Press release

Allianz report: Failure to manage natural resources brings increasing interruption and liability risks for businesses

- Companies increasingly face new threats from "natural capital" depletion, such as higher costs from resource scarcity, regulatory action, as well as pressure from communities and wider society
- Allianz industry-specific analysis of 2,500+ companies finds oil and gas, mining, food and beverage and transportation sectors have highest natural capital risk exposure
- Against a backdrop of growing stakeholder pressure around sustainability, a key challenge for businesses is to measure and manage their natural capital impact and dependency

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Natural resources such as clean air and fresh water are vital for businesses – and at the same time massively at risk across many industry sectors today. Failure to manage the earth's natural resources or "natural capital" has consequences that extend beyond direct effects on the environment. For businesses, it can also bring new interruption and liability scenarios which can wipe out profits and impact business models, as resource scarcity, regulatory action and pressure from communities and wider society grows, warns Allianz Global Corporate & Specialty (AGCS) in a new report **Measuring And Managing Environmental Exposure: A Business Sector Analysis of Natural Capital Risk**. According to analysis from the insurer, the oil and gas, mining, food and beverage and transportation sectors rank highest in terms of natural capital risk exposure.

"Companies around the world are increasingly confronted with the negative implications of natural capital depletion," says Chris Bonnet, Manager, Environmental, Social and Governance (ESG) Business Services, AGCS. "Sustainable use of natural resources is critical for the future success of most businesses. Yet while corporates' awareness of their natural capital footprint is growing, many still need to gain a better understanding of the specific threats that can impact their industry sector and company in particular, as well as the mitigation options available."

Natural capital risks analysis by industry sector

In a new report, AGCS analyzes data from research provider MSCI ESG Research, covering more than 2,500 companies, in order to assess the natural capital risk exposure in 12 industries. The oil and gas, mining, food and beverage and transportation sectors rank highest in terms of risk exposure, based on five factors – biodiversity, greenhouse gas (GHG) and non-GHG emissions, water and waste. All are classified as being in the "danger zone", meaning the natural capital risks businesses face are, on average, greater than the mitigation options currently employed.

Companies in the oil and gas and mining sectors have a high level of natural capital risk exposure due to the nature of their business. For example, in the mining sector, over 90% of global iron ore production is derived from areas that have a high risk of water stress and biodiversity impact[1]. The transportation sector also falls into the "danger zone" because of its biodiversity impact and GHG and non-GHG emissions. Transportation-related carbon emissions have increased by 250% since 1970 and now account for 23% of all global emissions[2], so there is room for further steps to be taken by the sector, such as emissions control or mitigation measures to reduce the impact on flora and fauna, the report says.

The food and beverage sector also ranks in the "danger zone" because of its high dependency upon natural capital in its supply chains. Despite the significant risk of supply disruption as a result of water stress, only 20% of MSCI All Country World Index food products companies have begun to address this in their agricultural supply chains[3]. Further, flora and fauna are often damaged by excessive use of pesticides, reducing fertility and increasing vulnerability to weather events, causing crop failure for suppliers of food companies.

Seven industry sectors – construction, utilities, clothing, chemical, manufacturing, pharmaceutical and automotive rank in the "middle zone", meaning risk and mitigation levels are approximately in balance. The telecommunications sector is the only sector to be classified in the "safe haven" zone, which means it does not have a high level of risk exposure. Furthermore, there are tremendous opportunities for telecom companies to hedge natural capital risk in other sectors. Digital communication and management solutions can enable more efficient resource use.

"Sectors with an inherent natural capital footprint often provide the necessary resources for manufacturing or other industries, so it's obviously harder for companies who operate in them to mitigate their natural capital risks. However, innovative risk solutions to reduce the stress to the environment could be more strenuously applied," says Bonnet.

The aim of the sector analysis in the report is to give a strong indication of each featured industry's overall exposure to natural capital risk, rather than that of individual companies. This is because there are significant differences in how companies in each sector address and mitigate natural capital risk. For example, in the utilities sector, the levels of risk exposure and management regarding GHG and non-GHG emissions can range from low-emitting companies who manage the impact well to heavy emitters with little emission management. It is important to acknowledge that there are natural capital risk-conscious companies operating in sectors ranked in the "danger zone" in the report.

Three phases of natural capital risk emergence

Natural capital risks rarely appear without warning. The report reveals they evolve through three phases before impacting the bottom line of a business. In the first phase, awareness of the risk grows. In the second phase, the natural capital risk will potentially start affecting individual companies in their supply chains or own operations through regulatory change or social pressure. In the last phase, once the risk cannot be mitigated, it materializes, leading to damages such as liability costs, higher production expenses or business interruption, ultimately affecting the financial performance of the organization.

"The key question is how risks can be mitigated as early as possible – both on a technical operational level and in regard to overall enterprise risk management (ERM)," explains Bonnet. "Local water scarcity, for example, can be addressed by rainwater harvesting in day-

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[1] MSCI ESG Research Industry Report: Non-precious metals, mining and steel, March 2017
[2] MSCI ESG Research Industry Report: Road and rail transport, May 2017
[3] MSCI ESG Research Industry Report: Food products, February 2017

to-day management or, on a more strategic level, by deciding not to expand an existing plant due to risk of water shortages."

Managing natural capital risk

A significant number of companies have started to address natural capital risk in their ERM. Factoring natural capital costs into business decision-making can also help companies anticipate potential threats. For example, when opening a new factory, factors such as future water availability and the emerging emissions regime should be considered.

However, balancing risk management focused on today with the management of emerging risks is challenging. Future and non-financial risks can easily be overlooked as companies focus on short-term targets. It can be difficult to measure, quantify and monetize these risks. Yet in future it is expected that companies will have to actively disclose their natural capital risk exposure to governmental agencies and investors, as standards evolve.

"With threats to the environment coming from many different areas, there will be no such thing as business as usual in the future," says Bonnet. "Companies need to understand, quantify and even monetize their dependence on natural capital and the impacts their operations have on it to ensure their organizations are resilient and future-proof."

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AGCS SE is rated AA by Standard & Poor's and A+ by A.M. Best.

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