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BEYOND THE INSURANCE TRANSACTION: ENABLING THE ENERGY TRANSITION THROUGH STAKEHOLDER PARTNERSHIPS

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INSURANCE'S ABILITY TO MANAGE RISK COULD BE KEY IN HELPING THE ENERGY TRANSITION TO SCALE



The energy transition, one of the riskiest human endeavours of modern times, could get riskier as a range of factors come together in 2024.

The chances of meeting the climate goals underpinning the transition are in the balance, with a survey in May 2024 revealing 80% of climate scientists expect global temperatures to exceed 2.5 degrees Celsius (4.5 Fahrenheit) this century, way above the Paris Agreement target of 1.5 degrees Celsius.¹

At the same time, the ability to scale up the energy transition and avert disaster is increasingly in question. Energy security concerns are fuelling a bullish view of oil and gas drilling² and rising populism is threatening decarbonization plans.

Such worries are leading the insurance industry to call for greater engagement with energy transition stakeholders. Insurers have a major interest in meeting climate goals because the insurance industry faces mounting natural catastrophe losses in a warming world.

In 2015, the year the Paris Agreement was adopted, AXA Group Chairman Henri de Castries underscored the insurance industry's position. "We have no choice," he said. "A 2 degrees Celsius world might be insurable. A 4 degrees Celsius world certainly would not be."³

An insurance industry unable to underwrite because of climate change could have significant implications for the

global economy, says Andrew MacFarlane, Head of Climate at AXA XL, AXA Group's property and casualty, and specialty division. "If it wasn't for insurance, we wouldn't be able to live the way we do," he says.

"We wouldn't be able to get in cars, we wouldn't be able to go on planes, the supply chains that we rely on wouldn't exist. Insurance is a critical part of the global economy and has a critical role to play in supporting the transition. There's skin in the game, for sure."

At the same time, the insurance sector has vast and often under-appreciated resources that it can use to speed and scale up the energy transition, plus unique knowledge of the risks involved.

These assets are not being exploited to the full by energy transition players, according to a January 2024 report from the Geneva Association, a global insurance industry think-tank and lobby group.

"Industry-level collaboration and cross-sectoral partnerships are essential to stepping up the insurance industry's contributions to accelerating the commercialization and wide-scale deployment of new climate technologies," said the report.⁴

This paper looks at the many ways insurers can support the energy transition—and what needs to happen for the industry's true value to be unleashed.

TRADITIONAL INSURANCE ADJUSTS TO NEW TECHNOLOGY RISKS IN THE ENERGY TRANSITION

The insurance industry is seeking greater engagement with clients as it grapples with pricing risk in the new technologies required for the energy transition.

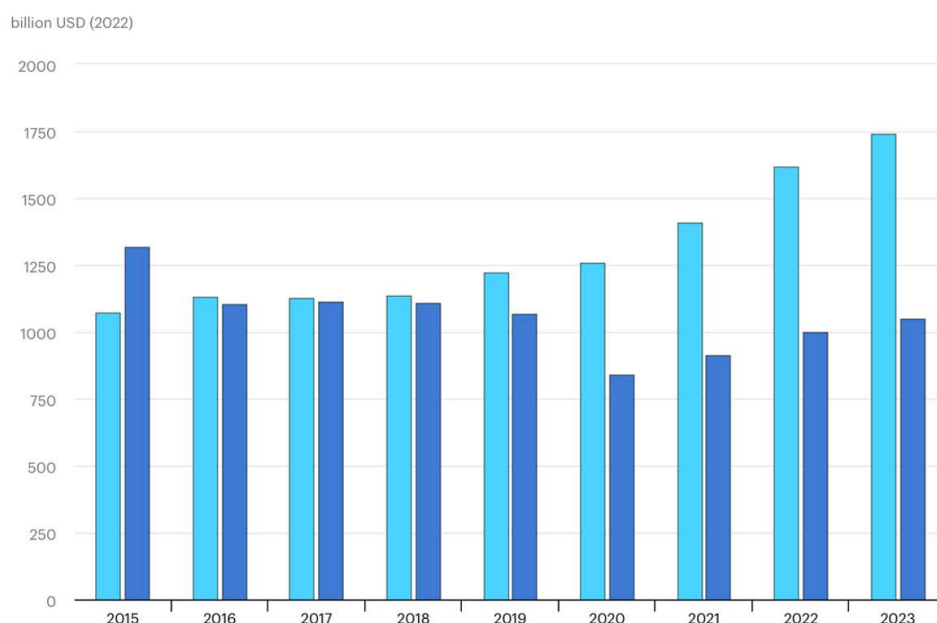
“The industry wants to innovate and develop products and services that support our clients,” says Vicky Roberts-Mills, Global Head of Energy Transition at AXA XL. “But we need to do that in the full knowledge and understanding of those exposures our clients are trying to manage.”

The Geneva Association’s January 2024 report on the role of insurers in industrial decarbonization says: “Climate tech stakeholders ... need to collaborate with re/insurers from the early phases of project development.”⁵

Insurance’s drive to get closer to energy transition clients is logical given the massive opportunity presented by the cleantech market, which the International Energy Agency (IEA) valued at more than \$1.7 trillion in 2023.⁶

GLOBAL ENERGY INVESTMENT IN CLEAN ENERGY AND IN FOSSIL FUELS, 2015-2023.

Source: IEA.⁷



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● Clean energy ● Fossil fuels



However, appeals for greater rapport with energy transition companies, including earlier involvement in product and project lifecycles, also respond to a genuine desire to improve insurance industry support for an endeavour seen as critical for the minimisation of other global risks.

“Insurers are well-placed to help with the commercialization and scaling-up of energy transition technologies and are keen to deliver value far beyond essential insurance cover,” says Roberts-Mills.

The hope is that insurers can provide benefits throughout all stages of a project or product lifecycle, whether through products such as political risk, trade credit and performance guarantee insurances or through broader risk consulting.

“The industry has built products and services that help clients protect against many of the things that can happen to a physical asset and the company’s ability to have constant revenue flows,” Roberts-Mills says.

“What we’re also seeing now is a need to unlock a flow of funding into the system—and the minute you get third-

party investors involved, insurance is massively on the agenda because you need to de-risk lending.”

In an ideal world, says Roberts-Mills, speaking to an insurer should “become less of a conversation about insurance and more of a conversation about risk.”

Taking on a more strategic role could help insurers to accurately price the risks associated with emerging cleantech segments such as those linked to low-carbon hydrogen production, for example. “Hydrogen is not a new technology,” says Roberts-Mills, “but the way it’s being considered and scaled feels new.”

As clean technology and project developers seek to grow these emerging markets in renewable power generation, it will be increasingly important for risk managers to have such insights early in the development process.

And the insurance industry is keen to help developers bake risk management into project and product lifecycles from an early stage. The aim is to ensure lower risks for all involved—which is an objective any stakeholder would welcome.



XL Insurance

Insurance touchpoints across the Energy Transition journey

Research, Financing & Acquisition

Design & Construction

Operational Lifespan & Decommissioning

Property and Casualty Insurance

Construction Insurance

Global Programmes

Risk Consulting - with specialist team for energy clients

Captives and Structured Risk Solutions

Political Risk and Credit Insurance, including Contract Frustration

Financing, Credit and M&A Solutions

Parametric Solutions

Performance Guarantee Insurance

Cyber Insurance

Environmental Insurance

Excess Emissions Insurance

Marine, Cargo and Transportation

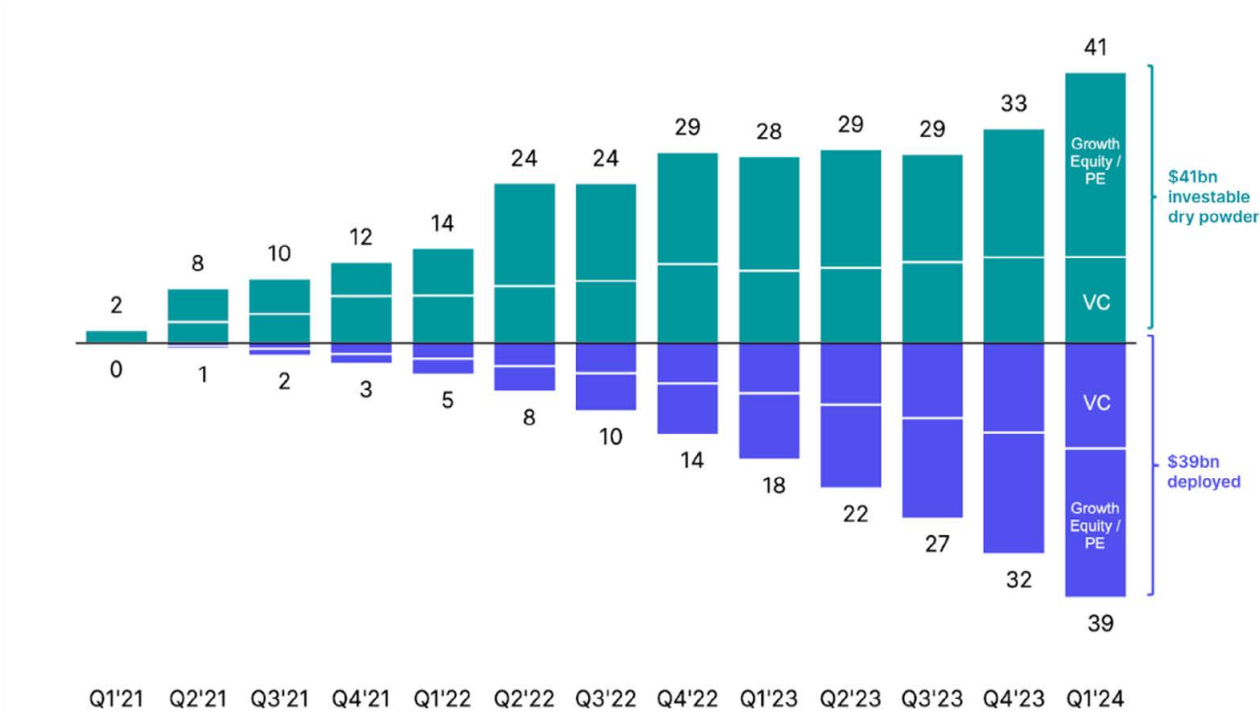
INSURERS SEEK TO DE-RISK THE TRILLIONS NEEDED TO MEET NET ZERO

The cheap, plentiful and sustainable power promised by the energy transition will only come after an upfront investment of trillions of dollars a year. Unlocking that kind of capital is no easy task—but it is one the insurance industry is angling to help with. The Geneva Association’s January 2024 Climate Tech for Industrial Decarbonisation report sees insurance as

playing a key role in closing a cleantech funding gap it says could amount to \$9.2 trillion a year on top of current levels.⁸ The money to plug this gap is increasingly available, with climate-related investment funding—principally venture capital and private or growth equity—on the up after almost two years of uncertainty sparked by high interest rates.

CUMULATIVE INVESTABLE VERSUS CUMULATE DEPLOYED CAPITAL FOR CLIMATE TECH INVESTMENT, IN BILLIONS OF DOLLARS (PE = PRIVATE EQUITY, VC = VENTURE CAPITAL).

Source: CTVC.⁹





The problem is that fund managers may be loath to invest this cash in ventures that cannot secure bank lending as well. And the cost of bank loans has soared in line with global inflation.

“The higher cost of borrowing affects the energy and natural resources sectors unevenly,” notes analyst firm Wood Mackenzie. “Highly capital intensive and often reliant on subsidies, low-carbon energy and nascent green technologies are most exposed.”

“Debt accounts for a higher share of the capital structure for low-carbon energy sectors, too. The impact of higher interest rates grows as the capital expenditure (capex) share of total expenditure increases.”¹⁰

In low-carbon hydrogen projects, capex can represent up to 75% of the total cost, says Wood Mackenzie. This means a 2% increase in interest rates can add 10% to the cost of the hydrogen produced, affecting the viability of projects. Oil and gas projects are less exposed to interest rates.

The outlook for cleantech is even worse in developing markets where the cost of borrowing is pushed up by the likelihood of defaults, expropriations and other risks.

A 2016 International Finance Corporation-backed solar buildout program in Zambia, for example, was stymied by borrowing costs that added an estimated \$10 million a year in debt servicing to an \$81 million loan, compared to rates available in western economies such as Germany.¹¹

Companies such as AXA XL are trying to reduce these debt costs through the clever use of two types of

insurance. One of these is directed at lenders operating in markets where there is significant political risk.

The insurance “is there to provide cover for particular named perils, for example expropriation or confiscation of assets, and can also come down to the contract you are being repaid on,” says Simon Morden, Underwriting Manager for Political Risk, Credit and Bond at AXA XL.

“It can also be something that sponsors would look at as well, to protect their investments in a country.”

But the more significant offering at a time of geopolitical and economic uncertainty is credit insurance. This protects lenders from non-repayment of loans, for instance because of regulatory changes. Such risks are by no means limited to developing countries.

In 2010, for example, Spain began introducing retroactive cuts to a previously lucrative feed-in tariff scheme for renewables that severely affected the viability of projects there.¹² What can be done to mitigate such political risks?

Having an insurer such as AXA XL de-risk loans in these environments can allow banks to lend capital at much more competitive rates. This allows more cleantech ventures to access lending, unlocking private capital as well.

Plus, says Morden: “The banks getting credit non-payment risk products take capital relief on the insurance. That makes it more efficient, on a capital basis, for banks to lend. Therefore, they can recycle that capital into more projects, which means one dollar goes further than it would otherwise.”

INSURANCE CAN SUPPORT THE ENERGY TRANSITION THROUGH INVESTMENTS AS WELL AS PRODUCTS



While insurers are generally viewed as supporting the energy transition through insurance products, they are also major investors.

AXA Investment Managers alone has put 480 billion euros into sustainable or environmental investments, out of a total 844 billion euros of assets under management.¹³ The spend includes around 15 billion euros in infrastructure debt and equity.

Such figures give AXA Investment Managers considerable heft. “We’re the fourth-largest infrastructure debt manager in the world,” says Mark Gilligan, the division’s Head of Infrastructure. “On the equity side, we’ve only been up and running since 2017, but we’re number 36 in the world today.”¹⁴

Gilligan says AXA Investment Managers’ marketing team “has been very candid” about backing investments that reduce climate risk, and from an infrastructure perspective the energy transition is also where the growth action is.

“Up until 2015, European infrastructure was basically buying and selling antiques—water companies, old gas-fired power stations, roads, airports,” he says. “Recently, we’ve seen a renaissance in building new infrastructure, and that’s driven by the energy transition.”

This renaissance is creating investment opportunities in areas such as electric locomotive leasing, which AXA Investment Managers has been involved in for four years. “It’s grown from 150 locomotives to over 200, and we’ve got another 200 on order,” Gilligan says. “These cost 5 million euros each.”

The scale of the opportunity is phenomenal, he adds. “It’s no longer the case that investment managers in the infrastructure space that are focused on the energy transition and on decarbonization are niche players,” he says. “In fact, if that’s not the main part of your game, you’re dead.”

This kind of talk is exactly what is needed to mobilize the trillions of dollars required for the energy transition, not least because it is coming from a financial giant whose business model is based on hedging against risk.

INSURANCE'S EXPANDING ROLE IN THE ENERGY TRANSITION SPARKS DEBATE OVER RISK SHARING



Insurance insiders hope better engagement with energy transition stakeholders will lead to a greater focus on risk, improving the outlook for cleantech products and projects.

"Often when we're talking to people who aren't familiar with the insurance industry, they don't always have mental models of risk and the risks that we are well placed to take," says Amy Barnes, Head of Sustainability and Climate Change Strategy at insurance broker Marsh.

"My start point is to be specific about where insurance can be most effective," she says. "Let's make sure we do that brilliantly but also be explicit about risks that need another home."

The risks involved in scaling up decarbonization technologies fall into four quadrants, says Barnes: financial, strategic, operational and hazard.

"Insurance fits really well in that hazard bucket of risk," she says. "We do a little bit of operational; we can do a little bit of financial. Equity typically takes strategic risk. You buy equities to take strategic risk. It's not a failing in the insurance industry if we don't take strategic risk."

Making sure risks are understood and apportioned correctly at the outset of a product or project lifecycle can help minimize the chances of things going wrong. This implies a need for greater and earlier communication and cooperation across all stakeholders, even within companies.

"Insurers feel they're brought in too late," Barnes says.

"Brokers feel they're brought in too late. If we think about large energy companies that have a risk manager, invariably those risk managers get frustrated that they get brought into the conversation too late."

Much of this is likely down to lack of awareness, with Barnes saying there should be more alignment between insurance providers and cleantech industry bodies to ensure risk conversations are channelled to the appropriate advisors.

If these experts are involved sooner, "we can give really good advice that can reduce the project life cycle cost of risk," says Barnes.

Such cost reductions would be a win-win and would help insurers in their quest to support a speedier and more effective energy transition. Right now, says Barnes: "People are frustrated by the cost of insurance. But the cost of insurance is the cost of risk, so we need to reduce the cost of risk."

Ultimately, the message from the insurance industry is that sharing knowledge can cut risks for all concerned—so early engagement between stakeholders across all stages of a cleantech project or product lifecycle can help reduce risk and cost, and thereby speed up the pace of the energy transition.

CONCLUSION



The energy transition needs insurance. Without it, the only clean energy projects that might be built are those where developers and financiers are willing to take on all the construction and operation risk themselves—a far cry from the tidal wave of deployment required to meet climate targets.

At the same time, the insurance industry needs the energy transition, or it could face climate impacts that make it challenging to model natural catastrophe risk effectively.

And energy transition actors have much to gain from working with insurers, which can provide support not just in terms

of insurance but also across the entire project and product lifecycle via offerings such as political risk, trade credit and performance guarantee insurances or through broader risk consulting.

A greater appreciation of how insurers and energy actors can work together could leverage these offerings to reduce project and product risk, improving the speed and scale of the transition, helping manage the cost of premiums and extending the range of assets that might benefit from coverage.

This is a win-win the energy sector cannot afford to ignore.

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