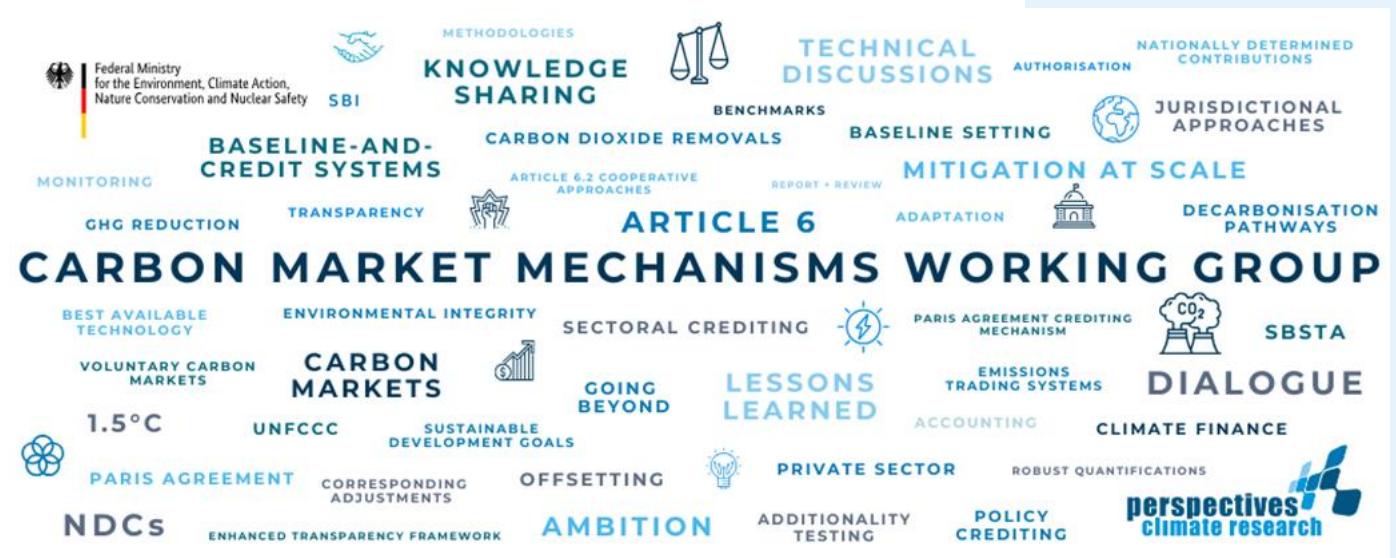


Can Insurance Successfully Address Reversal Risk in Carbon Markets?

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Discussion paper

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1. Purpose

The purpose of this paper is to contribute to ongoing discussions in international carbon markets about **whether insurance can serve as a credible tool for addressing reversal risk**, a critical concern among carbon market stakeholders to ensure the long-term integrity of emission reductions and removals. Existing literature and market practice on this topic remain limited, and the rapid introduction of new carbon insurance products over the past couple of years underscores the need for rigorous analysis of their potential role, limitations, and design features.

To date, **buffer pools** are the most widely used mechanism to address reversals in carbon markets. Under this approach, a portion of issued credits is set aside to compensate for future losses. Although buffer pools are not examined in detail in this paper, they provide important context for understanding why insurance providers have recently begun developing carbon insurance products. Several insurers and market participants have argued that buffer pools have **several shortcomings**, including **insufficient differentiation** by project-specific risk, and **limited transparency** in how they are operated and **uncertainty over their adequacy** across long time horizons (CarbonPool 2024; Oka 2023; Badgley et al. 2022). Concerns have also been raised about the financial burden placed on project developers, who bear the costs of locking away credits that could otherwise generate revenue and this constraint that falls particularly heavily on smaller and early-stage projects. From a financial efficiency perspective, buffer pool credits are held in kind for the entire duration of the project's reversal liability and, unlike insurance premiums, cannot be reinvested, meaning they represent a growing liability over time (Oka 2023). Buffer pools have further been criticised for offering limited flexibility to accommodate individual buyer risk preferences or the diverse profiles of different project types. These perceived limitations have contributed to growing interest among insurers and other market participants in exploring insurance-based approaches to managing reversals.

It is in this context that **insurance** has attracted growing attention as a **potential alternative or complement to buffer pools**. The insurance sector offers several features that make it well-suited to address at least some dimensions of reversal risk. Insurers bring demonstrated experience with long-term risk coverage, typically structured through annually renewable policies, and operate within a highly regulated environment that requires them to maintain sufficient capital reserves to reliably pay out claims. Crucially, insurance follows a **risk-based pricing approach**: premiums are calibrated to the specific risk profile of individual projects, using advanced actuarial modelling and spatial datasets to capture location-specific hazards. This stands in contrast to the often flat or broadly estimated contributions used in buffer pools. Risk-based pricing also creates direct **incentives** for project developers to implement stronger **risk mitigation measures**, such as improved fire management, enhanced monitoring, or more resilient project design, since doing so can lower their premiums. Beyond risk management, the availability of well-structured insurance products can **strengthen investor and lender confidence**, potentially reducing the cost of capital and helping to mobilise financing for new projects. A nascent but growing ecosystem of spe-

Specialised carbon insurance providers has emerged in the last couple of years, offering products covering reversal, non-delivery, and credit invalidation risks across the voluntary carbon market. Providers active in this space include dedicated carbon insurers such as CarbonPool, Kita, and Oka, as well as established brokers and insurers including CFC, Howden, and WTW. Several crediting programmes have also begun to formally consider or enable insurance as an eligible tool: ACR has long permitted approved guarantee products as an alternative to buffer pool contribution; the Climate Action Reserve (CAR) has similarly opened the door to such mechanisms; Verra recently launched a durability pilot under VCS allowing eligible projects to use insurance in lieu of the pooled buffer; and the PACM non-permanence and reversals standard now explicitly provides for insurance and third-party guarantees alongside buffer pools as eligible approaches.

Against this backdrop, the paper explores whether insurance could, in principle, address some of the challenges that have prompted criticism of existing reversal addressal mechanisms. The analysis draws on lessons from established insurance products, notably property insurance against wildfire risk and the World Bank Group's insurance products during the Clean Development Mechanism (CDM) era, to identify features relevant for carbon market insurance against reversal risk. It also considers the recent emergence of dedicated carbon market insurance products introduced in the voluntary carbon market over the past couple of years. Rather than evaluating individual products, the paper focuses on identifying key design features and limitations that would determine whether insurance could meaningfully contribute to addressing reversal risk, with the aim of supporting more informed and structured discussion on its potential role in evolving carbon market frameworks. This paper served as the basis for a CMM-WG workshop held on 12 March 2026, which brought together insurance industry representatives, carbon crediting programme experts, and policymakers to discuss the potential and limitations of insurance as a tool for addressing reversal risk in carbon markets. The reflections in Section 4 have been updated to reflect the key perspectives that emerged from that discussion.

2. Lessons from property insurance for reversal risk insurance

2.1. Basic approaches in property insurance

Property insurance provides financial protection against loss or damage to property, including productive assets, homes, personal items (Investopedia 2025; NAIC 2022; ICICI Lombard 2025; Openly 2025). Policyholders choose the **type of coverage** (e.g., coverage of building structure, personal belongings, or specific high-value items), **coverage limits** (i.e., maximum amount the insurer will pay in the event of a claim) and the **deductible** (i.e., portion of any loss policyholders must pay out-of-pocket before the insurance payout applies). Deductibles incentivize policyholders to implement risk mitigation measures, such as fire alarms, sprinklers, or security systems, which can help lower premiums.

Premiums, typically paid monthly or annually, are influenced by a number of factors including property value and reconstruction costs, the value of belongings, location-specific risks (fire, floods, crime, severe weather), construction features (age, materials, safety systems),

coverage limits, past insurance claims, risk mitigation measures implemented by policyholders and market-wide trends like rising construction costs (ibid.). Premiums are primarily determined by the likelihood of a loss and the potential cost if it occurs, with additional adjustments for operational expenses, reinsurance, and profit margins. Insurers use large datasets and modelling tools to assess risk, incorporating property characteristics, location, building construction quality, and risk mitigation measures. This data-driven approach ensures that premiums reflect both the specific risk profile of the property and broader market conditions (OECD 2024).

Typical property insurance **policies have a term of one year** and are renewable annually, with premiums reviewed at each renewal based on updated risk factors and claims history (Kin 2025). Policies often include standard coverage for events such as fire, storm, theft, or vandalism, with optional add-ons available for risks like earthquakes, floods, or high-value collectibles. Some policies also provide liability coverage in case someone is injured on the insured property, further broadening protection.

Several features of property insurance can be translated directly to the reversal risk context. Risk-based pricing calibrated to location-specific hazard profiles offers a more economically rational alternative to the flat or broadly estimated contributions used in most buffer pools. Deductibles, which incentivise policyholders to adopt risk mitigation measures, have a direct parallel in carbon markets, where premium structures could similarly reward project developers who invest in fire management, resilient design, or enhanced monitoring. The annual renewal model reflects a genuine actuarial reality that risks change over time and cannot reliably be priced over multi-decadal horizons, with direct implications for how carbon reversal insurance can and cannot be structured. Finally, the data-driven underwriting approach points to the kind of standardised, accessible MRV and hazard data that would be needed to underwrite carbon reversal risk at scale.

2.2. Property insurance covering wildfires – a proxy for coverage of reversal risk

We now zoom in specifically on the case of **property insurance covering wildfires**, as it provides a useful analogue for reversal events in carbon markets, where forestry projects may experience sudden and irreversible loss of stored carbon due to fire.

Standard homeowners' policies with wildfire **coverage** typically protect against structural damage, personal belongings, additional living expenses, detached structures such as garages, and landscaping (Investopedia 2026). However, such policies may not cover wildfires if the peril is not explicitly listed, if property maintenance is neglected, or in regions with extreme wildfire risk. In these cases, especially in high-risk areas, policyholders may need a separate wildfire policy.

Dedicated wildfire coverage protects against wildfire-related damage, often including smoke damage, debris removal, and sometimes additional living expenses (ibid.). These policies generally carry higher premiums and deductibles and may require detailed risk inspections, with specialty insurers often setting higher deductibles to keep premiums man-

ageable. Premiums and deductibles for properties in wildfire-prone areas, which are typically higher than average, reflect the assessed risk, including potential severity of losses, location, and property characteristics (Munich Re US 2025).

Insurers **assess wildfire risk** using a combination of **historical data, predictive models, and geographic and environmental factors**, such as vegetation type, proximity to forests, topography, and local climate patterns (Moody's n.d.). These models predict the likelihood of a wildfire near a property, its potential spread, ember reach (i.e., how far burning embers from wildfires travel through air and ignite structures downwind) and the resulting damage (NAIC 2024). Expected physical damage is then translated into financial terms, taking into account rebuilding costs, coverage limits, deductibles, replacement cost endorsements, and inflation factors. Property-specific features, such as building materials, roof type, defensible space around structures, and installed fire-safety systems, also influence premiums and eligibility. Higher levels of mitigation, such as fire-resistant construction, sprinklers, or cleared perimeters, can reduce both premiums and the likelihood of a claim (Munich RE US 2025).

When a wildfire causes damage, payouts are subject to the policy's coverage limits and the deductible. **Deductibles** play a dual role: they lower premiums while motivating property owners to maintain preventive measures, reinforcing the link between risk management and financial protection.

In addition to the reflections from the previous section, the wildfire insurance case adds further specificity relevant to reversal risk. The use of high-resolution spatial modelling, incorporating factors such as vegetation type, topography, climate patterns, and local risk factors, to price location-specific risk is directly applicable to forestry carbon projects, where site-specific fire, drought, and pest exposure varies substantially. The distinction between standard coverage and dedicated wildfire policies also mirrors a key design question for reversal insurance: whether coverage should be broadly scoped or narrowly defined around specific, well-documented loss triggers; and this choice that affects both insurability and environmental credibility. Importantly, the wildfire case also underscores the need for robust MRV systems capable of attributing what was stored and subsequently released, underscoring that data infrastructure is not merely a scaling requirement but a precondition for credible reversal insurance.

2.3. Wildfire Insurance in California – A High-Risk Case Study

California has emerged as the **epicentre of wildfire-driven insurance challenges** in the United States. Since 2017, eight of the top ten U.S. wildfires in terms of insured losses occurred in the state, illustrating both the increasing frequency and severity of extreme wildfire events (McKinsey 2025). These patterns have placed unprecedented pressure on homeowners and insurers alike, making it increasingly difficult to provide affordable coverage in high-risk areas.

Empirical evidence underscores the financial consequences for homeowners. Analysis shows that ZIP codes with elevated wildfire risk have experienced **insurance premium increases exceeding inflation**, directly linking location-based wildfire exposure with rising costs (Koller 2025). A working paper from the University of Pennsylvania and University of

Wisconsin found that the median annual insurance premium for California mortgage holders was \$1,700 in 2024, 28% higher than a decade earlier after adjusting for inflation (Keys and Mulder 2024). Yet, in fire-prone regions, premiums are substantially higher: Mariposa County recorded a median premium of \$3,700, more than double its 2014 level, reflecting one of the nation's fastest increases (San Francisco Chronicle 2025a).

Insurers have responded by **raising rates and restricting coverage**. In 2025, major insurers, including State Farm, have requested the state's insurance regulator to approve premium hikes of 22–30% to offset wildfire-related underwriting losses, noting that repeated severe fire seasons have significantly eroded profits (Reuters 2025; The Guardian 2025). In response to escalating wildfire risk and the associated financial strain on underwriting portfolios, insurers are not only raising premiums but also **withdrawing or restricting coverage** in the most vulnerable parts of California. Many major companies have responded to rising losses and limited pricing flexibility by declining to renew existing policies, exiting portions of the market entirely, or refusing to write new business in high-risk zones. For example, some insurers stopped issuing new homeowner policies and refused to renew tens of thousands of existing policies as wildfire exposure intensified, prompting a significant exodus of private market capacity (E&E News 2025; Washington Post 2025).

This retreat has forced more homeowners onto the California FAIR Plan, the **state's insurer of last resort**. The FAIR Plan, initially designed to provide temporary coverage for those unable to obtain private insurance, has seen exponential growth in high-risk areas, with total exposure reaching \$700 billion in September 2025, approximately 650,000 policies in force, and nearly \$2 billion in premiums collected (McKinsey 2025). Enrollment in the highest-wildfire-risk areas has expanded twelve times faster than in the lowest-risk regions, concentrating risk within the FAIR Plan and making it the largest residual market in the U.S., surpassing Florida's Citizens Property Insurance Corporation (ibid.).

Despite its critical role, the FAIR Plan provides limited coverage: essential protections such as liability, medical payments, and loss of use are typically excluded, rising premiums that are often two times or more higher than standard coverage and policy caps of \$3 million may not suffice to rebuild high-value homes (San Francisco Chronicle 2025b; Insurify 2025).

Combined with rising construction costs and a shrinking pool of private insurers, these coverage gaps expose homeowners, communities, and the state to potentially significant financial losses in future wildfire events, threatening both resilience and equity.

California has implemented **structural reforms** to address these challenges. The Sustainable Insurance Strategy introduces forward-looking wildfire models, incorporates net reinsurance costs, and strengthens insurer obligations in high-risk zones (McKinsey 2025). Previously, insurers were limited to using historical losses to set rates, excluding predictive models and reinsurance from filings. While these reforms aim to stabilize the insurance market and improve risk-based pricing, they may also result in higher premiums for homeowners in wildfire-prone areas, potentially placing a disproportionate burden on lower- and middle-income households. To address affordability and insurability concerns, experts emphasize the importance of active risk mitigation measures by both the state and homeowners. These include **public subsidies or low-interest loans** to support retrofitting of aging housing stock, investments in fire-resistant construction, and community-level mitigation

efforts, which can improve the insurability of homes and help moderate insurance premiums over time.

The California experience offers a sobering but instructive set of lessons for reversal risk insurance in carbon markets. First, climate-driven risk can escalate faster than pricing models and capital reserves can adapt, with insurers raising premiums sharply or withdrawing from markets altogether. Such a dynamic could equally materialise for forestry carbon projects in regions facing intensifying fire, drought, or storm risks. Second, affordability constraints are unevenly distributed: smaller projects and those in higher-risk geographies would be most exposed to premium increases and coverage gaps, potentially reinforcing existing inequities in access to carbon markets. Third, when private capacity retreats, public backstops tend to emerge but at higher cost and with more limited coverage, raising the question of whether government guarantees or public-private hybrid mechanisms may ultimately be needed to ensure continuity in the highest-risk regions. Finally, the California regulatory response, shifting to forward-looking models and updated pricing rules, illustrates that governance frameworks must evolve alongside risk, a lesson directly applicable to the design of permanence frameworks for carbon markets.

3. World Bank Group Insurance Products

The World Bank Group, through the Multilateral Investment Guarantee Agency (MIGA) and the International Finance Corporation (IFC), was among the first institutions to offer guarantee and insurance products for carbon market projects, setting early precedents for managing risks that could threaten the long-term integrity of carbon credits.

MIGA was established in 1988 with the goal of encouraging cross-border investment in developing countries to foster economic growth, alleviate poverty, and improve living standards (MIGA n.d.a). It offers a range of **guarantees covering political, credit, and trade-related risks** to a diverse client base, including governments, private companies, investors, and financial institutions.

In 2006, MIGA provided a **political and contractual risk guarantee** coverage of 1.8 million USD to Canadian company Biothermica Energy Inc., marking its first involvement in a carbon market project in El Salvador (MIGA 2006). The guarantee protected against risks such as expropriation, war and civil disturbance, and breach of contract, including any failure by the Salvadoran government to fulfil its commitments under the letter of approval for Certified Emission Reductions (CERs) under the CDM. While framed as political and contractual risks rather than reversal events, these are directly relevant to carbon credit permanence: expropriation or governmental non-compliance can render previously issued credits undeliverable or invalid, producing an outcome functionally similar to a human-induced reversal (i.e., one arising from circumstances beyond the developer's reasonable control rather than from negligence or misconduct, which insurance cannot cover). MIGA's products thus offer a relevant precedent for this category of unavoidable risk, even if not designed with carbon market reversal frameworks in mind. The El Salvador project, registered as a solid waste management initiative under the CDM, was the first of several carbon market projects to receive MIGA support in the years that followed. However, **demand** for the instrument was

relatively limited, in part due to low levels of foreign direct investment in CDM projects and the decline in carbon prices after 2012 (World Bank 2018).

In 2007, the IFC introduced the **Carbon Delivery Guarantee** (CDG), a financial instrument designed specifically for carbon market projects. The CDG ensured the delivery of CERs from CDM and Emission Reduction Units (ERUs) from Joint Implementation (JI) projects to buyers in developed countries by absorbing **country, credit delivery, and project performance risks** on the IFC's AAA-rated balance sheet (World Bank 2018). In return, buyers seeking AAA-rated CERs paid a premium, typically between 1.5 and 2 times the primary market price and closer to secondary market levels (Miller 2006).

Only three projects ultimately used the CDG. One project was implemented in India and covered approximately 850,000 CERs generated from a waste heat recovery power plant associated with calcined petroleum coke production (IFC 2016b). A second project involved a program spanning Tanzania, Uganda, and Mozambique, combining afforestation activities with wood waste-to-energy projects (IFC 2008). The third project was located in South Africa and focused on nitrous oxide destruction (IFC 2016a). The IFC was unable to scale the CDG for several reasons, including the relative **complexity of the instrument** for small-scale clients and, ultimately, the **collapse of the CDM** in 2012, which led to a sharp decline in demand from buyers of AAA-rated CERs (World Bank 2018). Market observers also identified **pricing** as a factor limiting the uptake of the guarantee (Michaelowa et al. 2020). Following the fragmentation and downturn of carbon markets after the carbon price collapse, the CDG was terminated.

MIGA continues to provide insurance products for carbon market projects, covering both the underlying investment and the carbon credits themselves (MIGA n.d.b). It is important to note that all of these products address political and contractual risks rather than reversal events. Coverage for the investment project addresses risks such as expropriation, war and civil disturbance, and inconvertibility or transfer restrictions. Coverage for the carbon credits addresses the risk of breach of contract, which includes the revocation of the initial authorization for carbon credits to be internationally transferred or the host country failing to honour its legally binding commitments.

MIGA's breach of contract coverage has become particularly significant in the **Paris Agreement** era, where host country authorisation is required for carbon credits to be used in Article 6 markets or under the CORSIA aviation scheme. In March 2025, MIGA issued its first guarantee for an Article 6 project, a \$179.64 million guarantee to KOKO Networks covering its equity investment in a Kenyan cookstove project against expropriation, transfer restriction, war and civil disturbance, and breach of contract for up to 15 years (MIGA 2025). However, KOKO Networks collapsed in early 2026 after the Kenyan government refused to issue the letter of authorisation required for KOKO's credits to be eligible for CORSIA and Article 6 compliance markets, forcing the company into administration. The case is widely expected to result in a breach of contract claim under the MIGA guarantee, making it a live and consequential test of whether and how political risk insurance can in practice protect carbon credit investments against government non-compliance.

MIGA's historical experience demonstrates that insurance against unavoidable human-induced risks to carbon credit permanence is feasible and implementable, and the IFC's CDG

further illustrates that while such instruments can mitigate carbon-related risks, their success is sensitive to instrument complexity, market conditions, and client capacity. Under the Paris Agreement, MIGA is playing a role in insuring these risks, but its coverage does not extend to reversal risks, nor to avoidable risks arising from negligence or mismanagement. Nonetheless, the lessons learned, including the importance of clear contractual triggers, coverage and robust monitoring frameworks, offer important guidance for designing credible insurance products that strengthen the permanence and integrity of carbon credits.

4. Reflections for Reversal Risk Insurance

Lessons from property insurance markets, particularly wildfire insurance, as well as experience with World Bank's insurance products highlight both the potential and limitations of insurance as a potential tool for managing reversal risk in carbon markets. This section distills key reflections on the practical feasibility and design requirements of carbon reversal insurance, drawing on the preceding analysis and workshop discussions.

- The insurance sector has demonstrated strong capacity to provide granular, location-specific **risk pricing**, using high-resolution hazard modelling for wildfire risk that can generally be applied for reversal risks and thus be translated into underwriting terms for carbon insurance against reversal incidents.
- Experience from California shows that **rapidly changing wildfire risk profiles can lead to sharp premium increases or a loss of insurability**. This reflects a broader dynamic directly relevant to carbon markets: as climate change intensifies reversal hazards, it simultaneously drives up insurance premiums or reduces coverage availability. For carbon projects, particularly forestry projects exposed to climate-driven hazards, this raises serious concerns about the long-term affordability and availability of insurance as a tool to manage reversal risk.
- **Risk mitigation** at the project level is a precondition for effective carbon insurance, not merely a co-benefit. Insurance design should actively incentivise such mitigation through premium structures that reward developers who invest in fire management, buffer zones, or climate-resilient species selection, mirroring the approach in property insurance markets where measures such as fuel management, fire-resilient design, and landscape-level interventions demonstrably reduce risk and lower premiums.
- Insurance can effectively mitigate **human-induced unavoidable reversal risks**, such as war, expropriation, and civil disturbances, and institutions like MIGA have demonstrated that such coverage is feasible and implementable for carbon market projects. However, uptake has been limited, mostly due to premiums being perceived as overly high.
- Most currently available carbon insurance products are structured as **short-term (often annual) policies**, such as those provided by CFC and CarbonPool. Annual policy structures and renewal cycles expose project developers to the risk that coverage may be discontinued at renewal due to increased risk exposure or that premiums may rise to levels that are no longer affordable. To properly cover reversal risks, insurance policies would have to have durations of decades, which is not the case in any current property insurance market. While multidecadal insurance policies exist for life or term life insurance, they have not made an inroad into property insurance. This is due to the rapid changes in risks in the latter, whereas risks to human life change only slowly (absent pandemics or effect of breakdowns of institutions due to conflict which are usually excluded in insurance contracts). Another reason is the

high degree of correlation of multiple claims if a disaster strikes many insured properties at once, whereas deaths are only correlated in the case of man-made catastrophes. As a result, insurance alone may not be suitable as a standalone solution for long-duration carbon projects unless complemented by other mechanisms that address long-term risk and ensure continuity of coverage.

- **Transparency** across the carbon insurance market remains uneven. Several providers disclose limited information on key policy features, such as policy duration, coverage limits, exclusions, and premium adjustment mechanisms, making it difficult for market participants to assess the robustness and comparability of different products. Clear disclosure and transparency requirements are critical, including on coverage scope, exclusions, deductibles, premium adjustment mechanisms, and conditions under which coverage may be withdrawn, to ensure market participants understand the limits of insurance in addressing reversal risk.
- **High or rising premiums** may disproportionately affect project developers, particularly smaller developers or projects in regions with elevated or worsening climate risk, potentially reducing the economic viability of projects or discouraging investment in certain geographies.
- Insurance could transfer some **reversal liability** away from project developers to buyers, a meaningful shift given that developers currently bear almost all long-term liability even though buyers, investors, registries, and host governments also benefit from credited mitigation outcomes. However, this reallocation requires careful design. Buyers have limited ongoing interaction with crediting standards and may lack the appetite to manage multi-decade legacy liability for every vintage they hold. The question of who should hold the policy beyond the crediting period is also unresolved. Once crediting ends, the financial incentive for a developer to maintain coverage diminishes, yet the permanence obligation does not. Buyers, investors or other third-party entities with ongoing exposure to the credits they hold may be more appropriate long-term policy holders. Any liability transfer, therefore, requires clear contractual terms, programme-level rules on policy continuity, and explicit assignment of responsibility across the credit lifecycle to remain workable in practice.
- Insurance-based approaches should explicitly account for the **risk of non-renewal**, including clear rules, established by carbon crediting programmes, on how reversals would be addressed if insurance coverage lapses or is withdrawn during the project lifetime.
- **Adverse selection** poses a structural risk to buffer pool integrity if insurance is introduced as an opt-in alternative. Lower-risk projects with affordable premiums will likely gravitate toward insurance, while higher-risk projects remain in buffer pools, progressively concentrating risk in the buffer and potentially undermining its financial soundness. This dynamic suggests that carbon crediting programmes may need to recalibrate buffer contribution requirements across the risk spectrum if insurance is permitted as an alternative, rather than treating the two instruments as straightforwardly interchangeable.
- Policymakers and carbon crediting programmes should carefully consider the interaction between insurance and existing mechanisms, such as buffer pools, rather than viewing insurance as a direct substitute. A **hybrid risk-sharing model** appears to be the most promising near-term architecture, under which insurance covers the short-term, granular, and well-defined layer of reversal risk where risk-based pricing and actuarial methods can be applied rigorously, while buffer pools continue to cover residual or long-tail risk that falls outside insurers' underwriting capacity over longer horizons. Buffer pools carry their own design weaknesses that a hybrid approach could address. They often rely on flat or non-risk-differentiated contributions, lock away credits that could otherwise generate revenue for project developers, and

may inadvertently create moral hazard by compensating for avoidable reversals in a way that insurance, which explicitly excludes negligence, does not. A hybrid model combining the risk-based precision of insurance with the long-duration stability of buffer pools could therefore deliver stronger overall integrity than either instrument alone.

- Certain **enabling conditions** are required for insurance products to achieve meaningful uptake and recognition as a credible tool for addressing reversal risk. First, stronger governance from crediting programmes is required, including clear definitions of loss triggers and transparent post-loss procedures covering monitoring, verification, remedies, and liability assignment. Second, high-quality and publicly accessible data, including histories of past loss events and applied remedies, are essential for insurers to model and price reversal risks accurately. Third, clear demand signals from governments and crediting programmes, such as mandating or incentivising insurance use or providing state guarantees to give insurers confidence to enter the market, are needed to move uptake beyond its current niche. Fourth, greater regulatory certainty in carbon market frameworks, including inclusion of carbon credits in compliance schemes and clear rules on eligible project types and how credit integrity issues are remedied, would strengthen investment incentives and support insurer participation.

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