Workstream proposal: Resilience Zones

Background

As the physical impacts of climate change continue to intensify, urban areas are becoming more vulnerable due to their high density and proximity to the sources of environmental hazards, like rivers and coastlines. This has led to a sharp rise in economic losses, for both local communities, governments and the insurance sector. From an insurance perspective, increasing the resilience of urban centres, to climate risks, is becoming more important if such markets are to remain insurable into the future. A 2013 ClimateWise action research collaboration (Phase 1) introduced the concept of Resilience Zones (RZs) as a way to promote climate adaptation and establish better market signals at the city level.

RZs are urban areas, specifically vulnerable to climate change risks, earmarked for regeneration via comprehensive risk management and upgrading. More recently, ClimateWise has also been involved in a European-wide project, called ENHANCE, that sought to understand the role of multi-stakeholder partnerships (MSPs) in achieving a viable response to climate risks.

One of the challenges in enhancing urban resilience is that local municipalities often fail to move beyond the adaptation plans they produce, often due to the high financial and opportunity costs, and also due to uncertainties linked to adaptation. There is a danger of unintended consequences – where a misjudgement of future risk levels can lead to costly design or investment errors.

Property markets do not yet send clear signals as to how resilience can be a key contributor to the medium- and long-term performance of properties and locations from an investor, owner, tenant, and municipal perspective.

The insurance industry itself, as the world's largest institutional investor, clearly has a role to play. Ironically, investment decisions by insurers do not usually consider the climate risk knowledge gained on the underwriting side. Far too often property and infrastructure investment decisions go ahead without any reflection on climate risks (Surminski et.al. 2016). Yet like RZs and MSPs, the role of the private sector is clear in theory but vague in practice.

Yet with both RZs and MSPs, the role of the private sector is clear in theory but vague in practice. Thus, a proof of concept is required to first identify and then realize the short and long-term resilience benefits to both cities and insurers. While the ultimate aim of this project (Phase 2 and 3) is to outline and test practical ways for insurance investment and underwriting to support urban resilience, phase 2 will start by investigating the investment and insurance value chains relevant for urban resilience.

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Methodology

The proposed project will be split into two distinct, yet progressive phases:-

- **Phase 2** will fully understand the investment and insurance value chains relevant for urban resilience; and
- **Phase 3** will apply this knowledge in the context of municipal level planning for upgrading and regeneration as Resilience Zones (RZ).

Phase 2 – Internal Decision Making

Phase 2 will seek to improve understanding of the internal value chains that frame the insurance industry's role in urban resilience. We will identify the entry points where enhanced consideration of climate risk and resilience can be more deeply integrated into the decision making process that drives insurers' underwriting and investment activities. These entry points might include the role that risk information can play, the use of modelling tools, regulatory aspects such as planning systems and building codes, and other economic considerations such as what factors dictate the viability of a particular property investment. A particular focus will be a greater alignment between risk concepts on both the underwriting and the investment side of the insurance business model and the risk concepts applied by other stakeholders (local governments, developers etc.). The project will also draw on ClimateWise's ongoing 'Investing for Resilience' workstream. For this we will also consider the broader engagement activities of the industry with other stakeholders, including local government and consider the scope for innovation.

Tasks

(1) A synthesis of the existing knowledge and experience of the industry's underwriting and investment activities in urban resilience.

(2) Following task 1, a set of interviews with ClimateWise members to deepen our understanding of what works, where the barriers are and what scope for innovation insurers see. While the focus will be on the internal insurance and investment value chain, we will also consider broader engagement activities such as awareness raising and advocacy.

(3) The overall findings of task 1 and 2 will be summarized through the use of a matrix structure, to be refined throughout the life of the project. Key deliverables to be produced at this stage (see below).

(4) Outputs of task 3 will be integrated into the plans for Phase 3 of the research stream by working with the CISL team and the leader of Phase 3.

Key deliverables

- 1 printed report, length to be defined by the research findings
- 1 or more webinars

Geographic scope

To explore entry points for resilience the project distinguishes between urban resilience in highly regulated markets such as the United Kingdom or the United States; and urban resilience in emerging markets / developing country context. Both categories will be explored. This will also assist informing Phase 3, which will consider a case study from each of those two market types.

Stakeholders

This project will focus on the 'internal' insurance industry processes that lead to decisions relevant for urban resilience. The interviews will be conducted with ClimateWise members. Informed by ENHANCE, the Investing for Resilience workstream and the previous Resilience Zone's project we can build on a good understanding of the type of other stakeholders already involved and/or needed, such as local/municipal government, DRM/adaptation decision makers at a urban level, utility companies, developers, planners, regulators (insurance and zoning/building codes).

Phase 3 – Proof of concept to be developed

Phase 3 will build directly on the outputs of Phase 2 by applying the evidence and considering the lessons learned to realize the benefits of resilience for both cities and insurers. This part of the project will focus on insurers' participation in the planning of an urban regeneration project or special purpose facility/district improvement project. It is envisaged that one or more insurers would join as a key stakeholder along with the municipality, property owners, development authorities and the property industry, utilities companies, and local community stakeholders.

The specific objective of Phase 3 will be to test out, in a real project context, how the different capabilities within the insurance sector (identified in phase 2) can be most successfully delivered and supported from a business (underwriting and investment), and regulatory and corporate relations perspective. It will:

- Consider how insurers can provide risk analysis expertise, as a business offering or otherwise, within an urban development and municipal planning context. Better understand the opportunities and barriers to greater sharing of data regarding place-based risks. Ensure that the study adheres to a systemic approach, and is not overly narrow from the outset (e.g. testing out a single, specific consulting offer/concept).
- Consider how risk transfer can support multiple aspects of resilience at urban precinct or district scale. The underwriting opportunities would be specific to the chosen area and its function (e.g., residential, commercial, specialized industry cluster, tourism, etc.). Generally, the opportunities would include peril-specific property insurance and business disruption policies. For specialized business districts, a resilience strategy might also include underwriting opportunities for foreign exchange risk (e.g., for export-oriented and tourism business clusters), event insurance, and data loss insurance. Exploring this in the context of innovative new

products/risk transfer solutions – such as pools, parametric solutions, and mutuals would be important. Some ClimateWise members are already doing this.

- Consider the possible nature of insurer investments in the chosen urban regeneration or major property development scheme. How might insurers, as investors, use investment participation as a way to better define and manage risks while also generating returns and protecting the balance sheet? This also speaks to ClimateWise's ongoing research around Investing for Resilience.
- Explore with stakeholder partners how resilience can be defined as a form of performance, and if, how, and in what ways property markets and public sector/regulators value resilience enhancement (i.e., de-risking of locations) as a form of performance. Understand how value created through resilience enhancement can be captured for further investment in risk management.