

Unlocking Climate Resilience Investment with Property Linked Finance

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The escalating cost of physical climate risk

Extreme weather events are becoming increasingly prevalent. Between 2015 and 2025, natural catastrophes caused approximately USD 4 trillion in direct economic losses globally. In 2025, these events resulted in USD 260 billion worth of losses and 42,000 fatalities¹. These figures are substantially higher when indirect impacts, such as business interruption and lost labour productivity, are also considered. The United Nations Office for Disaster Risk Reduction estimated that total annual disaster related costs now exceed USD 2.3 trillion². Physical climate risks are particularly acute in emerging markets and developing economies (EMDEs), where impacts are exacerbated by higher exposure and lower resilience capacity.

Property Linked Finance (PLF) offers a mechanism to mitigate these impacts whilst unlocking and scaling investment in climate resilience within the built environment. As a form of long-term, affordable financing linked to the property rather than the owner, PLF enables asset owners to fund improvements that enhance the environmental performance of property, including climate resilience measures.

Failure to adapt to physical climate risks exposes property owners and lenders to significant financial impacts beyond direct damage, with the cost of inaction far exceeding the cost of adaptation. Climate hazards increase credit, market, underwriting, liquidity, and operational risks by raising default probabilities, lowering property values, reducing insurability, and disrupting building performance. Collectively, these effects can materially erode financial performance, with organisations potentially facing annual revenue impacts of around 15% due to inaction.³ As these risks intensify, it is therefore becoming increasingly important for asset owners to proactively manage climate exposure and invest in adaptation measures.

Structural barriers and the climate adaptation investment gap

Despite this growing need, investment in climate resilience within the built environment remains constrained. A key barrier is the mismatch between the long-term benefits of resilience measures and the shorter investment horizons of many property owners. The value of avoided losses accrues over time, meaning such investments may appear unattractive to owners who do not expect to hold assets long enough to realise those benefits. This challenge is compounded by the fact that resilience investments often lack clear, predictable payback periods, or direct financial returns, with benefits framed as avoided losses that can be difficult to quantify.

Crucially, even where investments are economically justified, limited access to affordable finance can prevent otherwise viable projects from progressing. This challenge is especially pronounced in EMDEs, where constrained access to capital, as well as macroeconomic and political instability, can increase perceived risk and raise the cost of capital.

¹ <https://www.aon.com/getmedia/3fd8e3d3-1e2f-4df8-89a8-d376b753b3a0/20260120-cci-2026.pdf>

² <https://www.undrr.org/gar/gar2025#download>

³ https://www.ey.com/en_gl/insights/climate-change-sustainability-services/climate-action-barometer-survey

These structural challenges contribute to a significant global investment gap. It is estimated that, in EMDEs, an additional USD 284–339 billion in annual investment in climate adaptation is required, representing a 12–14-fold increase on current funding levels.⁴ Developed economies also face a significant adaptation investment gap. The European Commission has identified retrofitting existing buildings and infrastructure as the largest adaptation investment driver in the EU, with estimated annual investment needs of EUR 6.6 billion.⁵ Private finance will need to play a central role in closing these financing gaps.

How Property Linked Finance can unlock climate resilience investment

PLF's structure directly addresses these barriers. By tying repayment obligations to the property and aligning the financing term with the useful lifetime of the measure, PLF ensures that costs are shared across successive owners. This alignment allows those who benefit from resilience improvements over time to contribute to their cost, unlike in traditional financing⁶, where the initial owner may bear all of the financing costs but not realise the full benefits. PLF maintains the ratio of costs to benefits by ensuring that both costs and benefits transfer with the asset, as demonstrated in Figure 1. In doing so, PLF helps to bridge the disconnect between long-term benefits and shorter ownership horizons, while also mitigating perceived risk associated with uncertain or delayed returns.

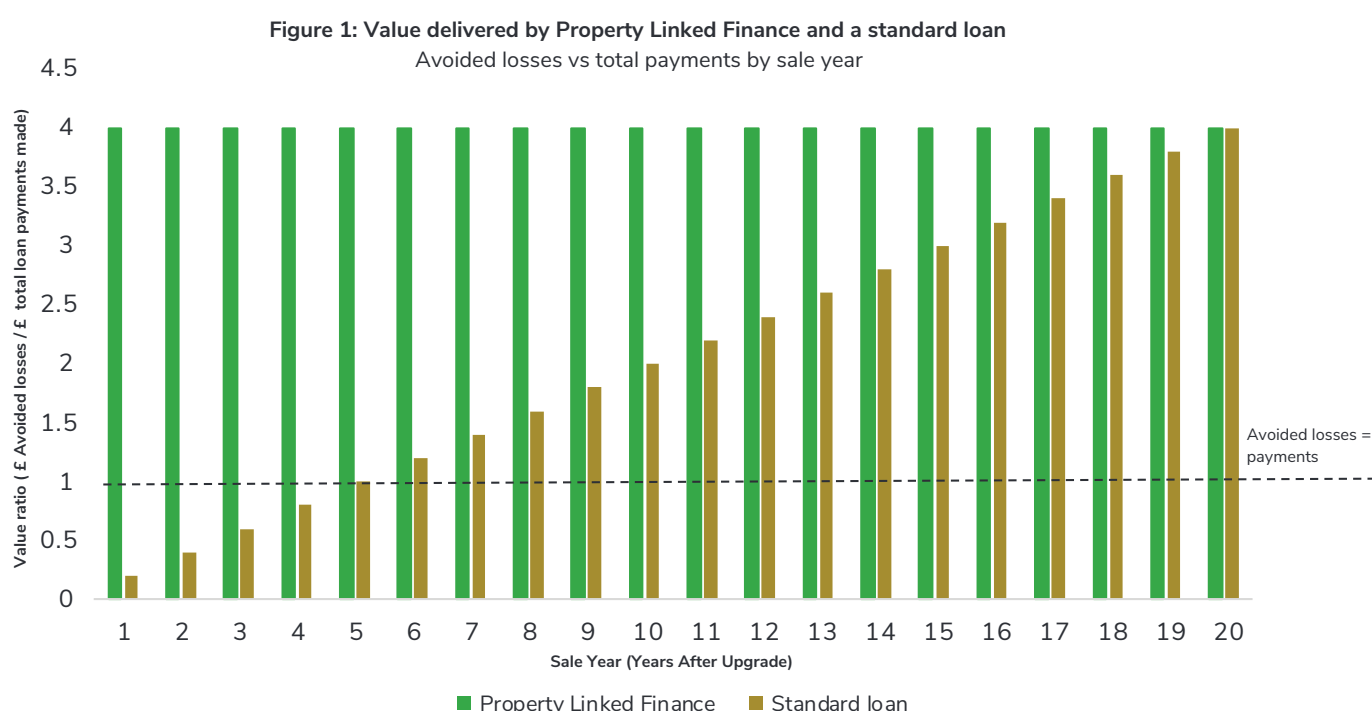


Figure 1 assumes that both loans are of equal value and have the same 20-year term. In both scenarios, the annual avoided losses are identical. The figure compares outcomes when the property is sold at different points during the loan term.

Under the standard loan scenario, if the property is sold before the end of the 20-year tenor, the outstanding loan balance is assumed to be repaid in full at the point of sale. Under the PLF scenario, the finance is assumed to transfer to the new owner upon sale. As a result, total payments only reflect repayments made up to the sale year, with no repayment of the remaining balance at sale.

⁴ <https://www.unep.org/resources/adaptation-gap-report-2025>

⁵ <https://op.europa.eu/en/publication-detail/-/publication/d2039eac-f742-11f0-b9bc-01aa75ed71a1/language-en>

⁶ Traditional financing includes mortgage financing, unsecured personal loans and commercial senior loans.

Owing to its long tenor, PLF also typically offers more manageable periodic payments compared to alternative financing solutions with a shorter tenor. It is also non-accelerating, meaning that in the event of default, the lender can only pursue interest and principal due at that time rather than the full outstanding balance, enhancing its appeal to borrowers. PLF is already being leveraged to finance climate resilience measures in several markets, including the US and Australia. In the US, PLF (also known as PACE (Property Assessed Clean Energy)) has mobilised approximately USD 3 billion towards resilience investments across commercial and residential real estate.⁷ These investments have supported measures such as flood and storm protection, heat and wildfire adaptation, and seismic resilience.



Case study:

Commercial PACE climate resilience deal in Michigan

PACE financing, a form of PLF, was used to fund a USD 1 million retrofit at the Belt Line Centre in Michigan, aimed at improving the property's flood resilience. The project included the installation of a 16,800 square foot green roof and a rain garden, designed to capture and infiltrate rainwater runoff, significantly reducing the risk of flooding. The retrofit facilitated several long-term economic advantages: it helped avoid losses from flooding, increased the longevity of the roof by reducing exposure to temperature fluctuations and ultraviolet radiation, and delivered energy cost savings. These benefits align with the long-term structure of the PACE deal, which was issued with a 20-year term, making the deal more economically viable compared to a standard commercial US loan that typically has a tenor of only 3–5 years.

⁷ <https://www.pacenation.org/resources/>

Growing interest in climate resilience PLF

Growing physical climate risks are driving interest in using PLF to fund adaptation and resilience measures across a range of markets, including:

Sea level and ground water level changes



The Netherlands

The Netherlands' built environment faces substantial physical climate risk due to its soil composition and low elevation, with 26% of land being below sea level⁸, making it particularly vulnerable to flooding and land subsidence. It is estimated that foundational damage to buildings due to subsidence will cost EUR 20–30 billion to repair.⁹ These challenges are expected to intensify as average and extreme temperatures increase and periods of extreme rainfall and drought become more frequent, leading to greater fluctuations in groundwater levels. The GPLFI and TNO are actively exploring introducing PLF in the Netherlands to help finance climate adaptation and resilience measures.



The Philippines

The Philippines is highly vulnerable to climate impacts, with recurrent heat waves, typhoons and flooding that are projected to worsen.¹⁰ Anecdotal evidence from scoping work conducted by GFI, the International Finance Corporation (IFC), and C40 on PLF in the Philippines identified clear demand from the commercial real estate sector to use PLF to finance resilience upgrades, particularly flood resilience measures.

Extreme weather events



Brazil

Brazil is facing an increasing number of extreme climate events, including droughts, wildfires, heatwaves and floods as a result of more intense rainfall and longer dry periods. Brazil experienced, on average, 4,077 recorded climate related disasters per year in the 2020s, compared with 725 in the 1990s.¹¹ These events pose a significant risk to Brazil's building stock, which will need to be adapted to withstand current and future climate conditions. The GPLFI is exploring opportunities to introduce PLF in Brazil as a mechanism to help finance climate resilience and adaptation measures.



The United Kingdom

The UK's built environment is experiencing increasing impacts from extreme weather events, with weather-related property insurance claims increasing by 157% between 2017 and 2025.¹² Research by the Green Finance Institute (GFI) found that 60% of small and medium enterprises (SMEs) and large enterprises would be likely to use UK commercial PLF (C-PLF) to fund such measures.¹³ The GPLFI has supported the launch of PLF in the UK and is actively supporting the use of PLF to finance climate resilience and adaptation measures.

⁸ https://www.researchgate.net/figure/The-map-shows-that-55-percent-of-the-Netherlands-is-flood-prone-26-percent-is-below-sea_fig4_273681624

⁹ https://publications.deltares.nl/11206466_002.pdf

¹⁰ https://www.oecd.org/en/publications/oecd-economic-surveys-philippines-2026_f0e0c581-en/full-report/confronting-climate-change_d3856ef6.html

¹¹ <https://maredeciencia.eco.br/wp-content/uploads/2024/12/Brasil-em-transformacao-1-2024-o-ano-mais-quente-da-historia.pdf>

¹² <https://www.deloitte.com/uk/en/about/press-room/uk-property-insurance-claims-expected-to-hit-record-high-for-2025.html>

¹³ https://www.greenfinanceinstitute.com/wp-content/uploads/2025/12/Scottish-PLF-Greenprint.pdf?gfi_pdf_raw=1



Conclusion

Physical climate risks are intensifying, with significant and growing financial implications for the real estate sector. Failure to adapt not only exposes asset owners and lenders to direct damage, but also to escalating credit, market, and operational risks that threaten long-term financial performance.

Property Linked Finance offers a compelling mechanism to help close the current global adaptation financing gap and, in doing so, mitigate these risks. By aligning repayment with the life of the asset and transferring repayment obligations with the property, PLF overcomes key barriers to investment and enables the scaling of adaptation measures.

Efforts to support the deployment of PLF, led by the GPLFI, are helping to scale this model across multiple markets, unlocking private capital and strengthening the resilience of building stocks worldwide.

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