



Due diligence and climate reporting: the rapidly changing landscape

A Q&A with Albert Slap

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The Source recently met with Albert Slap, CEO and co-founder of the hazard-assessment technology company, RiskFootprint™, to discuss the changing landscape in corporate real estate (CRE) due diligence and climate reporting. He shared his expertise and experiences with us, including some use cases. This is especially pertinent in the wake of the recent Hurricane Ian disaster in Southwest Florida.

The Source: You indicated that in the wake of increasing damage and loss from extreme weather events and a changing climate, the landscape of property-transfer due diligence and climate reporting is changing rapidly. Can you speak to that?

Albert: Yes, that's correct. For many years, major

companies in the U.S. and around the world voluntarily reported on their CO2 emissions (and now, it's required in some jurisdictions). They did this to answer a question posed mainly by institutional investors: "What are your company's assets doing to the planet's climate?" More recently, however, EU initiatives like the [Task Force on Climate-Related Financial Disclosures \(TCFD\)](#) have gone further to frame a related question: "What's



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the planet doing to your company's assets?" These are really two sides of the same coin.

The Source: *That's interesting. It seems that this trend might require a whole new set of tools, doesn't it?*

Albert: Definitely. There have been software-as-a-service (SaaS) tools for quite some time to help companies measure and track carbon emissions from their facilities. Assessment of the impacts of floods, natural hazards, extreme weather, and climate change on facilities requires a whole new paradigm. But the new paradigm is coming.

The Source: *How so? What's causing the shift?*

Albert: There is a growing realization in the CRE profession that commercial-property-transfer due diligence has been mired in the past and has not evolved along with rapid changes in the availability of online hazard-assessment tools. Historically, there have been four "pillars" for every CRE property transfer:

- the appraisal
- the phase 1 environmental site assessment (ESA)
- the property-condition assessment (PCA)
- the title report

No CRE deal of any size is completed without these four reports having been conducted. But none of these reports makes use of or reveals available, advanced assessments for floods, natural hazards, extreme weather, and climate change impacts, even though they are now available online and are fast, accurate and affordable.

As a result of this gap, [ASTM International](#) formed a committee this year to develop something called the Property Resilience Assessment (PRA) Guide and Standard. The guide, which is the first step in the ASTM standard-development process, is due out soon. When the guide and standard are finalized, they will articulate the new best practices for CRE property-transfer due diligence. And, from an initial review of the guide, I gather that the changes will add long-needed breadth, depth, and transparency to the caveat

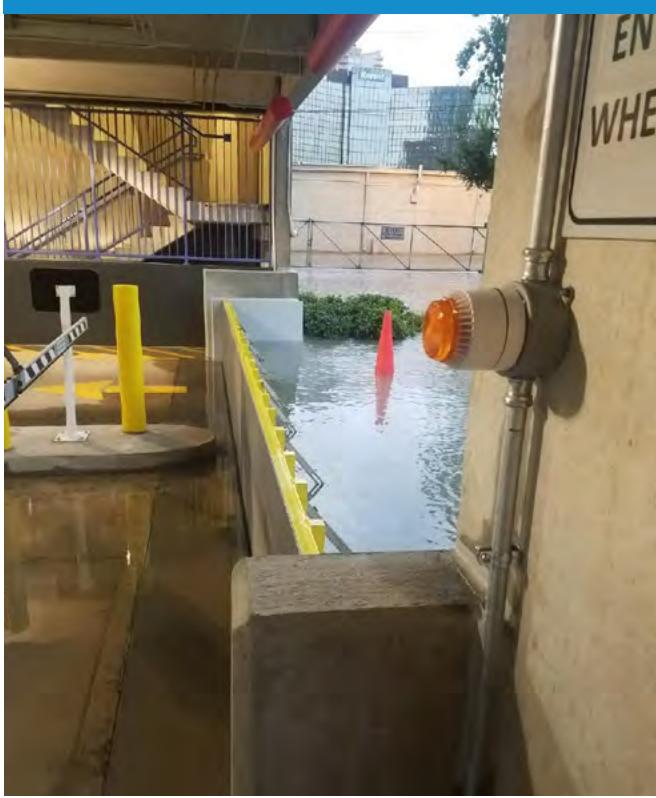
According to the National Oceanic and Atmospheric Administration (NOAA), storms, floods, natural hazards, and extreme weather events are increasing in frequency and intensity, impacting business operations and increasing financial risks. More than 285 climate-related disasters have occurred in the United States since 1980. The cost of these disasters amounts to almost \$2 trillion in damages. In 2020 alone, the U.S. experienced hazard events priced at \$22 billion in loss and damage. How can we find solutions to help us adapt and become more resilient?

emptor, due-diligence process. Corporate real estate owners and/or operators, commercial lenders, and their legal representatives tend to adopt and follow industry best practices.

Secondly, you have the U.S. Securities and Exchange Commission's proposed [rule on climate disclosures](#). This new rule has disclosure requirements for public companies in their annual reporting to the SEC on both sides of the coin; that is, what a company's assets are doing to the planet and what the planet is doing to those assets.

The Source: *Those two initiatives could really disrupt business as usual. So what are some of the questions that your CRE clients typically ask you and how do you help them?*

Albert: Our clients include real estate investment trusts (REITs), owners and/or operators of commercial, industrial and multi-family properties; hotels/resorts; and even government offices. Typically, they are asking us to risk-assess their entire portfolio of properties and to identify what I affectionately refer to as their "problem children." Not all of a company's assets are



at significant risk. By using the latest online tools for hazard assessments, however, the clients can quickly identify high-risk assets, whether they be 5 percent of the total portfolio or more. Then, with the short list in hand and the new PRA Guide and Standard, clients can answer important questions, such as:

- Should we keep the asset or sell it?
- Should we increase insurance coverage and, if so, in what amounts and types?
- Should we budget a reasonable amount of capital to make the building safer and more resilient, and in what time frame?
- Given the actual hazards, vulnerabilities, and materiality of the risks, how should we report these to the SEC, TCFD, and other quasi-regulatory agencies?

The Source: Do you have some use cases that you can share with our readers on how you help your clients?

Albert: Without revealing client names and confidences, here are two examples that I can share.

In one case, a REIT had bought a "greenfield" site for development of a large, multi-family, rental apartment complex. Like many buyers, it purchased the site with an approved land-development plan that the seller had previously obtained. The deal managers expressed some concern over the potential for flooding at the site. So, the REIT client asked our company, RiskFootprint™, to run a report on the property in its present, raw-land condition and then redo the flood modeling using the seller's site-development and grading plan. It turned out that proposed finished floor heights (FFHs) of the first-floor apartments would be subject to a 500-year flood event, but not the FEMA 100-year flood event. The client decided to raise the height of the first-floor apartments to be at the 500-year flood height, even though the FFHs were not subject to FEMA's 100-year flooding risks.

In another use case, a specialized, flood-mitigation consulting firm hired us to perform advanced modeling to determine if the final design of a large, industrial building could withstand hurricane storm surge or merely the FEMA 100-year flood (base flood elevation). Our site-specific flood modeling, in-depth structure analysis, and value-at-risk measuring showed that the building was at significant risk for damage/loss and business interruptions from category 1-4 hurricanes. As a result of our analysis, the developers decided to install removable flood barriers to mitigate some of the storm-surge risks.

The Source: That's great information. Looking into the future with climate change and its impacts, are there still gaps in the data that will need to be filled to enable better corporate decision-making?

Albert: That's a good question. When we start to look into the future at climate-induced changes in sea level rise, extreme rainfall, extreme heat, and drought, we have to consider the uncertainties of these predictions. Also, we have to realize that our focus on a particular building or property might very well have to be widened to encompass a community, a state, or even a whole region. For example, if a CRE owner/operator/investor is looking at a particular building in a particular area

of the U.S., while the building itself might be safe and resilient, the regional water supplies or the regional electric grid could be at risk from current or future drought conditions. So, sometimes clients do ask broader questions like, "Is this a safe and resilient place for me to invest?", "Does the city/county in which the building is located have the tax base and the political will to keep the streets dry and the lights on?" and, "Are there ingress/egress or supply-chain issues that might impact the performance of the asset?"

The Source: *A final question, Albert. You hear a lot about artificial intelligence (AI) and machine learning in risk-assessment technology. Are these new software programs really necessary to solve problems that your clients are dealing with on a day-to-day basis?*

Albert: The short answer is "not now" but, in the long-term, these new programming techniques will help us provide better advice to clients faster and with less cost. The presence of a hazard such as flood, wind, or wildfire does not automatically mean that the building is vulnerable to the hazard. Or, even if vulnerable, it does not mean that the risk of damage is significant – or "material," in SEC parlance. For example, we recently added to RiskFootprint™ an AI/machine-learning dataset that estimates finished floor heights (FFHs) of

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buildings. This technology uses AI and [Google Street View](#) to predict the height of a building's first floor above the ground level. This is an important first step and a work-in-progress to include vulnerability along with hazard assessments.

The bottom line of this discussion is that, with the increased impacts of extreme weather and a changing climate, CRE owners/operators need – and are now able to get from online hazard assessments – critical, actionable data to help them make better decisions about the appropriate next steps to take to make their properties safer and more resilient, maintain asset performance, and enhance market values.

The Source: *Thank you, Albert, for your time today.*