

Insuring a sustainable, greener future

A roadmap for climate action



Lloyd's
Futureset

1. Foreword



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Insuring a sustainable, greener future

Climate change is the largest, most challenging crisis the world has faced, bringing increasing risk and uncertainty for society, and for the future of our planet. With growing risks that threaten the livelihoods and futures of individuals, communities and entire ecosystems, there has never been a more important time for global collaboration and action on a vast scale.

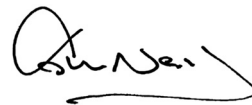
As a systemic risk like no other, there is an increasing urgency for governments, industries and communities to respond to the challenge, as well as the scale of opportunity it presents. With the world beginning to emerge from the devastation of the COVID-19 pandemic, we have a collective responsibility and imperative to put sustainability and inclusion at the heart of global economic and societal recovery.

Governments and industries across nations are coming together to take action through a number of significant commitments and initiatives to accelerate the transition to net zero. These activities will drive rapid decarbonisation across economies and sectors, alongside the expansion of greener energies and business models worldwide. Delivering climate resilience will require adaptation of our global systems, including our built environment, industry, transportation and energy. All of these changes will need to be paired with concerted action to ensure that the implications of the transition do not leave any person, business or industry behind.

With a unique view of the climate crisis, through its many decades providing support to communities, businesses and economies in the face of increasingly severe and frequent weather events, Lloyd's and the global insurance industry have a critical role to play in building a more sustainable, greener future. Alongside mitigating and managing the impact of these disasters, the industry continues to provide financial support across multiple industries to build greater climate resilience and support the increased scale and speed of the transition.

As risk managers, risk carriers and investors, insurance is a powerful enabler, providing innovative products and services to finance, manage and accelerate the decarbonisation of industries and economies, as well as the growth of greener industry, greener transport and greener energy. This includes using its expertise to help increase levels of safety in managing new fuels and new construction techniques, facilitating increased collaboration between the public and private sector to support vulnerable developing nations, and directing its own capital reserves away from carbon-intensive sectors towards green solutions.

This report sets out the sustainability and decarbonisation ambitions of the sectors that are critical to a successful global transition to a low carbon economy, together with a climate action roadmap that highlights the ways in which the global insurance industry will support and accelerate this transition and the delivery mechanisms which will be deployed.



John Neal, CEO, Lloyd's



Bruce Carnegie-Brown, Chairman,
Lloyd's

SMI Insurance Task Force Membership

AIG: Peter Zaffino, President and CEO

Allianz: Oliver Bäte, CEO

Amwins: Scott Purviance, CEO

Aon: Greg Case, CEO

Ascot: Andrew Brooks, CEO

AXA: Sean McGovern, CEO AXA XL

Beazley: Adrian Cox, CEO

Conduit Re: Neil Eckert, Executive
Chairman

Direct Line Group: Penny James, CEO

Hiscox: Bronek Masojada, CEO

Howden Group: David Howden, CEO

Legal & General: Nigel Wilson, CEO

Lloyd's: John Neal, CEO

Marsh McLennan: Dan Glaser,
President and CEO

Munich Re: Joachim Wenning, CEO

Phoenix: Andy Briggs, Group CEO

Tokio Marine Kiln: Brad Irick, CEO

Aon Reinsurance Solutions: Dominic
Christian, Global Chairman

Insurance Development Forum:
Ekhosuehi Iyehen, Secretary General

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The role of Lloyd's and the global insurance industry in the climate transition constitutes three main areas of action:

1. Pioneer new risk transfer solutions for green innovation.

The scale and pace of green innovation required across multiple sectors and geographies will require new and extensive risk management and transfer solutions.

Lloyd's and the global insurance industry can strengthen its support for private and public sustainability initiatives and innovation by pioneering new risk transfer solutions that empower customers to develop, invest and grow these activities as the world transitions towards a sustainable future.

2. Support and accelerate the transition of carbon-intensive sectors.

As carbon-intensive sectors embark on their respective decarbonisation pathways, the global insurance industry will need to support its customers, and the risk ecosystems they operate in, to actively reduce the carbon intensity of their activities.

Lloyd's and the global insurance industry can achieve this through its unique ability to support customers to unlock the opportunities of the transition and navigate a changing risk landscape.

3. Harness \$30tn capital pool to drive positive change.

Green finance is a critical enabler of the transition. There is a unique opportunity to harness the global insurance industry's more than \$30 trillion capital pool and direct this towards more sustainable investment opportunities.

Lloyd's and the global insurance industry can align its investment activities with the scale and pace of change needed across industries and economies.

To catalyse and deliver action across these three areas, Lloyd's is chairing a newly convened Sustainable Markets Initiative, launched by HRH the Prince of Wales, whose membership comprises many of the world's largest insurance firms. As an influential platform for the global insurance industry to collectively advance the world's progress towards a resilient, net zero economy, the Task Force will drive climate positive action at pace, through a number of key initiatives set out in this report.

London Advisory Committee

[Andrew Brooks](#), Chair, Lloyd's Market Association

[Sheila Cameron](#), CEO, Lloyd's Market Association

[Christopher Croft](#), CEO, London and International Insurance Brokers Association

[Richard Dudley](#), Chair, London and International Insurance Brokers Association

[Julian Enoizi](#), CEO, Pool Re

[Huw Evans](#), Director General, Association of British Insurers

[Sian Fisher](#), CEO, Chartered Insurance Institute

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[Broniek Masojada](#), Chair, Placing Platform Limited

[Dave Matcham](#), CEO, International Underwriting Association

[Robert Kuchinski](#), Chair, International Underwriting Association

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At such a critical moment in time, with monumental change and transformation across every industry and economy, the insurance industry's role in accelerating the world's transition to a more sustainable future has never been so important. Lloyd's is proud to be leading the way, in partnership with many of the world's most influential insurance companies, to take action and join the global reset on climate.

Lloyd's climate action roadmap towards a greener future




	Now	Next	Beyond
	<p>Immediate insurance industry action to de-risk critical decarbonisation activities</p> <p>The global insurance industry has an impressive role to play in supporting and accelerating these developments. Lloyd's will:</p>	<p>Further enhance understanding of the evolving risk landscape for priority sectors</p> <p>The global insurance industry needs to understand how these technologies may emerge and the potential impact on the risk landscape. Lloyd's will:</p>	<p>Deepen understanding of the risk ecosystem and stand ready to support emerging technologies</p> <p>The global insurance industry will need to be aware of new technologies and adapt their offerings in the longer term to reflect new risks. This includes:</p>
Greener industry	<ul style="list-style-type: none"> Convene SMI workstream for open source disaster recovery framework Convene stakeholders to understand risk profile of sustainable materials / techniques Convene SMI workstream for green assets Convene SMI workstream to drive innovation across insurance supply chain 	<ul style="list-style-type: none"> Lead a research initiative into construction materials and techniques 	<ul style="list-style-type: none"> <i>Hydrogen power for homes and public buildings</i>
Greener transport	<ul style="list-style-type: none"> Convene SMI workstream and industry stakeholders for a collaborative product design workshop to address potential protection gaps 	<ul style="list-style-type: none"> Facilitate a product design sprint to develop and bring products to market 	<ul style="list-style-type: none"> <i>Development of sustainable fuels (including hydrogen powered aircraft and ships)</i>
Greener energy	<ul style="list-style-type: none"> Convene SMI workstream to focus on green assets (including offshore wind) Work with SMI Hydrogen Task Force to open up discussions with customers Provide a platform to ensure coordinated action between stakeholders to meet capacity demands 	<ul style="list-style-type: none"> Commit to expanding coverage to ensure capacity constraints don't limit growth Lead research into specific risks posed by hydrogen and explore coverage requirements 	<ul style="list-style-type: none"> <i>Next generation nuclear technology</i> <i>Carbon capture and storage technology</i>



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Lloyd's Climate Action Roadmap Overview

For each of the sectors identified in this paper as critical to a successful global transition to a low carbon economy, we have articulated a roadmap for tangible action to accelerate change. We have identified three key enablers to deliver on these actions:

1.	2.	3.
 <p>The global insurance industry</p>	 <p>Lloyd's in its role as chair of the SMI Insurance Task Force</p>	 <p>Lloyd's</p>
<p>Actions which the global insurance industry should collectively take going forward. The global insurance industry refers here to the whole insurance ecosystem spanning across all geographies, lines of business and size of market share.</p>	<p>Actions which will be delivered through the Sustainable Markets Initiative Insurance Task Force which includes representatives across the global insurance industry. Lloyd's will accelerate change in its role as Chair of this Task Force.</p>	<p>Actions which Lloyd's will progress. This refers specifically to actions which the Corporation of Lloyd's will take to accelerate change with the Lloyd's market as part of the wider insurance ecosystem.</p>

We believe these enablers will allow us to strike an appropriate balance between effectively delivering what is within our control and progressing actions where broader industry collaboration and partnership is necessary for success. The colour coding of the roadmap for action described below corresponds with the colours introduced above, to indicate which delivery mechanism will be deployed to progress each action.

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Greener Industry

Green Finance



The insurance industry has a significant opportunity to direct capital towards climate-positive solutions and products. It can achieve this through actively integrating ESG factors into the investment decision making process, proactively making impact investments into areas of the economy which are actively decarbonising and excluding investment from particularly carbon-intensive sectors which are failing to commit to the transition.

There is also a significant opportunity for the global insurance industry to collaborate with investors and governments to provide financing structures to support disaster resilience, response and recovery in developing countries.



Through its role as Chair of the SMI Insurance Task Force, Lloyd's has:

- Convened a workstream focused on supporting and encouraging more sustainable investment. In 2021, the workstream will develop a framework for accelerating and scaling sustainable investment, to help unlock the global insurance industry's more than \$30tn in assets under management, increasingly directing capital towards investments that drive climate-positive outcomes in both developed and developing nations.
- Convened a workstream dedicated to establishing a public-private disaster resilience, response, and recovery framework to help protect developing nations from the evolving economic and societal impacts of climate change, including the effects of increasingly frequent and severe weather events. The framework will combine an insurance product with risk management and loss recovery services. Lloyd's, as part of the SMI, will work closely with key stakeholders including insurers, governments, aid agencies and data providers to deliver a pilot scheme in 2021.

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Homes, Commercial and Public Buildings



The shift towards using more sustainable materials, new construction methods and alternative energy sources has significant implications for the risk profile of a building, which insurers will need to understand. Insurers should explore how to incentivise customers to lower the carbon footprint of their building(s), and/or more readily introduce 'build back better' wordings in policies. This should be balanced with understanding the risk profile of sustainable materials and new construction techniques, to ensure that the application of these does not ultimately result in increased claims exposure.



Through its role as Chair of the SMI Insurance Task Force, Lloyd's has:

- Convened a workstream dedicated to developing and launching an industry-wide framework for greener insurance supply chains to drive sustainable outcomes for customers, including through claims processes.



In addition, Lloyd's will:

- Conduct targeted research to understand the risk profile of new construction materials and techniques, exploring the insurance implications and opportunities for new or evolved risk solutions.



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Greener Transport

Electric Vehicles (EVs)



The business model of automotive companies operating in the EV sector is shifting from manufacturing towards providing full lifecycle solutions to customers. New insurance requirements are emerging as a result of this change in business model, for example an increase in demand for non-damage business interruption cover to protect against enhanced risks of connectivity, and cover for inter-connected global operations (compared to cover for local operations). Insurers will need to refine their product offerings to remain relevant in a changing industry.



To drive innovation and accelerate product development, through the SMI Insurance Task Force Lloyd's will:

- Design an innovative EV insurance product to address protection gaps as new risks emerge and vehicle business models evolve.



Lloyd's will then:

- Facilitate a product design sprint to develop potential products from ideation to commercially viable products.



Jet Zero and Greener Maritime



As the aviation and marine sectors accelerate their efforts to drive sustainability through advancements in technology and alternative sources of fuel, opportunities will emerge for the insurance industry to support their decarbonisation pathway. Insurers should understand the risk implications of technological advancements, including resulting changes in infrastructure such as fuel transportation and storage, to ensure that cover is made available for emerging and alternative marine and aviation risks at the moment it is needed.



To support and drive innovation across the aviation and maritime sectors, the SMI Insurance Task Force will:

- Work closely with the SMI Aviation and Shipping task forces to open up discussion with customers embarking on research and development in this area to identify requisite insurance coverage for emerging risks and new technologies.



In addition, to support and accelerate the growth of greener maritime, Lloyd's will:

- Provide a platform for dialogue between customers and insurers operating in this space to understand the specific challenges customers are facing and develop insurance coverage for emerging risks, in particular those associated with retrofitting of the global fleet to drive operational efficiency.



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Greener Energy

Offshore wind



Offshore wind projects continue to increase in scale and complexity, with advances in turbine technology (with respect to foundation depth, distance from shore and power output of each turbine) evolving rapidly. The global insurance industry has a unique opportunity to further expand the coverage it provides to the offshore wind sector to meet demands for additional insurance capacity, which is being driven by the rapid advancement of new offshore wind technology including turbines and floating wind technology.

In addition, given the size of many offshore wind projects, a blended financing model is necessary which typically requires a combination of investment from private corporates (often large utilities and/or oil and gas companies), overseas investors and large institutional investors to achieve success.



To support and accelerate the growth of offshore wind, the SMI Insurance Task Force has:

- Convened a workstream focused on supporting and encouraging more sustainable investment, including into offshore wind projects. In 2021, the workstream will launch a green investment proposal, outlining the intent and capability of the insurance industry to make resources available to support green investment, and the regulatory changes required to realise this ambition.
- Provide a platform to ensure there is co-ordinated action between the insurance industry, operators in the offshore wind sector and private investors.



In addition, Lloyd's will:

- Commit to expanding its coverage to ensure capacity constraints do not limit the growth of the industry.

Nuclear



The global insurance industry has a unique opportunity to further expand the coverage it provides to the nuclear industry in order to meet demands for additional insurance capacity, which is being driven by anticipated regulatory changes and the development of new nuclear capacity. The Lloyd's market provides significant capacity to nuclear risk specialists NRI (the British Nuclear Insurance Pool) and Northcourt (an independent MGA), who take an active lead in identifying how to increase insurance capacity for the sector, and what combination of government support, risk pooling, and mutual arrangements is needed to ensure adequate protection is available.

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As global leaders in providing insurance for the nuclear energy sector, Lloyd's will support the increase in nuclear insurance capacity through:

- Providing a platform to ensure there is co-ordinated action between the insurance industry, civil nuclear sector and government, and to ensure that nuclear operators are able to meet the additional liability required by regulations.

Hydrogen



Hydrogen is a vector of change and facilitator of decarbonisation for several sectors and significant investment will be required to develop hydrogen infrastructure. The use of hydrogen also introduces unique safety implications which will need to be appropriately identified, measured, monitored and managed, and insurers are well-placed to support customers across multiple industries with this.

Insurers should enter dialogue with corporates operating across the hydrogen value chain to better understand the challenges they are facing in obtaining specialist insurance cover, and consider how cover may need to be segmented or consolidated across components of the hydrogen value chain to prove effective.



To help facilitate the develop of hydrogen, the SMI Insurance Task Force will:

- Work closely with the SMI Hydrogen Task Force to open up discussion with customers operating in this space on the specific challenges they are facing to develop insurance coverage for innovative or prototypical hydrogen technologies and infrastructure.



To support this, Lloyd's will:

- Lead research through Lloyd's Futureset into the specific risks posed by hydrogen, including its flammability, and how these risks might emerge in different ways according to how this fuel is used at a sectoral level. This will help corporates and private investors to understand how these risks can be managed and where specialist coverage may need to be introduced or expanded, for example in relation to the transportation of hydrogen.

Join the Reset

Lloyd's Climate Action Roadmap

The key mechanisms to deliver change in critical sectors include:

The global insurance industry

Actions collectively taken by the whole global insurance ecosystem.

The Sustainable Markets Initiative (SMI) Insurance Taskforce

Actions delivered by Lloyd's and other global insurance firms through the SMI Insurance Task Force.

Lloyd's

Actions which Lloyd's will take, in conjunction with market participants, to accelerate change.



Greener Industry



Greener Finance

Direct capital towards climate-positive solutions through integrating ESG factors into investment decisions and identifying impact investment opportunities.

Work with investors and governments to provide financing structures to support disaster response and recovery in developing countries.

Develop a consolidated industry-wide framework to accelerate investment in long-dated green assets, supporting climate innovation and the transition to renewable energies.

Develop and pilot a framework to support disaster response and recovery in developing countries, to increase preparedness for, and limit the impact of, extreme weather events in vulnerable nations.

Greener Construction

Incentivise customers to lower their buildings' carbon footprint, and introduce 'Build Back Better' wordings in policies.

Develop and launch an industry-wide framework for greener insurance supply chains to drive sustainable outcomes for customers, including through claims processes.

Conduct targeted research to understand the risk profile of new construction materials and techniques, exploring the insurance implications and opportunities for new or evolved risk solutions.



Greener Transport



Electric Vehicles (EVs)

Refine insurance products to reflect evolving business models of automotive companies, covering full-lifecycle solutions.

Design an innovative EV insurance product to address emerging protection gaps as new risks emerge and vehicle business models evolve.

Jet Zero and Greener Maritime

Understand the risk implications of technological advancements and alternative fuel sources to ensure that insurance products can evolve in tandem.

Work closely with the SMI Aviation and Shipping task forces to identify critical insurance coverage for emerging risks and new technologies.

Provide a platform for dialogue between customers and insurers operating in aviation and marine to understand the specific challenges customers are facing and develop insurance coverage for emerging risks, in particular those associated with retrofitting of the global fleet to drive operational efficiency.



Greener Energy



Offshore Wind

Expand offshore wind sector coverage to meet additional demands driven by technological advancements.

Develop a consolidated framework to accelerate and scale insurance industry investment into long-dated green assets to support offshore wind.

Provide a platform for a co-ordinated financing approach between the insurance industry, offshore wind operators and private investors.

Commit to expanding coverage to ensure capacity constraints do not limit the growth of the industry.

Nuclear

Further expand nuclear coverage to meet demands for additional capacity driven by emerging regulation and growth in nuclear capacity.

As the global leader in nuclear energy insurance, provide a platform for co-ordinated action between the insurance industry, civil nuclear sector and government.

Hydrogen

Work with corporates across the hydrogen value chain to better understand key challenges and opportunities for specialist cover.

Lead research into hydrogen risks to identify where specialist coverage is needed across the value chain.

Work closely with the SMI Hydrogen Task Force to develop insurance coverage for innovative or prototypical hydrogen technologies and infrastructure.

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