to continue to engage with stakeholders to promote risk recognition, provide solutions to reduce CO2 emissions, and provide adaptation measures to cope with the effects of climate change, and create a more resilient society.

Full details can be found in the statement on the MS&AD Group press release<sup>r</sup> and website <https://www.ms-ad-hd.com/en/csr.html>

The Natural Resources team at MS AUL has begun working on a measurement matrix through which it can assess the progress of clients on their transition journey. The aim of this matrix is to facilitate open discussion, encouraging positive changes to help support all our clients on their journey. A key part of MSAUL's climate strategy is to work closely with our clients, so the business understands how best it can assist them, as their insurer, in their transition towards a zero carbon future.

Source: MS Amlin

### Lloyd's / The Market / QBE / Communication of our climate change strategy

As an international insurer with insurance products covering a diverse portfolio including property, crop, energy, marine and aviation, QBE is acutely aware of the risks and opportunities that climate change presents for our customers and our business.

QBE communicates with our customers / clients on climate-related risks and opportunities and our progress in integrating these into our business strategies through our annual reporting suite (which includes our TCFD-related disclosures, our Sustainability Report, and

various other channels). In 2021 QBE published an updated version of 'Our approach to climate change' to update customers and clients on what we are doing in relation to climate change, including recent achievements and future plans.

Our three-year global disaster relief and resilience partnerships with Red Cross and Save the Children enables the rapid mobilisation of support for disaster relief activities in response to catastrophic events, and support disaster preparedness and climate resilience initiatives for vulnerable communities around the world. Our partnership vision is to work with communities to build their resilience and save lives by improving their capacity to prepare, anticipate, respond and recover from disasters.

In Europe, our Financial Lines RS team has developed an ESG Framework that customers can use to address climate change risks, stakeholder expectations and governance requirements, all of which are fundamental to long-term sustainability. Our aim is to build an ESG toolkit of templates providing support as our customers turn to incorporating sustainability into their businesses.

We participate in several external reporting and benchmarking initiatives, including but not limited to the ones in the following graphic. Further details of some of the initiatives are given below:



A global partnership between the United Nations Environment Programme (UNEP) and the financial sector. More than 200 institutions, including banks, insurers and investors, work with UNEP to bring about systemic change in finance to support a sustainable world.

The peak industry body representing responsible and ethical investors across Australia and New Zealand. RIAA works to promote a more responsible approach to investment by encouraging more people to actively choose a responsible and ethical option for their savings and investments.

The world's leading proponent of responsible investment. Built around six principles for investing responsibly, the PRI are supported by the United Nations. PRI has more than 2,200 signatories representing more than US\$82 trillion in AUM.



These provide a global framework for the insurance industry to address ESG risks and opportunities. The initiative aims to help strengthen the insurance industry's contribution - as risk managers, risk carriers and investors - to building resilient, inclusive and sustainable communities and economies.

ClimateWise supports the insurance industry to better communicate, disclose and respond to the risks and opportunities of climate change. Representing a global network of leading insurance organisations, ClimateWise helps align members' expertise to directly support society as it responds to climate change.

A not-for-profit organisation that runs a global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.

<sup>r</sup> See evidence 6a

QBE is a signatory to the CDP, a not-for-profit organisation which runs a global disclosure system that enables companies, investors and other bodies to measure and manage their environmental impacts. QBE has responded to CDP since 2010. Our climate-related progress resulted in our annual score jumping two places to a 'A-' for 2020.

Premiums4Good is a unique global initiative that enables a customer to use a portion of their premium to invest in securities with an additional social or environmental benefit. QBE customers can direct up to 25 per cent of their premiums into socially responsible, impact investments through Premiums4Good. By doing so, we raise awareness among our customers of climate-related investment product, and their choice to find additional value through their insurance premium. Please refer to section 2.1 for further detail.

Evidence also applies to principle(s): 3.1, 3.2, 5.1, 5.2, 6.2

Source: 'Our approach to climate change' (available here: <https://www.qbe.com/about-qbe/sustainability/climate-change>); QBE Sustainability Report 2020; QBE Annual Report 2020 (p.35)

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe has a long history of thought leadership on climate-related issues. Members of RenaissanceRe's senior leadership and underwriting teams participated in speaking engagements at conferences during the 2020/21 ClimateWise reporting period to advance the Company's thought leadership on climate resilience among its key stakeholders:

- SVP Underwriting & Head of Global Public Sector Partnerships, RIMS Climate Change Panel (2021)
- SVP Group Chief Risk Officer - Europe, Geneva Association Flood Panel (2021)
- SVP Underwriting & Head of Global Public Sector Partnerships, ABIR Climate Committee (2021)
- President RenaissanceRe Risk Sciences, State Farm Executive Climate Change Conference (2021)
- SVP Underwriting & Head of Global Public Sector Partnerships, GC Wildfire Symposium Panel (2021)
- SVP Group Chief Risk Officer - Europe, Moody's ESG and Climate Panel (2021)
- EVP Group Chief Risk Officer, InsurerTV ESG Panel (2021)
- President RenaissanceRe Risk Sciences, Bank of America Securities Global ESG Conference (2020)
- EVP Group General Counsel, ABIR Climate Risk Webinar (2020)
- President RenaissanceRe Risk Sciences, ILS Bermuda Convergence Conference (2020)
- President RenaissanceRe Risk Sciences, Tiger Risk Executive Summit (2020)
- President RenaissanceRe Risk Sciences, IBHS Research Center 10 Year Accomplishments Video (2020)
- President RenaissanceRe Risk Sciences, Lloyd's of London Climate Change and Natural Catastrophe Risk (2020)

RenaissanceRe engages directly with its clients on a regular basis to discuss its view of risk. RenaissanceRe seeks to raise awareness among its clients, outlining the need for them to consider resilience strategies and perform climate risk assessments as part of their own operations. RenaissanceRe's clients enjoy unique access to its scientific team and industry-leading expertise. Based in both the U.S. and Europe, RenaissanceRe Risk Sciences' wide-reaching data analytics are broad in scope, including emerging cross-portfolio perils like climate change and emerging risk amplifiers. Coupled with the insight of its underwriters, RenaissanceRe's risk intelligence resources support and inform its clients' view of risk, helping them optimize coverage against ever-changing global perils. During the 2020/21 reporting period, RenaissanceRe's science team, led by its President of RenaissanceRe Risk Sciences, engaged with several of RenaissanceRe's clients and third-party capital investors to communicate the Company's science intelligence and strategy around climate change.

RenaissanceRe's climate risk management position is also shared with clients indirectly through its dedicated external ESG website and corporate LinkedIn page, which capture key highlights of ongoing activities and commitments to Promote Climate Resilience. RenaissanceRe's senior management also prioritize the communication of the Company's climate change positioning in earnings calls, key stakeholder meetings and throughout the Company's public filings. For example, within the 2020 Annual Report,

<sup>1</sup>See evidence 6a

RenaissanceRe's Chief Executive Officer provides an honest outline of the potential impact of climate change on its business: "A substantial portion of our coverages may be adversely impacted by climate change, and we cannot assure you that our risk assessments accurately reflect environmental and climate related risks".

Source: RenaissanceRe Syndicate Management Limited

## Lloyd's / The Market / The Hartford

The Hartford's annual [Sustainability Highlight Report](#) provides an overview of our commitment to environmental stewardship and the actions we are taking to reduce negative impact. The report also includes a message from our CEO, Christopher Swift who reiterates our commitments each year.

The Hartford's official stance on climate change can be found in our [Statement on Climate Change](#) and our [ESG Investment Policy Statement](#) communicates how environmental impacts influence our investment decisions.

### Support Links:

- [Statement on Climate Change](#)
- [ESG Investment Policy Statement](#)
- CEO Letter in the [2020 Sustainability Highlight Report](#), p. 4-6

Source: The Hartford

## Lloyd's / The Market / Tokio Marine Kiln / Reporting

Tokio Marine Kiln and the Tokio Marine Group continue to report CSR related activities in the respective annual reports and via their company websites.

At Tokio Marine Kiln, many of these activities are directly driven by our Good Company values, which encourage us to provide clear leadership and act responsibly in:

### Our marketplace:

We believe we are in partnership with our customers, delivering the highest quality service, striving for excellence and behaving with integrity. We work in an industry that can involve significant and extreme catastrophes – it's about doing the right thing at the right time. That is why we are here.

### Our workplace:

We take pride in recruiting, retaining and developing proactive, responsive people and we believe in treating them with respect. We are committed to providing a safe,

open, inclusive and empowering environment in which everyone can thrive and so that staff can provide the best support for our clients and our investors.

### Our community:

We believe that we should all contribute to the local community. Staff are encouraged to get involved as much as they can; through volunteering schemes, taking part in our many charity activities that reach local as well as national causes and by acting as mentors to young people about to enter the world of work. Together we can have a big impact on our community.

### Our environment:

We are committed to achieving sustainable business growth together with the development of society and the conservation of the global environment. We believe that we should all behave responsibly by making sensible buying decisions, cutting down on what we consume and making the most of recycling opportunities.

Since the beginning of 2021 and following the publication of Lloyd's ESG strategy, we have seen greater engagement between our underwriters and the brokers and some of our insureds / customers on our climate strategy. In particular, brokers are keen to understand our stance with regards to renewals across coal mining, oil sands and Arctic exploration in 2022. Our customers are also interested in our ESG strategy in general and have sent us due diligence questionnaires as part of their information gathering and survey.

In April 2021, TMK also issued a public statement on its commitment to not participate in "any future underwriting" of multinational conglomerate Adani's Carmichael coal mine in line with our broader organisational goals. The Adani Carmichael mine and rail project was the first to target an untapped coal reserve in the Galilee Basin, Australia. If built, Adani's Carmichael mine will add an estimated 4.6bn tonnes of carbon pollution to the atmosphere.

We continue to proactively monitor our portfolio in terms of our overall reputational risks, and we believe in proactive communication with our customers where appropriate.

Source: [Tokio Marine Kiln refuses 'any future underwriting' for Adani coal mine | Latest News | Insurance Times](#)



## 6.2 Inform our customers/ clients of climate-related risk and provide support and tools so that they can assess their own levels of risk.

### Lloyd's / The Corporation of Lloyd's

In addition to the thought leadership, market insight reports, and initiatives such as the Lloyd's Lab mentioned in other principles, the Corporation also supported the following initiatives to inform and support policyholders and market stakeholders (principle 3.1, 3.2, 5.1, 5.2, 6.2):

#### Launch of Futureset

Earlier this year Lloyd's launched Futureset, a new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks. Futureset has been developed in response to the world's rapidly changing risk landscape and the urgent need to begin a new, connected conversation with customers, insurers, and government to tackle the challenges these risks bring.

By bringing together diverse perspectives, and through cutting-edge risk insight, intelligence, and cross-industry dialogue on the most complex and fast-changing risks faced by communities, businesses and countries, Futureset aims to build greater societal understanding and collaboration to find solutions and support greater preparedness, protection and resilience to the growing and interconnected risks that customers face today, and into the future.

Throughout 2021, Futureset will focus on the landscape of systemic risks, including exploring lessons learned from the COVID-19 pandemic, as well as examining the growing and global risks brought about by climate change. Established as an openly accessible platform, Futureset will convene global experts and partner with world class research organisations, creating new and pioneering insights to drive sustainable solutions to current and future threats around the world.

Futureset launched with a six-part Systemic Risk Masterclass series, developed in partnership with the Chartered Insurance Institute (CII) and Lloyd's Market Association (LMA). The masterclass series brought together experts across industry, academia and government to help insurance and risk professionals develop their knowledge and expertise in systemic risk.

#### Futureset systemic risk research

Futureset is commissioning new research on the landscape of systemic risk, to develop a body of

knowledge to raise the overall awareness, confidence and capability of our market and our customers. The research will highlight the potential impacts of systemic threats to the global economy, including extreme weather as a result of accelerating climate change, and provide insights into preparation and mitigation for businesses, governments and the (re)insurance industry.

The research will develop 10 systemic risk scenarios, each developed out with 3 variants, leading to a total of 300 systemic risk scenarios for use by Lloyd's stakeholders. These scenarios will inform a definition of systemic risk that is comprehensive, versatile, and useful across multiple business sectors.

Importantly the project will highlight actionable and practical steps which businesses, governments and the (re)insurance industry to prepare for, mitigate and improve their resilience against potentially systemic threats.

#### Futureset climate action campaign

Lloyd's is developing a climate campaign focusing on how the insurance industry can support its clients with decarbonisation. The campaign will focus on a selection of priority sectors, aligned with the UK Government's 10-point plan for a Green Industrial Revolution. It will articulate the decarbonisation pathway for each priority sector, key obstacles to success, and how the global (re)insurance industry may be positioned to support. The campaign, launching later this year, aims to:

- Enhance understanding of the decarbonisation pathways for priority sectors, providing a consumable overview of the current global landscape, anticipated decarbonisation trajectory, and key obstacles to success. for each priority sector.
- Highlight success stories from the global (re)insurance industry aligned to priority sectors, demonstrating how the Lloyd's market and the global (re)insurance industry is currently supporting priority sectors on their decarbonisation pathways, through product proposition and innovation.
- Promote action within the Lloyd's market and global (re)insurance industry to support priority sectors in accelerating decarbonisation, by committing to a holistic roadmap of activity to



support decarbonisation efforts and the transition to a low carbon economy, across the broader insurance ecosystem.

## Lloyd's Lab

The sixth cohort of the Lloyd's Lab innovation accelerator programme ran earlier in 2021, focused on creating simpler products for customers, including building solutions related to decarbonisation climate risks. Through a global application process, we sought companies who thought they could help the Lloyd's market:

- Offer insurance products to transfer decarbonisation risks,
- Respond to the increasing threat of climate events – either through traditional insurance response or through provision of services,
- Understand the changing nature of climate risks – from live forecasting services to longer term modelling of natural processes or their economic and social impact, or
- Understand the carbon footprint of the clients that they cover.

The programme received 177 applications from around the world, from which eleven successful teams were selected to join Lloyd's Lab. These included:

- **Tesselo**, a geospatial intelligence firm delivering solutions to monitor natural resources (trees, soils, crop) and reduce climatic risk, Lloyd
- **Jupiter Intelligence**, a global leader in climate risk analytics, and
- **CarbonChain**, a modelling company helping companies automate the accounting of their carbon emissions.

## Sustainable Markets Initiative

The Sustainable Markets Initiative Insurance Task Force, convened by HRH The Prince of Wales and chaired by Lloyd's, is comprised of executives from many of the world's largest insurance and reinsurance companies, providing an influential platform for the sector to collectively advance the world's progress towards a resilient, net-zero economy.

The SMI Insurance Task Force has committed to provide climate positive financing and risk management solutions to support and encourage individuals and businesses around the world to accelerate their transition to a sustainable future through a number of key initiatives:

Driving insurance product and services innovation to empower commercial customers to develop, invest in and

scale their sustainability initiatives, supporting green innovation across multiple sectors and geographies. As part of this initiative, the Task Force will launch at least two new insurance products to protect priority industries, such as nuclear energy, hydrogen and offshore wind, against an evolving risk landscape, in order to enable their accelerated growth.

Implementing sustainable processes across the insurance supply chain to encourage and incentivise individuals to take positive actions to live more sustainably. This will include launching an industry-wide framework to drive sustainable outcomes for customers, for example through introducing "build back better" claims clauses in home insurance policies to encourage customers to rebuild damaged properties with more sustainable materials in support of a net-zero transition.

Establishing a public-private disaster resilience, response, and recovery framework to help protect developing nations from the evolving economic and societal impacts of climate change, including the effects of increasingly frequent and severe weather events. The framework will leverage the insurance industry's unique ability to combine an insurance product with risk management and loss recovery services, in order to increase preparedness for and limit the impacts of these events. Once developed, this solution will be rolled out across vulnerable countries to support better disaster response and recovery, with a pilot being initiated in 2021.

Developing a framework for accelerating and scaling sustainable investment to help unlock the global (re)insurance industry's more than \$30tn in assets under management, increasingly directing capital towards investments that drive climate-positive outcomes in both developed and developing nations. As part of this initiative, an investment proposal will be developed through collaboration between public and private sectors, with a particular focus on renewable energy and climate transition assets to enable the transition towards a low-carbon economy.

Defining an approach to measuring the carbon footprint across underwriting portfolios and establish a framework to track the global insurance industry's ability to support the transition towards net zero across multiple industries and geographies.

[Evidence also applies to principle\(s\): 3.1, 3.2, 5.1, 5.2, 6.1](#)

*Source: The Corporation of Lloyd's*

## Lloyd's / The Market / Beazley

Beazley has identified two mechanisms by which to help inform our clients of climate related risk and provide the

support necessary to deliver behaviour change. The first is through the use of modelling, and the interpretation of the modelling outputs to determine the potential impact, and thus identify where behaviour change needs to occur. The second is through a combination of identification of the material climate related risk issues, as required under the TCFD guidance, as well as Beazley underwriters beginning to use ESG metrics and questioning as part of the underwriting process.

From a modelling perspective, Beazley has worked with a number of partners across the last couple of years to undertake the modelling of different climate change scenarios and determine the impact. This work has always been used to inform our clients of their climate related risk in general terms, where relevant. The dissemination of the outputs of this modelling has predominately been delivered through knowledge sharing session, with the expectation that the knowledge of the impacts of climate change would lead to clients changing their behaviour, where possible.

As detailed previously in this report, cross business collaboration with our Underwriting teams has enabled us to identify the key material issues, whether they be related to climate or part of the wider ESG agenda. This has also led to the identification of opportunities to help influence behaviour change. Of the work concluded to date, the biggest area for behavioural change is a transition to a decarbonised future, and a wider adoption of net zero targets, backed up by initiatives such as setting a Science Based Target. To deliver firstly awareness of the issue to our clients and secondly that Beazley is taking it very seriously, we have created a workstream to improve our appraisal of ESG matters (of which climate related risk forms a big part) within the underwriting process. From our experience, by creating dialogue around issues such as ESG matters, we can promote the benefits of moving towards a more responsible society and get our clients to think about how their business operates and the impact it has. Our work as part of the CLimateWise Net Zero Underwriting Project Group also supports this approach.

We are currently developing a set of questions which our underwriters will ask as part of the underwriting process, with the returns being reviewed and informing the underwriting decision process. This toolbox, will, therefore enable us to track the progress of our insureds as they transition to a decarbonised future. It will also help identify where opportunities exist to further support insureds with this transition, whether that be alignment

with the Paris Climate Accord, or the acceleration of their existing plans to decarbonise ahead of schedule.

*Source: Beazley*

## Lloyd's / The Market / MS Amlin

In June 2021, MS Amlin shared research with customers/clients by publishing a statement overview of the 2021 hurricane season forecasts.<sup>5</sup> The report correlated forecast data from more than 20 research groups, private companies and universities which (on 9 June 2021) called for an above average season, with a mean forecast of 17 named storms, 8 hurricanes and 4 major hurricanes. All reports on atmospheric perils published by MS Amlin, including this one, now automatically include commentary on the potential impact of climate change to the perils in question.

MS Amlin continues to develop the [Chart Magazine](#) area on its website which features articles, interviews and insights from a variety of sources on topical issues and future innovations for businesses, people and society. Climate change is a key theme for content and in the past 12 months research and articles have been shared that cover thought-provoking topics such as:

- **Why are grey whales starving?** - A 2020 study found a correlation between a reduction of sea ice in the Bering Sea and grey whale calving rates in Mexico
- **Imminent disaster in the Red Sea** - Urgent action is needed to stop a million barrels of oil spilling from an abandoned vessel into the Red Sea.
- **High-tech ship's hull coatings** - New ship's hull coatings promise to increase speed, reduce fuel consumption and eliminate marine growth.
- **The next generation of solar panels** - A new type of solar panel – lighter, more efficient and easier to manufacture – threatens to disrupt the renewable energy industry.
- **Bamboo as a steel replacement** - A radical new treatment for bamboo could see this natural product used instead of steel in the transport and construction industries.
- **Why are they filling New York Harbour with a billion oysters?** Pollution had stripped New York Harbour of its native oyster population. Now volunteers are working to bring them back. A billion of them.

<sup>5</sup> See evidence 6b

In addition to being hosted on MS Amlin's website, content is also shared with customer/clients across social media platforms, and through direct email communications.

*Source: MS Amlin*

### Lloyd's / The Market / QBE /Climate risk related customer support, tools and products

QBE works with clients and business partners to raise awareness of sustainability issues, manage risks and develop solutions. QBE offers events, seminars and publications that help clients and brokers build their risk management knowledge and sustainability awareness and assist customers in addressing sustainability issues through our products and services. Examples of some of the products and services are provided below:

Bushfires destroyed vast areas of Australia from late 2019 through to early 2020. QBE responded quickly with a dedicated Bushfire Catastrophe team to fast-track claims. We worked with our partners to create temporary locations in disaster-affected areas to expedite the claims process for our affected customers. We used our industry-first customer mapping tool to allocate resources and identify vulnerable customers. This innovative tool allowed us to assign appropriate responders and suppliers to a claim, freeing up our people to focus on the human side of things and provide individualised and empathetic customer service

Alongside the catastrophic fire season in the Western United States, the Atlantic hurricane season has also been at its most active since 2005. Using our powerful artificial intelligence tools, we sent proactive communications to customers identified to be in the path of disaster. With extreme winds making it impossible to assess fields across the Midwest, we also utilised drone technology to determine damaged versus salvageable acreage.

We continue to invest in technology, targeted communications, virtual assistance and 3D modelling to provide better and faster support to our customers when they need it most. We model approaching storm activity to identify where, and when, our customers might be at risk. This allows us to proactively communicate, alerting them to possible dangers. Our targeted email alerts give our customers time to put safety measures in place before a severe weather event hits, as well as providing them with information on how to report a claim.

Our Global Risk Solutions Practice is a community of risk engineers, risk management consultants and scientists. Together, they work with our customers on risk profiling and evaluation, accident investigation, business continuity, risk assessment, supply chain analysis, environmental management, client awareness forums

and training materials. The team uses technology to proactively engage business owners, making it easy for them to learn about, and plan for, the risks they face. In 2018, we launched a solution targeted at small to medium-sized businesses, honing their focus on risk management, and equipping them with expert knowledge, data and tools.

One of the innovative ideas that came out of our 2019 Global Challenge was to help our customers better understand sustainability and to provide them with a tool that can help them assess their sustainability risks. As a result of this, the risk solutions team has designed and built the QBE Sustainability Self-Assessment tool helps businesses to understand their current and emerging environmental, social and governance (ESG) risks and opportunities. Customers are asked a series of questions about their business and industry and, upon completion, receive a comprehensive, customised sustainability assessment report outlining:

- Environmental impacts to their business
- Key sustainability motivations
- The biggest sustainability challenges facing the organization
- Foundations of sustainability
- Sustainability recommendations across facilities, employee behaviour, supply chain, marketing, and communication

This tool further embeds sustainability into our business processes and enables us to share our passion and expertise for sustainability with our customers.

We have introduced a new mobile offering for selected new clients in Europe to make fleet telematics more accessible. The solution allows clients to reduce risk and fuel use, while encouraging safe-driving behaviours, as well as giving our underwriters the data they need to offer affordable premiums.

As renewable energy technology improves, over the past year, our team of Underwriters have stepped up to the challenge to deliver expert advice to support our customers. One of our Senior Underwriters in Asia is currently studying Renewable Energy Systems at the Singapore University of Social Sciences and our broader team have recently completed a Harvard course in 'Energy within Environmental Constraints', which has not only seen us build further knowledge in renewable energy technologies, but it has also helped us understand our customer's challenges and the industry better.

We offer a range of solutions that support our customers' transition to a low-carbon economy and manage the risks associated with climate change. In our Asia Pacific Operations, we have expanded our renewable energy portfolio, providing cover for solar farms across Vietnam and Korea. Some are set on floating pontoons in lakes, reservoirs and harbours. Floating solar farms are more efficient than normal farms because of the water's cooling effect, which can make the panels as much as 10% more effective, and limit water from evaporating.

Jupiter, a partner of QBE, offers a range of services for customers to assess their climate-related risks. Jupiter offers services for predicting specific perils and combined impacts. Please refer to section 3.2 for further detail.

### QBE European Operations

Our pricing and data science teams are developing a new generation of pricing and risk selection models blending machine learning, generalised linear models and other traditional actuarial techniques to enhance underwriting performance and decision making. We actively seek external data sources to augment our internal data and increase the quality of our algorithms.

Evidence also applies to principle(s): 3.1, 3.2, 5.1, 5.2, 6.1

Source: QBE Sustainability Report 2020 (p.8); CDP Climate Change Questionnaire 2021 (p.40, 46); The Weekly Edit: Helping our customers to integrate sustainability into their business.

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe views climate change as a driver of secular change, causing a material impact on all industry participants. It is considered of strategic importance that the magnitude of this impact is recognized throughout the market, and as such sharing research, data, and tools is considered of the utmost importance.

RenaissanceRe believes that direct engagement with its clients is at the heart of the underwriting role and helping clients to understand its risk view - including the impact of climate change - is a key element of the relationship. RenaissanceRe has a dedicated resource, its SVP Underwriting & Head of Global Public Sector Partnerships, who leads the group initiative to educate clients and potential partners on its climate change perspective; sharing research and insight with customers globally on a regular basis. RenaissanceRe believes it is well positioned to play a positive, stewardship role in the industry by sharing its skills and expertise with each of its stakeholders to ultimately help the world better manage climate risk.

RenaissanceRe's entrepreneurial and collaborative culture extends to its ESG approach, and a key value is encouraging and facilitating collaboration to generate solutions to the complex risks that are impacting society. Below are a few examples of RenaissanceRe's efforts to partner with others to both develop sustainable risk mitigation solutions, and provide tools and support to its stakeholders to enhance their climate risk understanding:

- Since 2008, RenaissanceRe has held 14 award-winning Risk Mitigation Forums bringing clients and brokers together with scientists and public policy makers. Among a host of topics with global relevance, the result has been the sharing of research and approaches to the management and mitigation of the changing risk from natural disasters due to climate change. The Forums have been an opportunity for RenaissanceRe Risk Sciences to share its own research as well as a chance to create an "environment of exchange" so participants can share ideas and capitalize on insights generated at each event. While there was no forum in 2020 due to the COVID-19 pandemic, RenaissanceRe has announced that its next forum will take place virtually in September 2021 and will be focused on 'Protecting Communities from Climate Change' through in-depth, results-focused discussions exploring the science behind climate change, what can be expected from its impact over time, and actionable ways to safeguard communities for the future.
- Through its role as co-Chair of the IDF's RMSG, RenaissanceRe is pursuing the broad adoption of open-source modeling tools and open-source exposure data standards. In effect, use of these tools would allow not just the insurance industry and developed economies but also developing nations to take control of their risk data. This groundbreaking technology will empower risk managers across commercial, sovereign, sub-sovereign, and humanitarian entities to quantify and manage the impact of climate change, with consideration of their own local geophysical and environmental circumstances.
- RenaissanceRe is a supporter of the Insurance Institute for Business & Home Safety (IBHS). During 2021, RenaissanceRe worked closely with the Working Group on Climate Adaptation sponsored by IBHS to develop the first Climate Change Adaptation Principles, which have been signed by representatives of the property insurance industry. Ultimately, this collaborative effort will promote climate resilience through building code improvements and greater structural integrity.

Source: RenaissanceRe Syndicate Management Limited



## Lloyd's / The Market / The Hartford

The Hartford helps our customers protect themselves from the risks associated with climate change and help them reduce their impact on the environment in several ways:

- Product Offerings:
  - Small Commercial

The Hartford currently serves over one million small business customers. Within our small commercial business, both property and general liability coverages are offered under a single package policy, marketed under the Spectrum name. Spectrum's base property offering includes a coverage extension for Ordinance or Law Coverage. This coverage helps protect customers from increased costs associated with repairs or replacement of damaged property caused by laws or ordinances enforced to regulate energy efficient or low carbon construction or repair. Examples of laws or ordinances covered by this policy extension are those mandating compliance with sustainable building practices. All Spectrum policies that have property coverage include the ordinance or law coverage extension.

- Middle & Large Commercial

The Hartford's middle and large commercial business is increasingly focused on the renewable energy sector in selling business and in supporting the renewable energy industry as a whole. The Hartford offers uniquely designed renewable energy products that provide end-to-end coverage for the solar, wind, fuel cell and biomass industries. As of December 31, 2020, 15% of written premiums in our energy business were written for policies related to energy efficiency. In addition, we doubled our renewable energy-related written premium in inland marine from 2019 to 2020, accounting for 7% of overall written premium in that business segment.

- Global Specialty

The Hartford provides management liability to companies that develop or have operations in renewable energy, energy efficiency and low carbon technology. Directors and officers insurance supports such companies and projects by providing protection against costly legal fees, whether securities-related or otherwise. Approximately 17.8% of written premium in our financial lines energy and utility portfolio, principally directors and officers insurance, is written for companies that engage in or support energy efficiency projects and operations.

Our environmental practice provides insurance products to a wide range of industries and companies that are

embracing sustainable practices and energy initiatives. We insure manufacturers, contractors and site owner-operators that support the development and growth of renewable and sustainable energy practices, and we actively pursue wind and solar farm and other green energy projects and properties. Our underwriting guidance allows underwriters to give customers that pursue sustainable practices (e.g., LEED) more favorable limits, deductibles, and pricing, as well as longer policy terms. When there is a loss, our products allow our insureds to repair, replace or restore the damaged property with products that meet green standards.

We are also actively executing on The Hartford's Coal and Tar Sands Policy by either non-renewing or not pursuing business opportunities within the scope of the policy. Within the Environmental practice, we identified at least 3% of our written premium as covering property and operations related to energy efficiency. In addition, for the rest of the environmental practice book of business, many of our insureds have implemented sustainable practices in their products or operations.

Our international marine and energy practice also insures a growing number of accounts that have non-carbon fuel based and renewable energy operations around the world.

- Personal Lines

We offer an Equipment Breakdown Coverage Endorsement to our homeowners insurance policyholders. This endorsement provides up to 125% of the replacement cost of the covered property if the insured replaces the property with independently certified, environmentally friendly property of otherwise like kind and quality. Approximately 7% of total homeowners policies in force as of December 31, 2020 include this endorsement.

The Hartford offers a policy discount between 1-5% for hybrid and electric vehicles. We insured nearly 36,000 of these vehicles as of February 28, 2021.

- The Hartford's dedicated Catastrophe Claims Operation team is available 24 hours a day, 365 days a year to help our customers through catastrophic events from preparation through recovery. The team provides guidance on associated risks, how to minimize damage and protect property, as well as actions to take following a catastrophic event. Examples of educational support include: [earthquake safety](#), [flood protection](#), [hurricane safety](#), [tornados](#), [wild fires](#), [winter storms](#) and other [severe weather events](#).
- Promoting environmental sustainability through our mutual fund business, launching The Hartford [Global](#)



[Impact Fund](#) and the [Climate Opportunities Fund](#) (formerly known as the Environmental Opportunities Fund) after joining the UN Principles for Responsible Investment (UNPRI) in 2016.

- Educational resources to help customers manage climate-related risks, operate in a more sustainable way and share The Hartford's green product offerings. Examples include:
  - [Green Your Business](#) – The Hartford's Business Owners Playbook
  - [Risk Engineering services](#) help customers create practical solutions that minimize loss and improve overall operations. These services include [on-demand training](#) on managing and mitigating specific business risks including environmental risks.
  - Green product information including Technical Information on [Green Construction](#) and an overview of [Builder's Risk Insurance](#)

#### **Additional Support Links:**

- [SASB Report](#)
- [2020 Sustainability Highlight Report](#), p. 17
- [CDP – C3.1f](#)
- [GRI – Disclosure #102-44](#)

Source: *The Hartford*

### [Lloyd's / The Market / Tokio Marine Kiln](#)

TMK is an active participant of ClimateWise, which represents a growing global network of leading insurance industry organisations to directly support society as it responds to the risks and opportunities of climate change. TMK CRO, Vivek Syal, is a member of the ClimateWise Insurance Advisory Council, a group of C-suite executives drawn from across ClimateWise's global membership base. They commission impact research into ways the insurance industry can support the zero carbon, climate-resilient transition.

Sufen Lim, Executive Director, TMK is a participant of the ClimateWise Managing Committee where meetings are held quarterly. Sufen is also a member of the Policy Engagement Task Force in 2020 where a thought leadership paper specifically focussed on Policy Opportunities on the road to Net Zero Underwriting was published in Q1 2021. The paper is a first step by the ClimateWise membership to showcase the vital role of insurance underwriting in meeting global climate goals, supporting the transition and enabling the societal

change and resilience. The intention is to raise awareness among policy makers and other decision makers of the unique expertise of insurance underwriting, its role in achieving net zero and potential barriers limiting the industry from maximising its role in the green transition. We do this through highlighting three key areas of contribution: (i) Sharing data and expertise, (ii) Product development to support green innovation, and (iii) Encouraging sustainable choices. Relating to these, we propose the following opportunities for policies and regulations, knowledge exchange and collaboration supporting consistency, partnership and mainstreaming resilience.

The distribution list of the white paper is to senior leaders of the insurance community but available widely to our customers on the ClimateWise website. The paper has generated good level discussions amongst the senior leadership and this has resulted in a Net Zero Underwriting Tools Task Force set up in 2021 as a follow up to further inform our customers on the tools that the insurers could use to evaluate climate change risks within their underwriting portfolio. TMK is also a participant of the Net Zero Underwriting Tools Task Force where we expect a publication in Q4 2021 to further inform our customers.

Furthermore, TMK Head of Innovation, Tom Hoad, has spearheaded the launch of the Lloyd's Product Innovation Facility – an initiative with over £100m of capacity designed to speed up (re)insurance product development for today's new and emerging risks. The PIF will bring forward new solutions for nascent risks, in direct answer to clients' evolving needs" by accessing the best ideas and data from the Lloyd's marketplace. In response to Climate Change, the PIF has engaged an insurtech company, Carbon chain in 2021 to work on quantification of carbon emissions across supply chains. This will help to close the gap in terms of the general lack of carbon emissions data amongst our customers, which is critical from a product innovation and development perspective to better service the emerging needs of our customers.

Source: [net-zero-underwriting \(cam.ac.uk\)](#) and [Product Innovation Facility - Lloyd's \(lloyds.com\)](#)

## 7. Enhance reporting

### 7.1 Submission against the ClimateWise Principles.

#### Lloyd's / The Corporation of Lloyd's

This document constitutes 'Lloyd's' response to the ClimateWise principle for the period covering 1 July 2020 – 30 June 2021. The Corporation of Lloyd's collates and submits this document on behalf of the Corporation of Lloyd's and the Lloyd's market members outlined in the front matter of the document, to provide an overview of activities undertaken by 'Lloyd's'.

As with previous years – although this has not previously been reported publicly – there have been no requests to exclude 'Lloyd's' from responding to any sub-principles, and this response will be publicly available on [Lloyds.com/ClimateWise](https://lloyds.com/ClimateWise) with previous year's responses when the independent report is released.

Evidence also applies to principle(s): 1.1, 1.3, 1.4, 3.1

Source: *The Corporation of Lloyd's*

#### Lloyd's / The Market / Beazley

Climate change is recognised at all levels of the organisation. Beazley's ClimateWise sponsor at Executive Committee and Board level is Adrian Cox, CEO. Beazley reports against all applicable sub-principles of the ClimateWise requirements, and offers a timely submission as part of the wider Lloyds market submission.

From 2022, we will be reporting independently of Lloyds, and will provide a direct submission to ClimateWise, detailing our progress against each of the principles.

Source: *Beazley*

#### Lloyd's / The Market / MS Amlin

Being a founder signatory to the ClimateWise initiative, MS Amlin continues to value the opportunity to collaborate with other industry practitioners to support the climate change agenda and since 2007 has reported annually against the ClimateWise Principles as one of the ways to demonstrate its contribution and commitment year on year.

MS Amlin's submission report for the ClimateWise Principles is currently made via the Lloyd's umbrella ClimateWise membership, but from 2022 it will be reporting independently.

Source: *MS Amlin*

#### Lloyd's / The Market / QBE

This document constitutes QBE's response to the ClimateWise principles and no requests to exclude QBE from responding to any of the sub-principles were submitted.

Climate change is recognised as an issue at Board level at QBE and has a ClimateWise sponsor at Board level.

Source: *QBE*

#### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

This document constitutes RenaissanceRe's submission to report against all ClimateWise sub-principles. RenaissanceRe's submission report for the ClimateWise Principles is formally made via the Lloyd's ClimateWise membership.

Source: *RenaissanceRe Syndicate Management Limited*

#### Lloyd's / The Market / The Hartford

This submission is for reporting year 2020 and follows the ClimateWise Principles. In addition to this report, The Hartford published its first TCFD report in November 2020 and SASB report in May 2021. The company has also disclosed to CDP annually since 2007.

Source: *The Hartford*

#### Lloyd's / The Market / Tokio Marine Kiln

ClimateWise Reporting to Lloyd's has been part of our annual reporting calendar since 2015 and the timely production is viewed by the Board as an essential part of monitoring and reporting our progress against each of the ClimateWise Principles.

Accordingly, our ClimateWise submission is prepared by the appropriate subject matter leaders in our business and is subject to ESG scrutiny to ensure that all relevant information is provided, and nothing is disclosed which cannot be properly evidenced prior to submission.

Source: *Tokio Marine Kiln*

## 7.2 Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.

### Lloyd's / The Corporation of Lloyd's

This document constitutes 'Lloyd's' response to the ClimateWise principle for the period covering 1 July 2020 – 30 June 2021. The Corporation of Lloyd's collates and submits this document on behalf of the Corporation of Lloyd's and the Lloyd's market members outlined in the front matter of the document, to provide an overview of activities undertaken by 'Lloyd's'.

As with previous years – although this has not previously been reported publicly – there have been no requests to exclude 'Lloyd's' from responding to any sub-principles, and this response will be publicly available on [Lloyds.com/ClimateWise](https://www.lloyds.com/ClimateWise) with previous year's responses when the independent report is released.

Similar information is also available in the annual report, across [Lloyd's.com](https://www.lloyds.com) and social media accounts, and internally to Corporation employees for transparency. This report goes into substantially more detail that can realistically be expected from the other sources.

In the annual report there are mentions of climate change in the following areas: External Environment (p13), Strategy (p17), Responsible Business (p18), and Risk Management (p25).

In 2020 we published our first ESG strategy and report, containing several climate-related initiatives. This follows our first report against the United Nations Global Compact which allowed us to align our vision, culture and operations with the world's largest corporate responsible business initiative.

**Evidence also applies to principle(s): 1.1, 1.3, 1.4, 3.1**

*Source: The Corporation of Lloyd's*

### Lloyd's / The Market / Beazley

We submit our ClimateWise report through Lloyd's and make a statement to this effect in our annual report. Lloyds publish the report they submit to CLimateWise, which includes our submission on the Lloyds website.

Our Annual Report and supporting Responsible Business Report draws out the key requirements of the CLimateWise principles, summarising our approach to corporate governance and outlining who is accountable for climate related risk, detailing how we incorporate climate matters into our strategy, identifying climate related risks and opportunities, citing our progress on reducing our environmental impact on the business and outlining our plans for the future. In May 2021 we published our Responsible Business Strategy, which

outlines our plans for the next three years. This also provides more detail on our progress on each of the CLimateWise principles, as well as committing to producing a standalone TCFD report at the end of 2021. This report will, given the alignment between TCFD and CLimateWise, result in further disclosure against the CLimateWise principles.

*Source: Beazley*

### Lloyd's / The Market / MS Amlin

MS Amlin publishes a copy of its ClimateWise report on its website <https://www.msamlin.com> and employee intranet to demonstrate ongoing commitment to the ClimateWise Principles

*Source: MS Amlin*

### Lloyd's / The Market / QBE

QBE recognises that ESG issues are critical to the sustainability of all businesses over the longer term, and that the insurance industry has an important role in ensuring these issues are appropriately prioritised across society.

As part of our commitment to PSI and PRI, we produce annual reports to demonstrate how these principles are integrated into our decision making, risk management and investment processes. Although the ClimateWise principles are not explicitly discussed within the annual report, the key elements and themes of the principles are discussed which details progress made against each topic. Further information about how QBE approaches sustainability issues more broadly can be found within the 2019 Sustainability Report.

The Lloyd's submission represents the annual statement of ClimateWise activities.

A statement from the Group CEO can be found within the 'Our approach to climate change' publication, which is available on our website, and demonstrates the commitment at the highest levels of our business to speaking about the impact of climate change, and the recognition of it as a business imperative.

**Evidence also applies to principle(s): 1.1, 1.3, 1.4, 3.1**

*Source: QBE Sustainability Report 2020; QBE Annual Report 2020; 'Our approach to climate change' (p.3) (available here: <https://www.qbe.com/about-qbe/sustainability/climate-change>).*

### Lloyd's / The Market / RenaissanceRe Syndicate Management Ltd

RenaissanceRe incorporates key elements of the ClimateWise Report content within its public filings, including its [Proxy Statement](#) and [Annual Report](#), comprising dedicated sections on climate change. RenaissanceRe's comprehensive external ESG website also houses information regarding its climate-related activities and commitments. This report is publicly disclosed on the website.

*Source: RenaissanceRe Syndicate Management Limited.*

### Lloyd's / The Market / The Hartford

The submission of this report will be disclosed on our public website following submission in August 2021. We also cite membership in ClimateWise in The Hartford's [2020 Sustainability Highlight Report](#), p.18.

*Source: The Hartford*

### Lloyd's / The Market / Tokio Marine Kiln / Our commitment to Climate Change

We disclose how we manage emerging risks, such as Climate Change, in our Annual Report and Accounts. Whilst not yet being a full disclosure, this is our first public report and we plan to continue preparing for TCFD disclosure.

Our ClimateWise Report is shared with our Head Office in Tokio and the information disclosed informs the annual Group Sustainability Report which is disclosed publicly.

*Source: Tokio Marine Combined Syndicate 510 Report and Accounts for the year ended 31 December 2020*

*Source: Tokio Marine Syndicate 1880 Report and Accounts for the year ended 31 December 2020*

*Source: Tokio Marine Reinsurance Syndicate 557 Report and Accounts for the year ended 31 December 2020*



# References

## Lloyd's / The Market / Beazley / References

### Table of Evidence

The following tables detail the supporting evidence to each of the CLimateWise principles, as outlined in Beazley's CLimateWise 2020/21 submission. Please note evidence has been referenced for its primary item within each clause, to help the audit process, however, does add to the volume of evidence for all points considered under the clause.

#### Clause 1.1

Submission Narrative	Evidence
Beazley Corporate Structure	<ul style="list-style-type: none"> <li>Page 63 of <a href="#">Annual Report 2020</a></li> </ul>
Board Oversight	<ul style="list-style-type: none"> <li>Reports demonstrating how board monitors and oversees progress:               <ul style="list-style-type: none"> <li>Page 9, 60, 73 and 77 of Annual Report 2020</li> <li>Page 3, 6 and 10 of <a href="#">Responsible Business Strategy</a></li> <li>Sustainability/ Responsible Business Update reports provided to both Executive Committee, Joint Boards and Plc Board</li> </ul> </li> </ul> <p>Climate risk governance PowerPoint</p> <p>BSD 2020 - A changing climate Final for circulation</p>
Incorporating Change into Business Strategy	<ul style="list-style-type: none"> <li>Beazley Board Training canvas FINAL</li> <li>Sustainability Officer/Head of Responsible Business Job Description</li> <li>Responsible Business Strategy</li> </ul>

**Clause 1.2**

<b>Submission Narrative</b>	<b>Evidence</b>
Senior Management Climate Risk Responsibility	<ul style="list-style-type: none"> <li>• Page 10 of Responsible Business Strategy</li> </ul>
Routine Updates for Senior Management and Committees on Climate-Related Issues	<ul style="list-style-type: none"> <li>• Reports informing Senior Management and Committees on Climate Risk issues:               <ul style="list-style-type: none"> <li>○ Quarterly Executive and Board Reports</li> <li>○ Corporate Development Sustainability Reports</li> </ul> </li> </ul>
Embedding Consideration of Financial Implications of Climate Change Risk As Business As Usual	Climate risk governance PowerPoint <ul style="list-style-type: none"> <li>• PRA Climate Risk Summary PowerPoint</li> </ul>

**Clause 2.1**

Submission Narrative	Evidence
<p>Prioritising Climate-Related Risks and Opportunities Across the Business and Investments</p>	<ul style="list-style-type: none"> <li>• Page 10 of <a href="#">Responsible Business Report 2020</a></li> <li>• Page 57, 58 and 59 of the Annual Report 2020</li> <li>• Page 6 of the Responsible Business Strategy Report</li> <li>• <a href="#">Responsible Business Investment Policy</a></li> </ul>
<p>Identifying Impact of Climate-Related Risks and Opportunities</p>	<ul style="list-style-type: none"> <li>• Page 6 of the Responsible Business Strategy</li> <li>• Page 12, 14, 15, 16, 18, 19 and 20 of the Responsible Business Strategy Report</li> <li>• Page 57 of the Annual Report 2020</li> <li>• Business Plan examples – Property and Covers</li> <li>• BSD 2020 - A changing climate Final for circulation</li> <li>• S2-0804 Catastrophe Risk - Dashboard V4.0</li> <li>• Example of TCFD Climate Related Risks Report - Energy</li> </ul>
<p>Developing Investment Strategy Addressing Implications of Climate-Related Risk and Opportunities</p>	<ul style="list-style-type: none"> <li>• Responsible Business Investment Policy</li> </ul>
<p>Leadership/ Strong Collaboration to Encourage Better Climate Disclosure and Further Research</p>	<ul style="list-style-type: none"> <li>• Email to CEO Adrian Cox confirming Beazley as a signatory for UN Principles for Sustainable Insurance</li> <li>• <a href="#">Web page confirming</a> CEO Adrian Cox as ClimateWise sponsor at Board/Senior Level</li> <li>• <a href="#">Web page confirming</a> CEO Adrian Cox as member of Lloyd's ESG Advisory Group</li> </ul>

**Clause 2.2**

Submission Narrative	Evidence
Setting Risk Appetite	<ul style="list-style-type: none"> <li>Page 150 of Annual Report 2020</li> </ul>
Measuring and Reporting Risk Appetite	<ul style="list-style-type: none"> <li>Page 62 and 149 of Annual Report 2020</li> <li>Exposure Management Group Terms of Reference</li> <li>S2-0804 Catastrophe Risk - Dashboard V4.0</li> </ul>
Incorporating Environmental risks in Wider ESG Metrics for Investment Process	<ul style="list-style-type: none"> <li>Page 2 and 3 of Responsible Business Investment Policy</li> </ul>
ESG Reports sent on behalf of shareholders/key stakeholders	<ul style="list-style-type: none"> <li><a href="#">Web page</a> on Beazley's Carbon Disclosure Project (CDP) report</li> </ul>

**Clause 2.3**

Submission Narrative	Evidence
Board Responsibility Identifying, Assessing and Setting Risk Appetite	<ul style="list-style-type: none"> <li>Page 57 of Annual Report 2020</li> </ul>
Climate Change Modelling Scenarios	<ul style="list-style-type: none"> <li>Page 10 of Responsible Business Report 2020</li> <li>2019 PRA GIST Return v2</li> <li>Beazley - Digital Climate Services - August 2019</li> <li>S2-0804 Catastrophe Risk - Dashboard V4.0</li> </ul>
Climate-Related Workstream	<p>Climate risk governance PowerPoint</p> <ul style="list-style-type: none"> <li>PRA Climate Risk Summary PowerPoint</li> </ul>



**Clause 3.1**

Submission Narrative	Evidence
Recognising Climate Change as an Emerging Risk	<ul style="list-style-type: none"> <li>Page 61 of Annual Report 2020</li> </ul>
Integrating Current Business Management and Processes into Overall Risk Framework	<ul style="list-style-type: none"> <li>Page 59, 61 and 62 of Annual Report 2020</li> </ul>
Stress and Scenario Framework	<ul style="list-style-type: none"> <li>Page 62, 149, 150 and 151 of Annual Report 2020</li> </ul>
Assessing and Reviewing Risk	<ul style="list-style-type: none"> <li>Page 58, 59 and 86 of the Annual Report 2020</li> <li>Page 10 of Responsible Business Report</li> <li>Section 4.7 to 5.1 of Q2020 ORSA report</li> <li>Example of Biannual group and strategic risk event summary documents (October 2020 R&amp;R)</li> <li>S2-0804 Catastrophe Risk - Dashboard V4.0</li> <li>Example of TCFD Climate Related Risks Report - Energy</li> </ul>
Tracking Current and Emerging Regulation	<ul style="list-style-type: none"> <li>Page 38 of Annual Report 2020</li> <li><a href="#">Environmental Policy</a></li> <li>Legal register</li> </ul>

**Clause 3.2**

Submission Narrative	Evidence
Developing Insurance Products and/or New Partnerships to Support Innovation for Climate-Related issues	<ul style="list-style-type: none"> <li>CEO Email to All Employees on ESG Consortium</li> <li>Page 10 of Responsible Business Report 2020</li> <li>Email summarising Redicova</li> </ul>

**Clause 4.1**

Submission Narrative	Evidence
Environmental Policy	<ul style="list-style-type: none"> <li>Environment Policy</li> </ul>
Procurement Policy	<ul style="list-style-type: none"> <li>Procurement Policy</li> </ul>
GHG Calculations	<ul style="list-style-type: none"> <li>Page 21 of Responsible Business Strategy</li> </ul>
Energy Consumption	<ul style="list-style-type: none"> <li><a href="#">Web Page</a> on 22 Bishopsgate Green Certification</li> </ul>
Environmental Working Group Initiatives	<ul style="list-style-type: none"> <li>Page 9 of Responsible Business Committee Executive Paper</li> </ul>

**Clause 4.2**

Submission Narrative	Evidence
GHG Emissions	<ul style="list-style-type: none"> <li>Page 21 of Responsible Business Strategy</li> <li>GHG emissions report <a href="https://www.beazley.com/documents/2021/Beazley%20GHG%20Methodology%20Summary.pdf">https://www.beazley.com/documents/2021/Beazley%20GHG%20Methodology%20Summary.pdf</a></li> </ul>

**Clause 4.3**

Submission Narrative	Evidence
Leased Offices	<ul style="list-style-type: none"> <li>Page 200 of Annual Report</li> </ul>
Renewable Energy Data	<ul style="list-style-type: none"> <li>Page 17 of Responsible Business Report</li> </ul>
Printing Data	<ul style="list-style-type: none"> <li>Page 17 of Responsible Business Report</li> </ul>

**Clause 4.4**

Submission Narrative	Evidence
Employee Engagement Activities	<ul style="list-style-type: none"> <li>• Email from Chair of Community Committee inviting colleague to join committee</li> <li>• Calendar invite for 'How Are We Doing Live' to All Employees</li> <li>• Calendar invite for 'Earth Day Q&amp;A Session' to All Employee</li> <li>• Page 10 of Responsible Business Strategy</li> <li>• Email from Responsible Business Executive to All Employees about Charity &amp; Community Week</li> </ul>
TCFD Workstream	<ul style="list-style-type: none"> <li>• Page 10 of Responsible Business Report</li> </ul>
Renewable World Charity Partnership	<ul style="list-style-type: none"> <li>• <a href="#">Beazley website article</a> on partnership</li> <li>• UREKA Q1 Project Update</li> </ul>
Impact Measurement	<ul style="list-style-type: none"> <li>• Email from B4SI with virtual Welcome Pack</li> <li>• Page 17 – 28 of Responsible Business Strategy</li> </ul>

**Clause 5.1**

Submission Narrative	Evidence
Key Material Issues	<ul style="list-style-type: none"> <li>• Page 12 of Responsible Business Strategy Report</li> </ul>
Collaborating with Others on Climate Change Matters	<ul style="list-style-type: none"> <li>• <a href="#">Web Page</a> on Lloyd's Disaster Risk Facility</li> <li>• <a href="#">Web page</a> on Lloyd's ESG Advisory Group</li> <li>• CBES Evidence</li> <li>• Email to CEO Adrian Cox confirming Beazley as a signatory for UN Principles for Sustainable Insurance</li> <li>• RE_ SMI Insurance Task Force - WS5 kick-off email and PowerPoint within</li> <li>• Email and content within FW_ Climate Litigation pilot</li> <li>• Email confirming involvement ClimateWise Net Zero Underwriting Case Studies Results and Next Steps</li> <li>• Email confirming speaker at Oceans of Knowledge conference: Fwd_ OOK Sponsorship Packages</li> </ul>

**Clause 5.2**

Submission Narrative	Evidence
D&O ESG Research	<ul style="list-style-type: none"> <li>• <a href="#">Web Page</a> on D&amp;O Research</li> </ul>
ClimateWise Net Zero	<ul style="list-style-type: none"> <li>• Email confirming involvement ClimateWise Net Zero Underwriting Case Studies Results and Next Steps</li> </ul>

**Clause 6.1**

Submission Narrative	Evidence
Responsible Business Reports on Public Domain	<ul style="list-style-type: none"> <li>• <a href="#">Beazley Web Page</a> on Responsible Business</li> <li>• <a href="#">Beazley Web Page on Annual Report 2020</a></li> <li>• Email confirming involvement ClimateWise Net Zero Underwriting Case Studies Results and Next Steps</li> </ul>

**Clause 6.2**

Submission Narrative	Evidence
Informing Clients on Climate Risk	<ul style="list-style-type: none"> <li>• Page 6, 12 and 20 of Responsible Business Strategy</li> <li>• Email confirming involvement ClimateWise Net Zero Underwriting Case Studies Results and Next Steps</li> </ul>

**Clause 7.1**

Detail provided in report, no supplementary evidence

**Clause 7.2**

Submission Narrative	Evidence
Responsible Business Strategy	<ul style="list-style-type: none"> <li>• Responsible Business Strategy</li> </ul>

## Lloyd's / The Market / MS Amlin / References

Confidential evidence shared separately:

Principle	Evidence
<b>Principle 1</b>	1a Climate Risk Timeline 1b Climate risk strategic review – success measures 1c Climate Risk Board Training
<b>Principle 2</b>	2a Areas of the risk register that require the most effort to identify the financial impacts of climate change
<b>Principle 3</b>	3a Article – Normative approach to Risk Management 3b Downwards Counterfactual analysis in insurance models
<b>Principle 4</b>	4a Procurement Policy v3.0 4b Procurement Standard v3.0 4c MS Amlin Supplier Code of Conduct (2020) 4d MS AUL Historical environmental performance metrics 4e ClimateWise – Insuring a sustainable future 4e Reminder Commuter and homeworking survey 4e ShelterBox event focuses on climate change 4e Winner of Clean Walk Challenge
<b>Principle 6</b>	6a MS & AD Net Zero 6b Forecast June 2021



## Lloyd's / The Market / QBE / Supporting Exhibits

---

- 2020 Annual Report
- 2021 CDP Climate Change Questionnaire
- E&S Risk Framework
- Helping our customers to integrate sustainability into their business
- QBE 2020 Sustainability Report
- QBE Group Environmental Policy May 2019
- QBE Insurance Group – Climate Change 2021

## Lloyd's / The Market / Tokio Marine Kiln / References

---

*Climate Group Update to ESG Committee Q2 2021*

*Tokio Marine Group CSR Report*

*Climate Risk Plan Update (ESG Committee Q2 2021)*

*Tokio Marine Group Sustainability Report*

*ESG Committee Terms of Reference*

*TMK AECOM report March 2021*

*Framework for the Climate Group*

*TMK Annual ORSA Report 2020*

*IST 2019 and its Climate Risk Implications*

*TMK Annual ORSA Report 2021*

*Model Completeness Framework*

*TMK ERM Framework*

*PRA C-BES 2021 Internal Mobilisation Pack*

*TMK Facilities Management*

*PRA's Insurance Stress Test 2019*

*TMK Intranet*

*Q2 2021 ORSA Lite Report*

*TMKS Board Risk Appetite Proposal (Q2 2021)*

# Appendix

## Lloyd's / The Market / RenaissanceRe Note on Forward Looking Statements

# Note on Forward Looking Statements

This 2020/21 ClimateWise Report of RenaissanceRe Holdings Ltd. contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which, with respect to future business decisions, are subject to change. These uncertainties and contingencies can affect actual results and could cause actual results to differ materially from those expressed in any forward-looking statements made by, or on behalf of, us. In particular, statements using words such as "may," "should," "estimate," "expect," "anticipate," "intend," "believe," "predict," "potential," or words of similar import generally involve forward-looking statements. For example, we may include certain forward-looking statements in the discussion and analysis of our financial condition and results of operations with regard to trends in results, prices, volumes, operations, investment results, margins, combined ratios, fees, reserves, market conditions, risk management and exchange rates. This 2020/21 ClimateWise Report also contains forward-looking statements with respect to our business and industry, such as those relating to our strategy and management objectives, market standing and product volumes, competition and new entrants in our industry, industry capital, insured losses from loss events, government initiatives and regulatory matters affecting the reinsurance and insurance industries.

The inclusion of forward-looking statements in this report should not be considered as a representation by us or any other person that our current objectives or plans will be achieved. Numerous factors could cause our actual results to differ materially from those addressed by the forward-looking statements, including the following:

- the uncertainty of the continuing and future impact of the COVID-19 pandemic, including measures taken in response thereto and the effect of legislative, regulatory and judicial influences on our financial performance and our ability to conduct our business;
- the frequency and severity of catastrophic and other events we cover;
- the effectiveness of our claims and claim expense reserving process;
- the effect of climate change on our business, including the trend towards increasingly frequent and severe climate events;
- our ability to maintain our financial strength ratings;
- the effect of emerging claims and coverage issues;
- collection on claimed retrocessional coverage, and new retrocessional reinsurance being available on acceptable terms and providing the coverage that we intended to obtain;
- our reliance on a small and decreasing number of reinsurance brokers and other distribution services for the preponderance of our revenue;
- our exposure to credit loss from counterparties in the normal course of business;
- the effect of continued challenging economic conditions throughout the world;
- the performance of our investment portfolio and financial market volatility;
- a contention by the United States (the "U.S.") Internal Revenue Service that Renaissance Reinsurance Ltd. ("Renaissance Reinsurance"), or any of our other Bermuda subsidiaries, is subject to taxation in the U.S.;
- the effects of U.S. tax reform legislation and possible future tax reform legislation and regulations, including changes to the tax treatment of our shareholders or investors in our joint ventures or other entities we manage;
- the effect of cybersecurity risks, including technology breaches or failure, on our business;
- the success of any of our strategic investments or acquisitions, including our ability to manage our operations as our product and geographical diversity increases;
- our ability to retain our key senior officers and to attract or retain the executives and employees necessary to manage our business;
- our ability to effectively manage capital on behalf of investors in joint ventures or other entities we manage;
- foreign currency exchange rate fluctuations;
- soft reinsurance underwriting market conditions;

- changes in the method for determining the London Inter-bank Offered Rate ("LIBOR") and the replacement of LIBOR;
- losses we could face from terrorism, political unrest or war;
- our ability to successfully implement our business strategies and initiatives;
- our ability to determine any impairments taken on our investments;
- the effects of inflation;
- the ability of our ceding companies and delegated authority counterparties to accurately assess the risks they underwrite;
- the effect of operational risks, including system or human failures;
- our ability to raise capital if necessary;
- our ability to comply with covenants in our debt agreements;
- changes to the regulatory systems under which we operate, including as a result of increased global regulation of the insurance and reinsurance industries;
- changes in Bermuda laws and regulations and the political environment in Bermuda;
- our dependence on the ability of our operating subsidiaries to declare and pay dividends;
- aspects of our corporate structure that may discourage third-party takeovers and other transactions;
- difficulties investors may have in serving process or enforcing judgments against us in the U.S.;
- the cyclical nature of the reinsurance and insurance industries;
- adverse legislative developments that reduce the size of the private markets we serve or impede their future growth;
- consolidation of competitors, customers and insurance and reinsurance brokers;
- the effect on our business of the highly competitive nature of our industry, including the effect of new entrants to, competing products for and consolidation in the (re)insurance industry;
- other political, regulatory or industry initiatives adversely impacting us;
- our ability to comply with applicable sanctions and foreign corrupt practices laws;
- increasing barriers to free trade and the free flow of capital;
- international restrictions on the writing of reinsurance by foreign companies and government intervention in the natural catastrophe market;
- the effect of Organisation for Economic Co-operation and Development or European Union ("EU") measures to increase our taxes and reporting requirements;
- changes in regulatory regimes and accounting rules that may impact financial results irrespective of business operations;
- our need to make many estimates and judgments in the preparation of our financial statements; and
- the effect of the exit by the United Kingdom (the "U.K.") from the EU.

As a consequence, our future financial condition and results may differ from those expressed in any forward-looking statements made by or on behalf of us. The factors listed above should not be construed as exhaustive. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to revise or update forward-looking statements to reflect new information, events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.