

OPINION



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CLIMATE ADAPTATION

Measure for measure

Measures to adapt to the changing climate are just as important as mitigation efforts

Since the topic of flood prevention was discussed in Insurance Europe's 2019 Annual Report by Zurich's Alison Martin, much progress to limit human-induced climate change has been made. In February 2021, the European Commission adopted the new EU strategy on adaptation to climate change. More ambitious targets were set at the UN Climate Action Summit in 2019 and at COP26 in Glasgow in November 2021. But the progress made is nowhere near the effort needed. Indeed, while important pledges were made on reducing deforestation, coal usage and methane, and commitments were made to greener transport, the world is still not on track to meet the 1.5°C target agreed on during COP21 in Paris.

So, while society must continue to make every effort to limit warming to 1.5°C, increased importance must be placed on adaptation. This is because even if the 1.5°C goal were reached — which, currently, seems highly unlikely — climate change would still have dire and sometimes catastrophic consequences¹.

Research, including our own from the Zurich Flood Resilience Alliance², confirms that climate change adaptation finance is insufficient and is not reaching the most vulnerable and those who need it most. We must therefore follow through on the commitment

¹ ["Climate Change 2022: Impacts, Adaptation and Vulnerability"](#), Summary for Policymakers, B.1.7, IPCC, 2022

² ["At What Cost?: How chronic gaps in adaptation finance expose the world's poorest people to climate chaos"](#), Zurich Flood Resilience Alliance, July 2020

Zurich partners with the Practical Action charity, which supported the Nepal Flood Resilience Project to build a 220m biodyke on the Aurahi River, preventing flood water from entering the community of Bangalipur and saving crops.

Photographer: Sanjib Chaudhary, Practical Action Nepal



to leverage \$100bn (€95bn) for climate finance, with an even split between mitigation and adaptation.

Wise investment

This makes economic sense, as it has been shown that any investment, whether into mitigation or adaptation, is economically sound and pays off, with cost-benefit ratios of 1:5 up to 1:10 consistently found, even from traditional approaches. And this does not even take into account the co-benefits of more modern approaches, for which evidence has become stronger over the years. These include nature-based solutions — such as natural water infiltration instead of channelling it into sewage, biodykes instead of concrete levees, or making room for the river instead of putting it into an artificial narrow bed — as well as solutions that are focused on the human and social aspects on top of financial ones.

However, various hurdles must be overcome and false incentives must be eliminated to massively scale up and speed up climate-smart and risk-informed development approaches that help our society adapt to the future climate.

Here I will focus on four action areas, which expand on parts of the findings from a European Policy Centre paper³:

³ ["Adapting to change: Time for climate resilience and a new adaptation strategy"](#), European Policy Centre, March 2020

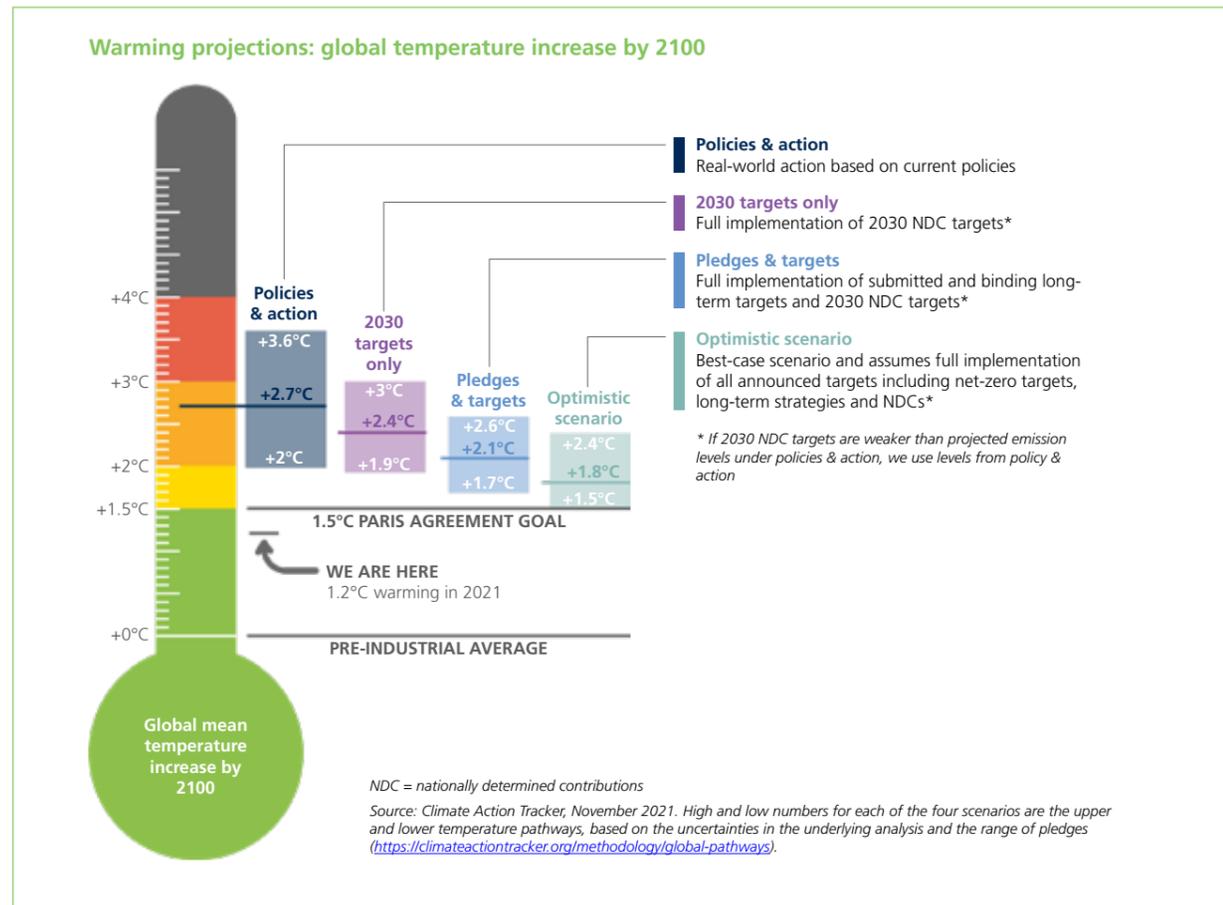
Synergising between mitigation and adaptation

Nowhere is this more obvious than in the built environment. As we move to less resource-intensive, greener buildings and lives, solutions must be implemented that contribute simultaneously to mitigation and adaptation.

As we increase the pace of the energy transition to new renewables, we must ensure they are also well adapted, using future climate modelling to find the safest location to deal with increased hazards and using construction materials that are able to handle those hazards.

The same is true for buildings. The stock that will be exposed to the climate of the 2050s is being built now. We have no time to lose in understanding what that climate is likely to be and what must be done to adapt to it. A building designed and constructed today can easily meet mitigation targets/be net-zero and be adapted to hotter temperatures, more intense storms, stronger hail and much more.

A simple example is photovoltaic systems for solar power that are certified for bigger hailstones. Or reducing heating and cooling emissions in more variable climates through modern methods of construction and thicker wall and roof insulation that can cope with more intense or new hazards including increasing wildfires or floods.



The insurance industry has a long track record of identifying and assessing emerging risks and providing recommendations for how to reduce them. This goes all the way back to the fire sprinkler. In the years to come, the industry can help the adaptation to climate risks through modelling, risk-assessment capabilities, learning lessons from past and new claims, and providing those learnings to decision-makers, construction experts and society at large. This means embracing a more transparent approach to sharing data on hazards, risks and losses.

In my view, the possession of risk information is not what gives an insurance firm a competitive advantage, but rather knowing how to assess that information. We should therefore not be afraid of sharing data transparently. As an industry, we must also embrace new technologies and help reduce new risks rather than slowing new approaches because we consider them too risky. This is an opportunity to bring our core skillset to the fore and to diversify risk.

Prevention is economically and socially right

The validity of the prevention case both financially and in terms of avoided misery is crystal clear, yet we keep falling at the hurdles of who pays and who profits and when to invest in preventative action. The asymmetries — in space and time — between who pays for prevention and who is better protected as a consequence, and how we justify paying for protection now and account for the avoided losses at a hypothetical time in the future must be overcome. Traditional excuses not to prevent include:

- Undeserved and unconditional *ex-post* compensation mechanisms for those that could have protected themselves. Although ways are, of course, needed to ensure the poorest and most vulnerable can still participate through the use of vouchers or similar means to alleviate the financial burden while still ensuring risk is clearly priced and displayed. Not enough progress has been made to ensure fair, pre-arranged compensation, for example, through the use of insurance as opposed

to unconditional, *ex-post* compensation, such as that implemented after the catastrophic flooding from low-pressure weather system “Bernd” in parts of Belgium, Germany and the Netherlands in July 2021.

- The understandable motivation to improve protection only after a loss. This reduces the benefit, as both the initial loss plus the cost of prevention have to be paid, rather than just the prevention cost. We must therefore better anticipate where the next major loss will occur.
- Macroeconomic excuses such as the opportunity cost and the complexity of carrying out prevention work, when in actual fact prevention can be quite simple and can be successfully implemented at low or even no cost.

Global capital markets should be part of the adaptation solution, yet their focus so far has mostly been on mitigation, so long-term investment vehicles for adaptation and resilience building are still lacking. More willingness to design and implement longer-term resilience bonds and to take the upfront risks are urgently needed. The Coalition for Climate Resilient Investment (CCRI), especially its third track on financial innovation, is an important step in the right direction.

Devolving authority and skills to lowest possible level

I see a big opportunity for adaptation at local level, where communities take decisions on their development objectives and climate risk management processes. In many decisions, the local level has the decision-making power but does not get the necessary support, incentives, skills and qualifications. The Principles for Locally Led Adaptation, developed by the Global Commission on Adaptation⁴, are supported by over 70 governments and leading organisations, including Zurich Insurance. They are the right approach to bringing support down to the local communities on the frontline of climate-change impacts. This is where we make or break climate-change adaptation. It will also help us reach those that are most exposed and need the best adaptation, focusing more on people (and their assets) than on high-value assets alone.

Reconsidering insurance industry role

Lastly, we must also reconsider the role of the insurance industry and how it must adapt its business model. Beyond the need to embrace new risks to ensure it is seen as an enabler of the transition rather than shying away from it, we must be part of the shift to accelerated mitigation and adaptation. From a

⁴ [Principles for Locally Led Adaptation](#), World Resources Institute, January 2021

Extracts from “Climate Change 2022: Impacts, Adaptation and Vulnerability”, IPCC, February 2022:

“Climate change is contributing to humanitarian crises where climate hazards interact with high vulnerability.” (*high confidence*)

“Climate and weather extremes are increasingly driving displacement in all regions.” (*high confidence*)

private sector perspective, investing in adaptation — including in the most climate-vulnerable countries — continues to look unattractive and is often considered risky. We must turn this into an opportunity. Let us better understand and handle the new risks. Let us provide the underwriting capacity and risk engineering knowledge for them. We must critically reflect on what incentives we provide to those taking adaptation action. We should reconsider whether it is enough to argue that actuarially sound premiums are reflective of the level of risk and are sufficient motivation for risk owners to reduce their risk. We must make clear that insurance mechanisms alone do not solve the adaptation challenge, since a risk transferred is not a risk reduced. We should consider how we more stringently link insurance mechanisms to adaptation action by providing:

- more direct and clearer rewards, be it better prices, higher capacity, higher limits or lower deductibles for more adapted risks; and,
- improved services, such as follow-on support to flood victims as well as comprehensive build-back-better approaches after losses.

There are numerous options, and these enable the market to work flexibly. We should also consider how the industry can directly participate in adaptation action by developing co-financing mechanisms at location or policy level or by participating in or conducting adaptation programmes, such as the Z Zurich Foundation’s long-standing flood resilience programme⁵.

I am hopeful that the insurance industry can continue to provide its ample support mechanisms in a changing world and play a meaningful part in society’s journey towards a well-adapted and net-zero future in 2050 and beyond. ●

⁵ [Flood Resilience Portal](#), Zurich Flood Resilience Alliance