

## Position Paper #2: Can Insurance internalize the externality of Climate Change?

Climate change represents a classic externality where the costs, such as damage from extreme weather events, are not reflected in the market. Insurance can potentially address this by internalizing climate risks, but its effectiveness and fairness remain subjects of debate.

Insurance companies can raise premiums or reduce coverage in high-risk areas, making climate risks financially tangible. The *13th Annual Survey of Emerging Risks* shows climate change as the dominant risk [1]. By tying premiums to climate-related risks, insurance can incentivize individuals and businesses to adopt risk mitigation strategies, such as flood barriers or structural reinforcements [2]. This market signal puts a price tag on climate risks, encouraging more proactive behavior.

However, insurance alone may not be enough. Studies [2] [3] reveal that insurance only works effectively when combined with accurate risk information and sufficient financial incentives. In cases where governments provide compensation for climate-related losses, individuals may feel less motivated to invest in mitigation.

### Ethical Concerns

Relying on insurance to **internalize** climate risks can exacerbate socioeconomic inequalities. Wealthier individuals are more likely to afford both rising premiums and mitigation measures, while low-income communities may be priced out of coverage entirely [2]. As **Telesetsky** discusses, climate insurance can shift the burden of climate risks onto those least responsible for the problem [3].

### The Business Case for Climate Action

Framing climate action as a business case through insurance can drive **behavior change**, but it's not sufficient. Financial incentives can prompt companies and individuals to adopt sustainable practices, but they do not address the **systemic** and **ethical** dimensions of the climate crisis. Market-based solutions, while helpful, must be part of a broader strategy that includes regulatory frameworks and international cooperation [2][3].

### References

- [1] Canadian Institute of Actuaries, Casualty Actuarial Society, and Society of Actuaries. (2020). *13th Annual Survey of Emerging Risks: Key Findings*
- [2] Botzen, W.J.W., Aerts, J.C.J.H., & van den Bergh, J.C.J.M. (2009). *Willingness of homeowners to mitigate climate risk through insurance*. *Ecological Economics*, 68(8-9), 2265-2277
- [3] Telesetsky, A. (2009). *Insuring Against Future Climate Change: The Use of Mandatory Catastrophe Risk Insurance and Microinsurance to Promote Mitigation and Adaptation*