Sustainability Blog

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Point of View: Future Insurance Availability for Businesses

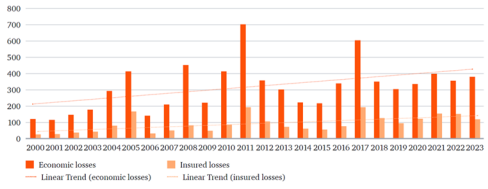
Sector-Specific Perspectives in the Context of Climate Change

Is your company prepared for a future where insurance may no longer be a given? Are you as insurer prepared for the changed risk landscape? As climate change intensifies, sector-specific vulnerabilities are growing – and traditional insurance models are under pressure. What risks does your industry face? Can adaptation secure your coverage? This Point of View explores the urgent need for strategic climate adaptation measures and the evolving role of insurers from passive risk carriers to active enablers of adaptation. Dive in to discover what's at stake – and chart the path forward.

Climate change is no longer a distant threat to insurers and industrial companies, it is already causing disruptions and significant costs alarming for both sides alike. This Point of View examines climate-related impacts on different industries as well as currently available insurance products, weighs in on insurance gaps and explores possible countermeasures in order to adapt to the rising intensity and frequency of natural hazards. It includes a deep dive into four exemplary, critical and climate vulnerable sectors: electric power transmission, control and distribution (convective storms), water & sewage systems (floods), inland water transportation (drought) and data processing, hosting and related services (floods). To manage and mitigate these threats, the Point of View presents climate change adaptation levers for insurers to protect their business model and seize opportunities.

Climate Change and the Insurance Gap

Fig. 1 Disaster losses from natural hazards worldwide 2000–2023 (values adjusted to 2023 U.S. dollars using the relevant U.S. inflation rate)[1]



[1] Statista (2024): Cost of natural disaster losses worldwide from 2000 to 2023, by type of loss https://www.statista.com/statistics/612561/natural-disaster-losses-cost-worldwide-by-type-of-loss/

With extreme weather events becoming more frequent and severe, businesses increasingly face impacts from physical climate risks. Traditional insurance models are under strain: reinsurers are tightening terms, premiums are rising, and only 26% of weather-related losses in Europe are currently insured. This growing protection gap threatens the financial stability of companies and the viability of insurers. Without proactive adaptation, many companies may find insurance increasingly unaffordable or unavailable and face high costs in case of natural disasters. While self-insurance and captives offer alternatives, they too face limitations. Therefore, adaptation to climate change is no longer optional – it's a strategic imperative. Companies must invest in climate resilience, while insurers evolve from passive risk carriers to active enablers of adaptation. The PwC Point of View outlines a dual imperative: companies must integrate climate risk into their strategies, and insurers must innovate to remain relevant. The future of insurance availability hinges on coordinated action.

Adaptation as a Strategic Imperative for Businesses

Insurance alone is no longer sufficient to manage escalating climate risks. To remain resilient and competitive, companies must treat adaptation not just as a defensive tactic but as a strategic investment. This involves upgrading infrastructure, deploying smart technologies, and embedding climate risk considerations into corporate governance and decision-making.

Climate adaptation enhances transparency and credibility with insurers, investors, and regulators. It also helps businesses maintain access to insurance markets, reduce exposure, and avoid costly disruptions. Inaction, by contrast, can lead to financial vulnerability and loss of coverage. Businesses that lead in climate adaptation will gain a competitive edge and secure better insurance access.

To navigate this evolving climate risk landscape, companies should:

- Conduct comprehensive scenario-based climate risk analyses, including asset damage, business interruption, liability, and supply chain impacts.
- Reassess insurance strategies to ensure alignment with emerging threats.
- Integrate climate risks into corporate strategy using scenario-based assessments and measurable progress tracking.
- Implement structured, transparent adaptation plans across the organization, guided by emerging planning frameworks.
- Collaborate with public authorities and communities, as many effective measures require coordinated action.

Insurers as Enablers of Climate Resilience

Insurers are evolving from traditional risk carriers into active enablers of resilience in a climate-altered world. To remain viable, they must innovate cross products, services, and partnerships. This includes developing solutions for hard-to-insure risks – such as parametric insurance, which offers fast payouts based on predefined triggers – and applying impact underwriting to reward policyholders who invest in adaptation.

Beyond product innovation, insurers can expand their role as advisors, offering risk consulting to help clients understand and reduce exposures. They should also invest in climate-resilient businesses and projects and engage in public-private partnerships to reduce systemic risk.

Insurers have a unique ability to influence broader societal resilience by:

- Participating in policy development and standard-setting initiatives.
- Raising awareness of climate risks.
- Aligning their underwriting, investment, and advisory functions with climate adaptation goals.

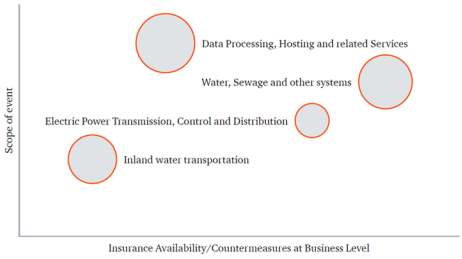
By doing so, they not only protect their own portfolios but also help build a more resilient economy and

society.

Sector-Specific Vulnerabilities

Not all industries are equally exposed to climate risks. This Point of View highlights four exemplary sectors that are among sectors with heightened vulnerability: (i) electric power transmission (convective storms), (ii) water and sewage systems (floods), (iii) inland water transport (drought), and (iv) data processing (floods). There are variations in how climate-related events affect each sector, as well as in the accessibility of insurance and the complexity of implementing countermeasures. Each sector faces its unique challenges in maintaining operations and securing insurance coverage. For example, power grids are increasingly damaged by storms, while data centers face rising flood risks. These sectors illustrate how climate hazards can disrupt critical infrastructure, threaten business continuity, and strain liability frameworks. Tailored climate adaptation strategies are essential to ensure resilience and maintain insurance availability in these high-risk environments.

Fig. 2 Assessment of the sectors comparing the impact of climate-related events with their resilience in terms of available insurance and difficulty of implementing countermeasures. Bubble size indicates the severity of the impact on the sector.



Electric Power Transmission – Convective Storms

The electric power transmission sector is increasingly exposed to convective storms in the form of winds, hail, and lightning. These events damage transmission lines, substations, and transformers, causing widespread outages and costly repairs. Business continuity is at risk, especially for critical services like hospitals. Liability issues may arise from service disruptions or worker injuries during storm recovery. Insurance remains essential but often comes with exclusions and limitations. Climate adaptation measures include reinforcing infrastructure, underground cabling, smart grid deployment, and microgrids for local resilience. Organizational strategies, such as crisis protocols and collaboration with grid operators, are also key. Insurers can support resilience by recognizing proactive risk management and offering tailored coverage that reflects reduced exposure.

Water and Sewage Systems – Flood

Floods pose a severe threat to water and sewage infrastructure, especially in aging systems and flood-prone areas. Damage to treatment plants, pipelines, and IT systems can disrupt water supply and sanitation, leading to public health risks and environmental contamination. Business interruption and liability

risks are significant, particularly if untreated wastewater is released. Insurance is vital but may exclude certain flood-related damages unless specific endorsements are in place. Adaptation strategies can include flood barriers, drainage upgrades, emergency power systems, and nature-based solutions like wetland restoration. Organizational measures such as climate risk modeling and integration of flood risk into planning processes are crucial. Long-term resilience depends on coordinated efforts between utilities, insurers, and public authorities to ensure service continuity and financial protection.

Inland Water Transportation – Drought

Inland water transport (IWT) is highly vulnerable to droughts which reduce water levels and limit navigability of waterways. This leads to reduced cargo capacity, delayed deliveries, and financial losses. While asset damage from groundings or collisions is covered by hull and P&I insurance, business interruption coverage is rare and often insufficient. Parametric insurance offers potential but is not widely adopted. Climate adaptation measures include developing flat-bottomed vessels, optimizing logistics, and improving unloading infrastructure. Long-term solutions like water storage systems require public investment. Accurate water level forecasting and collaborative planning are essential to mitigate operational disruptions. Insurers and policymakers must work with IWT operators to develop viable coverage options and support sector resilience in the face of increasing hydrological volatility.

Data Processing and Hosting – Flood

Data centers are critical infrastructure but increasingly exposed to flood risks. Flooding can damage servers, disrupt cooling systems, and cause service outages with cascading effects. Insurance is becoming harder to obtain or more expensive, especially in high-risk areas. Standard property policies often exclude flood damage unless specific endorsements are added. Business interruption and liability risks are growing, particularly if service disruptions affect clients. Adaptation includes geo-redundant sites, elevated construction, rapid equipment replacement protocols, and crisis management teams. Collaboration with public stakeholders and investment in flood defenses are also vital. Insurers must refine risk models and reward proactive resilience measures to ensure continued coverage for this digitally essential sector.

Final Thought

The future of insurance is not guaranteed – besides continued climate change mitigation, it must be secured through climate adaptation measures. Companies that act now will not only protect their operations but also secure better coverage and investor confidence. Insurers that innovate and collaborate will remain relevant in a climate-altered world. The path forward is clear: resilience must be built, not assumed.

Further Links:

- Download Point of View: Future Insurance Availability of Businesses
- WBCSD - Adaptation Planning for Business – Navigating uncertainty to build long-term resilience

- Identifizierung und Bewertung von Klimarisiken und -chancen für Unternehmen: Auswirkungen des Klimawandels mittels Szenarioanalyse verstehen
- PwC Blog: Aktuelle CSRD-Berichterstattung: Einblicke in das ESG-Risikomanagement von Versicherern (available in German)
- PwC-Studie: CSRD-Benchmarking – Versicherungen (available in German)
- PwC-Studie: Nachhaltigkeitsstrategie im Versicherungsvertrieb (available in German)
- Event: Insurance Business Breakfast 2025 – Jetzt Plätze sichern! (available in German)

Get ongoing updates on the topic via regulatory horizon scanning in our research application, PwC Plus. Read more about the opportunities and offerings **here**.

To further PwC Blogs

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