



α.s.r. real assets investment partners

Climate Adaptation within Real Assets Portfolios

Due to climate change, the likelihood and intensity of extreme weather and natural disasters are increasing. The consequences can lead to greater financial impacts on real asset investments. Research by a.s.r. real assets investment partners shows that physical climate risks are already affecting valuations and cash flows of real assets. Integrating physical climate risks into decision-making will become increasingly important in the future. a.s.r. real assets investment partners supports investors in managing physical climate risks.

Climate Change and climate risks

When a natural disaster occurs, there's a high likelihood of physical damage to real assets. Recent examples of such disasters include Hurricane Milton in Florida, floods in the Valencia region, and wildfires in Canada. In some cases, the damage was so severe that the assets could no longer be used. In addition to physical damage, assets in disaster-prone areas often face higher vacancy rates, higher debt costs, increased operational expenses, and reduced insurability. For instance, in Florida, alongside increased insurance premiums, major insurers have ceased providing coverage in the state.

The IPCC (Intergovernmental Panel on Climate Change) broadly defines risks as the potential for adverse consequences. Risks are determined by looking at 'hazard' multiplied by 'vulnerability' multiplied by 'exposure'. In the case of physical climate risks¹, this means:

- **Hazard** refers to the likelihood and intensity of climate effects, including the geographical scope. Hazard can be divided into two categories (see also figure 1):
 - acute hazards. These are caused by events, such as damage from floods and storms.
 - chronic physical risks. These stem from long-term climate changes, such as sea level rise and chronic heatwaves.

- **Exposure** refers to the extent to which assets are affected because they are located in affected areas.
- **Vulnerability** is the resistance or lack of resistance of an exposed asset; how well is the asset able to withstand a climate threat?

In practice, there is consensus on the definition of physical climate risks. However, different methods are used to assess these risks due to a lack of standard certification. This results in varying risk estimates.

The most common approach only considers risk from an area perspective, excluding asset-specific mitigation measures (gross area risk). For real assets, a.s.r. real assets investment partners follows the Dutch Green Building Council (DGBC) by dividing physical climate risks into location risks and asset-specific risks.

¹ Source: DGBC. a.s.r. real assets investment partners considers the definition of physical climate risks applicable to real assets.

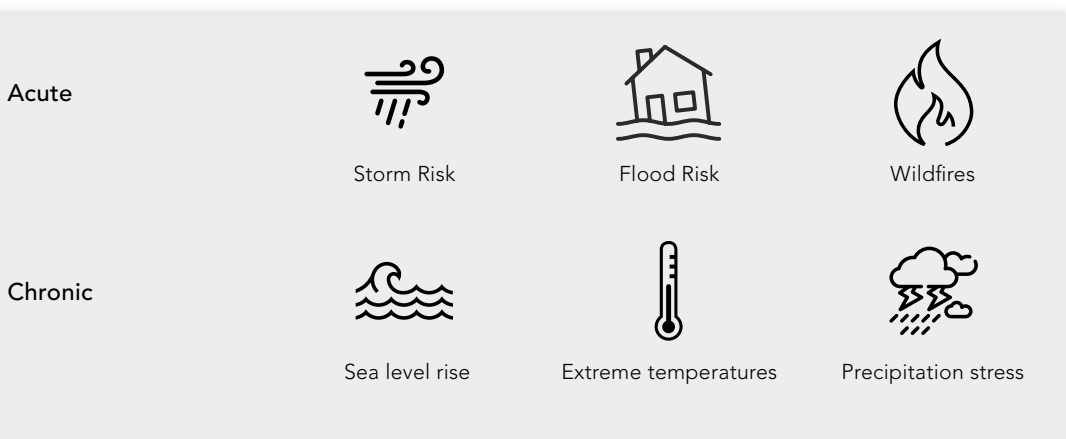


Figure 1: Some illustrative examples of hazards

Insight and managing physical climate risks

Together with a data provider, a.s.r. real assets investment partners gains insights into four types of environmental risks: floods, storms, earthquakes, and wildfires. This enables a.s.r. real assets investment partners to uniformly assess climate risks worldwide, independent of the various measurement methodologies used by fund managers. Additionally, a.s.r. real assets investment partners can provide consolidated insights and report these to clients (also see figure 2).

In addition to assessing gross area risk, the data provider also evaluates area mitigation measures such as dikes and delta works. This allows a.s.r. real assets investment partners to assess semi-gross risk (see figure 3). Following the IPCC definition, both hazard and exposure are now clear.

The data provider is unable to assess the vulnerability of the assets. This concerns the resilience (or lack thereof) of an asset that is exposed to hazards. Therefore, a.s.r. real assets investment partners considers an active approach to investment monitoring as necessary in mitigating climate risks. When high risks are identified within portfolios, a.s.r. real assets investment partners engages with managers. Components of the engagement include comparing insights (does the manager of the portfolios have insight in the same risks?) and assessing climate risk management (for example, are asset-specific measures in place for vulnerable assets?). By doing so, a.s.r. real assets investment partners gains increasing insight into the net physical climate risks within portfolios and encourages managers to reduce these net physical risks in investment portfolios.

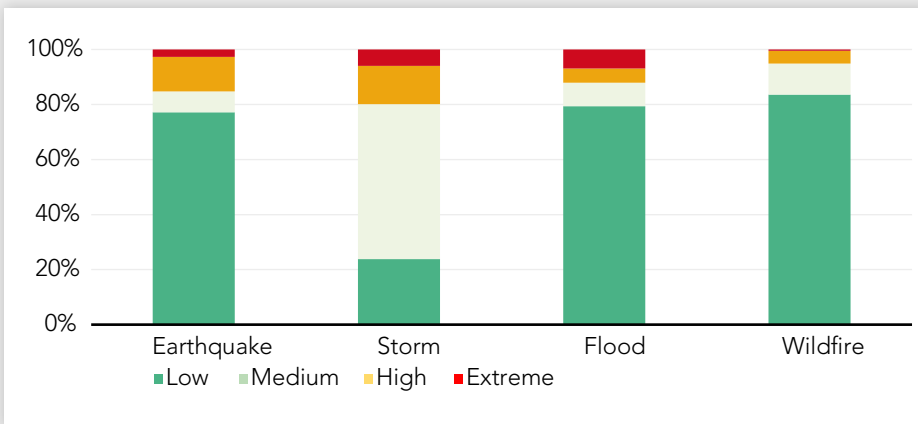


Figure 2: Share of physical climate risks per risk category (% in AuM)

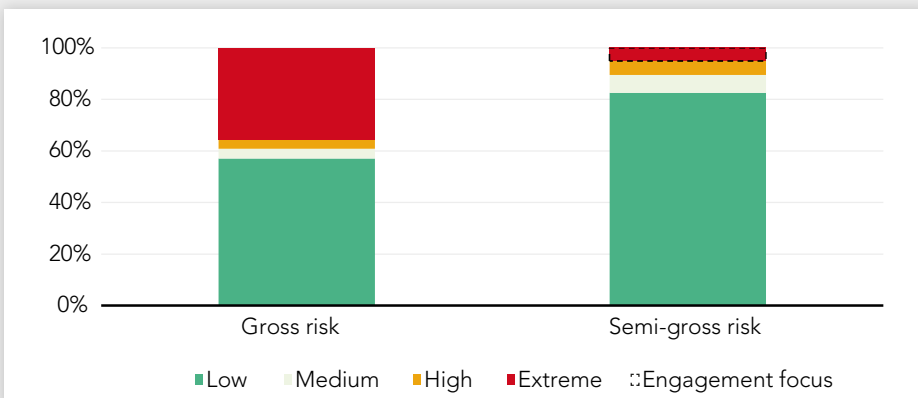


Figure 3: Differences between gross and semi-gross risks (% in AuM)

Influence of climate risks on the attractiveness of real estate

By examining semi-gross area risks along with rent and valuation data for each asset, a.s.r. real assets investment partners was able to better understand how these factors are affecting real estate portfolios. The results show that various types of physical climate risks negatively impact rental income and valuations of institutional real estate. The greatest negative impacts are caused by risks such as heavy rainfall, cold stress, heat stress, and storm risk. Previous academic research has shown that physical risks affect rent and valuation levels, but usually only as a direct result of acute hazards, such as the price effects of Hurricane Sandy in the United States².

In addition to the direct impact on valuations and rental income, the research highlights the phenomenon of "climate gentrification." Climate gentrification means that areas with low climate risk experience stronger rent and value increases compared to high-risk areas. In the long term, this could make lower-risk areas more attractive for investment. Even though markets like Florida, Valencia, and Canada currently offer attractive investment opportunities, it's crucial to recognize that these regions may develop higher risk profiles in the future. The same applies to markets with increased heat stress risk, such as Seville in Spain and Phoenix in the United States. This higher risk profile makes these regions less appealing to institutional investors. However, more depreciated areas might offer attractive entry prices for investors.

Beyond investment attractiveness, insurers reach the same conclusions about which markets are attractive, for example about Florida, as mentioned before. This could result in institutional investors withdrawing from financially attractive markets with higher climate risk profiles.

In the long run, a trade-off exists between geographical diversification, or accepting higher physical climate risks within investment portfolios. a.s.r. real assets investment partners incorporates physical climate risks into the assessment of the attractiveness of investments through an added risk profile premium. Moreover, physical climate risks are factored into the return outlooks of a.s.r. real assets investment partners' house view via an additional CapEx premium. This makes additional risks more transparent.

The alternative is to contribute to climate resilience through the generated insights and engagement as described above. Additionally, the financial sector can actively contribute to improving climate resilience through impact investments in financially attractive markets. a.s.r. real assets investment partners sees a clear link to SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action), and climate adaptive impact investing.

² [Link to the paper.](#)



Climate adaptive impact investing

a.s.r. real assets investment partners considers the analysis of physical climate risks to be a regular part of the investment process. Engagement is carried out where necessary. A step further is to make a positive impact in the area of physical climate risks. An integrated real assets approach increases the ability to make an impact by investing in the energy transition of vulnerable areas, as well as in future-proof agriculture. The GIIN (Global Impact Investing Network) has elaborated on this theme in four concept strategies:

- Improving household resilience to flood risk.
- Improving power systems resilience.
- Improving the capacity of communities to adapt to climate risk.
- Increasing agricultural resilience through technology.

Within the impact investing framework of a.s.r. real assets investment partners, the insights from our research provide direction to the areas where the greatest impact can be achieved. Especially in areas where climate gentrification is occurring (or will occur), communities may not have the resources or knowledge to protect themselves against increasing climate risk. a.s.r. real assets investment partners encourages fund managers to work with local stakeholders to (re)develop areas with higher risks to be 'climate adaptive'. After all, physical climate risks are not only relevant for institutional investors, but also for other stakeholders such as private homeowners.

a.s.r. real assets investment partners foresees increasing attention to the theme of impact investing within real assets and would like to discuss this topic further with you.

The future

As mentioned, there is currently no standard certification methodology. Given the need to understand physical climate risks, it is up to investors such as a.s.r. real assets investment partners to make their own assessments. Although a.s.r. real assets investment partners' findings show that physical risks already impact rental and valuation levels and that climate gentrification is present, the investment market is still not fully capable of uniformly pricing these climate risks.

A standard certification methodology could be one of the solutions. Several developments are underway in this area, including a.s.r.'s involvement in the climate adaptation working group (regarding to the sustainable finance platform, initiated by the Dutch National Bank), where cooperation between the government, the academic world and the business world aims to explore the possibilities of a uniform climate label.

Additionally, engineering firms are increasingly helping investors translate (semi-)gross area risks into net climate risks. This is an important step for taking adequate mitigation measures. a.s.r. real assets investment partners emphasizes this during engagement discussions with investors and shares best practices whenever possible.

The potential 'climate risk premium' that these developments may bring reflects the higher risk profile and necessary adaptation measures. For now, a.s.r. real assets investment partners includes this in its thorough assessment of investments and helps investors integrate physical climate risks into their decision-making by providing insights into area- and asset-specific risks. This is done both in the selection phase and during ongoing monitoring, partly through the use of engagement.

For more information, you can get in touch with:



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Publication date: December 17 2024