

Insuring the energy transition



Breakfast briefing with Equinor and DNV Tuesday 7th March

Transformational change can't happen without collaboration, and that's particularly true when it comes to addressing climate change and the important work across renewable energy production.

For our second *Risk revealed* event of 2023, we invited Equinor, Norway's international energy firm to Lloyd's, to share with Lloyd's underwriters what a credible transition plan from a leading energy firm looks like. We were also joined by DNV, an independent expert in assurance and risk management across the energy value chain helping Equinor to achieve their low carbon targets.



We hope you find this summary helpful, which covers the conversations and insights shared at the event. If you would like to attend events like this in the future, sign up to the Futureset mailing list to not miss out:

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Topics covered in this summary

1. Global energy market perspectives
2. Which clean technologies will enable clean energy generation in the North Sea?
3. Which North Sea-based projects are Equinor currently involved in or planning?
4. Equinor's net zero transition plan and advice to others
5. How does the energy transition impact the insurance industry, and what are the potential implications for insurers?

1. Global energy market perspectives

Equinor's Senior Advisor for Macroeconomics and Market Analysis, Michel Myhre-Nielsen started the session with his long-term outlook on the global energy market. He used a refreshing analogy of 'walls and bridges' to explain two ways that the decarbonisation of global energy systems could go.

'Walls', the first scenario is characterised by a combination of historical and current market trends, as well as policy signals that shape the energy systems development. Economic growth and energy independence stand out as key drivers to investment in clean energy solutions, as nations strive to expand their economies. Progress is isolated geographically and can be disrupted by geopolitical events like Russia's invasion of Ukraine, which has reshaped the energy landscape towards energy independence. He concluded that in the walls scenario, energy systems are expected to decarbonise, but the pace of change does not meet that needed to reach the global climate target of 1.5 degrees. Walls protect, but also divide.

'Bridges', the second scenario was a normative back-cast scenario, which means it presents a vision of the future and works backward to identify the steps needed to achieve that vision. The scenario is consistent with a temperature rise of 1.5°C, which is a critical threshold for avoiding the worst impacts of climate change. The key difference between the walls scenario and the bridges scenario is that it involves collaboration and coordinated international action across all sectors, from energy to agriculture to transportation. It featured ambitious targets for emissions reduction, the rapid deployment of clean energy technologies, and shifts in consumption patterns toward more sustainable and low-carbon options.

The view shared was that, to reach net zero, there is no organisation, industry, or country that can do it alone and that collaboration is key across countries, industries, and organisations. **We build too many walls and not enough bridges.**

A change of pace
and a revolution
in transforming
the energy system



	History 1990 - 2019	Walls 2019 - 2050	Bridges 2019 - 2050
Total primary energy demand CAGR %	1.8%	0.1%	-1.0%
Energy intensity CAGR %	-1.2%	-2.0%	-3.1%
Fossil fuel demand (Change in period - Gtoe)	4.5	-2.3	-9.2
Solar and wind in power generation (Change in period - Thousand TWh)	2	18	31

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Most of the industry leading reports agree that in a net zero 2050 scenario, fossils fuels are still part of the energy matrix. Therefore, it is important that the insurance industry continues to support all the sectors involved in the transition and not just one part of it.

During the presentation, DNV's Area Manager, Tony Linden, also shared important findings from [DNV's 2022 Energy Transition Outlook](#). According to their analysis, the world is expected to reach peak energy demand around 2040. This means that as energy efficiency improves, humanity will require less of it to perform an equivalent amount of work. Even with this expected decrease in energy demand, models show that it is not sufficient to achieve the goal of net-zero emissions by 2050. Both DNV and Equinor's energy outlooks agree that while we are on the path towards decarbonisation, it is not happening fast enough to limit global warming to 1.5 degrees °C by 2050.

2. Which renewable technologies will enable clean energy generation in the North Sea?

The North Sea will play a key role in reducing the use of fossil fuels across the European energy sector, which has ambitions to provide reliable and affordable low carbon energy across the continent. Many companies in the region are already shifting their focus toward low-carbon energy sources such as wind, solar, hydrogen, and carbon capture and storage.

In recent years, the North Sea has become a hub for offshore wind development, with many large-scale projects currently underway. These projects not only produce clean energy but also create jobs and drive economic growth in the region.

Another key area of focus is carbon capture and storage (CCS). Several large-scale CCS projects are underway in the North Sea, which aim to capture carbon dioxide emissions from industrial processes and store them safely underground. These projects have the potential to significantly reduce emissions from energy-intensive industries such as steel production.

The region is also favourable of low-carbon hydrogen production as a means of decarbonising sectors such as transportation and heating. Several companies in the region are developing projects to produce hydrogen from renewable sources, like using power generated from offshore wind to produce green hydrogen.

Overall, the North Sea energy sector is making significant strides toward a more sustainable future, driven by a combination of technological innovation, policy support, and public demand for cleaner energy sources.

3. Which North Sea-based projects are Equinor currently involved in or planning?

Equinor's, Vice President and Head of Corporate Insurance, Marit Lunde guided Lloyd's underwriters through the Norwegian energy firms transition plan to net zero, which covered their work across the North Sea.

Equinor told the market they have made solid progress on their ambitions. One of the key developments featured was [H2H Saltend](#), which has progressed through the next phase in the UK. This project aims to produce low-carbon hydrogen at an industrial scale, which could help reduce emissions from industrial processes.

Equinor has also established a broad energy collaboration with RWE in Germany, which includes the development of offshore wind projects and the deployment of CCS technologies. They discussed the importance of CCS in their plan and that the company had made strides across project, with the Northern Lights phase one fully booked and plans to develop a large-scale decarbonisation infrastructure in Belgium. Equinor is also partnering with other companies to establish a large-scale CCS value chain in Germany, which could help reduce emissions from industrial processes.



Looking further ahead, Equinor spoke to the value of renewable energy infrastructure, showcasing their plans to develop 3-5 major industrial clusters in Europe to produce clean hydrogen by 2035. These clusters could help decarbonise sectors such as transportation, heating, and industrial processes.

The firm's portfolio of low-carbon projects clearly demonstrated to underwriters the company's dedication to addressing the challenges of climate change and the opportunity that exist for insurers to help them on their journey with risk mitigation and transfer.



4. Equinor's net zero transition plan and advice to others?

Central to the conversation was, what does a strong transition plan look like and what is required to develop one. Equinor spoke to their plan in detail but started with a word of warning for those developing their own; that developing a transition plan is not a task to be left until the last minute. It requires a proactive approach that begins with a clear understanding of one's goals and aspirations.

They went on to explain that once goals and aspirations have been established, a well-defined strategy must be developed to achieve these objectives. In their view, a transition strategy should include measurable targets that can be used to track progress towards the desired outcome. The process of establishing standardised measurement mechanisms to ensure that progress towards targets is effectively monitored is continually evolving for Equinor. There is still work to be done to verify the effectiveness of plans, but overall, there was a tone of confidence that they are on the right path.

Helpfully, Equinor identified three strengths which it sees are essential to achieving its energy transition goals and gathering the support of the insurance industry:

Experience: Equinor has over 50 years of expertise in managing complex technologies and large-scale projects with high safety standards, which can be applied to new areas such as hydrogen, CCS, and offshore projects.

Financial stability: Equinor has a strong balance sheet that enables the company to invest in and scale up new technologies required for the energy transition.

Relationships: Equinor has established relationships with global suppliers, customers, insurers, and local authorities worldwide, which can help foster collaboration and enable the bridge-building that is so crucial to achieving net zero emissions. Decarbonising the energy system requires collective efforts from multiple stakeholders with many cross-sector relationships, which Equinor showed confidence they had.

5. View from our panellists: How does the energy transition impact the insurance industry, and what are the potential implications for insurers?

To close the session, we hosted a panel with market underwriters, Equinor and DNV to briefly discuss the opportunities and implications of the energy transition for insurers. All agreed that as energy firms continue to invest and focus on renewable energy projects, like clean hydrogen and CCS, the associated risks for firms and their insurers will change.

For example, offshore wind farms present a different set of risks than traditional oil and gas platforms, and as a result, insurance companies will likely have to adjust their underwriting practices accordingly. Insurers may also be called on to work with their customers and collaboratively look to innovate to address new areas of risks.

There was positive sentiment from the event at its conclusion and overall, it was felt that the global transition to a low carbon future, represents both opportunities and challenges for the insurance industry. Insurers that can adapt to the changing risk landscape and look to work with their clients in a customer centric way, to provide innovative solutions that help with risk transfer will be best placed to succeed in the evolving energy landscape.

“The London market, and Lloyd’s, in particular has been fantastic at adapting and enabling the largest, most complex, capital-intensive projects in the world. It’s what we do every day. So, I think in terms of decarbonisation, and addressing all the emerging technologies discussed today, we should be very excited as a sector for the opportunity it presents”.

Lloyd’s Underwriter
