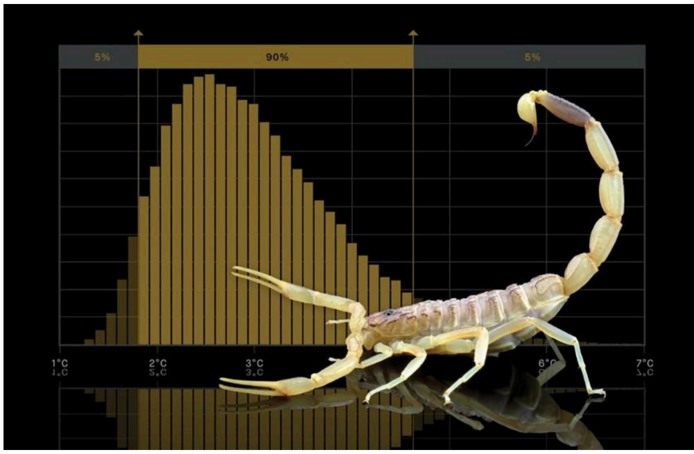
CLIMOBILIZE

White Paper:

3 Laws to Address Tail Risks Threatening Planetary Solvency

Introduction

At the heart of the debate on how to address the "climate crisis" lies the deep-seated issue of overshoot and overconsumption. Despite numerous efforts, consumption, emissions, and ecological degradation continue to accelerate. Alarmingly, six of the nine identified climate tipping points have already been breached, with the seventh - ocean acidification - on the verge of tipping. Clearly - we need a new strategy. We need a new way to incentivize business to strive for “sustainable profits” rather than rewarding business for achieving “profits at all costs”.



This white paper will showcase how the **“The 3 Laws of Business”** (created by Climobilize) can re-shape business policy to overcome obstacles that for decades have hindered progress towards sustainable profits. The policies and strategy will unfold from within the **Scorpion’s Tail Club,** a discreet forum for influential leaders from the financial world, specifically the fields of insurance, banking, investment and pensions.

The Club’s ultimate goal will be to establish systems level policy change (anchored by the 3 Laws) with accompanying policy and legislation. This will be achieved through 4 working groups for each of the 4 financial sectors, each working to embed the 3 Laws into their respective focal topic: governance, metrics, finance and innovation.

The Scorpion’s Tail Club and its efforts were inspired by the report, Climate Scorpion – The Sting is in the Tail, prepared in partnership with the University of Exeter and the Institute and Faculty of Actuaries. The report convincingly argues that we should view climate risk as a problem of **‘Planetary Solvency’**, understanding and managing risks to the long-term survival of global society.

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Part 1:
Tail Risks, Planetary Solvency, and the Urgent Need for System Change

One of the greatest weaknesses of existing environmental frameworks is their failure to address tail risks - rare events with catastrophic potential - which can disrupt entire systems. Despite their possible severe impact on both businesses and ecosystems, they are often overlooked in corporate planning due to their rarity.

In finance, tail risks [can] trigger significant economic losses, while in the environment, they [can] lead to ecological collapse, climate tipping points, or irreversible biodiversity loss. For example, events like the predicted collapse of the Atlantic Meridional Overturning Circulation (AMOC) illustrate tail risks with cascading impacts - disrupting weather, threatening food security, and destabilizing economies.

The 3 Laws of Business are designed to directly confront these tail risks by redefining corporate responsibility and governance with the aim of ensuring both planetary and business resilience. The 1st Law, which prohibits corporations from degrading ecosystems beyond repair, establishes a safeguard against tail risks. Business operations must be aligned not just with profit-making but with the imperative of maintaining planetary solvency - a condition in which Earth's systems remain viable for both human life and economic activity.

Understanding Tail Risks in the Context of Planetary Boundaries

Tail risks, such as the 2008 financial crisis, are rare but have the power to destabilize entire economies. Similarly, in the realm of planetary boundaries, tail risks present themselves through ecological tipping points - like runaway global warming or the collapse of essential circulatory systems - that cause irreversible harm to Earth's life-support systems.

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The unpredictability and immense scale of these risks make them particularly dangerous; once these thresholds are crossed, the resulting systemic breakdowns jeopardize not only natural ecosystems but also the economic systems that rely on them.

Current business and policy frameworks rarely account for the cumulative impact of high-impact, long-tail risks, focusing instead on gradual solutions like carbon reduction pledges or biodiversity protection. But incremental approaches overlook the fact that the entire system is at risk of collapse. Accordingly, the 3 Laws of Business present a radically different approach: transforming corporate operations to prevent or mitigate the [individual and cumulative] impact of catastrophic events by embedding planetary boundaries into the heart of business governance.

Planetary Insolvency: The Ultimate Tail Risk

Planetary insolvency, where the Earth’s systems become so degraded that they can no longer support human or economic life, is the ultimate manifestation of tail risk. This concept highlights the inseparability of planetary and economic stability. Without a functioning climate, healthy ecosystems, or reliable natural resources, businesses lose their operational foundations. Supply chains fail, markets collapse, and entire industries face existential threats. Ecological collapse directly leads to economic collapse, rendering any notions of profit, market growth, or shareholder value irrelevant in a world where clean water, arable land, and a stable climate no longer exist.

Current business models that externalize environmental costs treat Earth's resources as infinite and impervious to exploitation. This approach ignores the accelerating biodiversity loss, water depletion, and frequency of extreme climate events driven by unchecked exploitation. Planetary insolvency signals the realization that the planet’s ecological health is a prerequisite for economic survival. If the Earth’s systems fail, the global economy faces bankruptcy with no prospect of recovery.

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Part 2:
The 3 Laws

<u>Introducing The 3 Laws of Business: A Financial Imperative for Planetary Solvency</u>

In the following section, we will explore in greater detail how the 3 Laws framework can drive this systemic transformation.

The 3 Laws provide a framework to address structural vulnerabilities that allow tail risks - rare but highly disruptive events - to accumulate. By redefining corporate responsibility, they align business operations with planetary boundaries and human well-being, helping prevent practices that drive climate change, ecosystem instability, or biodiversity loss.

The 3 Laws assert that protecting planetary systems is a financial necessity as well as an ethical responsibility. By adopting these principles, businesses mitigate operational risks and invest in the long-term viability of the systems they rely on.

The 1st Law embeds the prevention of ecological degradation directly into corporate governance, mandating that businesses operate within Earth's ecological limits. The 2nd Law aligns the pursuit of profit with these ecological constraints, preventing businesses from treating the planet as a limitless resource. Finally, the 3rd Law ensures that any capital allocation excesses must be offset within the same capital class, preserving cumulative capital thresholds and preventing cross-capital trading. In this context, there are 7 forms of capital: natural, cultural, human, social, political, financial, and built/manufactured.

- *The First Law*: Prohibiting Permanent Degradation

"A corporation may not engage in activities that exceed their entity-specific allocations of vital capitals."

The First Law prohibits business activities that permanently degrade ecosystems or human well-being. It directly addresses tail risks by requiring corporations to internalize the costs of pollution, deforestation, and other harmful practices, which are the root of catastrophic risks like biodiversity collapse or climate tipping points. By embedding ecological protection into business governance, this law mandates that businesses operate within the limits of planetary systems and adhere to their entity-specific capital allocations to maintain both minimum and maximum thresholds within a given region or ecosystem.

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- *The Second Law*: Profits Aligned with Ecological Integrity

“A corporation may pursue profits to ensure its continued existence so long as such pursuit does not conflict with law #1”

The Second Law allows businesses to pursue profits, but only when doing so does not violate the First Law. This Law shifts the focus from maximizing short-term profits to fostering long-term sustainability, preventing corporations from engaging in ventures that contribute to systemic threats like climate change or resource depletion. By aligning corporate goals with planetary stability, the Second Law mitigates the chances of large-scale environmental failures.

- *The Third Law*: Accounting for Trade-Offs and the Need for Flexibility

“To ensure "strong sustainability", a corporation may only exceed its allocated share of capital* IF such excess can be offset by capital* reserves or a compensatory arrangement within the same capital* class (i.e. no cross-capital trading!), ensuring cumulative effects remain within capital* threshold limits.”

The Third Law recognizes the difficult trade-offs businesses often face between economic, social, and environmental goals. It introduces a structured approach to allow for exceptions to the First Law: if a company needs to exceed its allocation of a specific capital, it must offset the excess within the same capital class. This requirement ensures that such actions do not threaten the sustainability threshold for that capital class.

By limiting offsets to the same type of capital, the Third Law prevents cross-capital trade-offs that could destabilize overall sustainability efforts and protects the integrity of each capital type. This structure requires businesses to manage any temporary excesses responsibly and demonstrate that their actions support planetary resilience, preventing exceptions from being used to justify harmful practices.

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How the 3 Laws Reduce Tail Risks & Systemic Vulnerabilities

The 3 Laws address systemic vulnerabilities in current economic and environmental policies. Tail risks, like ecosystem or climate collapse, are the result of an economic model that prioritizes extraction over sustainability. By embedding resilience into corporate governance, the 3 Laws shift this paradigm and make the prevention of tail risks a core business strategy.

The Laws challenge the conventional separation between ecological and economic systems, recognizing that their fates are intertwined. Ecological collapse will lead to economic collapse, just as unchecked economic activities contribute to environmental degradation. The 3 Laws integrate environmental health into the core legal and fiduciary responsibilities of businesses, transforming companies from contributors to systemic risk into stewards of global resilience.

How the 3 Laws Improve Planetary and Economic Resilience

By embedding ecological protection and long-term sustainability into business operations, the 3 Laws create a governance structure that shifts business priorities from contributing to tail risks, like climate tipping points and ecosystem collapse, to actively working to prevent them.

In doing so, the 3 Laws promote a new form of capitalism, where economic success is built upon the foundation of planetary health. Businesses that adopt these principles become key players in safeguarding not only the natural world but also their own long-term viability. This systemic change reduces the likelihood of catastrophic events that threaten both the planet and the economy, ensuring that both can thrive in the future.

The 3 Laws of Business provide a transformative approach to business, environment, and systemic risk. By embedding planetary boundaries into corporate governance, they address tail risks threatening ecological and economic solvency. In doing so, they lay the groundwork for resilience, sustainability, and long-term prosperity, offering a practical pathway to navigate an increasingly uncertain world.

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Part 3:
The Contribution of the 3 Laws Framework: System Change At-Scale

Why the 3 Laws are Different from Other Frameworks for Systemic Change

Unlike past frameworks that rely on voluntary action and external incentives, the 3 Laws define clear, enforceable limits for business activity based on entity-specific capital allocations. By embedding these allocations into decision-making and legal frameworks, the 3 Laws make ecological responsibility a fundamental corporate duty.

First Law: This prohibits ecological degradation and ignoring of environmental externalities by mandating that businesses operate within limits of allocated vital capitals, embedding environmental protection directly into corporate governance.

Second Law: This aligns profit-making with ecological integrity, ensuring that sustainability is part of the business strategy, not an afterthought. It promotes "sustainable profits," where profitability and ecological responsibility are inseparable.

Third Law: This mandates that any excess in capital use be offset within the same capital class, maintaining cumulative thresholds and preventing cross-capital trade-offs, ensuring businesses are kept accountable for supporting planetary resilience.

The result is a framework that not only promotes sustainability but makes it a fundamental part of how businesses operate, creating systemic change from within.

Accountability Through Metrics

Accountability is essential for the success of the 3 Laws, and it must be based on science-based metrics that directly reflect adherence to entity-specific capital allocations. Existing frameworks like Global Reporting Initiative (GRI) or the Task Force on Climate-related Financial Disclosures (TCFD) are a starting point but lack the enforcement power needed to ensure businesses stay within these allocations, which are essential for preventing cumulative ecological harm.

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The 3 Laws call for comprehensive metrics directly tied to planetary boundaries, including but not necessarily limited to:

- Greenhouse gas reductions, biodiversity, soil health, water resources, and other essential ecosystem factors.
- Planetary boundary indicators, including biodiversity loss, nutrient cycles, freshwater use, and land-system changes.
- Global warming KPIs, such as temperature anomalies, CO_2 levels, and ocean acidity.

To ensure transparency and prevent greenwashing, independent third-party audits would be required. These and other metrics would serve not only as internal tools for businesses but also as critical indicators for investors, regulators, and consumers, providing a clear framework for assessing the degree to which corporate behavior is aligned with the 3 Laws. Simultaneously, regulatory bodies would have a standardized framework for enforcing environmental laws, enhancing the ability to penalize non-compliance and promote long-term sustainability.

Embedding Governance and Metrics in Corporate Charters

One of the most innovative aspects of the 3 Laws framework is the collaboration between the Club's Governance and Metrics Working Groups to embed both governance principles and intra-capital limits from the Third Law into corporate charters. This integration ensures that capital use remains within specific allocations, making sustainability a binding aspect of governance and reporting.

Through this approach, businesses are legally bound to both governance principles and performance metrics that align with planetary resilience, ensuring that sustainability is not just a goal but a requirement embedded in corporate DNA.

- *Governance Working Group*: Embedding the 3 Laws in Corporate Legal Frameworks

The Governance Working Group's mission is to embed the 3 Laws as enforceable legal standards that mandate adherence to allocated capital limits, making environmental sustainability a core business requirement rather than an aspiration. Unlike voluntary ESG frameworks, the 3 Laws redefine fiduciary responsibilities by legally binding directors and officers to ensure company actions align with the imperative to act within planetary boundaries.

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Traditional governance models prioritize short-term shareholder value, often at the expense of long-term ecological and social well-being. The Governance Working Group seeks to shift this paradigm by embedding the 3 Laws into corporate charters. This would prohibit activities that lead to irreversible environmental degradation, transforming sustainability from a peripheral CSR initiative into a legal obligation. Non-compliance with these laws could result in legal penalties or loss of operational licenses, compelling businesses to take accountability for their ecological impact.

- *Metrics Working Group*: Measurement of Corporate Compliance with the 3 Laws

The Metrics Working Group complements this shift by developing policies and tools to measure and enforce compliance with science-based targets, directly tied to planetary boundaries and specific capital allocations. Independent audits and transparent reporting ensure that corporations balance profitability with environmental responsibility.

This approach not only holds corporations accountable but also incentivizes leadership. Companies that excel in adhering to the 3 Laws would gain preferential access to capital, attract talent, and build trust with consumers. As a result, governance and metrics serve both as tools for accountability and as drivers of sustainable business innovation.

Scaling the 3 Laws: Global Impact Through Incentive Alignment

For the 3 Laws to make a meaningful difference, they must scale across industries and regions with mechanisms to monitor adherence to intra-capital thresholds across all sectors. This scalability hinges on aligning the incentives for financial institutions, governments, and businesses to ensure compliance with planetary resilience goals. Banks, investors, insurers, and pension funds are deeply invested in ensuring business resilience to climate risks. The 3 Laws provide a critical framework that links financial stability with ecological integrity, creating a pathway to planetary solvency while preserving the viability of financial markets.

Scaling the 3 Laws requires regulatory support and cross-sector collaboration. Through partnerships with governments and regulators, the Governance and Policy Working Groups aim to make the 3 Laws legally enforceable across jurisdictions.

The framework overcomes previous barriers to scalability by realigning financial, environmental, and social incentives. Businesses adhering to the 3 Laws will discover new markets, build consumer trust, and attract investment from ESG-conscious stakeholders, all while ensuring compliance with a universal framework that transcends borders.

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Conclusion: A Transformative and Scalable Path Forward

The 3 Laws offer a transformative, scalable solution to the environmental crisis, embedding sustainability and intra-capital accountability into corporate governance. This approach enables businesses to operate within ecological limits, aligning human activity with planetary boundaries to rein in overshoot and overconsumption. By making sustainability legally binding and supported by financial incentives and accountability metrics, the 3 Laws provide a structured, actionable path to address global environmental challenges.

Visit
https://www.climobilize.com/scorpions-tail-club
to learn about the strategy for adopting the 3 Laws.

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