eBook: ESG

Leveraging Technology to Fulfill Insurers' Climate Change Commitments

Focusing on Climate Change as a Key Element in the ESG Equation

earnix

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Executive Summary

Environmental, Social, and Governance (ESG) is a topic of intense global focus and discussion today among governments, corporations, non-profits, and concerned citizens and consumers. With their far-reaching scope and impact, ESG commitments can appear daunting, as in many ways they can be as broad and as deep as one cares to define them.

For insurers, ESG affects and is affected by their operating decisions, their investment strategies, and the risks and rewards posed by their customer portfolios.

In this eBook, we will focus specifically on the climate change component of ESG for insurers. We will explore how technology can be applied to advance insurers' understanding of climate change and its effects on their businesses, requirements for maximizing the technology leverage in their climate change efforts, and practical measures they can take now to prepare for the future and mitigate its uncertainty.

We will see that technology can be brought to bear to mitigate climate change effects and even allow insurers to capitalize on climate change in several critical areas:

- ✓ Using data analytics to give insurers the ability to identify patterns and trends they can use to better predict the likelihood, location, and severity of future events across geographies and portfolios, to assess these risks, and take proactive steps to mitigate them.
- ✓ Allowing insurers to add value, through offering new products, as well as increasing their ability to more accurately price and personalize offers and reduce risk, improving corporate sustainability, and protecting shareholder value.
- ✓ Ensuring that climate-related efforts are focused in the areas of greatest business return and maximum effectiveness.
- ✓ Improving their internal operations, through such measures as implementing new digital tools to streamline and automate underwriting, and freeing up insurers' scarce talent to focus on creating true business advantage, rather than perform repetitive manual tasks and/or cover regulatory overhead.





Focus of this eBook

In this eBook, we will not endeavor to cover the entire ESG waterfront, but instead focus on what Earnix does best – bringing industry-leading technology to help financial services firms maximize their business results and Reimagine Insurance. Within the panoply of potential measures, we will further restrict ourselves to the application of technology in addressing climate change.

ESG Is a “Natural Fit” for Insurers

ESG is not new to insurers - it is ingrained in their mission. They are natural ESG stewards. ESG has been an integral part of their business strategies and raison d’etre from the advent of the industry.

Insurers have been offering protection against unforeseen events such as environmental risk (the “E” in ESG) for centuries, and the value of the property they insure and the payouts they make in any given year are major drivers of the economy.

For example, in the US alone, in 2021 P&C insurers paid out nearly **$90 Billion** in claims for nearly **100** catastrophic events.

When one considers the various insurance lines available (L&H, P&C, healthcare), insurance products have always provided a key societal good (the “S”). Long before the “ESG” term was coined, and before insurers put dedicated programs in place to address the issues, societal good has always flowed from helping to protect policyholders from disasters of all kinds.

Finally, insurers’ boards and managers hold themselves to extremely high governance standards, and insurers are among the most tightly-regulated business entities (the “G”).

As just one example of how many insurers view ESG, this paragraph from Penn National Insurance’s *2021 Corporate Responsibility Report* speaks volumes:

> *“Insurance companies’ core activities naturally support sustainability — providing loss control services to policyholders to minimize their risk, supporting strong building codes to protect assets and the environment, promote [sic] safe driving habits to protect individuals and society, and serving as a risk transfer mechanism for economic activity.”*

Stakeholder Imperatives

Not only is attention to ESG "the right thing to do," insurers with strong ESG commitments are viewed in a more positive light by investors, customers, prospects, and business partners. Insurers who commit to, execute on, and regularly report their ESG progress are also fulfilling some very real market needs.

For example, PwC, in its article "ESG: A growing sense of urgency", cites these measures of concern about ESG among key stakeholder groups:



of global investors say how a company manages ESG risks is an important factor in investment decision-making.



of global investors say companies should address ESG issues, even if it reduces short-term profitability.



of consumers say they will discontinue their relationship with companies that treat the environment, employees, or community in which they operate poorly.



of global insurers say that customers are their top priority when they are defining their ESG strategy (regulators came in second at 26%, then shareholders at 16%).

Add to this increasing regulatory pressure around environmental impact in particular (the SEC's nearly 500-page draft climate disclosure requirements, for example), and there is no question that the time to act is now (or perhaps yesterday).



Climbing the ESG Hill

Like many things in life, making a concerted effort to tackle ESG requires knowing where to start and prioritizing the many potential measures to take.

Hundreds of potential corporate priorities can be grouped under the broad ESG umbrella, as evidenced by the 100-plus page 2021 Sustainability Report from Allianz Group.

MAPFRE Insurance group, in its Corporate Social Responsibility Policy, lists 15 general and specific Principles of Action, with a total of 35 detailed commitments and reporting mechanisms contained within them.

Climate Change: Some Very Difficult Decisions for Insurers

Under the broad heading of ESG, climate poses very difficult questions and decisions for insurers, some possibly existential.

In markets such as Florida and other states bordering the Gulf of Mexico, will sea level rise and the increased frequency and power of hurricanes force some insurers to simply abandon those markets?

Hurricane Ian in 2022 caused between **$50 billion** and **$65 billion** in damage, losses second only to Hurricane Katrina in US history. Is this a harbinger of things to come?

Is any market immune from climate disasters, given that Ian spread its catastrophic effects across both Florida and South Carolina? Even a market as far north as the New York City metro experienced an estimated $19 billion in property losses and interrupted economic activity due to Superstorm Sandy.

Add in West Coast wildfires, Midwest droughts, 100-year Kentucky floods, record-breaking Great Lakes winter storms, and there is really is “nowhere to hide” if an insurer wishes to remain in the P&C space and somehow also remain economically viable.



Are Consumers and Taxpayers the Ultimate Losers?

The whole flood insurance market can be bewildering to property owners.

With FEMA flood maps of often unknown accuracy, customers may not be required to buy flood insurance, only to later discover that they were in fact living in a high-risk area, and that they have little or no coverage when seeking help after an event.

For others, flood insurance may be available, but unaffordable, if insurers price coverage in line with the growing risks. As insurers write policies across broad swaths of territory, low-risk locations may be lumped in with higher-risk areas, causing property owners to pay more than warranted for coverage.

For some consumers, with escalating climate event severity in the forecast, their coverage may not be sufficient, even if they can attain and afford it.

As the payers of last resort, do taxpayers end up “holding the bag?” FEMA estimates that over **$1 billion** in claims from the National Flood Insurance Program (NFIP) were paid out in just the first 60 days after Hurricane Ian hit. Will we hit a crisis point at which this chronically-underfunded program requires a major infusion of money just to stay afloat?

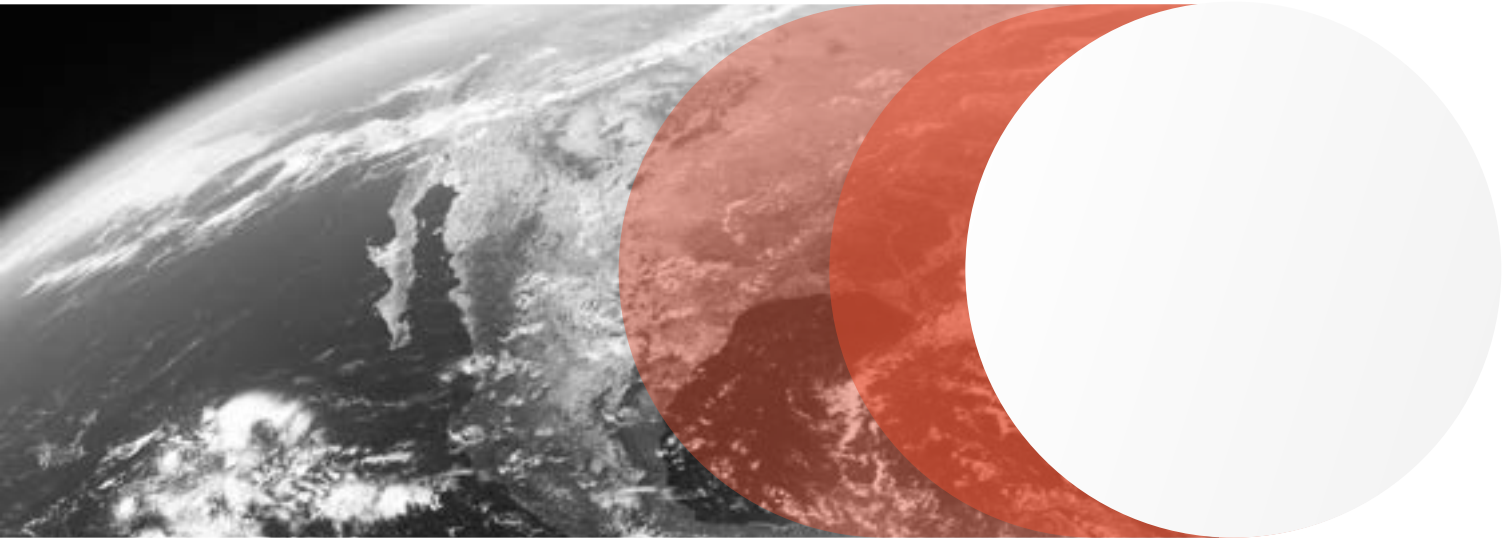
Using Technology to Mitigate the Business Impacts of Climate Change

The time for addressing climate change aggressively is upon us. Some science indicates that we have already passed the point of no return, and that now we are in mitigation mode, not reversal mode.

Thomas Buberl, CEO, AXA, said "If you go much further to 2020, 2030, we can clearly say that at a scenario between 3 and 4 degrees, it's not insurable anymore,"

Thomas Buburl
CEO at AXA





Laying the Groundwork – Addressing the “Why”

Earnix has been addressing the impacts of climate change and how insurers can prepare for it for some time. We view addressing climate change through leveraging and augmenting IT infrastructure as a critical part of forward-looking solutions that are **intelligent, dynamic, and composable**, resulting in Intelligent Insurance Operations, or **Intelligent InsurOps**.

For example, at the Earnix Excelerate 2021 Summit, guest speaker Seth Rachlin, Executive Vice President and Global Insurance Leader at Capgemini, included a number of climate-related initiatives in his predictions about insurer priorities.

At the 2022 Summit, climate changes was included as one element of the insurance industry's "perfect storm", along with once-in-a-generation inflation, global supply chain issues, skyrocketing consumer expectations, increasing regulatory pressures, new workforce dynamics, and hungry competitors.



Getting to the “How”

Even with a seemingly-infinite set of choices for how to apply technology to climate change, there are some that have been proven by Earnix in other areas of insurance – such as underwriting, pricing and rating – and can be applied to climate as well.

Data and Analytics: “Know Thy Customers”

We have addressed extensively the key role of data and analytics related to other elements of the insurance value chain.

Here is an **action list** that applies specifically to climate change initiatives related to customers and prospects:

01

By collecting and analyzing data on past natural disasters, insurers can use machine learning (ML) algorithms to identify patterns and trends that can help them better predict the likelihood, location, and severity of future events.

02

Armed with this global view, data analytics, artificial intelligence (AI), and ML can be used to model the impacts of different scenarios, and to evaluate the potential risks and costs associated with climate-related events across broad regions (drought in the American Midwest or floods in Asia, for example). Insurers may choose to not cover those risks in certain areas (e.g. exit those geographies), adjust regional pricing mechanisms, or increase their reinsurance in those areas.

03

Also at the macro level, when combined with climate models around issues such as sea level rise, insurers can more accurately assess their exposure across geographies and portfolios, to evaluate these risks and take proactive steps to mitigate them.

At the level of individual covered entities (or prospective covered entities), insurers can **use data analytics** to better understand and predict climate-related risks:

01

They may choose to offer climate-risk-specific products. This may require partnering with other companies and organizations to develop innovative solutions, such as new insurance products or the use of blockchain technology to track and verify carbon offset credits.

02

For both new and current products, implementation of data analytics increases the ability to more accurately price products, personalize offers, and reduce risk, improving corporate sustainability and protecting shareholder value. AI and ML hold the promise of being able to price and write coverage at the level of individual properties, rather than pricing across large swaths of territory, making pricing more accurate, affordable, and equitable.

03

For their insured entities, insurers need to be prepared to make investments that leverage the Internet of Things (IoT) to monitor and track the risks associated with climate change in real time. Proven technology exists for installing sensors on buildings and infrastructure to detect early warning signs of damage from catastrophic weather events, or slowly-evolving risks due to the effects of rising temperatures, varying precipitation patterns, building foundation deterioration, seismic shifts, and rising sea levels.

04

A critical subset of IoT in automotive insurance is telematics and its ability to guide insurers in providing usage-based insurance (UBI). With climate change and novel weather events will come the need for driver re-education, changes in driving behavior, and adjustments to automotive coverage resulting from changing driver risk profiles.

More Data and Analytics: "Know Thyself"

In addition to the market-focused measures in the previous section, insurers must turn inward and employ technologies required to improve their own operations and profitability:

- ✓ Insurers should implement digital tools to **streamline** and automate underwriting. It is a safe bet that climate-related risks are going to continuously evolve, making agile planning and reaction to climate change and events more important than ever. Without automation, underwriting will consume more and more resources, increase expenses, decrease customer satisfaction, and hurt profitability.

- ✓ Insurers should also invest in digital tools to **automate** the claims process, making it easier for policyholders to report claims and submit supporting documentation. This can help reduce the time and resources required to process claims and pay policyholders, improving the overall customer experience and reducing the financial impact of claims.

- ✓ Invest in renewable energy and other low-carbon technologies to reduce the carbon footprint of insurers' operations and **mitigate** the risks associated with climate change. With stakeholder attention focused on sustainability, insurers' investments in everything from renewable energy sources for their own buildings, to energy-efficient lighting and building systems, to electric vehicle fleets will pay dividends financially and in the realm of public and stakeholder opinion.

Let Earnix Help Drive Your Climate Technology Initiatives

Earnix provides a wide range of solutions to help insurers improve their underwriting, pricing and rating, and customer experience.

Earnix technology can help insurers in their climate-related efforts in several ways:

✓ **Data analytics and machine learning**

Earnix technology includes data analytics and machine learning capabilities that can help insurers better understand and predict the risks associated with climate change, allowing them to price their products more accurately and reduce their exposure to climate-related risks.

✓ **Personalized product delivery**

Delivering winning insurance products, whatever the covered risks, is not a “one size fits all” proposition. Earnix technology allows insurers to create customized products that consider a wide range of factors, including policyholders' risk profiles, needs, preferences, and behaviors.

✓ **Customer engagement**

Earnix solutions include a wide range of tools and features that can help insurance companies engage with their customers and understand their wants, needs, and preferences. Insurers are better able to meet the needs of their policyholders and improve the overall customer experience.

Insurers the world over are employing Earnix technology and expertise to lead their markets. Let us help you take the next step in your climate journey.

Meet Your ESG Demands with Earnix

Reimagine Insurance →

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Earnix is the premier provider of composable intelligent solutions designed to transform how global insurers and banks are run. Earnix solutions unlock value across all facets of the business, connecting with customers, and breaking away from the status quo imposed by legacy monolithic, single systems. Earnix's solutions offer systemized, enterprise-wide value with ultra-fast ROI. It has been innovating for Insurers and Banks since 2001 with offices in the Americas, Europe, Asia Pacific, and Israel. For more information visit: earnix.com.