

Risks in Modern Global Energy and How to Manage Them

KEY CONCLUSIONS

Sanctions, cyberattacks, and climate change are major global risks for the energy industry

"Today there are two global risks: sanctions and cyber risks. Moreover, reinsurance companies exclude the latter from the insurance list. Indeed, as we know, a single cyberattack can affect not only one company, but the entire global market", Russian National Reinsurance Company Deputy Chairman of the Board Natalya Karpova said.

"Naturally, sanctions have a rather serious effect on the oil and gas sector. It's connected with virtually every aspect – exploration, extraction, refining, transportation, etc. [...] Projects have been suspended not only offshore, but also those involving hard-to-recover reserves", President of the National Association of Oil and Gas Services Viktor Khaykov said.

"Climate risks are a highly multifaceted thing. On the one hand, we need – and this is already being done – a wide range of insurance products that deal with this issue in one way or another. First and foremost, global warming and weather anomalies that somehow affect the infrastructure of companies, industries, pipelines, and many other things. I know that a number of Western companies have already included their products in the range of services that are offered as a financial hedge for the problem of climate risks", Head of the Ecology and Development Centre of the Institute of Europe at the Russian Academy of Sciences Sergey Roginko said.

PROBLEMS

Cyber risks are not fully understood

"Despite the fact that the products already exist, the market is not yet quite ready to introduce cyber insurance [...] It's clear that cyber risks are the most dangerous risk of the future [...] We don't fully understand cyber risks in terms of how to evaluate them and how to evaluate their possible accumulation", Karpova said.

Dependence on foreign technologies in the oil and gas industry

“We have virtually lost sight of the development of our own technologies and our own service technology companies in the oil and gas sector [...] Thus, the industry has become dependent on foreign technologies, foreign contractors, etc. [...] It is also very important to give priorities to Russian companies in procurements, at the very least to state-owned companies. In doing so, they will be able to compete with foreign companies”, Khaikov said.

SOLUTIONS

Reduce dependence on Western funding

“Oil and gas companies have seen their profit margins decline by 1.6 percentage points since 2014 primarily due to the introduction of a new tax policy and not due to the influence of sanctions. At the same time, the imposition of sanctions has changed the debt and liability structure of companies in the oil and gas industry, as we are seeing an increase in the share of rouble-denominated borrowings (from 13% to 41%) and the share of bonds (from 40% to 66%). The geography of borrowing has also changed – the share of borrowing from non-residents has decreased and there has been a redirecting from Western banks to Chinese counterparties”, Head of the Research and Forecasting Group at the Analytical Credit Rating Agency (ACRA) Natalya Prokhorova said.

Support Russian energy sector technology developers

“At present, there is basically already a government decree in force that gives priority in state procurements and procurements by state-owned companies to Russian manufacturers of goods, works, and services at a 15% [discount] in price compared with foreign companies [...] But it does not work for all intents and purposes”, Khaikov said.

“We are currently working on introducing smarter meters and so on. This will be done in a centralized manner. Maybe these platforms need to be included in this programme [...] The introduction of smart meters is inevitable. A large share of the components will be produced in the Russian Federation”, Institute for Energy and Finance President Vladimir Feigin said.

Develop risk insurance tools

“We are now seeing companies come in that are starting to insure their supplies and purchases for a month or two or three, which was not the case before [...] The tool of exchange contracts exists. It is now having obvious success for the Russian stock exchange [...] In this case, we have launched successful contracts on the domestic market because there are oil companies that are interested in promoting fixed-term contracts. In doing so, they see the prospect of selling their goods for a month or two or three or up to a year in advance in order to generate their income in the future”, Head of the Derivatives Market Development Department at the St. Petersburg International Mercantile Exchange Nikita Zakharov said.

Develop cybersecurity standards

“There are new [technologies], electric cars, and many other things emerging now that are a problem to be solved. To do this, we need to establish new cybersecurity standards. We must take into account all the costs that are required for the transition to all these devices, which will work differently, and all other things that are associated with the management of these new devices, which previously did not exist at all. [...] All this can be solved through the use of blockchain technology”, Senior Associate for Affiliate Engagement and Business Development at the Energy Web Foundation Oriol Pujoldevall said.