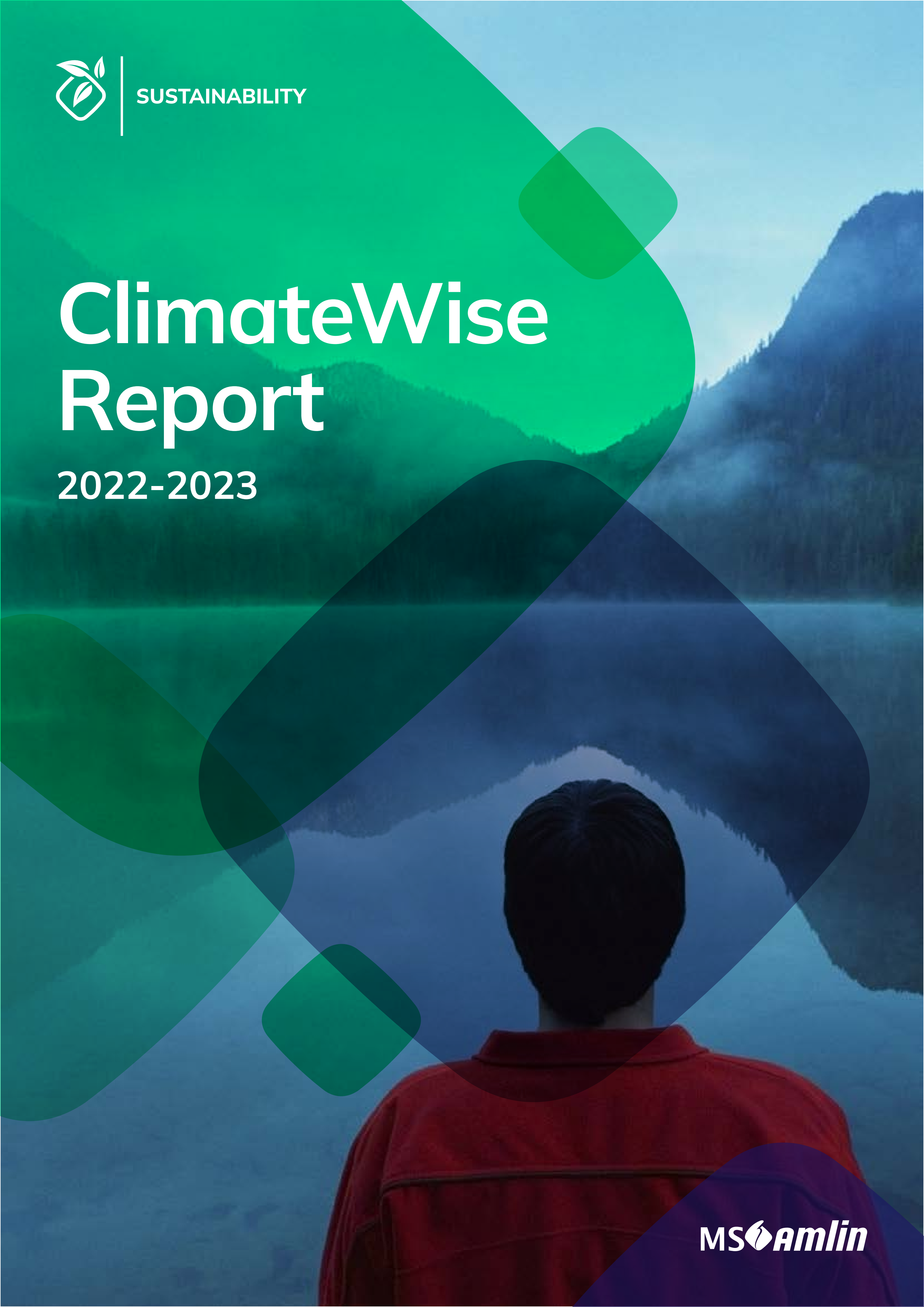
SUSTAINABILITY

# ClimateWise Report

## 2022-2023



MS Amlin

# Content

# **Principle 1:** Be accountable

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## 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

**1.1.1** The MS Amlin Underwriting Limited (MS Amlin) Board (the Board) has overall responsibility for setting and overseeing the implementation of the strategy, business performance, risk management, and ensuring high standards of corporate governance are maintained. The Board has a number of committees, to which it delegates oversight and decision making powers in accordance with documented Terms of References. It is through careful management in each of these aspects that MS Amlin can achieve its objectives and manage the risks and opportunities arising from climate change. Our Board provides ultimate oversight of material sustainability related risks and opportunities, including climate, and approves our Sustainability Strategy. The governance structure for sustainability and climate change is shown in Figure 1.1 below.

**1.1.2** The Board recognises that the impact of climate change on natural hazard events, amplified by significant and uncontrolled property stock, and population growth in vulnerable regions, is a major threat to the global economy and to the MS Amlin business model. The Board also recognises that existing societal issues may be exacerbated and the vulnerable are likely to affected the most as the cascading impact of climate change leads to health and food crises, forced migration, unemployment and poverty, social unrest, global conflict and security concerns, state failure, business interruption and market destabilisation. Given the pervasive nature of climate change in society and in our business, which affects not only catastrophe and physical damage classes but also Casualty, War and Terrorism, Political Risks and Product Recall classes, the Board has identified climate change (and sustainability, more broadly) as a key priority area.

**1.1.3** This is evidenced by:

- Setting a net zero 2050 target and agreeing key sustainability and climate change priorities for MS Amlin.
- Ongoing liaison with Head Office and stakeholders such as Lloyd's and the Prudential Regulation Authority (PRA), alongside participation in market initiatives and forums.
- Clarifying our purpose in relation to Sustainability and Climate Change acknowledging that MS Amlin's commercial ambitions and societal obligations are intrinsically linked. Providing regular updates to employees at Townhalls on progress.
- Adopting the UN Sustainable Development Goals (UNSDGs) framework and providing training workshops for all our staff to develop climate change and broader sustainability knowledge, and select priority UNSDGs .
- Creating mandatory ESG (Environmental, Social, and Governance) Underwriting Guidelines that set out: 1) MS Amlin's expectations of Insurance Underwriters to include relevant ESG factors in the underwriting process and evidence this in the underwriting file notes; 2) ESG related Underwriting Exclusions / Red Lines; 3) Risk types that require referral to the Chief Underwriting Officer (CUO) or Deputy CUO; and 4) Guidance on areas of Heightened Focus. This will now form part of the Internal Risk Review, with supporting metrics and the CUO being informed of how this work is progressing within each portfolio over time.
- Undertaking a Board (training) update on climate change and sustainability (June 2023), which apprised Board members on the embedding of sustainability and climate change within the business, the development of ESG and climate risk metrics, and the Board's responsibilities on climate change.

Sustainability Governance Approach


Figure 1.1 Sustainability Governance Approach

- Approving the 2022 Bank of England (BoE) Climate Biennial Exploratory Scenario – part 2 (CBES 2) responses to four questions, prior to submission to the PRA. Evolving the CBES work to develop a clearer view of what transition risk means to MS Amlin's underwriting portfolio and, alongside further analysis on physical and litigation risk, using this to create an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making.

- Implementing the recommendations arising from a governance review that considered the Board's oversight of climate related risks and opportunities, in the context of regulatory requirements e.g. PRA Supervisory Statement SS3/19, Lloyd's ESG Guidance October 2021, Lloyd's Principles of Doing Business 2022 and other committed obligations (e.g. English Law, ClimateWise Principles, Obligations to Head Office and Colleagues).

- Providing Board members and employees with a combination of training sessions and updates on sustainability, climate risk and natural catastrophe modelling/exposure management topics e.g. the results of a review of the natural catastrophe models used by MS Amlin in the context of climate change, model completeness, and model reliability.

- Completing an internal audit of our approach to climate change, commissioned by the Audit Committee

**1.1.4** The Board believes that insurance is an enabler for equitable, affordable and rational transition to net zero and that it is entirely possible – through innovation, collaboration and by drawing on MS Amlin's deep underwriting expertise – to build a valuable, profitable and prestigious business whilst tackling climate change, preserving nature and addressing society's changing needs. The Board believes that it is responsible to offer thoughtful capacity (i.e. insurance that supports fair transition) and that it is good business sense to incorporate climate change into our overall business strategy. This is evidenced by:

- Nominating Martyn Rodden (MS Amlin Strategy & Transformation Director), as the Executive Management Committee member responsible for climate change. Martyn represents MS Amlin on the ClimateWise Insurance Advisory Council and is Chairman of the our Sustainability Committee (see Principle 1.2.2). He is the named executive with regulatory responsibility for climate change.

- Appointing Amir Sethu to the role of Head of Sustainability and ESG in Q4 2021, which further signals our commitment to the climate change and broader Sustainability agenda. Amir reports to Martyn Rodden. He is Chair of the Lloyds Market Association (LMA) Sustainability Committee and a member of the LMA Climate Risk Working Group and ClimateWise Managing Committee.

- Appointing Maurice Rose (Senior Enterprise Risk Manager) to the role of MS Amlin Climate Risk Working Group Chair. Maurice supports the integration of climate risk across MS Amlin and the MS Amlin Risk Management Framework, whilst also providing second line challenge around key sustainability issues.

- Setting a Sustainable Underwriting Philosophy and Responsible Investment Policy for MS Amlin, which communicates our beliefs and strategy on climate-related issues to our clients, supports our sustainability narrative and helps in responding to information requests regarding MS Amlin's position on climate change.

- Conducting training sessions (for underwriters, claims handlers, corporate lawyers and other relevant parties in the business) on Climate Litigation Risk. These training sessions were provided by external law firms with appropriate expertise.

- Submitting MS Amlin's response to a questionnaire developed by the PRA for CAT 2 firms that seeks to assess compliance with the PRA's Supervisory Statement SS3/19 – a number of relevant parties within MS Amlin were involved in drafting responses to the questionnaire, which were reviewed by our Climate Risk Working Group and Climate Risk Controller, prior to submission in June 2023.

- Undertaking a stakeholder mapping exercise that concentrated on understanding and encompassing our stakeholders' wide range of expectations about the role of MS Amlin in society. These expectations are not mutually exclusive and there is an underlying theme amongst all stakeholder groups that doing the right thing will create enterprise value.

- Implementing updated governance arrangements for climate change and sustainability, which were developed in 2021-22 and designed to support MS Amlin in its delivery against the ClimateWise principles and regulatory requirements, align climate risk strategy to the existing risk appetite and Exposure Management Framework, and embed Sustainability and Climate Risk Management within business as usual.

**1.1.5** The governance review referenced above identified the roles and responsibilities of the Board and Board Committees as regard to sustainability and climate change. The Board Committees include the Risk and Solvency Committee, Underwriting Oversight Committee, Audit Committee and Investment Governance Committee.

## 1.2 Describe management's (below board-level responsibility) role in assessing and managing climate risks and opportunities

**1.2.1** MS AUL's Executive Management Committee (the Exco)

The Exco reviews and challenges the design and implementation of our Sustainability Strategy, receiving updates throughout the year and incorporating sustainability considerations within strategic decision making. The Exco is chaired by MS Amlin's CEO, whose remuneration is linked to sustainability and climate targets, which are part of his annual objectives that are agreed with the Board and cascaded to other Exco members and all our employees.

**1.2.2** MS AUL's Sustainability Committee (the Sustainability Committee)

The Sustainability Committee convenes quarterly and includes three Exco members (Strategy & Transformation Director, Director of Underwriting Performance and Chief People Officer), alongside senior level representatives (i.e. Head of Department or equivalent) from across the business who have authority, influence and motivation to prioritise climate change on our strategic agenda. The Strategy & Transformation Director chairs the Sustainability Committee and there is an open invitation to Risk Management and Compliance functions as well as shareholder representatives and MS Amlin's CUO. Minutes are available to all Exco members.

The roles and responsibilities of the Sustainability Committee, as set out in its terms of reference that were agreed by the Committee members, have been mapped to the Board and other Board Committees, including the Exco, Risk and Solvency Committee, Underwriting Oversight Committee, Investment Governance Committee, and Audit Committee. The agendas of the meetings are broadly aligned with the TCFD principles (governance, strategy, risk management, and metrics and targets) and external third parties are invited to the meetings to share relevant perspectives (e.g. the co-chair of the LMA Climate Risk Working Group and an ESG expert from Oxbow Partners presented to the Sustainability Committee in October 2022 and January 2023, respectively). Each quarter the Board (and other Board Committees, where appropriate) receive a report from the Head of Sustainability and ESG for discussion and to review and approve recommendations.

The Sustainability Committee helps MS Amlin to be a responsible, resilient and sustainable business. In doing so, it will:

- Support the embedding of sustainability within our commercial philosophy by harmonising internal employee & external client propositions.
- Ensure we are well placed to fulfil our regulatory, and other committed sustainability related obligations.
- Encourage a more coordinated approach to decision making, which incorporates sustainability considerations, by aligning the various components of climate change and sustainability related work across MS Amlin.

While the Sustainability Committee has multiple priorities across sustainability related topics, climate change is one of the key priorities, given what we have set out in Principle 1.1 above. The roles and responsibilities of the Sustainability Committee are set out in its terms of reference and cover:

- MS Amlin's performance in implementing its sustainability strategy
- Global developments in sustainability, including evolving best practices and emerging issues
- Compliance with material regulation and legislation on sustainability issues
- Sustainability targets and KPIs
- Sustainability related risk management
- Data requirements and sustainability reporting
- Communications and marketing

The Sustainability Committee members work actively in their business-as-usual roles to embed sustainability and climate change within business processes and delivering components of our company's strategic plan and Risk Framework relating to climate change. They are supported by working groups, discussed in section 1.2.4 below.

The Sustainability Committee commissioned a review of progress against plan, which was undertaken by a member of the strategy team who has not been involved in sustainability work. The review concluded that the Sustainability Strategy is far-reaching, has influence across the organisation, and is progressing well against plan. Thoughtful and pragmatic progress has been made and there are a few areas where more progress is needed, especially with respect to scenario analysis capabilities, hence MS Amlin has not reached what could be considered an 'end state' across all areas. We believe that this is not out of kilter with the rest of the market.

**1.2.3** Other Management Committees

Risk classes which are impacted by climate change were regularly reviewed by a dedicated Catastrophe Risk Management Committee (CRMC). The purpose of the CRMC was to provide an effective control framework over the management and reporting of current annualised catastrophe risk exposures. The CMRC also reviewed the suitability of the current catastrophe model suite, in the context of recent actual catastrophe events and relevant new science, and directed any research into areas where the catastrophe models diverge from current scientific understanding, or our own loss experience. The CRMC recommended to the Model Governance Committee (MGC), which oversees the capital Internal Model, the adoption of adjustments to our view of risk, noting observations or areas of concern that relate to risks impacted by climate change. The CRMC held this role until June 23 and since then has been replaced by senior governance, before the MGC makes the final decisions.

Impacts from climate change are also considered by the MS Amlin Investment Governance Committee (IGC) whose main role is to oversee the material outsourcing of investment management, in line with agreed investment guidelines and to monitor the investment performance, risk appetite, asset allocation, governance, operations, and compliance of MS Amlin's investments. The IGC receives management information (MI) on the above, which also includes ESG metrics that provide insight at a portfolio and asset level.

**1.2.4** Working Groups

Climate Risk, Sustainability Reporting, and Operations Working Groups have been convened to support and further align the heavy lifting that is happening in the business already and mobilise resources to execute relevant actions. Further working groups may be set up, depending on business needs. One of the outcomes expected from the working groups is an assessment of what additional resources are required to deliver against our agreed priorities.

During 2022, our focus on developing a strategic response to the material financial risks arising from climate change, the Climate Risk Working Group (CRWG) was strengthened through enhanced membership and clear accountabilities therein, the development and agreement of more formal terms of reference, and a regular cadence of meetings (every 4-6 weeks). The CRWG focused on considering what strategic foresight was gained from the Climate Biennial Exploratory Scenario (CBES) exercise, how we embed the aspects of CBES that are most relevant to MS Amlin within existing Risk Modelling, and how this translates into meaningful and applicable risk appetite and tolerance metrics. The CRWG will help the business to determine how resilient MS Amlin is to disruption (i.e. the extent to which we can adapt) and provides input to the Sustainability

Committee. Further details of the CRWG's focus activities over the next 12-18 months have been set out in Principle 3.1.4.

The Sustainability Reporting Working Group continued to stay abreast of evolving, current and future reporting obligations, ensuring that MS Amlin fulfilled its commitments. Given the onset of new frameworks and standards (e.g. ISSB, CSRD) which have varying degrees of direct relevance to MS Amlin, the Sustainability Reporting Working Group has obtained support for the hiring of a dedicated ESG Reporting Specialist – recruitment is currently underway.

**1.2.4** Head of Sustainability and ESG

Amir Sethu (Head of Sustainability and ESG) is responsible for developing and implementing a coordinated sustainability strategy that:

1. Supports MS Amlin's overall strategy and growth plans.
2. Focuses on long term value creation and resilience; and
3. Aligns with MS&AD Group's global sustainability strategy.

Given sustainability and climate change affect every part of MS Amlin's business, the Head of Sustainability and ESG works with different business areas, individuals and market participants outside of the business, building relationships and networks, connecting the dots on Sustainability related matters and helping us to prioritise focus areas and implement change. The focus this year has been on upskilling colleagues on sustainability and climate related matters, and explaining how sustainability and climate change is relevant to MS Amlin's business.

In 2022, the Head of Sustainability and ESG undertook a stakeholder analysis to understand and encompass our stakeholders' wide range of expectations about the role of MS Amlin in society. These expectations are not mutually exclusive and there was an underlying theme amongst all stakeholder groups that doing the right thing will create enterprise value. We believe that good communication will help us to develop trust with all stakeholders and clearly articulate needs, expectations and challenges, whilst creating opportunities.

| Areas of improvement in 2022-3 | Future plans over the next 12-18 months |
|---|---|
| MS Amlin has:<br>• Developed a Board approved Sustainability Strategy designed to support the business strategy, ensure that MS Amlin remains relevant and create value for all of its stakeholders by doing the right thing.<br>• Created Responsible Underwriting and Investments Policies; adopted Insurance ESG Underwriting Guidelines, providing training to all senior insurance underwriters.<br>• Evolved the Climate Risk Working Group, which has begun to develop metrics for Climate Physical, Transition and Liability Risk.<br>• Achieved positive ESG outcomes with Lloyd's; Oversight of implementation of the ESG Roadmap by the Sustainability Committee<br>• Continued use of TVAR metric to identify highest ranked region-peril within MS Amlin's worldwide natural catastrophe portfolio.<br>• Adopted the ESG Underwriting Heat Maps to measure the sustainability performance of the insurance underwriting portfolio and help Underwriters to understand the Sustainability risks and opportunities within their books of business.<br>• Started to pilot a measurement approach for assessing transition performance for parts of our portfolio that we expect to have the highest carbon footprint; we plan to use this to help compare year-on year progress and promote conversations with our clients on their net zero journeys.<br>• Started to develop qualitative Climate Transition and Liability Risk metrics that reflect the pace and extent at which an entity adapts to a low-carbon economy.<br>• Developed ESG Investment metrics that include an overall ESG portfolio score, Weighted Average Carbon Intensity (WACI) for the portfolio and analysis by: Asset Type, Currency, Country and Sector. | MS Amlin intends to:<br>• Build upon and further develop our climate risk metrics, setting meaningful targets, which the business can monitor and hold itself accountable for.<br>• Continue to use the ESG Underwriting Heat Maps to assess the overall ESG performance of the insurance underwriting portfolio and as a key input the 2024 business planning process.<br>• Continue to capture ESG Underwriting case studies, which have been shared within and across underwriting teams to provide learnings, identify themes and encourage consistency, where appropriate, weighing this against the nature of exposures arising from each business line.<br>• Embed the ESG Underwriting Guidelines through consultation, training and independent review and feedback to Underwriters.<br>• Undertake an Internal Audit of the measurement approach that is being piloted for assessing transition performance for parts of our portfolio that we expect to have the highest carbon footprint.<br>• Recruit a dedicated ESG Reporting Specialist to support with the adoption of a PCAF aligned methodology to measure and report on underwriting supply chain emissions<br>• Embed ESG within fund manager mandates, specifically considering: How MS Amlin's ESG scores compare to peers if there are any obvious areas for improvement; Assessments being applied to third party fund managers, and if their ESG scores are materially different to our portfolio average; and if there are 'low hanging fruit' ways of improving our ESG credentials without impeding investment returns (or indeed driving alpha) |

# **Principle 2:** Incorporate climate-related issues into our strategies and investments

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

**2.1.1** Our Climate Change Strategy

The Board recognises that the impact of climate change on natural hazard events is a major threat to the global economy and to the MS Amlin business model. This is covered in more detail in Principle 1.1 and Principle 3.1.2.  Given the pervasive nature of climate change in society and in our business, the Board has identified climate change (and Sustainability, more broadly) as a key priority area.

As a (re)insurance business, focused on underwriting complex risks, our business is well positioned to support sustainable economic development; for example, by insuring clean energy installations, public infrastructure, charities, and non-governmental organisations, supporting the safe decommissioning of brown assets, and promoting the use of decarbonisation technology, where possible. We are also well placed to support and influence clients through net zero transition, strengthening collaborative efforts towards building an inclusive, sustainable, and resilient future. We believe that it is entirely possible, through innovation and collaboration, to build a valuable, profitable, and prestigious business whilst addressing society's changing needs, tackling climate change and preserving nature. In other words, we not only have a moral obligation to respond to climate change but also believe that this is good for business and an integral part of our strategy.

Our Sustainability Strategy – which was developed over a 9 month period, was designed to support the business strategy, and built around the core ethos of creating enterprise value by doing the right thing  – was approved by the Board in September 2022 ahead of submission to Lloyd's of London, alongside the Syndicate Business Forecast (SBF), i.e. the Business Plan. The Sustainability Strategy is anchored around nine priority areas, as set out in Figure 2.1 [see page 9].

As a (re)insurance business, we are best placed to have an impact through our underwriting and investments, which is why we have adopted responsible underwriting and responsible investment policies, focused on supporting fair transition, which is aligned with the Paris Agreement, but goes beyond the net zero metric, taking into consideration the trade-offs between environmental performance and impact on societies; for example, in emerging markets.

The Sustainability Strategy looks to ensure that we remain relevant as a business and creates value for all of its stakeholders. To measure and monitor progress, and support decision making, we have started to use data and qualitative and quantitative metrics, where appropriate, whilst navigating the risk of triggering unintended consequences. These metrics are considered later in this report and include: ESG Underwriting Heat Maps (Principle 2.2.1.1), ESG Underwriting Case Studies (Principle 2.2.1.3), ESG Investment metrics (Principle 2.2.2), Climate Physical Risk metrics (risks that relate to weather events), Climate Transition Risk metrics (risks arising from the process of adjustment towards a low

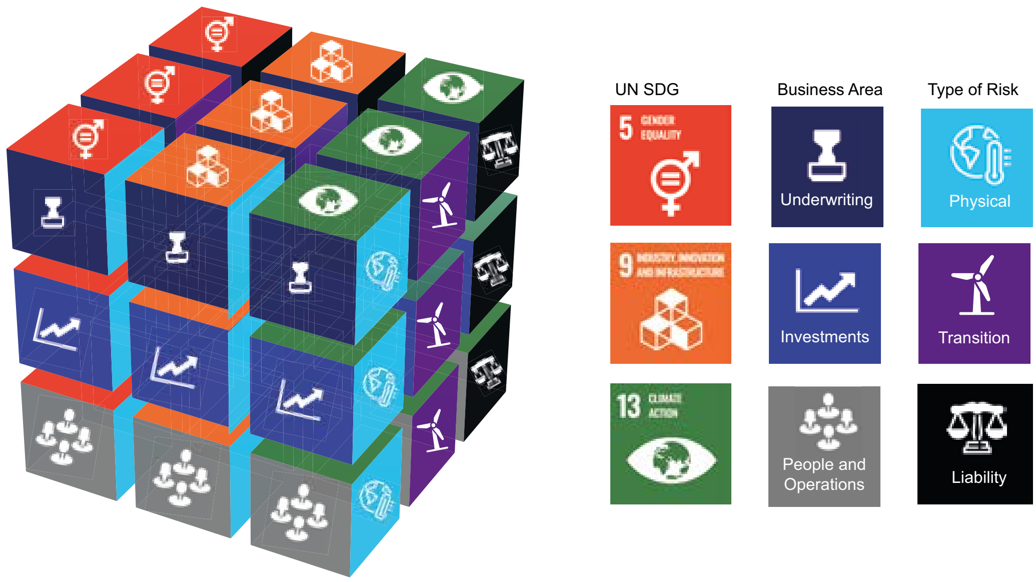



Figure 2.1: Our Sustainability Strategy blocks

carbon economy), and metrics to monitor the impact MS Amlin, and its people are having within our communities. For Climate Liability risk (risks arising from climate related litigation) we have agreed our risk appetite and are working with legal experts and affected underwriters to consider what type of metrics may be most relevant to this area, what data we require, and its availability.

We have adopted and applied risk management techniques and strategic planning processes, including climate scenario analysis, to consider how the future might conceivably develop; how a diverse set of climate and related risks may impact our business; and how resilient our strategy is to potential disruptions (i.e. the extent to which we can adapt).

We recognise that financial risks arising from climate change (Physical, Transition and Liability) manifest as increasing underwriting, reserving, market, credit, or operational risk in our business. We broadly consider physical risk from a more immediate standpoint compared to transition or liability risks. However, all risks are increasingly being considered across a range of time horizons from the immediate to the long-term. The impact of climate-related risks on our business, strategy, financial planning, and risk register is covered in more detail in Principle 2.3 and Principle 3.1 Climate-related opportunities, which have been discussed by the Sustainability Committee and prioritised as follows.

### **2.1.2** Underwriting

MS Amlin maintains a materiality ranking of region-perils for its worldwide natural catastrophe-exposed business. This is one output of the Exposure Management Framework (EMF), which groups low materiality country-perils into regional buckets for practicality in reporting and monitoring, while isolating high and medium materiality country-perils for focus. The ranking metric is the modelled 1-in-100 Tail Value at Risk (TVaR). The ranking table is updated quarterly in-line with exposure change through the year. The highest ranked region-peril at January 2023 is US/Caribbean hurricane, which forms more than 80% of the 1-in-100 TVaR total for the MS Amlin worldwide natural catastrophe portfolio. This includes hurricane risk in the U.S., Mexico, Canada, and the Caribbean. By comparison, North America severe convective storm, North America winter storm and California wildfire have low materiality rankings of 1% or less. This high material exposure to US/Caribbean hurricane is a deliberate business strategy based on its profitable position on a risk-reward efficient frontier specific to MS Amlin. However, this makes it imperative for the business to understand the impact of climate change on the frequency and severity of hurricanes in the North Atlantic and the Gulf of Mexico. Research into the impact of climate change and a recent assessment of the appropriateness of the natural catastrophe model used in managing this risk is discussed below in Principle 3.2.1

MS Amlin, operates through six underwriting departments, with each constituted by a number of sub-classes. The business areas that we are exposed to, from a climate risk perspective, are shown in figure 2.2:

| Department | Potential impacts from Climate Risk | Climate risk type |
|---|---|---|
| Reinsurance | HIGH | Physical and Transition |
| Natural Resources (Including Energy) | HIGH | Physical and Transition |
| Property | HIGH | Physical and Transition |
| Marine | MEDIUM | Physical, Transition and Liability |
| Casualty | MEDIUM | Liability |
| Crisis Management (including Political Risks and Product Recall) | MEDIUM | Physical & Transition |

Figure 2.2: Climate risk impact for MS Amlin departments

Findings from the CBES exercise would suggest that:

- Our business will likely to be able to withstand the capital implications of transition (see principle 2.1.2.1)
- Households / homeowners are most vulnerable to physical risk (higher insurance premiums / unavailability of insurance, which may lead to re-mortgage issues) and,
- Directors and officers (D&O) is most likely to pay out for liability risk (greenwashing, financing of Green House Gas (GHG) emissions, fiduciary breach).

During 2022, we undertook work to further understand the limitations of the approaches adopted and models used. This is covered in more detail in Principle 2.3 and Principle 3.1.

We have well established processes in place that are used to evaluate the implications of climate change on underwriting business performance. This includes an embedded Exposure Management Framework and oversight from committees such as the Risk and Solvency Committee, Audit Committee, Exco, CRMC, Underwriting Oversight Committee and Investment Governance Committee (see Principle 1.2.3 for details).

We believe that specialist insurance products for new technologies linked to greening the economy will evolve over time. We also believe that insurance for new technologies could use existing or adapted wordings and product ranges. Understanding new exposures and emerging risks is key. As an example, the Felicity Ace ship fire in 2022 emphasised the need to consider stability and thermal conductivity of electric car batteries. More recently, with the increase in interest and concern about climate change - including amongst artists – the fine art world has been exploring and advocating the climate benefits, due to a lower carbon footprint of sea freight over air freight. This has ramifications for Marine Specie insurance and has resulted in a new policy clause being drafted for use, as it will bring about new risks to insurers. There has been further development of approaches to respond to the risks and opportunities arising from climate change on both the business and our clients, and we have set out below some specific examples which are aligned to the strategic direction of the company, whilst further example of R&D have been included in Principle 5.3.1.

### 2.1.2.1 Climate Transition Risk

This is the risk that arises from the process of adjustment (i.e. pace and extent at which an entity adapts) to a low-carbon economy, which is influenced by:

- Legal and regulatory policy
- Disruptive technology or business models
- Shifting market sentiment and societal preferences

We have set out below examples of what transition risk could mean to our underwriting portfolio and, alongside further analysis on physical and litigation risk, plan to use this to create an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making.

| Climate-related Transition Risks | Potential Financial Impacts for MS Amlin |
|---|---|
| **Policy** | |
| • Introduction of carbon pricing for financial services / Lloyd's or PRA carbon loadings<br>• Enhanced emissions reporting obligations (e.g. Lloyd's PCAF, H/O)<br>• Regulation of existing products and services to limit supply or demand<br>• Low carbon incentives (IRAS, EU Green Deal Strategy)<br>• Sudden shift in policy taxes as climate becomes a top issue among voters<br>• Greater reliance on Governments as insurers of last resort | • Increased operating costs and cost of capital; portfolio re-alignment; strain on DUA teams<br>• Increased demand for new and adapted insurance products and services<br>• Increased cost of / inability to purchase reinsurance<br>• Reduced demand for existing insurance products and services<br>• Incentives for insurance solutions for clients looking to invest in and evolve green technology<br>• Prerequisites for MS Amlin to participate in government insurance tenders |
| **Technology or Business Model** | |
| • Substitution of existing products and services with lower emission options<br>• Renewables become new baseload, accounting for 50% power mix by 2030<br>• Flexible assets (gas, H2, batteries) become key for grid stability and decarbonisation<br>• Undue dependency on new technologies to be rolled out at scale (e.g. CCUS)<br>• High thermal conductivity of electric batteries / storage devices<br>• Proliferation of electric infrastructure, with low level charging ports on all buildings<br>• New business models emerge as value chains dismantled to spread risk<br>• Emergence of new green tech for which there is little / no historical data and modelling | • Re-assessment of reserves due to early retirement / impairment of stranded assets<br>• Reduced lead time to develop credibility and expertise in insurance of renewables<br>• Client demand for new insurance product lines, as they shift to "full value chain" models<br>• Failure of clients with monoline fossil fuel dependent business models<br>• Increased fire peril for risks where batteries / EVs are involved e.g. Cargo risks<br>• Increased Property BI exposure from flood / other perils that disrupt electrical connectivity<br>• Increased demand for Product Recall insurance for new and untested technologies<br>• Challenging price adequacy / loss making risks / reduced commercial appetite |

### 2.1.2.2 Natural Catastrophe Reinsurance

| Market Sentiment | |
|---|---|
| • Reduced demand in crude oil before 2030 driven by increased uptake of EVs and growth in bio/alternate liquid fuels<br>• Extreme weather causing water scarcity / crop failure, leading to food and health crises, social unrest, market subversion or conflict<br>• Emergence of circular approaches that shift industries towards extending the life cycle of products and services as long as possible<br>• Stigmatization of sectors (e.g. aviation) that don't have credible transition plans, as NGOs and activists grow their influence<br>• Changing expectation of brokers and clients, who are looking to promote their ESG / anti-ESG credentials<br>• Extreme weather causing pollen allergenicity, particulate pollution, and more respiratory, cardiovascular and infectious diseases<br>• Calls for high integrity carbon markets and windfall taxes on fossil fuel companies to subsidise those impacted by climate change<br>• Increased demand for air-conditioning and refrigeration; water shortage for power plants leading to outages and greater heat stress<br>• G7 / OECD impel loss and damage compensation to emerging markets, boosting funding development bank/multilateral funding | • Re-calibration of pricing for insurance for renewable risks, as solar and wind become the new baseload<br>• Demand for PV insurance increases with increased competition for resources and climate inequality<br>• Demand for new / adapted Product Recall products where clients move to Xerox model (i.e. lease over buy)<br>• Forced adaptation / obsolescence of existing product lines (e.g. art world shifted from air to sea freight)<br>• Increased consideration for how we are viewed by brokers and clients, where we have an appetite to participate on certain risks<br>• Re-evaluation of risk profile of A&H account; 2nd order impacts on D&O from class action lawsuits<br>• Increased NGO and activist pressure for windfall taxes to be extended to fossil fuel company bankers / insurers<br>• Shift to more real time technical pricing due to abrupt and unexpected shifts in energy costs and parametric insurance<br>• Increased demand for credit insurance and insurance products with resilience features (cyclone or flood proofing when rebuilding after claims) |

We continue to develop our own view of risk in the changing environment, to help underwriters discuss the changing trends they see driven by climate risk; a specific example being Flood and an increased incidence of severe losses. In the wider reinsurance team we are seeing increased interest on the topic of climate change and will continue to work with our clients and partners to identify possible solutions.

Our Catastrophe Underwriters indirectly assume financial responsibility for major events impacting people worldwide, and our ability to assume this risk competitively should feed back to the cedent a reduced cost of insurance. Additionally, we support Governments when forming Insurance Pools for risks the private market finds difficult to support (e.g. Earthquake, Flood, Terror Pools are part of our book).

Our main route has been via the Insurance Industry and its ability to deliver cover to people across the World. Yet it is here that the greatest challenge exists in bridging the protection gap. We continue to explore the viability and proposals made by NGOs and Charities to see how we can deliver further cover.

We have seen an increased contribution from precipitation losses over the past few years which could be attributed to Climate Change. We price these perils outside of the 3rd Party Vendor models with the help of the Pricing Actuaries and adapt our view of the technical price accordingly.

We continue to participate on the Lloyd's DRF and review each opportunity with careful reference to our underwriting risk appetite. The nature of these tends to be innovative and have characteristics which sit outside our normal commercial business. We continue to work with colleagues on refining a view on how we may participate in this area.

Our Catastrophe risk appetite is set in tandem with our capital provider and regulators. That said, improved market conditions have enabled growth over the past few years. We can see continuing opportunity to deploy more capacity in the near term.

Regrettably, we continue to see evidence of the Insurance Protection Gap, most recently in the floods in Italy where insurance penetration is circa 15% of economic losses. If there is no insurance bought, then the loss will be borne by the individual and likely the State will have to participate in some way.

#### **2.1.2.3** Casualty Insurance

In the context of climate-related litigation against policyholders, our Casualty Underwriting team has identified the following risks:

Increased claims from green initiatives:

- Technology and services connected with recent green initiatives have resulted in increased claims.

- The increase in claims due to unproven technology (waste-to-energy), poor design/workmanship (wind turbine bases) or fraud/mis-selling (carbon credits).

Market-wide data sets including causes of claims would help underwriters understand conditions leading to claims. This knowledge would allow underwriters to work with clients to mitigate the known risks and therefore ensure cover remains available.

Claims due to greenwashing:

- Underwriters need to ask relevant questions about how clients manage their approach to being "green". This would reduce the risk of insuring clients who are likely to be accused of greenwashing.
- We have yet to see greenwashing exclusions. However, if litigation increases significantly, this could be a risk.
- Robust disclosure requirements would mitigate the risks of greenwashing litigation as clients would be required to provide more evidence of their green credentials.

Rules and standards:

- Whilst the 2021 Millieudefensie vs Royal Dutch Shell landmark ruling in the Dutch courts held Shell to the principles of the Paris Agreement and human rights standards, on a forward looking basis, subsequent cases and rulings would suggest that climate related litigation is likely to fall into one of three categories: 1) not doing enough; 2) not doing what was promised; or 3) doing harm.

Court rulings around policy exclusions are also finding that the proximate cause of losses was the misrepresentations by the Directors and Officers, as opposed to the pollution or human rights violations, resulting in any exclusion not being applicable.

This would suggest the growing need to consider existing and impending principles, standards, laws and regulations more explicitly within risk assessment and underwriting decisions, recognising that different governments have yet to codify all of the rules and standards into law. This will require collaboration between governments, data providers, industry, financial services, and market associations.

D&O professional coverage:

- In theory, the professional only has to be compliant with the standards in force at the time they delivered their service.
- However, we have seen professionals making representations as to the future suitability and/or compliance of any proposed solution.
- This practice can lead to claims from people challenging the practice. To mitigate claims and ensure cover remains available, professional associations could work with their members to reduce this practice.

Professional insurance:

- In the UK, many of the associations that represent the 'regulated' professions require their members to have mandated (minimum terms) coverage.
- This usually limits the extent to which Insurers can restrict/exclude coverage.
- This ultimately means (as is the case for us with architects) that Insurers may choose to avoid the profession altogether.
- Central bodies could work with professions to align mandated coverage with coverage insurers are able to provide.

**2.1.2.4** Energy Insurance

Our natural resources team continues to evolve our portfolio and is working with clients to develop more sustainable energy solutions. Some examples include:

Biodiesel / renewable diesel where insureds are converting existing units within refineries to convert waste oils / grease / animal fats into renewable diesel. This has lower emissions across the product lifecycle than conventional diesel with the added benefit of burning more cleanly than conventional diesel, which results in lower tailpipe emissions.

Electrification of offshore platforms (predominantly Norwegian platforms). Some of the platforms that we insure are powered by hydroelectricity. For more remote platforms, localised renewables generation offers a sustainable design option.

As well as increasingly writing and actively supporting wind, solar, hydro and biofuels assets, our Natural Resources Underwriting team is working with the Oil and Gas Authority to explore how best we can support and develop the Carbon Capture and Storage (CCS) market in the UK and around the world, given there are an abundance of worldwide depleted oil and gas wells that can potentially be used and that CCS will be a vital component of transition as we use the existing fossil fuel infrastructure to accelerate transition to net zero.

Other examples include, capturing methane in underground mines to generate power or sell, production of steel using renewable energy, and improved leak detection and vapor-recovery units to mitigate methane emissions at upstream operators.

Moreover, carbon capture, blue / green ammonia and blue / green hydrogen are being actively researched and developed by insureds. For example, the most developed plans for carbon capture systems is at the Canadian Oilsands and we expect to see this network come to the insurance market in the next five years.

We have a dedicated underwriting team working closely with battery storage engineers and we are currently looking at offshore wind construction products which mirrors upstream technology Battery Energy Storage Systems (BESS).

Discussions with clients on their transition plans are now standard practice during all renewal conversations and our Head of Sustainability and ESG met with a handful of clients whose core businesses are fossil fuel driven, to discuss their transition journeys.

**2.1.2.5** Political Risks Insurance – Project Finance insurance for renewables and conservation initiatives:

- These projects often have a tenure of up to 30 years and clients are looking for project insurance rather than pure credit risk.

- The need for project insurance with long tenures requires a shift in underwriting approach where shorter policy periods are currently the norm.
- As intergovernmental organisations (e.g. UN, G7, OECD) drive loss and damage compensation to emerging markets, there could be increased demand for credit insurance from multilaterals, development banks, and other international financial organisations involved in such transactions.
- Development finance programs combined with private political risk and credit insurance have become a popular way to ease sovereign debt burdens in emerging markets, while at the same time funding conservation efforts. The Galápagos marine conservation-linked bond is an example.

2.1.2.6 Product Recall Insurance

Insurance opportunities include:

- Automotive recall coverage e.g. lithium-ion batteries or software.
- Product contamination coverage in the production of plant-based products.
- Renewable Energy Installation Components e.g. solar panels and components for wind turbines.

We are conscious of the impact of Right to Repair legislation, and its implications on insurance products:

- As more legislation is introduced aimed at reducing waste, the market will have to evaluate how policies may or may not respond.
- Policy wordings will need to be amended to ensure coverage is aligned with new legislation and/or new business models (e.g. lease over buy, circular economy).
- There is an increasing demand for Product Recall insurance for new and untested technologies, with limited historical data points (e.g. electric battery cells).

**2.1.3** Investments

MS Amlin's investments portfolio is a diversified multi-asset multi-manager mandate, appointing external managers to implement security selection and covering asset types including:

- Equities: Global active long-only strategies; 13.2% assets under management (AUM)
- Cash and Cash Equivalents: Wide and highly liquid opportunity set; 13.7%
- Traditional Fixed Income: Government and Corporate Bond strategies; 63.6% AUM
- Real assets: Property, Infrastructure and Farmland; 9.5% AUM

The total assets under management of the MS Amlin portfolio is approximately £2.19bn. The external managers within the investment portfolio all typically have global mandates but with a focus in developed markets (in particular the 'G10' – a group of eleven countries that agreed to participate in an agreement to provide the International Monetary Fund with additional funds to increase its lending ability). We have defined:

- 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 focuses efforts on identifying long-term shifts and trends, more likely characterised through broader government securities and associated yield movements (carbon neutral targets, green bonds).

**2.1.3.1** Strategy and governance

We have adopted the following Responsible Investment Philosophy:

- We believe that a binary approach of divesting is short sighted as it would do little to directly reduce real-world emissions in the long run.
- We are committed to working with our Investment Managers to consider what sustainability factors to include in MS Amlin's investment strategy.
- We consider the processes in place to support decision making in relation to sustainability integration into investments are sufficient and appropriate.
- All our investment managers are current or prospective UN Principles for Responsible Investment (UN PRI) signatories. The majority attest on a regular basis that they incorporate ESG factors and sustainability into their investment processes.

We are focused on ensuring ESG considerations are integrated within asset selection, via third party mandates, as we believe that this is closely correlated with driving increased alpha.

Management information that is produced for the Investment Governance and Sustainability Committees shows breakdowns of the largest ESG contributors of the portfolio by asset type, industry sector, country and currency of investment. The top three climate sensitive sectors that we are exposed to by weighted average ESG contribution (taking into account assets under management as a percentage of the total fund) are:

- Aerospace / Defence;
- Auto Manufacturers; and
- Transportation

The overall portfolio allocation to these three sectors is relatively small, as a proportion to the overall portfolio, at only 1.83% of AUM.

**2.1.3.2** Stewardship and voting

The majority of our external managers are signatories to the UN PRI and attest on a regular basis that they incorporate ESG factors and sustainability into their investment processes. Consequently, we would broadly expect to have a lower than average allocation to any likely ESG risk impacted sectors of the economy.

As long term investors focusing on asset allocation, we are aware of the importance of stewardship and sustainability alongside integrating ESG into our governance structure, which involves the inclusion of ESG 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 our 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 we continue to promote.

Our 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). Our ultimate parent company, MS&AD Insurance Group, is also a UN PRI signatory.

#### **2.1.3.3** ESG integration

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.

There is an initiative to acquire more detailed data and research in this area, with the view to integrating ESG into the front office portfolio monitoring architecture (leveraging our in-house expertise), promoting further use of climate risk and ESG factors into the investment process. The aim is to incorporate the analysis into the investment decision making process. This work builds on other regulatory submissions MS Amlin has made (i.e., PRA General Insurance Stress Test (GIST)– see Principle 2.2.2).

We have partnered with 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. We have also leveraged Bloomberg emissions data, as well as public emissions and GDP data from the World Bank, in the development of carbon intensity metrics which have also been included in all board reports. We also leverage new Bloomberg security level scope 1 and 2 temperature contribution data to provide metrics estimating the future temperature alignment of the portfolios.

We continue to engage positively when meeting the increasing supervisory expectations and regulatory submissions in the area of Climate Risk. We were active participants in the Bank of England CBES which greatly expanded upon on our previous work with the inaugural Climate scenario in the PRA 2019 GIST.

ESG investment analysis is performed by:

- Asset Type
- Currency
- Country and Sector

ESG score for the MS Amlin investment portfolio implies a 'low' overall Sustainability risk. Weighted Average Carbon Intensity (WACI) for the portfolio is 190.46 t $CO2$/$m, which implies a 'medium' score.

To date, we have focused efforts on the corporate bond portfolio (32% by value, 1,314 securities) and use the Sustainalytics ESG tool to identify hotspots and guide conversations with third party asset managers. Focus in 2023 and beyond considers the rest of the portfolio and embedding ESG within fund manager mandates, specifically considering:

- How our ESG scores compare to peers if there are any obvious areas for improvement.
- Assessments being applied to our subadvisors, and if their ESG scores are materially different to portfolio average.
- If there are 'low hanging fruit' ways of improving our ESG credentials without impeding investment returns
- The implications of any commitments made by our sole shareholder and parent MS&AD.

### **2.1.4** People and Operations

MS Amlin has adopted the triple bottom line sustainability framework (People, Planet and Profit) to help examine our social, environmental, and economic impact, rather than solely focusing on financial, or the standard "bottom line". In doing so, we aim to minimise our negative impacts and maximise our positive impacts.

We believe that by expressing our positive contribution to society and the planet, we can attract, motivate, and empower employees to be their best and drive innovation. We also believe that employee engagement will be critical and help employees to play their role in meeting our sustainability commitments, which is aligned with our culture of inclusion. Indeed, employee wellbeing and ED&I are key focus areas of our Sustainability Strategy.

We have instigated a number of initiatives to engage our people in ESG and Climate Change related activities, e.g. the MS Amlin Forest that restores nature and wildlife habitats in southern Africa, whilst creating employment for local families; monthly lunch and learn sessions with charities and not for profit organisations that highlight the impact they are making and provide opportunities for our people to get involved and give back through volunteering or other means; and departmental update / townhall training sessions on Sustainability and Climate Change.

Our leadership position and strong collaboration efforts for encouraging better climate disclosure and further research is further set out in Principle 1.1, Principle 3.2.1, Principle 5.2 and Principle 6.2.1.

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

**2.2.1** Underwriting

We continue to review our products to make sure they are aligned with our sustainability priorities. Catastrophe prone classes i.e. those which are at risk from losses from damage caused by natural catastrophes (including hurricanes, floods, earthquakes, and wildfire) are an obvious area of focus, and our Underwriting and Risk Modelling teams continue to quantify the potential impact of climate change through climate scenario analysis and the Realistic Disaster Scenarios (RDS) and business planning processes.

We have 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 and reinsurance policies issued by MS Amlin, including controls to compensate for data availability and data quality issues. The portfolio of exposed policies is then modelled by country and peril, to estimate loss probabilities from events such as hurricanes, severe convective storms, earthquakes, floods, bushfires, and other hazards. The contribution of individual policies in key exposure classes is modelled prior to underwriter acceptance of risk.

Modelling is undertaken on a quarterly basis using: 1) externally supplied software, licensed from firms staffed by scientific experts, and incorporating analysis of trends from multiple years of data on climate-related hazards; and 2) in-house expertise. The climate-related risks monitored in this way are windstorm, severe convective storm, wildfire, flood, storm surge, winter storm, and tropical cyclone. The modelling assesses historic events, and probabilistically models extremes of events across relevant geographic regions. Climate variability can be incorporated into a model depending on the chosen event set, 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 Amlin's historic claims experience. With increasing focus from Regulators on climate change, scenario testing using models is becoming more critical in understanding the robustness of the assumptions used for the modelled perils. MS Amlin's Risk Analytics function produce a range of metrics to assess catastrophe exposures ranging from the 1-in-30 to the 1-in-200 annual exceedance probability TVaR. These are tracked quarterly and monitored against tolerances used to manage the level of risk authorised by the Board.

Understanding potential tail losses is imperative for a heavily catastrophe-exposed syndicate such as MS Amlin, hence work is underway to further improve our understanding of the impact of climate change on tail risk In respect of disclosure, the Exposure Management Framework is used to produce regular updates for committees, the Board, and regulators, to monitor changes in the catastrophe risk profile of the business.

In the spirit of bringing together the scientific approaches and blending them with the process of Underwriting, we are continually focussed on the practical applicability of catastrophe and climate driven models, exploring and understanding the limitations of the approaches adopted and models used. This enables us to evolve existing, established processes so we can better understand, measure and assess the impact of climate related risks on our business. To help guide this work, we have adopted the following Sustainable Underwriting Philosophy for MS Amlin, against which underwriters can measure and manage priority climate-related risks and opportunities, alongside the data driven modelled approaches:

Sustainability is a priority area for MS Amlin. We are well placed to support, influence and enable our clients through transition by drawing on our deep underwriting expertise. Our focus is on:

*INTEGRITY – Our strategy is centred around a desire to do the right thing. We seek to balance the interest of our four main stakeholders – our customers, our owner, our employees and our community. With regard to our strategy on sustainability, community is number one.*

*TRANSITION – We believe net zero is more likely to be achieved if we responsibly recognise existing fossil fuel infrastructure, work to achieve decarbonisation and realise the UN Sustainable Development Goals (UNSDGs) with our clients, across a transition plan with hard metrics.*

*DIFFERENTIATION – We recognise there are strong differences in the directions various clients are heading. Our approach may also differ and will be driven by the integrity of our clients' long-term aspirations.*

*PARTNERSHIP – Equitable and rational transition will not happen overnight. Our goal of net zero 2050 and alignment with the UNSDGs will only be achieved through a true partnership of facilitating decarbonisation and responsible business over a period.*

**2.2.1.1** ESG Underwriting Heat Maps (overall ESG performance metric)

We have mapped carbon intensity hotpots, broader ESG hotspots and examples of good practice (e.g. insuring: renewable energy assets; mining of rare earth, precious and other metals critical to electrification; COVID vaccine cargo; NGOs, charities and educational institutions; medical cover for refugees through the Affordable Care Act in the US) across the insurance underwriting portfolio, on a class-by-class basis. The outcomes of this work – the ESG Underwriting Heat Maps – provide an initial measure of the sustainability performance of the insurance underwriting portfolio and capture the ESG impacts of our assureds' activities on the real economy, with reference to the UNSDGs. The ESG Underwriting Heat Maps are intended to be used in conjunction with additional ESG factors and other business performance, and are aligned with the climate transition measurement framework, noted below. The ESG underwriting Heat Maps are designed to help Underwriters to understand the sustainability risks within their individual books of business and highlight areas that require greater attention from Underwriters (e.g. closer scrutiny of their transition plans), as well as potential underwriting growth opportunities linked to climate transition and net zero 2050.

In 2022, the ESG Underwriting Heat Maps data was modelled, on a consolidated basis, against the 2023 business plan. The analysis demonstrated that the overall sustainability performance of the insurance underwriting portfolio is moving in the right direction, however there are areas that require more focus, which have been considered in the new ESG Underwriting Guidelines, see Principle 2.2.1.4. The ESG Underwriting Heat Maps are in the process of being updated and will provide input to the 2024 business planning process.

**2.2.1.2** Climate emissions and transition measurement framework

We consider a binary approach of consciously declining to renew particular risks as short sighted as it would do little to directly reduce real-world emissions in the long run. Instead, we are focusing on supporting clients through transition and applying our ESG Underwriting Guidelines. Having participated in a Lloyd's pilot study and become a Partnership for Carbon Accounting Financials (PCAF) signatory in 2022, we are exploring the feasibility of estimating and reporting the Green House Gas (GHG) emission intensity of our underwriting portfolio, based on a client's total Scope 1 and Scope 2 emissions, using a PCAF aligned methodology and applying a materiality based / sectoral approach that begins with the parts of our portfolio that we expect to have the highest carbon footprint. The greatest challenge we have faced is obtaining reliable and consistent data, which will ultimately be a combination of client data, purchased data, data proxies, and publicly available information. We expect new regulations – such as the EU's Corporate Sustainability Reporting Directive (CSRD) that explicitly focuses on targets, value chain and double materiality; and the US Securities and Exchange Commission's (SEC's) new rules that require listed companies to disclose not only material sustainability risks but also Scope 1, 2, and 3 emissions – to improve the level of data availability.

In 2022, we started measuring transition performance for parts of our portfolio that we expect to have the highest carbon footprint to compare year-on year progress and promote conversations with our clients on their net zero transition journeys. Information is gained from clients during the risk inception / renewal process, based on a standard set of questions. As well as scoring risks on their transition performance, underwriters are encouraged to include comments in the underwriting file notes. For some of the risks identified as ESG hotspots (e.g. Oil Sands), the new ESG Underwriting Guidelines (see Principle 2.2.1.4) have included provisions for referral to the CUO, prior to the risks being written or renewed.

**2.2.1.3** ESG Underwriting Case Studies (qualitative metrics)

We recognise that fair transition to net zero by 2050 involves working towards climate neutrality whilst preventing an unfair burden of the monetary and collateral costs on those least able to bear it by ensuring that no one is left behind, in particular those most dependent on fossil fuels, most affected by the green transition, and those already in vulnerable situations. This is neither binary nor straightforward and includes complex trade-offs (e.g. sourcing of cobalt for electric batteries from jurisdictions with poor human rights records).

Our underwriters have engaged with the Head of Sustainability & ESG to navigate complex ESG issues. Each of these examples has been captured and documented as an anonymised case study. The anonymised case studies have been used within and across teams to provide learnings, identify themes and encourage a more consistent approach, where appropriate, recognising that each underwriting team is accountable for the approach to ESG integration within their respective books of business, weighed against the nature of exposures arising from each business line.

**2.2.1.4 ESG Underwriting Guidelines**

In 2023, mandatory ESG Underwriting Guidelines were developed and adopted across the insurance portfolio. A series of training workshops were conducted with all insurance underwriting teams to communicate the new guidelines and clarify possible areas of ambiguity. The guidelines require: 1) recognition of relevant ESG factors in the underwriting process, evidenced in the underwriting file notes; 2) engagement with the Head of Sustainability & ESG on complex issues where help is desired or needed (which in a number of areas is happening already); 3) adherence to the new referral requirements in areas that we wish to ensure are being given the correct levels of scrutiny before we bind the risk; and 4) adherence to all baseline exclusions. This will now form part of the Internal Risk Review, and give rise to new metrics, with the CUO being informed of how this work is progressing within each underwriting area over time. These metrics will be used to support and train teams, identify areas that may require course correction and inform decision making.

**2.2.2** Investments

MS Amlin Investments has built upon the climate scenarios developed by the Network for Greening the Financial System (NGFS) to form the basis for the development of a climate risk module that is being integrated into existing investment architecture and reporting. The module utilises the climate change impacts supplied for the climate risk section of the 2019 PRA General Insurance Stress Test (GIST) and is being enhanced using the analysis gleaned from our participation in the CBES.

The infrastructure includes a database as well as several proprietary in-house tools and dashboards that provide an overview at a legal entity level, 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 we 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 four years.

The "No Action" scenario value is highlighted as a key climate risk metric to be monitored within our proprietary dashboards. This prudent, 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 Paris/TGFS climate risk scenarios to our 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 the development and enhancement of 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.

The Climate Risk data module (as part of the wider ESG data infrastructure) has provided a foundation for the development of the Investments team ESG policy. The policy sets out not just the processes used for our risk focused oversight of ESG (and our external managers implementation of ESG factors within their investment methodology) but our overall sustainability philosophy. In that regard, the MS Amlin Investments team believe the ESG and climate metrics to be important for assessing whether the external managers are adhering to the agreed investment mandates, and regard ESG as a key pillar in the external manager review process alongside such factors as performance, compliance and risk. Their importance is reflected in their inclusion in all monthly and quarterly board/stakeholder ESG reporting.

As a rule of thumb, we do not envisage using ESG or Climate Risk scores as part of a tolerance-based exclusionary process – rather as a basis for communication, disclosure and engagement with our external managers that reflects their active engagement on ESG matters, and position as the first line of defence from an ESG risk perspective.

With disclosure in mind, the Investments team ESG policy contains clearly stated expectations of the level and frequency of submissions by our external managers on climate and ESG data, as well as wider ESG engagement. Firstly, we expect an annual disclosure addressing wider ESG policy. This should consist of (but is not limited to) the following:

- A statement of the broad company ESG Investment policy (including Stewardship policy).
- Confirmation of signature to UNPRI and date. In addition, the UN PRI Assessment results should be provided if available.
- Confirmation of signatures (and date) to any other significant worldwide sustainability organisations.
- Broad overview of ESG resourcing within the organisation including key personnel.
- Highlights of any internal company ESG initiatives.
- Summaries of any active engagements (including voting) with security issuers (this can include any not currently part of the portfolio).
- Summary of ESG related research, collaborations and partnerships.

Secondly, a quarterly submission focusing primarily on key ESG metrics and analysis. This should consist of (but is not limited to) the following:

- A statement of ESG modelling methodology including data vendor (if any) and percentage data coverage of securities.
- Fund level overall ESG scores (Both composite and separate E, S and G scores). Any relevant benchmark scores should also be included.
- Top/Bottom ESG scores. The "worst" ESG scores should include both long positions in poor scoring ESG securities and short positions in good scoring ESG securities.
- Top/Bottom ESG contributors. As per the top/bottom ESG scores above. Fund level Climate Risk scores – Including at least carbon emissions metric e.g. Carbon Intensity.
- Top/Bottom Climate risk (Carbon) scores and contributors (As per top/bottom ESG scores).

The submissions are assessed, in combination with all other engagement with our external managers, and form part of the ESG pillar within our quarterly external manager review process. This process is the key foundation for portfolio allocation/deallocation decisions.
At present, climate-related metrics are not explicitly incorporated into the remuneration policies or investment mandates of the external managers that we invest in. With the data analysis and policy formation still in its infancy, we are not yet ready to prescribe 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.

**2.2.3** People and Operations

MS Amlin's CEO's remuneration is linked to sustainability and climate targets, which form part of his annual objectives. Those are agreed with the Board and cascaded to Exco members.

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

**2.3.1** Climate change scenarios

As much as we should be guided by science when it comes to climate change, fair transition is a combination of art and science. Climate Scenario Analysis (CSA) is a means of gaining strategic foresight, through more than one lens, exploring how today's decisions may play out and helping to rationalise decision making. CSA is intended to be an analytical approach to exploring how a diverse set of risks may impact an entity and the extent to which it can adapt (i.e. how resilient it is).

MS Amlin uses CSA to:

1. Deal with uncertainty and consider how the future might conceivably develop
2. Analyse how today's decisions may play out in the future
3. Build consensus by rationalising decision making
4. Facilitate in the mitigation of risks (especially if risks not well understood)
5. Understand alternate pathways and, in doing so, becomes a key strategic tool
6. Assess organisational resilience is to potential disruptions and the extent to which it can adapt
7. Calibrate and evaluate regulatory policies

The CBES scenarios that MS Amlin developed build upon a subset of the Network for Greening the Financial System (NGFS) climate scenarios. NGFS climate scenarios aim to provide central banks and supervisors with a common starting point for analysing climate risks under different future pathways. They are produced in partnership with leading climate scientists, leveraging climate-economy models that have been widely used to inform policymakers

Whilst a good foundation, the CBES scenarios have limitations: they were based on static balance sheets; assumed constant socio-economic conditions, broadly based on developed markets, and consistent policy response; failed to reflect risk correlations, tipping points and secondary effects; and did not consider real world factors (e.g. changing fuel mix, increasing carbon price, water scarcity, crop failure, food crises, social unrest, forced migration).

When considering climate scenario analysis, the output and use case for such an exercise is paramount. MS Amlin, in line with the scenario testing framework, looks to derive business insight to drive strategic and operational business decisions, and inform our forward looking strategy.

Even from a physical risk perspective, the CBES scenarios were viewed within MS Amlin as being over simplistic or did not properly reflect the relevant peril. The scenarios assumed a uniform response of individual perils with temperature changes, as well as all peril characteristics changing in the same way, i.e. frequency and severity generally increasing. The scenarios themselves did not reflect the fact that 3rd party vendor models did not necessarily represent all sub-perils for key hazards. For example, tropical cyclone models do not necessarily include key sub-perils such as tropical cyclone induced precipitation and its associated flooding. The CBES scenarios also provided variables which were not relevant to the definition/assessment of catastrophe events, such as providing mean max windspeed changes for European Windstorms. These findings will inform us of definitions for future climate change scenarios.

Following on from the 2021 CBES exercise, on receipt of PRA feedback, we provided an update on the areas of weakness identified and progress made to close gaps identified. This was done in conjunction with a CBES 'Lessons Learnt' review, which identified that a static balance sheet was not 'real world' representative. In developing additional climate scenarios, we will consider the following:

- Climate Value at Risk
- Input into underwriting assumptions
- Build out of risk appetites and metrics
- Stress Testing of Business Plan

The development of physical risk scenarios to understand potential climate change impacts is more developed within MS Amlin due to the everyday use of natural catastrophe models whose results can be adjusted to reflect climate change. We are also developing transition and liability risk scenarios to understand the potential impacts of climate change (refer to paragraph 2.1.2.1). The process is being carried out through consultations with senior underwriters, in-house and external legal experts, and third parties. Through these consultations MS Amlin intends to build comprehensive scenarios and reporting metrics to understand these less well developed (compared with physical risk) impacts of climate change. This will support the end goal of creating an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making in the short (12-36 months), medium (3-5 years) and long (5-10 years) term.

**2.3.2** Underwriting

The outcomes of the CBES scenario work are consistent with market outcomes, shared by the Bank of England during market wide feedback in May 2022; namely:

- Participants will likely to be able to bear the capital implications of transition that fall on them
- Petroleum manufacturing risks present the most transition risk impact for General Insurers
- D&O is most likely to pay out for liability risk (greenwashing, financing of GHG emissions, fiduciary breach)
- In the No Additional Action scenario, households / homeowners are most vulnerable to physical risk (higher insurance premiums / unavailability of insurance, which may lead to re-mortgage issues)

In the No Additional Action scenario, we considered how our management actions would change to manage the physical risk if the 'negative liabilities impact' were to double. We concluded that we would pull the levers available to us more strongly and earlier. For a specific number of actions which are listed in Figure 2.3 (below), we have added commentary to set out what would change.

If the impact of negative liabilities were to double, we would have concerns over the availability and affordability of reinsurance capacity. In this scenario we would look carefully at what cost effective reinsurance cover was available and at the same time aggressively manage our gross exposures to ensure that our net exposures remained within our risk appetite as agreed with our parent company.

| | |
|---|---|
| **1. Reduce exposures to vulnerable sectors** | **Manage Gross Exposures** – in order to manage the additional volatility posed we would take more aggressive action to limit our monetary catastrophe risk appetite by territory, return period, class and specific clients. It is possible that other carriers might take similar action and as a result pricing may increase as supply contracts. |
| **2. Reinsure exposures** | **Manage Net Exposures** – we would take further action to manage the gross to net relationship by reviewing the structure of reinsurance protections to reflect both the higher frequency and volatility posed in this scenario. We would use our Internal Capital Model to assess the cost effectiveness of proposed reinsurance protections and assess using our specialist outwards reinsurance team. Ultimately this could involve purchasing additional reinsurance capacity either commercially or through the wider parent Group companies or indeed retaining more risk depending on pricing and capital requirements. |
| **3. Other** | **Pricing** – we would further re-calibrate our technical pricing models to reflect the increased volatility in catastrophe areas in order to ensure our pricing builds in a sufficient allowance for the impacts of climate change. |

Figure 2.3: Management Actions

**2.3.2.1** Model Completeness Framework

At the end of 2021, MS Amlin adopted a new Model Completeness Framework (MCF), which is a systematic assessment per insured class of the representation of catastrophe risk in the capital model. This was operated in Q1 2022, and produced a number of recommendations for adjustments to catastrophe models. These adjustments were approved in June 2022 by the Model Governance Committee (MGC). The adjustments are being deployed to all catastrophe-impacted classes reflecting climate-related issues for the North Atlantic Hurricane peril, with uplifts for climate change and for tropical cyclone clustering, and for the US Inland Flood peril, with a reworked flood exceedance probability distribution. Further climate-related adjustments will be assessed in the next MCF cycle. Discussion continues in the Technical Pricing Steering Committee about the methodology and parameters required to embed scenarios into the existing Technical Pricing Framework, beyond the model adjustments adopted through the MCF.

The MCF will be used to consider climate risk and to conduct scenario analysis where relevant. As our understanding of climate risk matures, through the MCF, we will consider the capital and reserving implications of climate risk, and make adjustments where necessary. This may also require / drive a re-parametrisation of the internal capital model, dependent on output of scenario analysis and available data. It is important, in line with other risks, whether modelled or not, that climate risk is appropriately considered and the impact on our risk profile fully understood.

**2.3.3** Investments

For the CBES activity, Transition risk analysis has been performed on the fixed investments portfolio as of December 31 2020 with the contract details of all securities (issuer, coupon, duration etc.) assumed to remain constant.
A top-down approach has been taken to model the effects of the three CBES climate risk scenarios on the investment portfolio. Where possible, we have applied directly the variable paths provided to all participants by the BOE for use in the CBES activity. Where direct application is not available, we have extrapolated country level climate risk impacts on the investment portfolio from additional sources. We have then sought to adapt the country level climate impacts with sector level Gross value added (GVA) output variations (where applicable) to account for the range of climate transition risks on different sectors of the economy. Finally, where deemed to both material and necessary, we have undertaken specific climate risk analysis of individual holdings.

Figure 2.4 below shows specific results from the application of the three climate scenarios and the counterfactual. The counterfactual represents the control against which the three climate change scenarios are assessed on a relative basis (i.e. if there was climate no change). The table shows the cumulative returns through time from applying the counterfactual and three climate scenarios to the portfolio. We note a smooth and consistent return over the model period with an average annual portfolio return of between 0.56% and 0.97%. This is consistent with the current expected return of the portfolio which is 0.93%.

The Early Action climate scenario results show a slight but consistent underperformance compared to the counterfactual scenario throughout the model time period. The average annual portfolio return varies between 0.33% and 0.95%. Given that the Early Action scenario is the most positive growth-wise of the scenarios (given the smooth climate transition projected) this is entirely expected.

It can be seen clearly that the cumulative return of the portfolio in the Late Action scenario is greater than in the Early Action scenario up to Year 10. However, the impact of the sudden climate transition shift can also be seen in the portfolio drawdown up to year 15 (with an average annual return of -0.44%) from which, despite a relative recovery, the cumulative return remains below that of the Early Action scenario through to the end of the model period.
In the No Additional Action scenario, the cumulative portfolio return remains significantly below that of the Early and Late Action scenarios throughout the model period. The average annual portfolio return varies between 0.20% and 0.37%.

| | Counterfactual | Early Action | Late Action | No Action |
|---|---|---|---|---|
| **Year 5** | 3.61% | 2.93% | 3.61% | 1.86% |
| **Year 10** | 6.46% | 5.40% | 6.46% | 2.95% |
| **Year 15** | 10.58% | 7.05% | 4.29% | 3.94% |
| **Year 20** | 15.01% | 11.25% | 8.27% | 4.96% |
| **Year 25** | 19.95% | 15.69% | 12.34% | 6.23% |
| **Year 30** | 24.94% | 20.53% | 17.09% | 7.56% |

Figure 2.4: Results from the application of the three climate scenarios and the counterfactual

Figure 2.5 below shows the climate risk module in one of our investment management tools, which illustrates the climate stress figures from the Paris scenarios (and other supporting climate risk metrics) applied to our equity fund as of 1 June 2023.

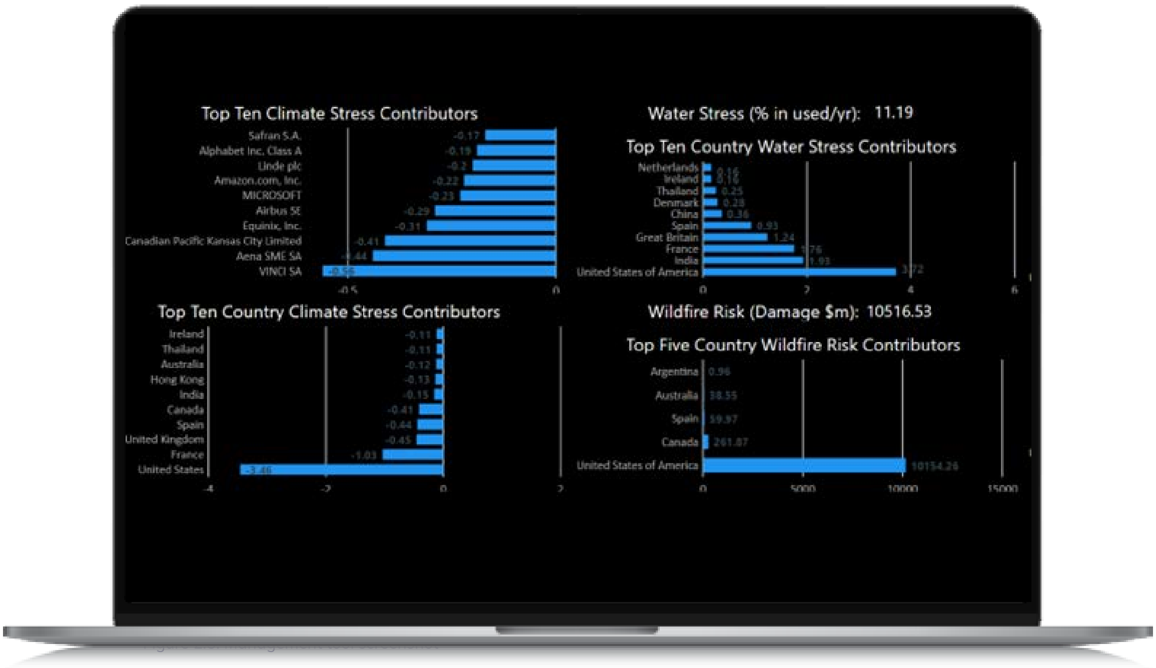



Figure 2.5: Management tool screenshot

Figure 2.6 below shows the management tool presenting a time series showing the changing impact of the “No Action” scenario:

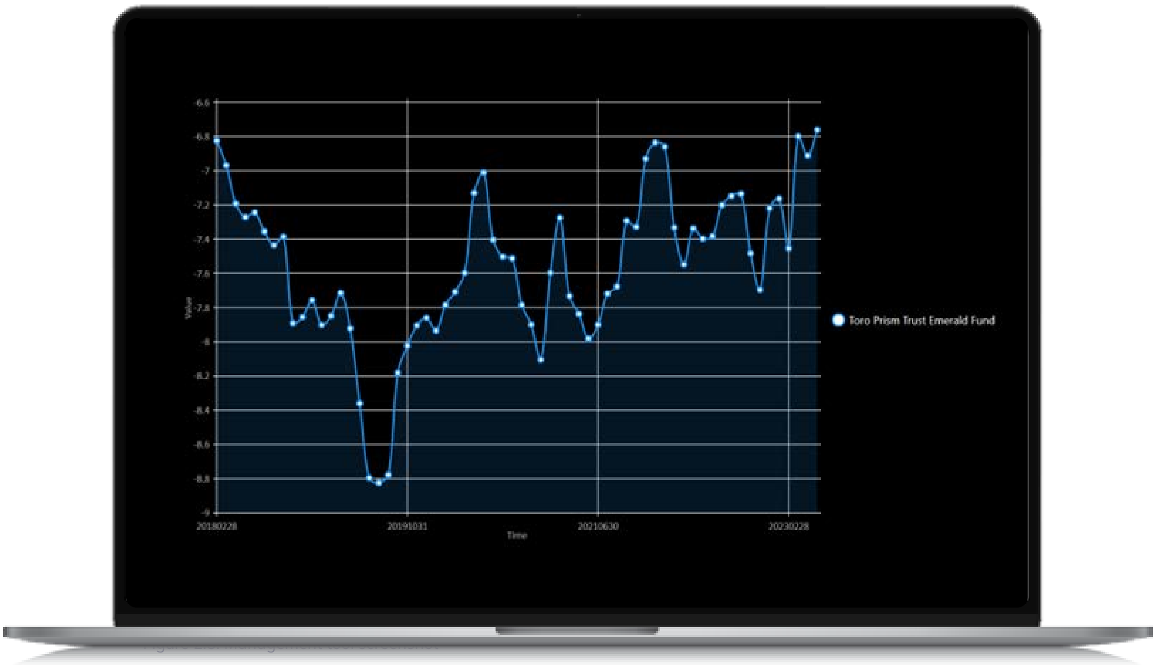



Figure 2.6: Management tool screenshot presenting a time series of the changing impacts

The above demonstrates that we are able to essentially "re-run" the core of the CBES exercise on our portfolios where required. As an example, the table below shows the relative stress results from a re-run of the CBES exercise over our portfolio as of September 2022: Comparing this with the relative stress results implied by Figure 2.4 shows a consistency within the portfolio with a slight improvement in the results (particularly in the No Action scenario) for September 2022 versus the original CBES exercise of December 2020.

We have started to think about the extent to which physical risk could be modelled for investments and have started with the MS Amlin property portfolio. ESG metrics are used as a proxy for climate risk. Senior management receive portfolio weighted average carbon intensity scores on a monthly basis and weighted average carbon intensity contributors, portfolio water stress and portfolio temperature alignment scores on a quarterly basis. For our climate risk and ESG analysis we leverage Sustainalytics and Bloomberg however we need to augment that with appropriate public datasets (e.g. World Bank) to provide complete coverage for our multi-asset portfolios. "Country level" securities (e.g. Government bonds) are a particular challenge with data providers not providing the same level of coverage as corporate securities. The metrics have been chosen due to their normalised features allowing us to compare different mandates within our multi asset portfolio within one standardised framework. Our managers have been chosen as peer leaders not just on their investment management performance but also their incorporation of ESG within their investment processes. We have independent oversight and analysis of our external manager climate risk metrics with any data gaps at a security level bridged using appropriate publicly available country level datasets. Our managers also provide periodic ESG and Climate Risk reporting containing their own climate risk analysis as well as relevant information on issuer engagement (which would include transition plans).

| | Early Action | Late Action | No Action |
|---|---|---|---|
| **Year 5** | -0.89% | 0.00% | -1.76% |
| **Year 10** | -1.47% | 0.00% | -3.61% |
| **Year 15** | -2.89% | -5.86% | -6.10% |
| **Year 20** | -3.11% | -6.63% | -9.37% |
| **Year 25** | -3.34% | -6.95% | -12.81% |
| **Year 30** | -3.38% | -6.85% | -16.20% |

Figure 2.7: Relative Stress Results CBES Rerun Sep 2022

## Areas of improvement in 2022-3

MS Amlin has:

- Developed a Board approved Sustainability Strategy designed to support the business strategy, ensure that MS Amlin remains relevant and create value for all of its stakeholders by doing the right thing. The Sustainability Strategy was widely shared externally and internally and includes information on our approach to Sustainability – across the domains of E, S and G – and how we will implement our plans over the next three years.
- Created Responsible Underwriting and Investments Policies; adopted Insurance ESG Underwriting Guidelines, providing training to all senior insurance underwriters.
- Adopted the ESG Underwriting Heat Maps to measure the sustainability performance of the insurance underwriting portfolio and help Underwriters to understand the Sustainability risks and opportunities within their books of business.
- Modelled the ESG Underwriting Heat Maps against the 2023 business plan, which demonstrated that the overall sustainability performance of the insurance underwriting portfolio is moving in the right direction, whilst also recognising there are areas that require more focus, which have been considered in the new ESG Underwriting Guidelines.
- Captured ESG Underwriting case studies, which have been shared within and across underwriting teams to provide learnings, identify themes and encourage consistency, where appropriate, weighing this against the nature of exposures arising from each business line.

## Future plans over the next 12-18 months

MS Amlin intends to:

- Continue to implement the ESG roadmap as set out in the Sustainability Strategy
- Build upon and further develop our climate risk metrics, setting meaningful targets, which the busi-ness can monitor and hold itself accountable for.
- Continue to develop a clearer view of what transition risk means to our underwriting portfolio and, alongside further analysis on physical and litigation risk, use this to create an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making.
- Continue to use the ESG Underwriting Heat Maps to assess the overall ESG performance of the underwriting portfolio and as a key input the 2024 business planning process.
- Continue to capture ESG Underwriting case studies, which will be shared within and across underwriting teams to provide learnings, identify themes and encourage consistency, where appropriate, weigh this against the nature of exposures arising from each business line.
- Embed the ESG Underwriting Guidelines through consultation, training and independent review and feedback to Underwriters.

### Areas of improvement in 2022-3

- Started to pilot a measurement approach for assessing transition performance for parts of our portfolio that we expect to have the highest carbon footprint; we plan to use this to help compare year-on year progress and promote conversations with our clients on their net zero journeys.
- Started to develop qualitative Climate Transition and Liability Risk metrics that reflect the pace and extent at which an entity adapts to a low-carbon economy, whilst influenced by: Legal and regulatory policy; Disruptive technology or business models; Shifting market sentiment and societal preferences; or Evolving evidence, frameworks and legal interpretations.
- Developed ESG Investment metrics that include an overall ESG portfolio score, Weighted Average Carbon Intensity (WACI) for the portfolio and analysis by: Asset Type, Currency, Country and Sector. Used metrics to engage with external fund managers on specific positions (e.g. Russia, Top 5 Worst ESG scores, Top 10 Worst Carbon Emission Scores, no long term emissions reduction targets, etc)
- Continued to analyse increased risk of casualty claims from emerging and nascent green initiatives and as a result of rising climate litigation
- Provided political risk and credit insurance to development finance programs designed to ease sovereign debt burdens in emerging markets, whilst also funding UNSDG aligned efforts.
- Outlined a proposed series of:
  - Physical risk scenarios around mean temperature changes, predominantly focus on modelled natural catastrophes, which MS Amlin can use to assess the potential impacts of climate change risk on all or part of its portfolio, make tailored business decisions when run on an annual/bi-annual basis and inform our forward looking strategy.
  - Climate transition and liability risk scenarios and reporting metrics, through consultations with senior underwriters, in-house and external experts (including legal experts and other 3rd parties) to understand the less well developed impacts of climate change and consider this alongside the analysis on climate physical risk

### Future plans over the next 12-18 months

- Undertake an Internal Audit of the measurement approach that is being piloted for assessing transi-tion performance for parts of our portfolio that we expect to have the highest carbon footprint.
- Embed ESG within fund manager mandates, specifically considering: How MS Amlin's ESG scores compare to peers if there are any obvious areas for improvement; Assessments being applied to third party fund managers, and if their ESG scores are materially different to our portfolio average; and if there are 'low hanging fruit' ways of improving our ESG credentials without impeding invest-ment returns (or indeed driving alpha)
- Continue working with legal experts and underwriters to consider what type of metrics may be most relevant for Climate Liability risk.
- Increase physical damage underwriting of and support for wind, solar, hydro, biofuels and carbon capture assets, as well as electrified offshore platforms and Battery Energy storage devices
- Use the proposed series of climate physical risk scenarios and climate transition and liability risk scenarios and reporting metrics, to supports the end goal of creating an MS Amlin scenario that combines the above, sufficiently represents the real world and could be used to support decision making in the short (12-36 months), medium (3-5 years) and long (5-10 years) term.
- Identify suitable methodology and parameters required to embed scenarios into the existing Technical Pricing Framework, beyond the model adjustments adopted through the MCF, capital modelling and reserving.

# **Principle 3:** Lead in the identification, understanding and management of climate risk

# Principle 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).

**3.1.1** Risk Management

MS Amlin has an embedded a company-wide Risk Management Framework (RMF) to support the identification, assessment and management of internal and external risks to which the company is exposed. The RMF provides the infrastructure to facilitate the ownership of risk at the highest level within the organisation and supports the ability of MS Amlin to achieve its strategic objectives whilst ensuring the sustainability of the company. The RMF has a number of key elements:

- Robust governance and oversight provided by the MS Amlin Board, Risk and Solvency Committee, our Executive and other fora to support the identification and management of specific areas of risk
- Risk policies and standards
- Risk appetites and tolerances
- Risk identification and assessment process
- Internal controls
- Risk reporting

The Risk function is responsible for overseeing the effectiveness of the RMF and updating as necessary to respond to changes in our risk profile, to ensure that current, new and emerging risks are identified, monitored and mitigated (where possible). Regular discussions are held between first-line functions and Risk Management to support the identification and consideration of potential emerging threats, including those related to climate developments and MS Amlin operates risk management controls through the "three lines of defence" model.

Decisions that materially change the risk profile of the business require a formal risk opinion or deep dive. These provide an independent and objective opinion to the MS Amlin Board and/or Risk and Solvency Committee as to whether the Risk Function supports approval of the change. Deep dives are proactive whereas a risk opinion is similar in outcome, but is a reactive process that considers the embedding of a process, system or significant change. Risk Management have provided and continue to provide challenge over key sustainability deliverables and at relevant sustainability governance fora. Individual risks have a Board level owner and senior level risk manager accountable for oversight and business decisions. The Risk function continues to support Risk Owners in identifying suitable controls to mitigate changes to the risk profile and where control gaps exist, recommend remediation. The MS Amlin Risk Register was fully reviewed in 2023 to ensure the risks identified and drivers are commensurate to the nature, scale and complexity of MS Amlin. The RMF is subject to ongoing review to ensure appropriateness.

**3.1.2** Climate Risk

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. Since our last ClimateWise submission, a climate risk assessment has been conducted to outline relevant risk drivers across all areas of our risk register for physical, transition and liability climate risk. Each risk in the risk register is assigned an executive owner and through the Quarterly Risk Review Process, climate risk is a topic of discussion where relevant. The PRA Senior Management Functions (SMF) for climate change is the owner of sustainability risk in the risk register, which includes the assessment and management of climate risk. We have also developed and agreed climate risk appetites across physical, transition and liability climate risk. The Risk & Solvency Committee, which is a sub-committee of the Board, has a role in challenging and reviewing risk appetites for sustainability risk and ensuring these are reflective of the company risk profile.

Through MS Amlin's Own Risk and Solvency Assessment (ORSA) process and through discussion at the Sustainability Committee (see Principle 1.2.2) at which an update from the CRWG is a standing agenda item, we have identified climate change as a significant risk for MS Amlin. The Risk team continue to engage the business to consider climate risk through the ongoing and regular risk assessment. The MS Amlin Emerging Risk Process has been updated to allow for more robust business engagement of Sustainability related risks including the failure to adapt for or mitigate against climate change  biodiversity loss, water scarcity, and climate engineering. Follow up work is planned around climate litigation risk . All risk types are considered and any drivers related to climate change analysed. Sustainability has been explicitly included in the risk register, which also considers the impact of climate change and incorporates climate risk where not covered within other risk types.

Sustainability and climate change are considered and included in the scope of independent external risk reviews, External Audit, to ensure MS Amlin is in line with the market and continues to maintain best practice. A Senior Risk Manager has been assigned responsibility for Sustainability related matters from a risk perspective and attends the Sustainability Committee, providing both second line oversight and supporting workstream delivery when needed.
For physical climate risk, MS Amlin leverages its well-established and embedded Exposure Management Framework and has in place a number of catastrophe risk tolerances and metrics, which include monitoring against Annual Exceedance Probabilities (AEPs) and the Lloyd's RDS Framework. For transition and liability climate risk, the CRWG have proposed metrics for: (1) carbon intensive areas of the portfolio; (2) engagement with clients; and (3) climate litigation activity. These continue to be refined and will be monitored on an ongoing basis and for the former, we are building these into underwriting strategy and business plan

considerations linked to insuring the transition (e.g. forced adaptation / obsolescence of existing product lines; increased demand for new product lines / product recall insurance for new and untested technologies). In the meantime, we are working with market bodies (e.g. LMA Climate Risk Working Group, PCAF) and data providers (e.g. Moody's) to develop meaningful, relevant, and consistent measurement approaches that will facilitate the development of further metrics, taking care not to create unintended consequences (e.g. where attribution factors could skew outcomes including pricing or where the correlation between different ESG providers is low) and to reflect secondary effects and real world factors such as changing fuel mix, increasing carbon price, water scarcity, crop failure, food crises and social unrest. We are also speaking to legal experts (including our in house lawyers) to develop our thinking and associated metrics around climate liability risk.

Climate risk is also considered from a physical risk perspective for individual perils which are climate driven. As an example, MS Amlin adds an adjustment of 1.5% to North American Hurricane losses to account for any changes in tropical cyclone severity/frequency resulting from climate change. This is thought to be conservative in terms of adjustments given uncertainty in how North Atlantic Hurricane characteristics are likely to change. The 1.5% adjustment is based on an adjustment to the frequency of tropical cyclones in the North Atlantic from the long-term rate to account for climate change that has already happened.

From an investment perspective, in relation to climate risk management, senior management receive portfolio weighted average carbon intensity scores and weighted average carbon intensity contributors, portfolio water stress and portfolio temperature alignment scores on a quarterly basis. As per the above, data remains the key challenge. ESG data is procured from Sustainalytics and Bloomberg and augmented with appropriate public datasets (e.g. World Bank) to provide coverage for MS Amlin's multi-asset portfolios.

### **3.1.3** Climate Scenario Analysis

We use Climate Scenario Analysis to assess the financial risk impacts of climate change on our balance sheet, providing an indication of our position under severe, yet plausible scenarios and stressors. However, as much as we are and should be guided by science when it comes to climate change, we believe that fair transition requires a combination of art and science; which is why CSA is used to:

1. Deal with uncertainty and consider how the future might conceivably develop
2. Analyse how today's decisions may play out in the future
3. Build consensus by rationalising decision making
4. Facilitate in the mitigation of risks (especially if risks not well understood)
5. Understand alternate pathways and, in doing so, becomes a key strategic tool
6. Assess organisational resilience is to potential disruptions and the extent to which it can adapt
7. Calibrate and evaluate regulatory policies thereby helping to shape impending regulation

Given that CSA is a relatively new development with no defined market standard, the ongoing work focuses on:

- What scenarios to use; where climate-related risks and opportunities depend on factors such as geography and geographic location of our value chain, type of assets and nature of operations.
- What assumptions to make about the future, which aren't necessarily informed by the past; CSA considers up to 30 year timescales so the appropriate discount rates to use are a factor.
- Availability of consistent and granular data e.g. location, Scope 1, 2 and 3, asset, activity; although there is an abundance of proxy data
- What modelling approaches to adopt; whilst established modelling techniques are broadly applicable, existing models tend to assume consistent policy responses; and fail to reflect risk correlations, tipping points and secondary effects.

This work has informed and been informed by our CBES submission to the Bank of England, which is covered in Principle 2.3.1

Scenario testing is undertaken on an annual basis, with scenarios reviewed to ensure they remain relevant and reflective of the wider external landscape. MS Amlin has a scenario based on potential risk profile impacts from climate change, that considers an increased frequency of hurricanes and wildfires. At the time of writing, Risk Management are considering additional new scenarios to include within the scenario testing suite (See Principle 2.3.1).

### **3.1.4** Climate Risks Working Group

Given climate change is a key driver of risk across MS Amlin, during 2022 we established the Climate Risk Working Group (CRWG) which is a sub-group of the Sustainability Committee. The objective of the CRWG is to coordinate climate risk activities across the business, ensuring there is a consistent and unified approach, for example, in developing climate scenarios, setting climate risk tolerances, creating a strategic plan for climate-related risks, whilst identifying new opportunities that may arise as the climate changes.

The CRWG convenes every six weeks (or more frequently as required) and is chaired by a Senior Risk Manager, with representation from relevant areas of the business.

A coordinated and consistent approach will allow the business to develop a strategic plan for climate-related risks and explore the resilience and vulnerabilities of our business model, against our overall business strategy and risk appetites. It will also place the business in good stead to respond to future regulatory demands, and identify new opportunities that may arise as the climate changes. In accordance with its terms of reference (ToRs), the CRWG will:

- Build upon and develop additional climate risk metrics, as understanding evolves and new data comes on-stream.
- Work with the business, industry leaders and external parties to develop and build out applicable climate risk scenarios to embed in order to understand climate

change risk exposure and to inform business decision making. These scenarios will take on board the lessons learnt from CBES in terms of 3rd party vendor model flexibility and omissions from the prescribed CBES scenarios (i.e. tipping points).

- Consider relevant case studies in relation to transition and litigation climate risk.
- Consider new and emerging frameworks and their applicability for MS Amlin.

During this reporting period, the CRWG has been strengthened through enhanced membership and clear accountabilities, developed and agreed more formal terms of reference, and had a regular cadence (every 4-6 weeks) of meetings. The CRWG is focused on considering what strategic foresight was gained from the CBES exercise, how we embed the aspects of CBES that are most relevant to MS Amlin within existing Risk Modelling, and how this translates into meaningful and applicable risk appetite and tolerance metrics.

**3.1.5** Risk Analytics

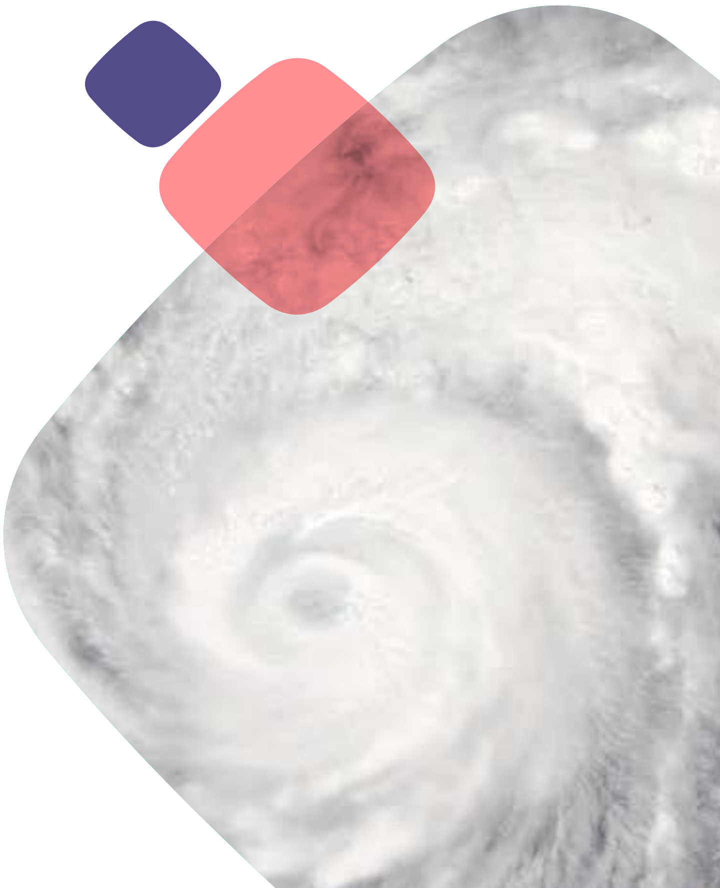
MS Amlin licenses a number of sophisticated natural catastrophe risk models for a range of different region and perils, and the output from these models is used to assess the risk from climate- and non-climate related perils to the insurance portfolio. As part of our quarterly reporting, the most significant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

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

- 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 Amlin.
- If the materiality of a region/peril significantly increases for MS Amlin as result of a changing portfolio (increasing exposures, riskier business etc.), a review of the catastrophe model external validation should be undertaken.
- 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.
- A review of MS Amlin'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.
- 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 Amlin's proprietary portfolio simulation model allows the flexibility of adjusting the frequency of events to align with current understanding of climate risks and establish MS Amlin's own view of risk. Outcomes from the scenarios are used to inform parameterisation changes to the model going forward, through the operation of the Model Completeness Framework as described earlier. A key change to date is an adjustment in the internal model for North Atlantic hurricane to account for possible climate change impacts. The ability to make adjustments to its own view of risk allows MS Amlin 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.

Our natural 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.



**3.1.6** Investments

We found the initial PRA GIST Climate Scenario (see Principle 2.2.2) useful to shape our preliminary research and technical infrastructure capabilities and we've used the CBES scenarios to enhance the scenarios that we're monitoring in our Investment dashboards.

Although our Investments team took accountability for the Assets section of the CBES submission, the CBES submission as a whole proved to be an opportunity for the various departments within MS Amlin to collaborate and formulate an integrated response, including any broad climate modelling assumptions.

Climate risk data is an important part of our regular Sustainability and Investment Committees reporting, and a key element to our external manager ESG oversight. At present our external managers place their emphasis on metrics such as ESG scoring and Carbon Intensity rather than scenario analysis. The limitations of the scenarios (many of which we raised as part of our CBES submission) mean that both our external managers ESG approach and our own will continue to be metric rather than scenario led for now.

Our external manager mandates are not labelled as "ESG focussed" but more view ESG as a fundamental valuation and analysis tool integrated within the Investment process. This focus on ESG as a funda-mental methodology feeds through to our quarterly external manager reviews and helps to shape the ESG pillar of that review process. The process contains six pillars (Business, Investment team, Invest-ment Process, Operations, Performance and ESG). This constitutes the formal basis of our allocation/deallocation decisions and ensures that ESG is a fundamental part of that process.

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

**3.2.1** Risk Analytics

The MS Amlin Risk Analytics team is engaged with the MS&AD group research company, InterRisk, in their project with Jupiter Intelligence to produce localised 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 open source.

We have a strong team of natural catastrophe experts and research specialists that develop and inform our business strategies. It includes:

- Dr Jessica Turner, who recently joined MS Amlin as Head of Risk Analytics. She has strong experience in leading teams of natural catastrophe experts providing model advisory, evaluation and adjustment analytics as well as climate change physical risk quantification for all major perils in the EMEA and Asia-Pacific regions. Jessica holds a Ph.D. in Atmospheric Science, an Advanced Diploma in Insurance, and is a Certified Catastrophe Risk Analyst

- Dr Huw Goodall (Senior Research Analyst), who is a catastrophe model researcher with a PhD in earthquakes. This involved developing and evaluating Baysian (statistical) methods, and using 3rd party catastrophe models. He has a background in geology, and experience of palaeo-climatology methods. His experience since his PhD includes flood model development, software testing, climate change adjustment methodologies. He also has a background in catastrophe model evaluation of 3rd party vendor models. He has previously published seven research papers on natural hazards.

- Dr Ed Pope, a research scientist with a particular interest in natural catastrophes, including submarine landslides, earthquakes, tropical cyclones. Alongside his work for MS Amlin, he continues his role as an Honorary Fellow at Durham University, where his research is focused on understanding the frequency and magnitude of these events, and quantifying the hazard they pose to infrastructure and communities. To date his research has resulted in a white paper, 28 research papers and two briefing documents to the UK Cabinet Office. It has also led to consultancy work within telecommunications industry and gained national and international newspaper coverage (https://www.bbc.co.uk/news/science-environment-57382529).

- Jess Boyd (Senior Research Analyst) who is a natural catastrophe risk analyst with a focus on meteorological perils. She has a background in climate and meteorological physics. She has expertise in vendor model development as well as 3rd party vendor model evaluation, validation and adjustment. She has previously published research papers on approaches to quantifying climate risks for insurers and evaluation of potential hurricane impacts.

In 2022, the MS Amlin Research team published a chapter in a book titled “Hurricane Risk in a Changing Climate”. This publication was also sponsored by MS Amlin and the modelling firm RMS. The book relates to presentations made at the second symposium with the same title, held in Miami in June 2022, in respect of which the organizing committee contains several of the world’s leading meteorologists and climate scientists. The main objective of the symposium series 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 Amlin chapter 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 Amlin also participated on the poster judging panel at the symposium, and sponsored the Early-Career presentation award given to Dr Yi-Jie Zhu for a poster titled “Recent Rebounding of the post-landfall hurricane wind decay period over the continental United States”.

In conjunction with the Lighthill Risk Network, MS Amlin has sponsored 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.

The first project was completed in the first half of 2023, the second in 2022. Both are intended to produce data which can be directly applied to modelling, risk frameworks, and business planning.

As part of the Lighthill Risk Network, we have also contributed to the authorship of a paper entitled ‘Best practices for modelling the physical risks of climate change’. This was published in the first half of 2023 and seeks to provide leadership to the insurance industry as a whole as to how to quantify the possible changes in risk profile associated with climate change.

MS Amlin commissioned a set of deliverables from Reask, an extreme weather risk advisory, forecasting, and modelling company. These deliverables were datasets for tropical cyclones in the North Atlantic basin, based on ERA-5 reanalysis of the period 1980-2019. Each year in the period is sampled multiple times to produce 20,000 years of ERA-5-driven stochastic activity. The metrics produced in the first set of deliverables cover basin-wide genesis, regional genesis, US landfall rate, US regional landfall rate. These deliverables were also calculated for sub-set periods to explore decadal variability, AMO phase, and ENSO phases. The second set of deliverables positions the observed historic risk in the wider distribution of modelled climates for the same period, using the Community Earth System Model (CESM) Large Ensembles (LENS) project output.  CESM is a fully-coupled, community, global climate model that provides state-of-the-art computer simulations of the Earth’s past, present, and future climate states. The 40 CESM LENS members are sampled hundreds of times to force the Reask Unified Tropical Cyclone model. These metrics enable MS Amlin to calibrate vendor catastrophe models for North Atlantic hurricane risk to allow climate signals within the models to be verified, and to make further refinements of the climate scenarios used to adjust the models via the Model Completeness Framework.

MS Amlin have also been involved in the development and launch of a new academic journal, the “Journal of Catastrophe Risk and Resilience”. This journal will provide a location for the publication of novel academic research and commentary on the world of catastrophe risk and how to build resilience in at-risk communities and countries, including those at risk to climate related hazards. Unlike many academic journals this journal is diamond open access meaning there are no publishing fees, nor access fees; both of which can be barriers to the publication and access to world leading research. The support of MS Amlin and other companies within the market has enable this to happen.

### **3.2.2** Employee Engagement

In 2021, research and training were conducted to help MS Amlin understand the views and opinions of our people before the final selection and Board approval of our priority UNSDGs. A series of employee workshops, facilitated by the Head of Sustainability and ESG, took place to identify what issues our people care most strongly about and where they felt MS Amlin's business can be most impactful. This approach has led to greater engagement from our people for the chosen priorities and influenced the outcome of business decisions determining our future strategy and approaches. The UNSDG priorities, alongside our other Sustainability priorities (refer to figure 2.1, page 9) have been used to anchor our Sustainability initiatives.

Since then, regular update / training sessions have been provided to colleagues through team meetings , Townhalls and Workshops – these have broadly focused on Underwriting, Investments and our People and Operations, including our work in the community. We have also updated our intranet, with a dedicated section on Sustainability that sets out the primary components to our Sustainability Strategy and showcases how we are delivering on our commitments. It also contains volunteering opportunities for our people to get involved with and a glossary of terms / aid memoire that relates Sustainability and explains terms such as Net Zero, Carbon Neutral, Scope 123.

To coincide with International Women's Day in March 2023, we arranged a facilitated panel discussion to discuss the interconnection between climate change and gender equality, focusing on our partnership with the Red Cross and the project in Bangladesh (one of the countries most affected by extreme climate conditions, which only contributes a small share of global emissions) that we are supporting, which empowers women and girls to build their resilience to climate-related emergencies. The panel was made up of MS Amlin and Red Cross representatives, and the session was attended by over 50 employees.

In June 2023, having developed new ESG underwriting guidelines, we conducted a series of workshops for senior insurance underwriters. The workshops were conducted on a team by team basis and used to introduce the ESG Underwriting Guidelines, seek underwriter feedback into Climate Transition risk impacts on the underwriting portfolio that would become a key input to Climate Scenario Analysis, and update the ESG Underwriting Heatmaps. Real life case studies were used within the workshops as well as honing in on specific examples relevant to the classes of business being written.

### **3.2.3** Investments

Within the Investments team there is an on-going initiative to obtain and assimilate alternative datasets to inform and enhance the investment process.  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.  Our own investment research has focused on sourcing data for our investment reporting. The results of this are shared the in the Quarterly Investments ESG reports that the Board receive. We will continue to monitor and evaluate all 3rd party ESG/Climate data providers.

The investments team 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. We also set clear expectations for our external managers in terms of their periodic submissions with the quality of information forming one aspect of the ESG pillar of our external manager review process. In addition, we are also working with our custodian to further develop our understanding of the full climate risk research landscape and data market place.  Discussions are ongoing but their primary offering was as a "one stop shop" for assessing our current data (licences) against our data requirements.

One of the main data challenges we face, is whilst it is possible to obtain country-level data reasonably 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.

| Areas of improvement in 2022-3 | Future plans over the next 12-18 months |
|---|---|
| MS Amlin has:<br><br>• Assigned a dedicated Senior Risk Manager to Sustainability and Climate related matters, who is accountable for considering how a diverse set of climate and related risks may impact our business and how resilient our strategy is to potential disruptions.<br><br>• Conducted a climate risk assessment to outline relevant risk drivers across all areas of the risk register for physical, transition and liability climate risk. Sustainability has been explicitly included in the risk register, which also considers the impact of climate change and incorporates climate risk where not covered within other risk types.<br><br>• Considered limitations of the CBES scenarios e.g. Based on static balance sheet; assume constant socio-economic conditions, broadly based on developed markets, and consistent policy response; fail to reflect risk correlations, tipping points and secondary effects; and do not consider real world factors (e.g. changing fuel mix, increasing carbon price, water scarcity, crop failure, food crises, social unrest, forced migration).<br><br>• Used lessons learnt from CBES to outline a proposed series of:<br><br>- Physical risk scenarios around mean temperature changes, predominantly focus on modelled natural catastrophes, which MS Amlin can use to assess the potential impacts of climate change risk on all or part of its portfolio, make tailored business decisions when run on an annual/bi-annual basis and inform our forward looking strategy.<br><br>- Climate transition and liability risk scenarios and reporting metrics, through consultations with senior underwriters, in-house and external experts (including legal experts and other 3rd parties) to understand the less well developed impacts of climate change and consider this alongside the analysis on climate physical risk. | MS Amlin intends to:<br><br>• Build upon and further develop our climate risk metrics, setting meaningful targets, which the business can monitor and hold itself accountable for.<br><br>• Continue to develop a clearer view of what transition risk means to our underwriting portfolio and, alongside further analysis on physical and litigation risk, use this to create an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making.<br><br>• Continue working with legal experts and underwriters to consider what type of metrics may be most relevant for Climate Liability risk.<br><br>• Use the proposed series of climate physical risk scenarios and climate transition and liability risk scenarios and reporting metrics, to supports the end goal of creating an MS Amlin scenario that combines the above, sufficiently represents the real world and could be used to support decision making in the short (12-36 months), medium (3-5 years) and long (5-10 years) term. |

# Principle 4: **Reduce the environmental impact of our business**

# Principle 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.

MS Amlin is dedicated to fostering strong relationships and collaborations with our suppliers and partners to enhance the environmental sustainability of their products and services. Through proactive engagement and robust supplier sourcing and onboarding, We aim to drive continuous improvements and share responsibility, creating a collective impact towards a reduced carbon footprint.

We have consolidated and enhanced our supplier governance within the confines of a Procurement Policy, Procurement Standard, Supplier Code of Conduct and underlying due diligence processes and standard contract templates, all of which seek to minimise negative impacts on the environment and ensure compliance with applicable environmental (including climate), social (including human rights) and governance (including anti bribery and corruption) laws and regulations.

We are enhancing our Third Party Risk Management (TPRM) framework to include ESG considerations in the selection and monitoring of our critical third parties. ESG positions and scores will be captured at point of selection and monitored for changes as part of our oversight models, which is proportionate to the Third Party's categorisation. We have commenced a trial to capture the ESG score of a portion of our direct and sub-contracted material and tier 1 supply base, using an external ESG data provider. Using the outcomes of this trial we will refine and extend the approach from 2024 onwards.

**4.1.1** Positive developments achieved:

- In the past year, MS Amlin has procured a new material outsourcing arrangement with Genpact. As part of the vendor selection process MS Amlin conducted a thorough review of Genpact's ESG climate change approach and status. Genpact will provide their most up to date position as part of their bi-annual updates.

- MS Amlin, with the support of its service company, has developed a draft methodology to estimate the carbon emissions associated with its supplier base, which we intend to incorporate into our Scope 3 emissions calculations from 2024 onwards (see Principle 4.2 below for further details on this). Additionally, we have initiated work to establish an ESG heatmap for its supplier base via Sustainalytics and we expect this to mature over coming years to help us identify any areas of concentrated risk and inform any necessary action.

- We have worked with its data centre providers and successfully reduced the amount of energy used in our main data centre. Additionally, we have purchased computer equipment that is approximately 35% more energy efficient than the hardware it replaced.

- We have introduced of a new Human Rights Policy that applies to all suppliers and partners, and is published on our website.

**4.1.2** Further enhancements expected over the next twelve months:

- Further development of the methodology used to calculate supplier-based emissions to ensure that Scope 3 reporting is more accurate and reflective.

- A formal review of MS Amlin's existing travel supplier arrangement is underway to determine whether an alternative supplier may be able to provide greater ESG capabilities (e.g. displaying carbon values of flights / hotels at the point of selection, detailed reporting on traveller behaviours, real-time carbon emissions reporting and offsetting capabilities). The review and selection of any new services is expected to conclude in Q3 2023 for implementation from 1 January 2024.

- Completion of requirements gathering to support the deployment of an enhanced Third-Party Risk Management (TPRM) framework solution, which will incorporate more detailed and specific ESG considerations and due diligence processes, allowing us to better quantify and assess the ESG risk(s) associated with new / renewed suppliers prior to contracting.

- Mature our Supplier Code of Conduct by introducing a mandatory requirement for all suppliers to share their ESG report(s) with us annually.

## 4.2 Disclose our Scope 1 and Scope 2 GHG emissions and Scope 3 GHG emissions using a globally recognised standard.

**4.2.1** GHG Emissions

MS Amlin is committed to reporting its Scope 1, 2, and 3 greenhouse gas (GHG) emissions in line with the requirements set out by the UK Streamlined Energy & Carbon Reporting (SECR) Regulations 2019.

We believe that transparent reporting of our GHG emissions is essential to understanding and taking accountability for the environmental impact of our operations, and will drive us in taking meaningful action to reduce our overall footprint.

Our Scope 1, 2, and 3 GHG emissions for 2022 are set out in Table 4.1, including a comparison to prior years:

| Scope | Source | 2022 (MT CO2e) | 2021 (MT CO2e) | 2019 -(est) (MT CO2e) | 2019 - 2022 % change | |
|---|---|---|---|---|---|---|
| Scope 1 | Gas | **158.13** | 187.54 | 292.70 | -46% | -24% |
| Scope 1 | Refrigerant Gas | **78.67** | 55.77 | 17.54 | 349% | |
| Scope 2 | Electricity (market based) - info only | **96.3** | 70.86 | No data | No data | -60% |
| Scope 2 | Electricity (location based) | **234.21** | 320.99 | 590.87 | -60% | |
| Scope 3 | Business Travel - Air | **277.37** | 130.27 | 1082.41 | -74% | -42% |
| | Business Travel - Other | **5.17** | 1.29 | 196.65 | -97% | |
| | Employee Commuting | **941.02** | 117.94 | 786.06 | 20% | |
| | Hotel Stays | **12.11** | 4.00 | 40.02 | -70% | |
| | Waste | **1.01** | 5.08 | 21.03 | -95% | |
| | Water | **3.31** | 1.73 | 3.79 | -12% | |
| Employee Headcount - FTE | | **615** | 654 | 484 | | |
| Floor Area – m2 | | **7,389** | 11,383.32 | 6422.74 | | |
| Scope 1 and 2 Location-Based | | **471.01** | 564.30 | 901.11 | | |
| Scope 1 and 2 intensity FTE/CO2e | | **0.77** | 0.86 | 1.86 | | |
| Scope 1 and 2 intensity m2/CO2e | | **0.06** | 0.05 | 0.14 | | |
| Scope 1, 2 and 3 Location-Based | | **1711.00** | 824.61 | 3031.04 | | |
| Scope 1, 2 and 3 intensity FTE/CO2e | | **2.78** | 1.26 | 6.26 | | |
| Scope 1, 2 and 3 intensity m2/CO2e | | **0.23** | 0.07 | 0.47 | | |
| Energy use from combustion of gas and other fuels (kWh) | | **866,284.07** | 971,300.91 | No data | | |
| Energy use from consumption of electricity purchased for own use (kWh) | | **1,097,102.75** | 1,526,072.75 | No data | | |
| Energy use from business travel (kWh) | | **24,549.07** | 153,132.62 | No data | | |

Table 4.1: MS Amlin historical carbon emission performance – absolute and intensity metrics

**4.2.2** Trend Analysis

- MS Amlin's data for 2022 is based on actual occupancy of office space and is the second full year of recording data for specific legal entities since a change in organisational structure.
- Market-based electrical emissions (Scope 2) are based on the net position after renewable energy has been discounted. Fewer sites reported procuring renewable electricity resulting in higher emissions; however, electricity generated from renewable sources rose as a proportion of the overall figure.
- Refrigerant gas increased due to an increase in reporting resulting in a higher benchmark for the sites requiring estimation.
- For our water data, Dubai and Singapore (WeWork) were unable to provide historical information due to vacating the sites. We therefore relied on estimations.
- Despite increased occupancy levels at all sites following the lifting of COVID-19 restrictions, Scope 1 and 2 emissions decreased 17% compared to 2021, which can be attributed to energy efficiency initiatives and reduction in occupied floor space.
- Increases in emissions relating to Business Travel, Employee Commuting and Hotel Stays can be attributed directly to more business travel and return to office following lifting of SARS-CoV-2 (COVID-19) restrictions, as well as higher FTE headcount compared to 2019.

**4.2.3** Evolving requirements for Sustainability Reporting

In January 2023, the Corporate Sustainability Reporting Directive (CSRD) entered into force in the EU. CSRD was introduced to improve the quality and comparability of corporate ESG disclosures for public and private companies. It requires targets to be set and monitored against and Scope 3 reporting, which includes the collection of sustainability information across a company's value chain.

In June 2023, the International Sustainability Standards Board (ISSB) issued inaugural sustainability disclosure standards for capital markets worldwide, creating a common global language for disclosing the effect of climate-related risks and opportunities on a company's prospects. ISSB standards require controls to identify, assess, monitor and measure ESG risks; and scope 3 reporting.

The U.S. Securities and Exchange Commission's (SEC's) climate-related disclosures proposal is expected to be finalised later this year and include requirements for scope 3 reporting. This is consistent with the Biden administration's "whole of government" approach that seeks to use environmental justice, as well as climate, to drive decision-making across agencies and sectors.

We believe that these resolutions will lead financial markets to an inflexion point over the next 12 to 18 months, where emissions disclosure and trajectories will become a basic governance requirement for banks and (re)insurance companies. In addition to the analysis we have already done on operational and investment emissions, we have also begun to analyse our underwriting portfolio emissions by adopting a PCAF-aligned methodology, whilst acknowledging the methodology will evolve over time.

Notes:

- Scope 1 emissions (direct emissions from the combustion of fuels and through fugitive emission releases from the portfolio) equated to 237 MT $CO_2e$ (about 14% of overall emissions).
- Scope 2 emissions (electricity purchased for our own use) equated to 234 MT $CO_2e$ on a location-based approach and 96 MT $CO_2e$ on a market-based approach (location-based Scope 2 emissions about 14% of overall emissions). Note: Market-based reflects the amount of emissions attributable to the purchasing of renewable energy (i.e. in 2022, MS Amlin emitted 96 MT $CO_2e$ relating to electricity generated from renewable sources, and 138 MT $CO_2e$ relating to electricity generated from non-renewable sources).
- Scope 3 emissions from our business travel, hotel stays, employee commuting, waste, and water amounted to 1,240 MT $CO_2e$ (about 72% of overall emissions).

The Department for Business, Energy & Industrial Strategy (BEIS) emissions factors for 2022 were released in June 2022 and as per the guidelines, MS Amlin used the emissions factors from this data set to report on the 2022 carbon footprint. For non-UK electricity the Group uses the 'International Energy Association Emission Factors 2022' to provide geography specific carbon intensities for international electricity and gas networks.

- Tier 1: Where possible, actual data has been used for the KPIs being reported on. However, there is a large reliance on the landlord or head lessor to supply the data. In some cases, data either cannot be supplied, or is deemed unreliable as it cannot be verified to an original source. Therefore, a series of estimation techniques has been applied.
- Tier 2: Where current month/period data is not available, use the same data for the corresponding month of the previous reporting period. (i.e., March 2021 data for March 2022, where data not available) OR, where this is not available from the previous year due to similar data gaps the missing months will be extrapolated from Tier 1 data this is available for the reporting year.
- Tier 3: Use a proxy benchmark figure for the building's utility/activity data, drawn from a building of similar floor space, FTE employees or region in our business portfolio OR utilise industry benchmarks for electricity, gas, water, waste, paper etc.

## 4.3 Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.

**4.3.1** Operations

As noted above, we are committed to reporting our Scope 1, 2, and 3 GHG emissions in line with the requirements set out by the UK Streamlined Energy & Carbon Reporting Regulations (SECR) 2019, in order to measure and seek reduction opportunities for our operations. In addition, MS Amlin is committed to reducing the environmental impacts of our operations and the way in which we do business.

Positive developments achieved:

- In 2022, we have achieved a 24% and 60% reduction in Scope 1 and Scope 2 emissions, respectively, compared to a 2019 baseline [1]. This is primarily driven by a reduction in total floor space occupied by our business, and greater procurement of renewable energy for our primary locations (i.e. The Leadenhall Building, London).
- Since the onset of the COVID-19 pandemic in 2020, we have made significant investments in technology to support remote and hybrid working models. We recognise the importance of providing our employees and contractors with the tools and resources necessary to work efficiently and collaboratively, regardless of location. By leveraging cutting-edge technology, MS Amlin has empowered its people to thrive in a flexible work environment, whilst supporting our strategy to reduce our carbon footprint.
- In 2022, we have introduced a sustainable business travel policy that mandates less carbon-intensive travel modes where available, and restricts business-class flights.
- During 2022, a net-zero building audit was conducted at our primary London location, The Leadenhall Building (TLB), and the recommendations are being considered.
    - Additionally, MS Amlin and its service company, MS Amlin Business Services, have continue to build positive relationships with other tenants, the building management, and the landlord, in order to improve the building's environmental performance (e.g. installation of waterless urinals and sensor taps, installation of LED panels to replace fluorescent lighting).
- Notwithstanding an easing of the COVID-19 pandemic travel restrictions and a return of in-person meetings, MS Amlin continues to embrace and support a flexible, remote working policy for its employees. This is demonstrated by reduced GHG emissions attributable to both employee commuting and business travel categories, in spite of a 27.1% increase in our FTE levels since 2019.
- In 2023, we entered into a new material outsourcing relationship with Genpact. As part of the vendor selection process, we conducted a review of the shortlisted candidates' ESG status. This included Genpact's ESG climate change approach, status, and risk rating (Low – Sustainalytics). As part of our strategic partnership and oversight Genpact will provide their most up to date position in their bi-annual performance reviews and we will continue to encourage reductions in their environmental impact in line with our own goals.

Further enhancements expected over the next twelve months:

- We expect to continue our improvements in relation to GHG reporting; for example, by 2024, we expect to calculate the emissions associated with employees' working-from-home, as well as from our supplier spend (see comments Principle 4.1). By doing so, we believe that we will have a more representative and accurate calculations of our total carbon footprint, and will be able to develop even more meaningful short-term reduction targets, to better enable achievement of our longer-term objective to be operationally net-zero by 2030
    - We acknowledge the significance of carbon offsetting as a crucial component of our long-term commitment to achieving net-zero emissions by 2030 at the latest. We are actively engaged in exploring and developing a robust and effective long-term solution that aligns with our sustainability goals. By taking thoughtful measures, we aim to ensure that our carbon offsetting efforts make a meaningful and lasting impact on mitigating climate change (see also efforts to enable business travel offsets at point of booking in Principle 4.1 above)
- MS Amlin and its service company, MS ABS, are working with the building management of The Leadenhall Building to facilitate the installation of water meters for each individual tenant, driving accuracy and reliability of our water usage
- An internal communications drive is being planned to improve engagement with our annual commuter survey; improving the reliability of our employee commuting GHG emissions calculations, as well as increasing awareness of our carbon footprint for employees

[1] The MS Amlin group restructured in 2020 and MS Amlin became a standalone legal entity. As such, all emissions data pre-dating 1 January 2020 is calculated on an MS Amlin group-wide basis only. In order to determine an accurate 2019 baseline for MS Amlin, a methodology has been derived which uses MS Amlin's proportion of the 2022 group-wide data as a proxy.

## 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.

Whilst developing MS Amlin's Sustainability Strategy, we concentrated on understanding and encompassing our stakeholders' wide range of expectations about the role of MS Amlin in society. One of our key stakeholder groups is our employees. 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 lifestyle choices, that our sustainability ambition of net zero 2050 at the latest (see Principle 1.1) can be achieved. We have prioritised employee engagement and:

- Heavily promoted our sustainability strategy which sets out the steps we will take over the next 36 months to embed ESG criteria and monitor performance effectively.
- Continued to clarify our Purpose in Relation to Sustainability, by linking sustainability priorities to an overarching company purpose, which acknowledges that our commercial ambitions and societal obligations are aligned
- Engaged with colleagues across the business – through discussions at various fora, presenting at team meetings, conducting employee workshops, and on a one-to-one basis – to raise awareness of sustainability and climate related matters
- Reviewed our underwriting policy and conducted workshops for our underwriting teams to educate and inform them of the changes and our future requirements.
- Engaged with a wide variety of diverse charity partners and Lloyd's, to help facilitate take up of the three volunteering days available to all staff;
- Celebrated Earth Day and International Women's Day, recognising the fact that women and girls are disproportionately impacted by climate change
- Set up further Working Groups in the business to help embed sustainability within our culture (see Principle 1.2.3).
- Included a sustainability section into our induction process, embedding the importance of ESG from Day One

### **4.4.1** Internal communications

The Communications team has been working alongside the Head of Sustainability and ESG to keep our people up-to-date with our ESG approach and progress, including sharing climate-related events, news, reports and stories via various media channels e.g. email updates. Our Intranet has a dedicated Sustainability area and our enterprise social networking platform – Viva Engage – is frequently used by our people to share what's happening across the organisation. The senior leadership host quarterly Townhalls for all staff, at which sustainability and climate change is a regular agenda item.

### **4.4.2** Listening to our people

In 2022 we launched the MS Amlin Forest, having partnered with Ecologi (a social enterprise start-up) and Eden (a not-for-profit NGO that works in developing countries to redress deforestation). Our Forest directly supports livelihoods by seeking to restore nature, creating jobs and economic development and promoting gender equality – building on and reinforcing our commitment to our priority UNSDG (#13 – Climate Action and #5 – Gender Equality). One of the key drivers for this initiative was feedback from colleagues. To date our people have planted over 60,000 trees and funded 6 projects

### **4.4.3** Employee Commuting and Hybrid Working

Employee commuting remains an on-going focus. We 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 "Hybrid working" initiative.
- Where commuting journeys are essential, we encourage employees to adopt alternative modes of transport (e.g. adoption of greater use of public transport and maximising off-peak travel commuting), and offer bicycle parking facilities at our offices.
- Offering a car salary sacrifice scheme (via Tusker who are hoping to be the "greenist Leading UK car benefit provider") so our people can drive a cleaner, more affordable and safer car.

We have also updated the Travel Expenditure Policy with a view to continuing to reduce international travel except in circumstances deemed necessary. This includes an updated approval process, with strong encouragement to our people to make a decision based on not just the commercial impact but also the environmental impact of travel. Our policy states, "If travel is deemed necessary, the method of travel with the lower environmental impact (e.g., train over plane where direct availability on Eurostar) should be considered, in addition to cost considerations."

### **4.4.4** Charitable Giving

We recognise that our societal and moral obligations are as important as our commercial objectives - and we are committed to making a positive contribution to the communities in which we operate and providing opportunities for our people to do the same.

Our approach to Corporate Social Responsibility (CSR) has been developed based on feedback from our people to ensure we have a clear and focussed approach.

There are three key strands to our CSR approach:

- Core strategic charity partner

  To ensure we make the biggest, most positive impact to causes aligned with our Sustainability Strategy, and to allow us to build a strong collaborative relationship that is mutually beneficial, we will focus on one strategic charity partner.

- The British Red Cross has been selected as our strategic charity partner, where we plan to make an impactful contribution and build a strong collaborative relationship.

  Through the partnership, MS Amlin will directly support a programme in Bangladesh that helps to reduce the vulnerability of women to climate related disasters and support them to adapt to climate change. Women and girls in Bangladesh – and all over the world – often suffer disproportionately when weather-related disasters strike due to their social and economic status, but they can also be a powerful force for change in their community. The programme will help women and their wider communities prepare for and recover from climate-related disasters.

- Local charity partners

  We also support a range of smaller, local charities by giving them access to our people, our networks and our broader resources such as use of our offices in London. Each month we host a Lunch & Learn with a one of the local charities, selected by colleagues in the business, so people can learn about different causes and their impacts, and get involved through volunteering, fundraising or other means.

- Volunteering days

  Each colleague has three volunteering days available to support a charity / activity of their choice, with communication of their efforts and requests for volunteers shared through our internal channels. The charities / activities include those linked to mitigating and adapting to climate change

**4.4.5** Waste and paper

We continue to promote the adoption of digital working methods and have cut down the number of printing/ photocopy machines to discourage unnecessary printing. Our office paper is sourced from the Woodland Trust, who plant a tree for every 12 boxes and we get a certificate each year to track progress. We also continue to rollout a recycling programme across all offices. New bins have been provided encouraging staff to separate materials for recycling and therefore divert waste from landfill. We have a company target to recycle 80% of all waste and have internal posters communicating this. 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.

Recognising the importance of emissions measurement, as regards our operations, we performed an in-depth review of our 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.

| Areas of improvement in 2022-3 | Future plans over the next 12-18 months |
| --- | --- |
| MS Amlin has:<br>• Commenced a trial to capture the ESG score of a portion of our direct and sub-contracted Material and Tier 1 supplier base, using an external ESG data provider<br>• Successfully reduced the amount of energy used in our core data centre and purchased computer equipment that is approximately 35% more energy efficient than the hardware it replaced<br>• Introduced and published a new Human Rights Policy that applies to all suppliers and partners<br>• Achieved a 24% and 60% reduction in Scope 1 and Scope 2 emissions, respectively, compared to a 2019 baseline (estimated)<br>• Achieved a 42% reduction in Scope 3 emissions compared to a 2019 baseline (estimated)<br>• Made significant investments in cutting-edge technology to support remote and hybrid working models<br>• Introduced a sustainable business travel policy that mandates less carbon-intensive travel modes, where available<br>• Conducted a net-zero building audit for our primary office location, The Leadenhall Building<br>• Promoted our sustainability strategy and engaged with colleagues across the business to raise awareness of sustainability and climate related matters | MS Amlin intends to:<br>• Finalise the development of a methodology to estimate the carbon emissions associated with our supplier base, which we intend to incorporate into our Scope 3 emissions calculations from 2024 onwards<br>• Finalise the development of a methodology to estimate the carbon emissions associated with working-from-home, which has become more prevalent since the onset of the COVID-19 pandemic<br>• Complete the integration of more comprehensive ESG considerations into our Third-Party Risk Management Framework<br>• Enhance our existing Supplier Code of Conduct by introducing a mandatory requirement for all suppliers to share their ESG report(s) with us annually<br>• Finalise our process of identifying and selecting a new Travel Management Company that is aligned with, and can address MS Amlin's future travel needs,<br>• Liaise with the buildings management of The Leadenhall Building to install water meters for each individual tenant to drive accuracy in reporting and better inform usage habits<br>• Explore and develop a robust and effective long-term solution that aligns with our overall sustainability goal of being operationally net-zero by 2030<br>• Improve the uptake and reliability of our employee commuter survey to improve the reliability of our employee commuting GHG emissions calculations, as well as increasing awareness of our carbon footprint for employees |

# **Principle 5:** Inform public policy making

# **Principle 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.

**5.1.1** Lloyd's of London

In September 2022, alongside other Lloyd's Managing Agents, we submitted our Board approved Sustainability Strategy to one of our main regulators – Lloyd's of London – to assist in their assessment of market best practice and development of market wide policy.

The Sustainability Strategy aligns with the business strategy; it has been designed to support the business strategy by creating enterprise value and covers our various Sustainability priorities with a focus on Underwriting – the area in which we can have most impact. It covers a period of 36 months and the key benefits include: 1) Supporting MS Amlin to attract, motivate, empower and retain the best talent; 2) Ensuring our business model remains relevant, as society shifts; and 3) Empowering our people by providing them with data and metrics and a framework to:

- Understand what is driving the sustainability impact of our underwriting and investment portfolios
- Identify areas that require greater attention (e.g. closer scrutiny of client transition plans to ensure net zero alignment)
- Rationalise and, where necessary, defend underwriting / investment positions that we take, which may be subject to scrutiny
- Highlight potential underwriting growth opportunities, which are aligned with global transitionary trends
- Examine the causal link or correlation between sustainability performance and loss ratios
- Improve our decision making and inform the commitments that we make

The feedback from Lloyd's was in line with expectation. They called out the ESG Underwriting Heatmaps as particularly advanced and encouraged MS Amlin to continue to use ESG data and metrics and to reinforce its own view of risk. Lloyd's also provided thematic market feedback that covered various areas, with a focus on Underwriting and ESG data and metrics. Lloyd's have set out its intention to codify this within a Roadmap, which we understand is in the process of being developed.

**5.1.1.2** PRA

Having received feedback from the PRA, our other main regulator, on the 2021/2 CBES submission, we undertook a lessons learnt exercise in order to shape our thinking around climate scenario analysis and ultimately work towards creating an MS Amlin scenario that sufficiently represents the real world, which incorporates the relevant facets of climate physical, transition and liability risk, and could be used to support decision making in the short (12-36 months), medium (3-5 years) and long (5-10 years) term.

In Q2 2023, we used the outcome of this work and other related work – generally managed by our Climate Risk Working Group – to complete a PRA questionnaire that was sent to the larger regulated firms. The questionnaire articulates how MS Amlin has embedded the management of climate-related financial risks. In completing the questionnaire, we have outlined the actions taken to embed the expectations in SS3/19 regarding governance, risk management, scenario analysis and disclosure. There were also additional questions that gave consideration of capital adequacy and net zero planning. Through the questionnaire, we have outlined that climate change is no longer a Corporate Social Responsibility issue but an integral part of our approach to risk management. In particular, the awareness that climate change can create real financial risks to firms, and therefore requires a strategic response.

**5.1.2** Actively engaging in public debate on climate-related issues through industry collaborations

As well as being members of ClimateWise represented by our Head of Sustainability and ESG being part of the Managing Committee, our Strategy Director is also on the council. Our people regularly contribute and engage with climate-related external events and market bodies to actively engage, drive awareness and promote the debate on climate-related issues; these include:

**5.1.2.1** Industry Collaborations, market committees and memberships

MS Amlin is represented on key market committees and industry bodies with high engagement in climate change challenges. Our purpose on these committees and industry bodies is to actively contribute to the ongoing conversation and help identify and resolve issues facing the market. This work is done in partnership with other market participants and Lloyd's, where relevant. Key examples include:

- LMA Sustainability Committee – our Head of Sustainability and ESG is currently the Chair
- LMA Climate Risk Working Group – Our Head of Sustainability and ESG is a member
- London Market New Opportunities Sustainability Working Group – Our Strategy and Transformation Lead is a member
- LMA Joint Power Committee – our Lead Underwriter, Energy & Industry is currently the Chair
- LMA Renewable Energy Sub-committee – our Lead Underwriter, Energy & Industry is a member

- Sustainable Underwriting Group Committee – our Senior Underwriter, Energy & Industry is a member
- Sustainability working group for the LMA Joint Natural Resources Committee – our Head of Natural Resources is a member. This working group is working to standardise a best practice framework for ESG information across client submissions. Another stream is to educate and explore the new technology required for effective transitions.
- Lloyd's Lab  - our Strategy & Transformation Lead is a mentor where there is a significant focus on new climate and sustainability related opportunities.
- Insurance Development Forum – our Head of Risk Analytics and Research lead are members of the Risk Modelling Steering Group. This group is working to expand global natural catastrophe modelling capabilities in order to improve government resilience. It is also working to develop models and model frameworks which can be applied to improve local understanding of natural catastrophe hazards among other aims.

**5.1.2.2** LMA Committees and Working Groups

Through MS Amlin's chairing of the LMA Sustainability Committee and membership of the LMA Climate Risk Working Group, we continue to take a leadership positions in respect of market-wide challenges that include Sustainability and Climate Risk, and work with the LMA, Lloyd's and other stakeholders to influence the course of related, future market initiatives. This has included obtaining and providing feedback to Lloyd's on pilot projects, proposed emissions measurement and reporting frameworks, and emerging ESG risks including Climate Transition and Liability risks. Lloyd's are invited to Sustainability Committee and Climate Risk Working Group meetings alongside other ESG and Climate Risk experts.

Alongside a handful of other Lloyd's Managing Agents, and with the support and guidance of the LMA, we have helped to further define the roles of the LMA Sustainability Committee and LMA Climate Risk Working Group, including hand offs between the two groups. Collectively, these groups have started to help shape market approaches around and understanding of: Sector Transition Pathways (e.g. presentation from a Big 4 consulting firm on transition in the Energy Sector); the role that brokers play in insuring the transition (e.g. presentation from Head of Sustainability and Climate Change Strategy from one of the big broking houses), ESG and Climate Risk training (via the LMA Academy) and Climate Liability Risk (e.g. presentations from Law firms on climate litigation).

MS Amlin is a also 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 all types of disaster, including climate-driven and weather risks. The key benefits of the facility:

- Ease of access to the pooled knowledge, expertise and resources of the consortium members
- Local contacts through Lloyd's global platforms

**5.1.2.3** Our Partnership with the British Red Cross

After a careful selection process in Q4 2022, MS Amlin partnered with the British Red Cross to support the global work of the Red Cross and Red Crescent Societies. We believe that by combining our expertise, we have an opportunity to make a tangible positive impact to communities most vulnerable to the climate crisis, whilst supporting climate research. The partnership aims include

- Supporting a flagship female-empowerment programme in Bangladesh - the seventh most climate-change affected country in the world – helping people to reduce their risk and build resilience to climate-related emergencies through local and sustainable solutions.
- Collaborating on climate research, thought leadership, skills and knowledge sharing. Both MS Amlin and the Red Cross are committed to exploring alternative and innovative financing to address increasing humanitarian needs and close the finance and protection gap.
- Inspiring and engaging MS Amlin employees and stakeholders through a range of volunteering and fundraising opportunities.

MS Amlin and the Red Cross share a commitment to fostering solutions that promote climate resilience and aid communities affected by the worst impacts of climate change. The establishment at COP27 of a new Loss and Damage fund assisting developing nations, with funding arrangements to be agreed at following COPs, is an avenue worth exploring. It could be an opportunity to combine our skills to develop innovative financing mechanisms to reduce and respond to the impacts communities are already facing due to extreme weather and climate events. Extensive discussions are ongoing with brokers around new products designed to offer reinsurance protection against small Natural Peril Events.

**5.1.2.4** Thought leadership and presenting at conferences

- November 22, our Head of Sustainability and ESG spoke at the Insurance Transformation Summit. The event looked at how the ESG landscape will develop and lead to new practices and market opportunities with the panel discussing ESG and sustainability: a new lens for insurers.
- November 2022, our Head of Natural Resources presented at the Canadian Risk Managers Conference where thought leaders from risk management and insurance came together to discuss the latest innovations and best practice. His talk, titled "How to maintain Energy Insurance Capacity in an ESG world" was centred around exploring the ongoing challenges for all involved in the insurance value chain.
- 28 February 23 our Head of Natural Resources also attended and spoke at an ESG conference in Perth. Organised by Gallagher, the conference topic was reporting sustainability in organisations and future steps.
- In April 2023, our Head of Sustainability and ESG took the moderator's chair at a panel event held as part of the Global Insurtech Summit. The topic was on creating value and finding purpose – integration of ESG considerations.

- In April 2023, our Head of Natural Resources spoke on ESG from a Lloyd's perspective during the Emerging risks panel session at the Lloyd's European broker academy. Other respected panel members included, the Head of ESG Lloyd's, Managing Director of Natural Resources at Howdens Specialty and Head of Global Insurance & Risk Management at Lightsource bp.

**5.1.3** MS&AD Group Focus on Climate Change

Our parents has set the following objectives:

1. Support the realisation of a resilient and sustainable society; and
2. Promote decarbonisation, and establish an organisation in charge of addressing climate change; with a focus on: Climate Change; Nature; and Human Rights.

Further details are available on the MS&AD Sustainability page and within that, there is also more specific information on what is being done on climate change – see Action on Climate Change.

In May 2021, MS&AD set a decarbonisation target of "net zero by 2050" for greenhouse gases emitted through the Group's business activities and declared that it would contribute to the transition to a decarbonized society in cooperation with its stakeholders. The Medium-Term Management Plan for the four years from FY2022 designates "Symbiosis with the Global Environment: Planetary Health" as a priority issue for sustainability and further prioritises the response to climate change.

To support the transition to decarbonisation in society, MS&AD supports next-generation energy such as renewable energy and hydrogen and the establishment and social implementation of innovative technologies toward a decarbonised society. MS&AD is also adapting to climate change by providing services that eliminate or mitigate damage and losses from natural catastrophes.

At MS Amlin, we have a regular dialogue with our parent to actively engage in debate on climate-related and other sustainability topics. One such example was the introduction of underwriting exclusions around thermal coal, informed by actions being taken by the Japanese insurance market.

**5.1.4** Surveys

We have taken part in external surveys, such as the Insurance Post ESG Survey (June 2022), Hymans Robertson Climate Change survey (March 2023) and various LMA surveys on climate change and related matters. We have used the output from the surveys as one of the ways of benchmarking against peers and assessing and evaluating the our approach.

**5.1.5** Action(s) the government, regulators and other industry bodies could take to accelerate opportunities:

- Government could exempt insurance policies meeting certain ESG criteria from income premium tax. This would allow insurers to provide more affordable solutions to clients.
- Industry bodies could collect and distribute data sets to allow underwriters to better understand risks and price appropriately.
- From Political Risk observation (See Principle 2.1.2.5), Regulators could assess the potential for allowing increases to insurer tenures on projects to higher than historic norms, including different treatment for capital requirements.
- Industry bodies could build on the work done by Howden, Fidelis, Axa and other insurers that have considered the correlation between ESG performance and underwriting performance
- Industry bodies could set up collaboration spaces between regulators, industry associations, manufacturers and insurers.
- Government, UK regulators and/or industry bodies could lobby foreign regulators to allow Parametric (small scale) Flood and Wind related products to be sold as 'Insurance'. This has a potentially very large market size.

## 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.

We are also keen to collaborate and contribute to industry wide initiatives and tools that relate to climate change. As outlined in Principle 3.2.1 and Principle 5.1.2, We are involved in a number of climate change research activities:

- Supporting and funding climate change research via the Lighthill Risk Network (https://lighthillrisknetwork.org/)
- Publication in leading scientific journals and books. e.g. Hurricane Risk in a Changing Climate
- Supporting academic research and new technologies for extreme weather risk e.g. Partnership with Reask
- Continuing to provide feedback to various data providers, who are looking to develop ESG rating models for insurance.
- Working with one of the key ESG data providers on a pilot project to explore the correlation between ESG performance and underwriting performance for two selected classes of business that we write
- The development of a bespoke view of catastrophe (and climate) risk through the evaluation and adjustment of catastrophe models

**5.2.1** Lighthill Risk Network Partnership

In conjunction with the Lighthill Risk Network, MS Amlin is sponsoring two research projects to provide data to support business strategies:

- Tom Philip: 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.

As part of the Lighthill Risk Network, MS Amlin has also contributed to the authorship of a of paper entitled 'Best practices for modelling the physical risks of climate change'. This was published in the first half of 2023 and seeks to provide leadership to the insurance industry as a whole as to how to quantify the possible changes in risk profile associated with climate change.

### **5.2.2** Downwards Counterfactual Analysis in Insurance Tropical Cyclone Models: a Miami case study

In 2022, the MS Amlin Research team published a chapter in a book chapter titled "Hurricane Risk in a Changing Climate", which is also sponsored by MS Amlin and the modelling firm RMS. The book relates to presentations made at the second symposium with the same title, held in Miami in June 2022, for which the organizing committee contains several of the world's leading meteorologists and climate scientists. The main objective of the symposium series 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 Amlin chapter 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. We also participated on the poster judging panel at the symposium, and sponsored the Early-Career presentation award given to Dr Yi-Jie Zhu for a poster titled "Recent Rebounding of the post-landfall hurricane wind decay period over the continental United States".

### **5.2.3** Partnership with Reask

MS Amlin commissioned a set of deliverables from Reask, an extreme weather risk advisory, forecasting, and modelling company. These deliverables are datasets for tropical cyclones in the North Atlantic basin, based on ERA-52 reanalysis of the period 1980-2019. Each year in the period is sampled multiple times to produce 20,000 years of ERA-5-driven stochastic activity. The metrics produced in the first set of deliverables cover basin-wide genesis, regional genesis, US landfall rate, regional landfall rate. There deliverables were also calculated for sub-set periods to explore decadal variability, AMO phase, and ENSO phases.

The second set of deliverables positions the observed historic risk in the wider distribution of modelled climates for the same period, using the CESM LENS project output (refer to Principle 3.2.1 for more information on CESM LENS). These CESM LENS metrics will enable a calibration of vendor catastrophe models for North Atlantic hurricane to allow climate signals within the models to be verified and modified, and to make further refinement of the climate scenarios used to adjust the models via the Model Completeness Framework (for more information on the Model Completeness Framework see Principle 2.3.1).

### **5.2.4** Lloyd's Net Zero Underwriting tool feasibility assessment

As one of the larger syndicates in the Lloyd's market, keen to contribute to, influence and help shape the outcome of any future market approach and industry standard tools, we are one of seven Lloyd's Managing Agents who participated in a Lloyd's net zero underwriting tool feasibility assessment.

The outcomes of this work helped Lloyd's to further shape their net zero journey for the market and ongoing conversations regarding a Lloyd's Roadmap.

### **5.2.5** Energy Underwriting

As well as increasingly writing and actively supporting wind, solar, hydro and biofuels assets, our Natural Resources underwriting team is working with the Oil and Gas Authority to explore how best we can support and develop the Carbon Capture and Storage (CCS) market in the UK and around the world, given there are an abundance of worldwide depleted oil and gas wells that can potentially be used and that CCS will be a vital component of transition as we use the existing fossil fuel infrastructure to accelerate the efficiency of our energy supply through transition to net zero.

We have also doubled our renewable energy portfolio from £4m to £10m and welcomed two new renewable underwriters to the natural resources team. Lindsay Waller (Senior underwriter) joined November 2022 and Georgina McLean (Underwriter) joined in April 2023.

### **5.2.6** CBES

As part of the CBES climate scenario analysis follow up exercise (CBES Part 2), we analysed and considered specialist types of insurance products for the new technologies to support greening the economy. The nature of the Lloyd's market is one which is naturally responsive to customer demand and therefore we believe that specialist insurance products for new technologies linked to greening the economy would evolve over time. Refer to Principle 2.1 for more details. Whilst the CBES scenarios start to incorporate climate transition risk, the transition analysis leaned towards Investments and our view is that the scenarios don't go far enough to reflect fair transition.

We have identified that it needs to develop a clearer view of what transition risk means to our underwriting portfolio and, alongside further analysis on physical and litigation risk, use this to create an MS Amlin scenario that sufficiently represents the real world and could be used to support decision making in the short (12-36 months), medium (3-5 years) and long (5-10 years) term.

**5.2.7** Evaluation and adjustment of catastrophe models

We have convened a Climate Risk Working Group to consider what strategic foresight was gained from the CBES exercise, the limitations of the approaches adopted and models used, how we embed the aspects of CBES that are most relevant to us within existing Risk Modelling, and how this translates into meaningful and applicable risk appetite and tolerance metrics.

Refer to Principle 2.3.4 for more details.

**5.2.8** Employee Workshops

In 2023, a series of mandatory training workshops were conducted with all insurance underwriting teams to communicate the new ESG Underwriting Guidelines and clarify possible areas of ambiguity. The guidelines require:

1. Recognition of relevant ESG factors in the underwriting process, evidenced in the underwriting file notes;
2. Engagement with the Head of Sustainability & ESG on complex issues where help is desired or needed (which in a number of areas is happening already);
3. Adherence to the new referral requirements in areas that we wish to ensure are being given the correct levels of scrutiny before we bind the risk; and
4. Adherence to all baseline exclusions.

This now forms part of the Internal Risk Review, giving us new metrics, with the CUO being informed of how this work is progressing within each underwriting area over time. These metrics will be used to support and train teams, identify areas that may require course correction and inform decision making.

| Areas of improvement in 2022-3 | Future plans over the next 12-18 months |
|---|---|
| MS Amlin has:<br>• Submitted our Sustainability Strategy to Lloyd's of London to assist in their assessment of market Best Practice and development of market wide policy.<br>• Continued to take a leadership positions to market-wide challenges that include Sustainability and Climate Risk, and work with the LMA, Lloyd's and other stakeholders to influence the course of related, future market initiatives. This has included obtaining and providing feedback to Lloyd's on pilot projects, proposed emissions measurement and reporting frameworks, and emerging ESG risks including Climate Transition and Liability risks.<br>• Alongside a handful of other Lloyd's Managing Agents, and with the support and guidance of the LMA, MS Amlin has helped to further define the roles of the LMA Sustainability Committee and LMA Climate Risk Working Group, including hand offs between the two groups. Collectively, these groups have started to help shape market approaches around and understanding of: Sector Transition Pathways; the role that brokers play in insuring the transition, ESG and Climate Risk training (via the LMA Academy) and Climate Liability Risk.<br>• Continued to be a member of the Lloyd's 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 all types of disaster, including climate-driven and weather risks.<br>• Supported a flagship female-empowerment programme in Bangladesh - the seventh most climate-change affected country in the world – helping people to reduce their risk and build resilience to climate-related emergencies through local and sustainable solutions. | MS Amlin intends to:<br>• Through our partnership with the Red Cross, we are exploring how the Loss and Damage fund announced at COP27 could be used to bridge the insurance protection gap. Extensive discussions are ongoing with brokers around new products designed to offer reinsurance protection against small Natural Peril Events. At the time of publication, wording and Legal contracts are still under review with no final decision confirmed. Our approach is underpinned by our desire to do the right thing.<br>• Continue to use its voice and participation in market fora to inform public policy making, promote public debate on climate-related issues, share insights and influence outcomes that are beneficial for the insurance industry and its clients and other stakeholders. |

# **Principle 6:** Support climate awareness amongst our customers / clients

# Principle 6:
# Support climate awareness amongst our customers / clients

## 6.1 Communicate our beliefs and strategy on climate-related issues to our customers/ clients

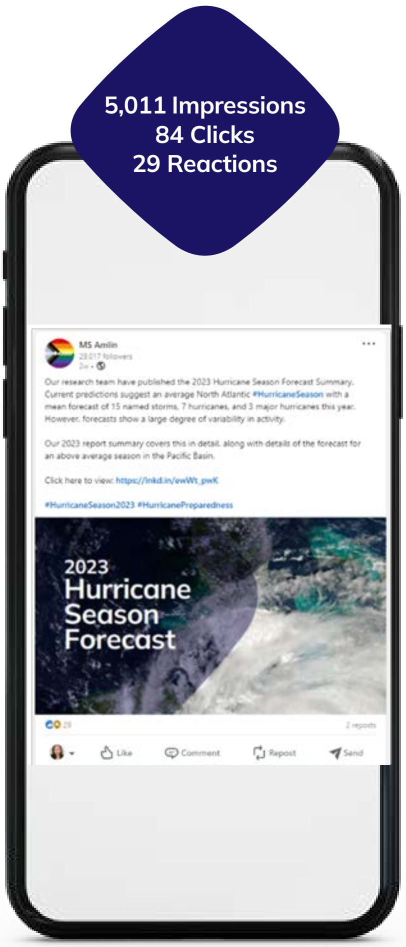
As set out in  Principles 1.1 and 2, we believe our business is well positioned to support sustainable economic development; and to influence, enable and accelerate our clients through net zero transition. We also believe that it is responsible to offer thoughtful capacity (i.e. insurance that supports fair transition), which is why we are committed to the sectors in which we specialise and recognize that the world still needs oil and gas today. We communicate this and our related beliefs, strategies and priorities on climate related issues to our clients in a number of different ways.

**6.1.1** Website

Our website is one of the key communication channels used to share information with our customers, brokers, partners and other stakeholders.  In April 2023, we launched a newly branded website specific to our Lloyd's business at http://global.msamlin.com. On this new site, access to our sustainability content is featured on the homepage and in the top level navigation, ensuring users can quickly and easily source and discover this information.

Visit the Sustainability area here. Content includes:

- A dedicated page on climate change and other environmental factors where we highlight our key achievements and targets
- Initiatives and examples of company activities with regards to equality, diversity and inclusion (ED&I)
- How we are making a positive contribution to the communities in which we operate and social responsibilities that are aligned with our purpose and complement our values.
- Measurement and reporting, where visitors can download our ClimateWise report and view our emission statistics
- Areas we have identified as a priority and how we plan to deliver our sustainability ambitions
- Links to policies and statements that control our operations


**6.1.2** Social Media

We are active users of social media channels such as LinkedIn and Twitter and post regular updates and share information on the company's climate related activities. Our LinkedIn account currently has close to 30K followers (an increase of circa 8,000 in the past year) with strong engagement with our ESG content.

Some examples of our sustainability posts and analytics are below.

**6.1.3** Media

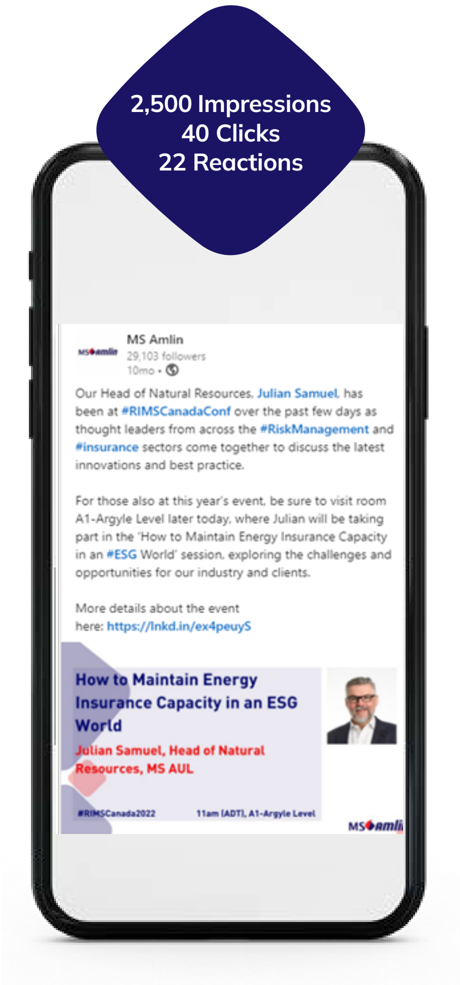
We continue to engage and build relationships with journalists and trade publications to further enhance our climate related communications and demonstrate our expertise in this area. As well as short form content such as press releases, we have also committed to longer-form copy, such as thought leadership interviews, with the intention of increasing our engagement with key stakeholders in the wider sustainability discussion. It is important to us that we do not simply focus on individual deliveries, but seek to inform, prompt and potentially educate our audiences on some of the sometimes subtle implications of events and developments around the globe

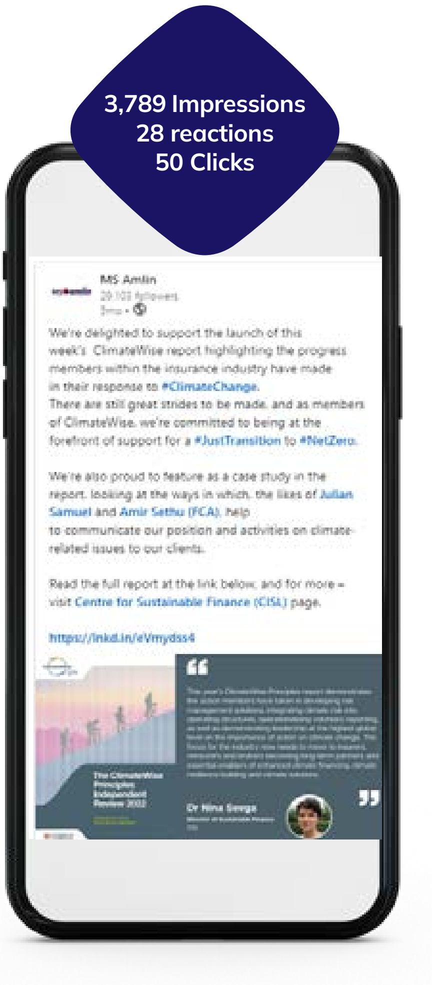
For example, following the launch of our ESG strategy in November 2022, Amir Sethu, was interviewed for a feature by Insurance Day. The article discussed the new sustainability strategy in detail, how a greener economy creates opportunities for insurers and how ESG considerations are being built into our underwriting process. https://lnkd.in/eqSD2ScY

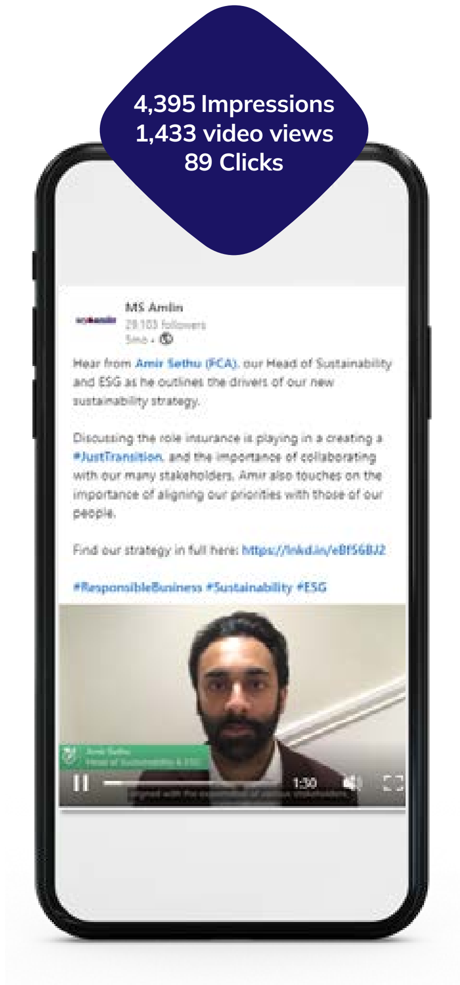
In April 2023, Amir Sethu was interviewed for Insurance Business UK, to share his perspective on the need to build on the natural links between the E, S and G, sustainability ambitions and ethos of doing the right thing. The interview provided a deep dive into the thinking behind our sustainability strategy and the foundations that underpin it. https://lnkd.in/ePgijUXE

During this reporting period, we also issued a number of sustainability focussed press releases which were picked-up and featured across the leading trade insurance titles. Press releases included:

- November 2022 - MS Amlin announces sustainability roadmap to embed ESG
- January 2023 - Strengthening Asian reinsurance offer with Phoenix 3 Relaunch
- May 2023 - MS Amlin strengthens Natural Resources with claims expertise




**6.1.4** Client meetings

Direct communications with brokers and clients are often managed personally, through meetings, either face-to-face or virtually, where the subject of climate change and transition plans have become an increasingly popular and significant line of enquiry.

For example, our International Property Treaty Reinsurance underwriter travelled to Australia earlier this year to discuss the recent floods and actions the local industry is taking to manage this risk. In every broker and client meeting the impact of climate change and the (re)insurers strategy to manage this risk was consistently discussed.

Our underwriters have been educated on our climate strategy, and where helpful, the Head of Sustainability and ESG continues to join client meetings in an advisory capacity to support, influence and ensure clients receive a consistent message on our climate strategy, and how it relates to the (re) insurable risks in question.

**6.1.5** Award Nomination

Amir Sethu was shortlisted in the category for Sustainability Champion at the 2023 Burberry British Diversity Awards. The Burberry British Diversity Awards celebrate the individuals and organisations working to promote equality, diversity and inclusion, acknowledging milestones in business, media, politics and grassroots activism. The nomination was a strong recognition of Amir's work to champion such a critical global issue.

We were also sponsors of the Insurance Insider Honours 2022, ESG Category.

**6.1.6** Events

During this reporting period, we have held three large scale industry events as part of our "MS Amlin Leaders' series". These events have been run for our Casualty, Natural Resources and Crisis Management departments. At each event over 100 Brokers and industry partners were invited to hear from our senior leadership and underwriting teams on our strategy and future plans, including updates on our sustainability strategy.

These events also supported our partnership with Ecologi to develop the MS Amlin forest, as ten trees were planted for each guest who attended. Highlighting this partnership and its benefits, as well as placing a spotlight on the broader issue of climate change, has been at the heart of this partnership, and the planting of further trees has been used at other events, including as part of our sponsorship of events such as the Singapore International Reinsurance Conference, where we planted trees for each of the 1500 attendees.

In 2024 we plan to continue our sponsorship of the Florida Symposium on Hurricane Risk in a Changing Climate, to continue both our association with this everchanging topic, as well as use the event as a dynamic environment to inform and challenge our own thinking on the subject.

**6.1.7** Planned activities

Whilst developing our Sustainability Strategy, we concentrated on understanding and encompassing our stakeholders' wide ranging expectations about the role we play in society. These expectations are not mutually exclusive and there is an underlying theme amongst all stakeholder groups that doing the right thing ultimately and consistently creates enterprise value.

We believe that good communication will help us to develop trust with all stakeholders and clearly articulating needs, expectations and challenges, creates opportunities. As sustainability and climate change in particular continues to be a key strategic priority for the business, we plan to maintain this level of activity, ensuring our customers/clients continue to be aware of our progress.

## 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.

We inform our clients of climate-related risk and provide support and tools so that they can assess their own levels of risk, through our publications, products and memberships of industry bodies – the latter of which is covered in Principle 5.2.1.

**6.2.1** Research

In June 2023, we shared research with customers/clients by publishing a statement overview of the 2023 hurricane season forecasts. The report correlated forecast data from 20 research groups, private companies and universities which (on 01 June 2021) outlines for average North Atlantic hurricane activity with a mean forecast of 15 named storms, 7 hurricanes, and 3 major hurricanes and an above average season in the Pacific Basin. 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.

We also support and help clients assess their levels of risk through our representation and contribution to industry wide initiatives including Lloyd's, ClimateWise and the Lighthill Network.

**6.2.2** Lloyd's

As one of the larger syndicates operating in the Lloyd's

market, we are keen to embrace new opportunities to influence and help shape the development of future sustainability initiatives. Having participated in the Lloyd's Feasibility Assessment of a Net Zero Underwriting Toolkit initiative in 2022, we continue to share our perspectives and feedback with Lloyd's through various channels, which include: submission of our Sustainability Strategy as part of the 2023 business planning process; membership of the LMA Sustainability Committee and Climate Risk Working Group; one-to-one meetings.
As a responsible syndicate, we fully support both the ambition and specific commitments contained within the latest Lloyd's ESG Report.

### **6.2.3** ClimateWise

MS Amlin is a founding member, and active participant, of the ClimateWise initiative which represents a global network of leading insurance industry organisations. Our ESG Executive Sponsor is a member of the ClimateWise Insurance Advisory Council and our Head of Sustainability and ESG is a member of the Managing Committee.

Through our membership we have the opportunity to participate in research and task groups which explore issues related to the industry and climate change. This research is publicly available to our clients via the ClimateWise website. We also participated in a series of workshops to consider the future strategy for ClimateWise.

### **6.2.4** Lighthill Risk Network

We are a core member of the Lighthill Risk Network. The networks purpose is to link its extensive academic knowledge to the research needs of industry. This provides the business community with a gateway into the latest knowledge and understanding of risk, while the scientific community have an opportunities to interact with industry. See Principle 5.2.1 for our latest research projects.

### **6.2.5** Products

In January 2023, our Singapore based operation MS Amlin Asia Pacific Pte. Ltd. (MS AAP) launched the company's third Asia focussed reinsurance ILS offering, Phoenix 3 Re. The original offering, Phoenix 1 Re Pte. Ltd. was a landmark first locally issued ILS that provides capacity to local cedants, solely focused on the Pan-Asia region, which is a region prone to non-modelled perils. These transactions provide quota share capacity to the MS AAP Cat XL portfolio with differing but complementary risk appetites. The combination of all three sidecars helps MS AAP to strengthen our status as a reputable treaty leader in the region. With the additional capacity, we are actively working with our cedants to help grow their reinsurance programmes, in turn reducing the protection gap and providing better catastrophe coverage for insurance clients.

Phoenix 3 Re received external recognition in when it was awarded the 'Strategic Partnership of the Year - Singapore' award at the 2023 Insurance Asia Award, the award honoured innovative or breakthrough partnerships that insurers have entered into with insurtechs, distribution providers, analytics companies, other technology providers, brokers, loss adjusters or consultants to enhance its capabilities as well as deliver value to customers.

## Areas of improvement in 2022-3

MS Amlin has:

- Developed ESG Underwriting Heat Maps to measure the sustainability performance of the insurance underwriting portfolio and help Underwriters to understand the Sustainability risks and opportunities within their books of business. These help underwriters to identify areas that require more scrutiny (e.g. review of client transition plans), which in turn support client engagement and the ability for us to support our clients by insuring the transition.
- Provided political risk and credit insurance to development finance programs designed to ease sovereign debt burdens in emerging markets, whilst also funding UNSDG aligned efforts.
- Developed a Responsible Underwriting Policy and Insurance ESG Underwriting Guidelines, that are aligned with balancing the interest of our main stakeholders, facilitating decarbonisation and responsible business over a period, supporting our clients to transition to net zero, and continuing to provide cover for selected fossil fuel operators so long as they commit to transition
- Started to pilot a measurement approach for assessing transition performance for parts of our portfolio that we expect to have the highest carbon footprint; we plan to use this to help compare year-on year progress and promote conversations with our clients on their net zero journeys.
- Developed and launched and new website (global.msamlin.com) where anyone can access information on our beliefs and strategy in relation to sustainability and climate-related issues.
- Grown our social media followers (Linked increased by nearly 8,000 followers) and continue to share sustainability posts
- Engaged with insurance media to promote our views on sustainability (e.g.) and received award recognition for the contribution from our people
- Communicated our ESG beliefs and strategy to clients at large scale events

## Future plans over the next 12-18 months

MS Amlin intends to:

- Through our partnership with the Red Cross, we are exploring how the Loss and Damage fund announced at COP27 could be used to bridge the insurance protection gap. Extensive discussions are ongoing with brokers around new products designed to offer reinsurance protection against small Natural Peril Events. At the time of publication, wording and Legal contracts are still under review with no final decision confirmed. Our approach is underpinned by our desire to do the right thing.
- Continue to use its voice and participation in industry conferences and through thought leadership and trade media to support clients, promote public debate on climate-related issues, share insights and influence outcomes that are beneficial for the insurance industry and its clients.
- Increase physical damage underwriting of and support for wind, solar, hydro, biofuels and carbon capture assets, as well as electrified offshore platforms and Battery Energy storage devices
- Identify suitable methodology and parameters required to embed scenarios into the existing Technical Pricing Framework, beyond the model adjustments adopted through the MCF, capital modelling and reserving.
- Communications and sustainability are part of the same department (Strategy and Transformation). This close relationship and engagement aids promotion and effective communication of our initiatives and plans. We intend to continue sharing regular updates and informative communications, ensuring our people and clients continue to be aware of our Sustainability strategy and progress.

# **Principle 7:** Enhance Reporting

# **Principle 7:** Enhance Reporting

## 7.1 Submission against the ClimateWise Principles.

Being a founder signatory to the ClimateWise initiative, we continue 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.

## 7.2 Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.

MS Amlin publishes a copy of its ClimateWise report, which has been reviewed by the Sustainability Committee and approved by the Exco, on its website https://global.msamlin.com/about/financials/reports/
and employee intranet to demonstrate ongoing commitment to the ClimateWise Principles.

MS Amlin's existing and future reporting requirements have been reviewed carefully and current feedback suggests that the additional effort required to produce a standalone, broader sustainability and/or TCFD report is neither justified by the potential benefits nor mandatory for MS Amlin.

Given the nature, scale and complexity of our business, management believes that less formal disclosures, via our website and wider media, provide greater reach and influence when compared to voluntary reporting. The effort that would otherwise have been afforded to voluntary reporting will be deployed in the business to drive sustainability outcomes that are aligned with our sustainability priorities (e.g. working with Underwriters to develop modified products that will support fair transition to net zero).

Following discussions MS Amlin's Audit Committee and other relevant parties, we have captured information concerning broader environmental, social and governance issues within our ClimateWise report, where relevant and will explicitly map the ClimateWise disclosures to the TCFD recommended disclosures, and SECR disclosures. We will seek to demonstrate the adequacy of the mapping between the disclosures, as part of the approval process, and ask Internal Audit to review the work to provide assurance to the Audit Committee.

For 2023/24 and beyond, we will continue to monitor the sustainability reporting landscape and update the Audit Committee on developments.

# Climate wise report definition of Acronyms:

AEP – Annual Exceedance Probabilities.

AUM – Assets Under Management.

AMO – Atlantic Multi-decadal Oscillation.

BAU – Business as Usual.

BESS – Battery Energy Storage Systems.

BEIS – Business, energy & industrial Strategy.

BoE – Bank of England.

CAT 2 – Category 2.

CBES – Climate Biennial Exploratory Scenario.

CCS – Carbon Capture and Storage.

CCUS – Carbon Capture, Utilisation and Storage.

CESM – Community Earth System Model.

CRMC – Catastrophe Risk Management Committee.

CRWG – Climate Risk Working Group.

CRED – Centre for Research on Epidemiology of Disasters.

CUO - Chief Underwriting Officer.

CSA – Climate Scenario Analysis.

CSA – Corporate Sustainability Assessment.

CSR – Corporate Social Responsibility.

CSRD – Corporate Sustainability Reporting Directive.

DRF – Disaster Risk Facility.

D&O – Directors and Officers.

ED&I – Equality, Diversity & Inclusion.

EMF – Exposure Management Framework.

EMEA – Europe, Middle East, Africa.

ENSO – El Nino Southern Oscillation.

ESG – Environmental, Social, Governance.

EV – Electric Vehicles.

FTE – Full-time equivalent.

FY2022 – Financial Year 2022.

GDP – Gross Domestic Product.

GHG – Green House Gas.

GIST – General Insurance Stress Test.

GVA – Gross Value Added.

H/O – Head Office.

IGC – Investment Governance Committee.

IRA – Inflation Reduction Act.

ISSB – International Sustainability Standards Board.

KPI – Key Performance Indicator.

LED – Light Emitting Diode.

LENS – Large Ensembles Project Output.

LMA – Lloyd's Market Association.

MCF – Model Completeness Framework.

MGC – Model Governance Committee.

MI – Management Information.

MSAAP – MS Amlin Asia Pacific Pte. Ltd.

NAHU – National Association of Health Underwriters.

NGO – Non-governmental Organisation.

NGFS – Network for Greening the Financial System.

OECD – Organisation for Economic Co-operation and Development.

PCAF – Partnership for Carbon Accounting Financials.

PRA – Prudential Regulation Authority.

PRI – Principles for Responsible Investments.

PV – Photovoltaic

RDS – Realistic Disaster Scenarios.

R&D – Research and Development.

RMS – Risk Management Solutions.

RMF – Risk Management Framework.

RQE – Risk Quantification and Engineering.

SBF – Syndicate Business Forecast.

SEC – Securities and Exchange Commission.

SECR – Streamlined Energy & Carbon Reporting.

SMF – Senior Management Functions.

TCFD – Task Force on climate-related Financial Disclosures.

ToRs – Terms of Reference.

TLB – The Leadenhall Building.

TPRM – Third Party Risk Management.

TVaR – Tail Value at Risk.

UNSDG – United Nations Sustainable Development Goals.

WACI – Weighted Average Carbon Intensity.