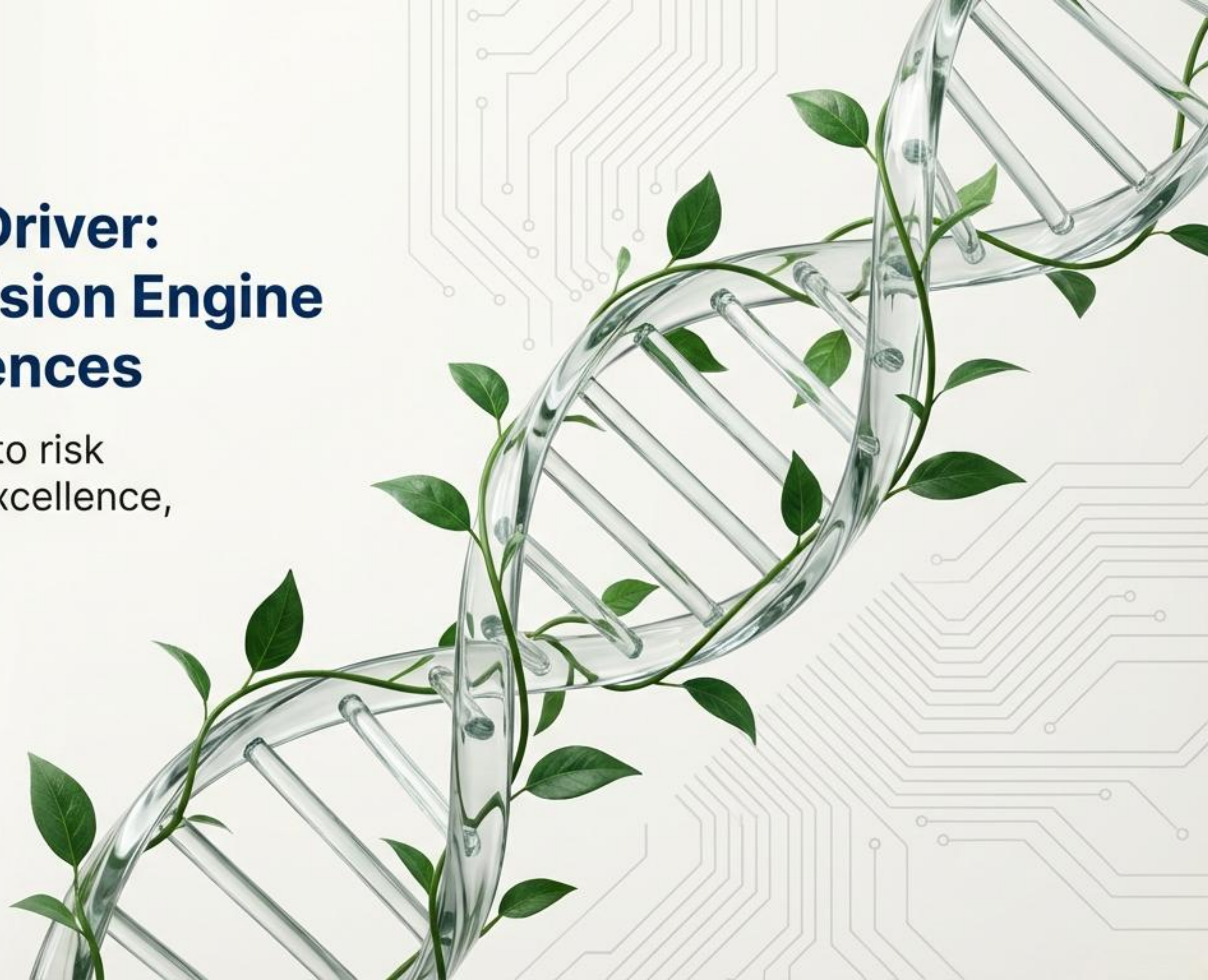


ESG as a Value Driver: A Strategic Decision Engine for RPG Life Sciences

A data-driven approach to risk mitigation, operational excellence, and sustained growth.



Our Path to Resilient Growth

We have developed a proprietary ESG 'Decision Engine' that proves a direct link between sustainability and financial performance. It has identified clear, ROI-positive initiatives to de-risk our operations and unlock significant value.



Outperformance

Our market-leading growth **(+707.6%)** is correlated with a defensive, stable profile (Beta: 0.85), a narrative ESG strengthens.



Quantified Risk

Our supply chain holds a potential **₹2,168 Cr. climate Value-at-Risk (VaR)**, and a future carbon tax could impact profits by over **₹5.6 Cr. annually**.

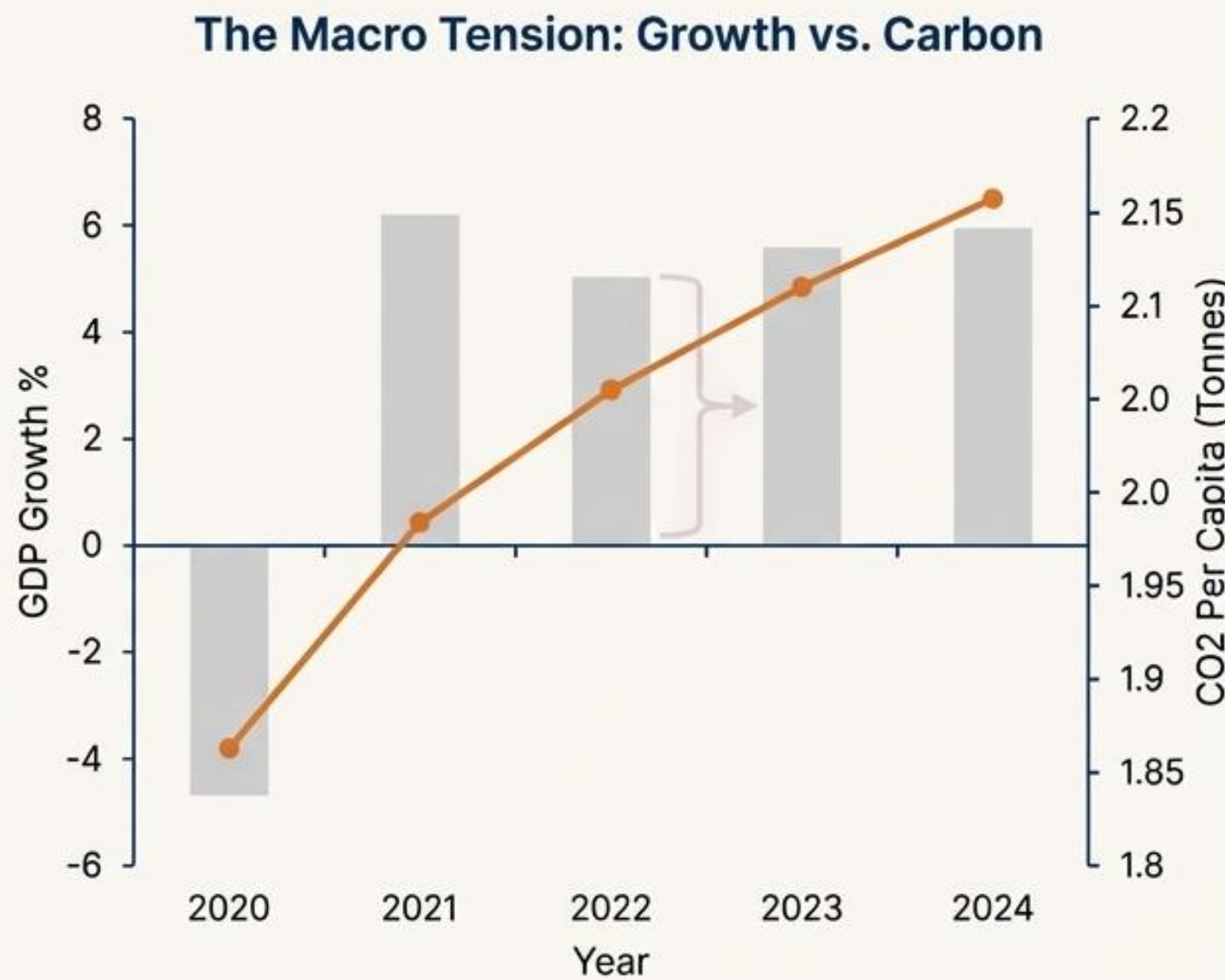
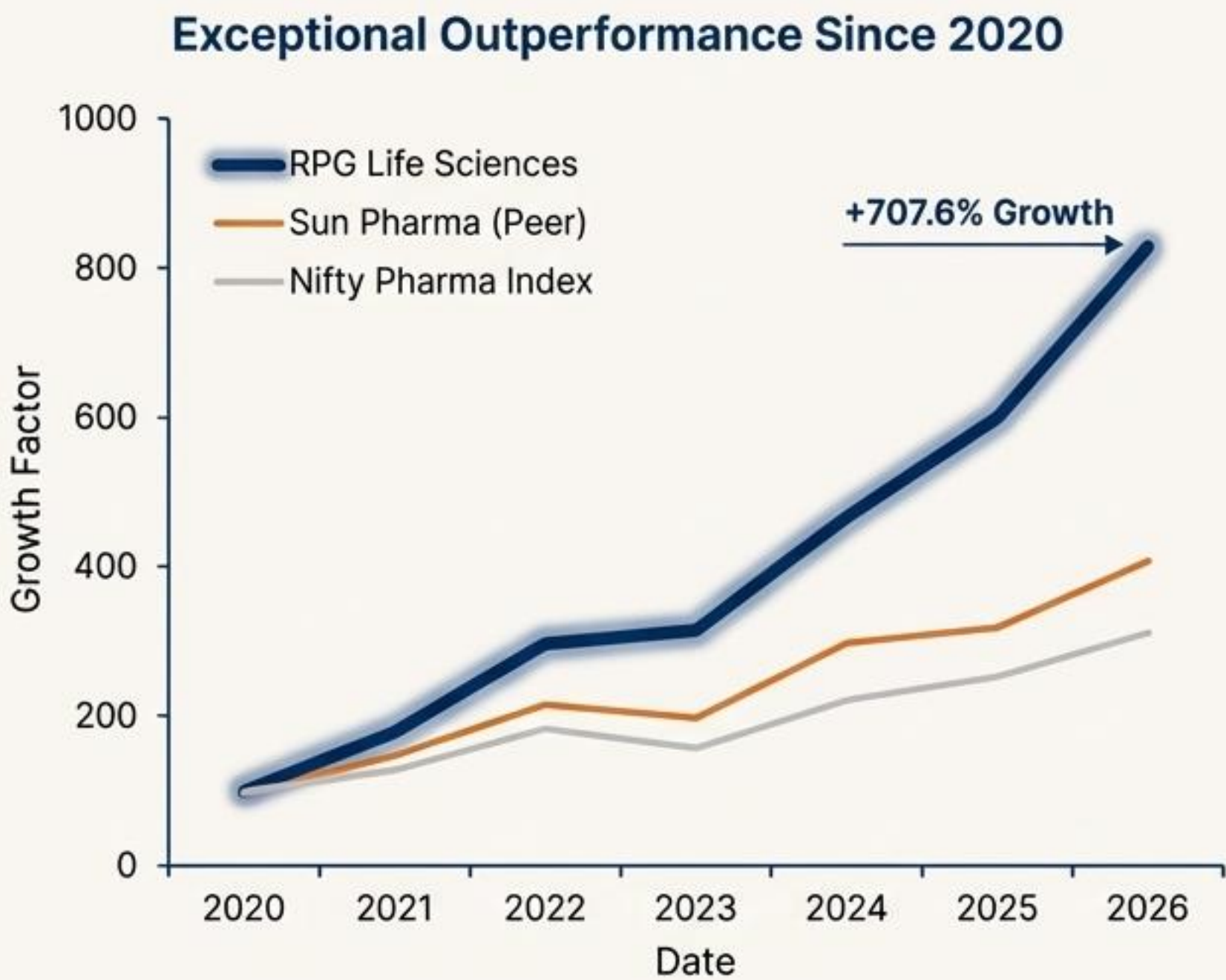


Actionable Opportunity

Strategic investments in water, energy, and green chemistry are not costs, but profitable ventures with clear breakeven points.

The Ask: We recommend approving a focused CapEx plan for three high-priority initiatives detailed in this report.

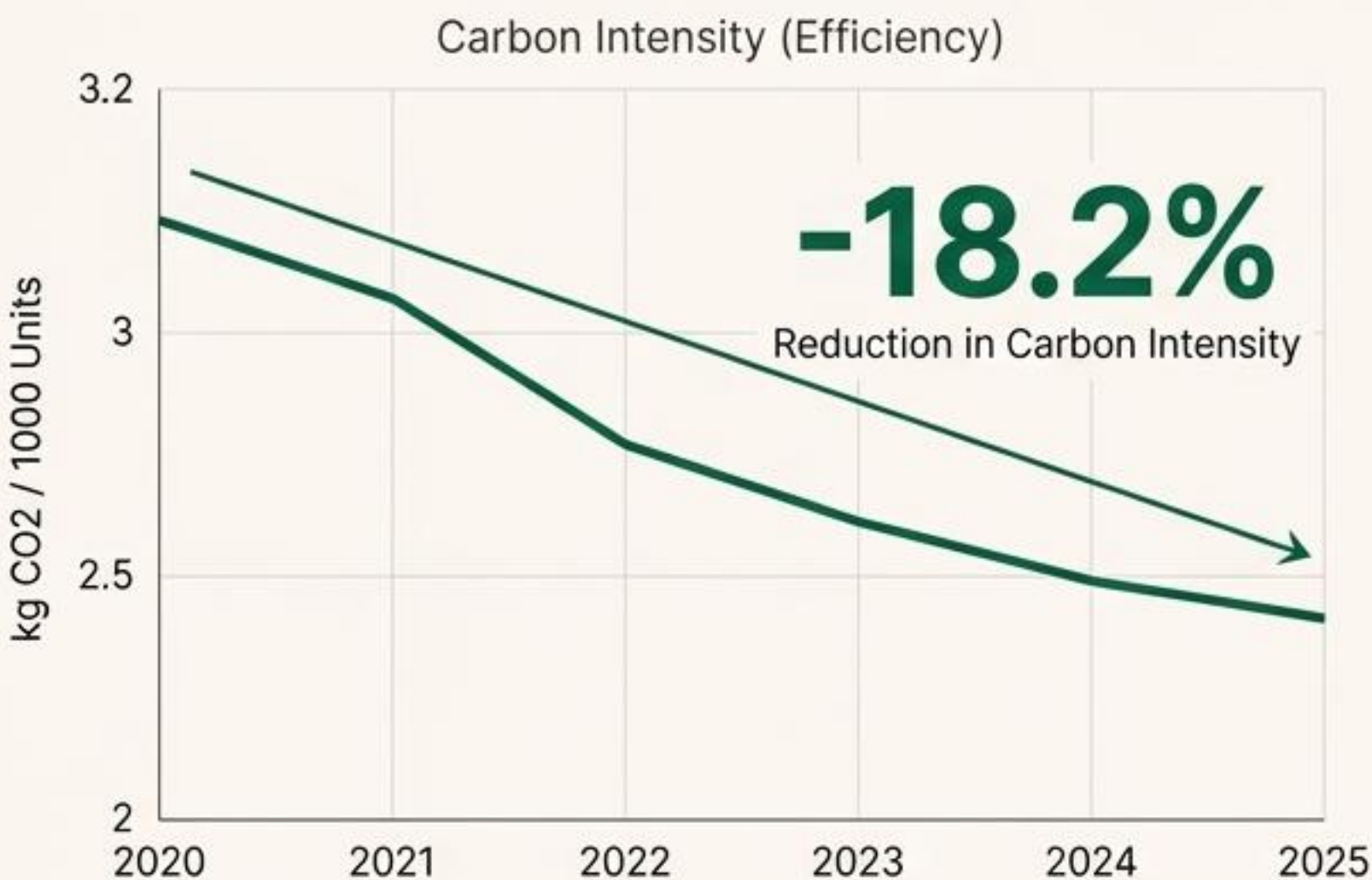
Market Leadership Amidst a Growing 'Decoupling Challenge'



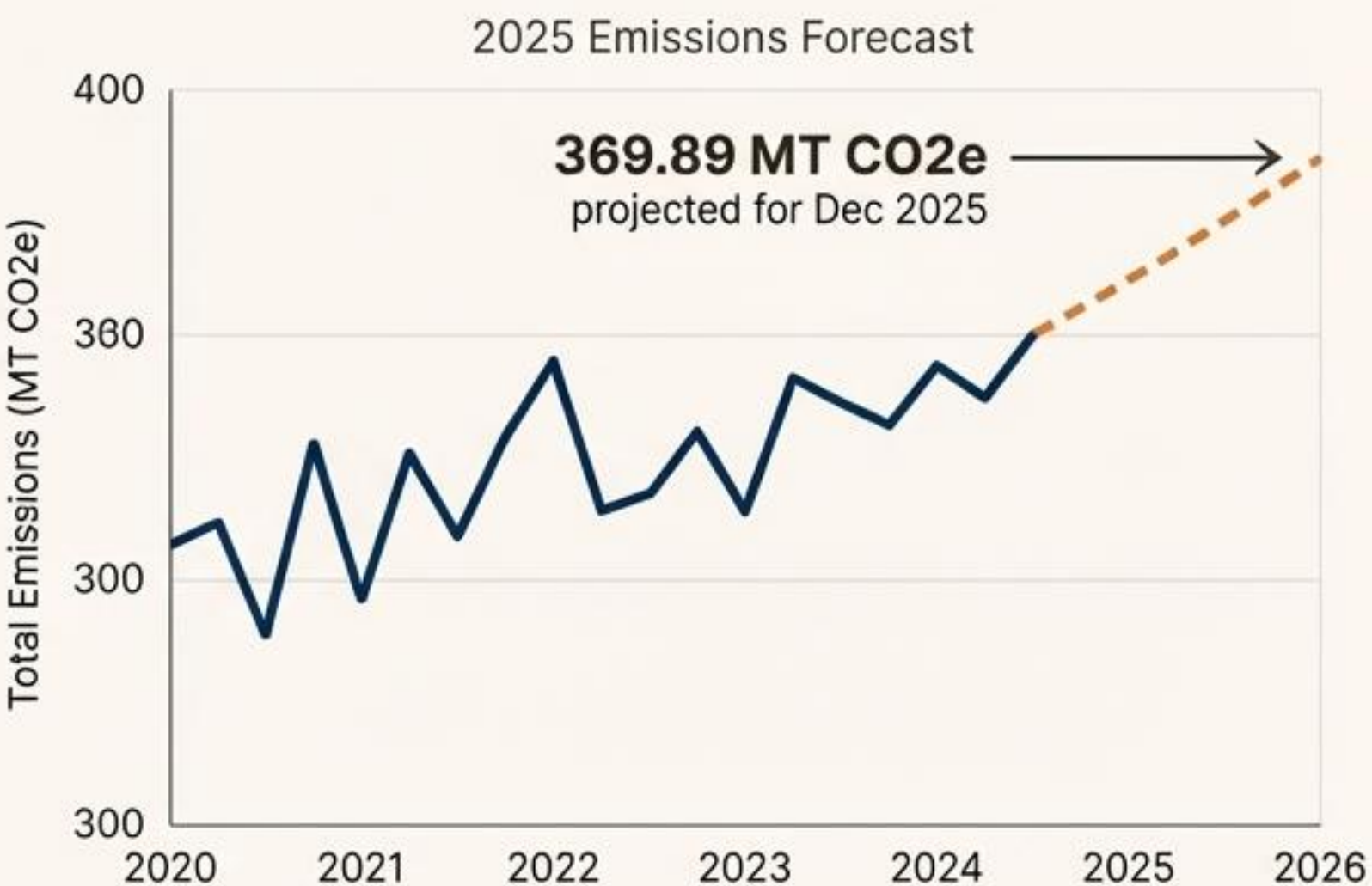
Our exceptional financial growth has occurred alongside rising national carbon intensity. The strategic imperative is clear: We must decouple our future growth from environmental impact to maintain our leadership and social license to operate.

Efficiency Gains are Masking a Rise in Absolute Emissions

Getting More Efficient

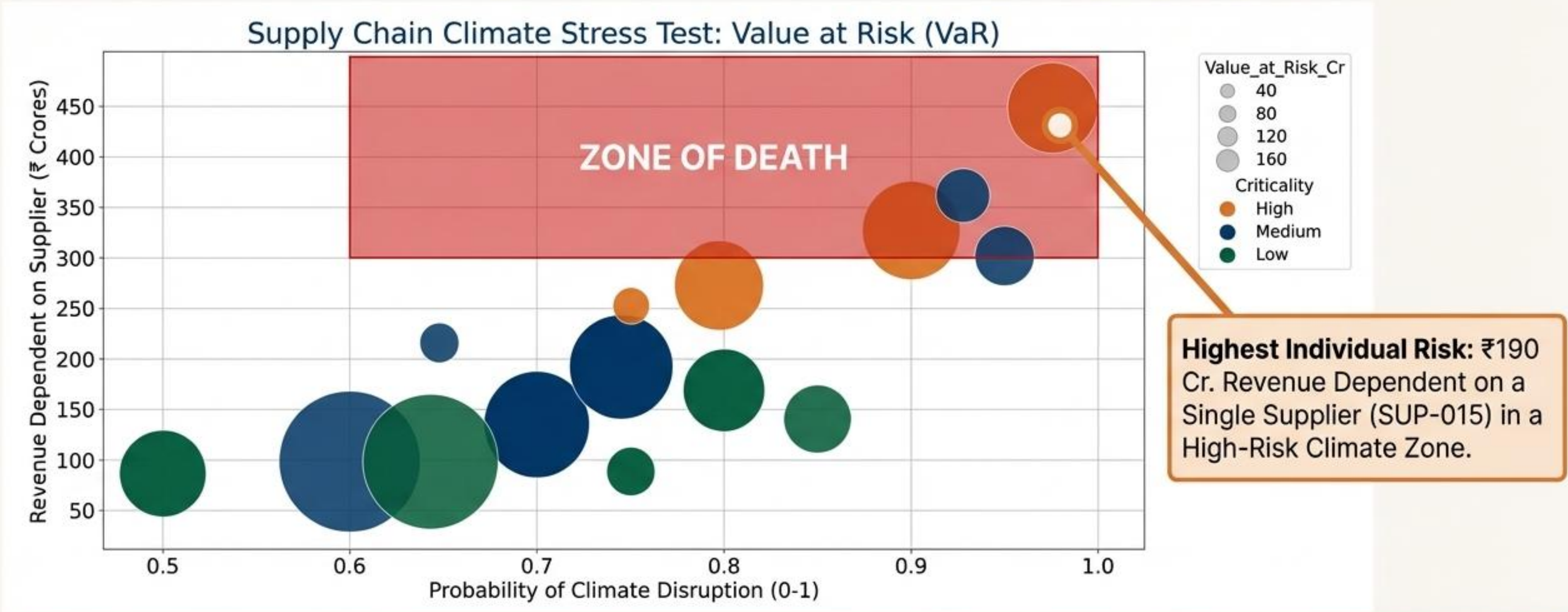


Facing Higher Absolute Emissions



While our carbon intensity per unit is decreasing—a significant achievement—our total emissions are projected to rise with production growth. This exposes us to growing transition risks like carbon taxes and stakeholder pressure.

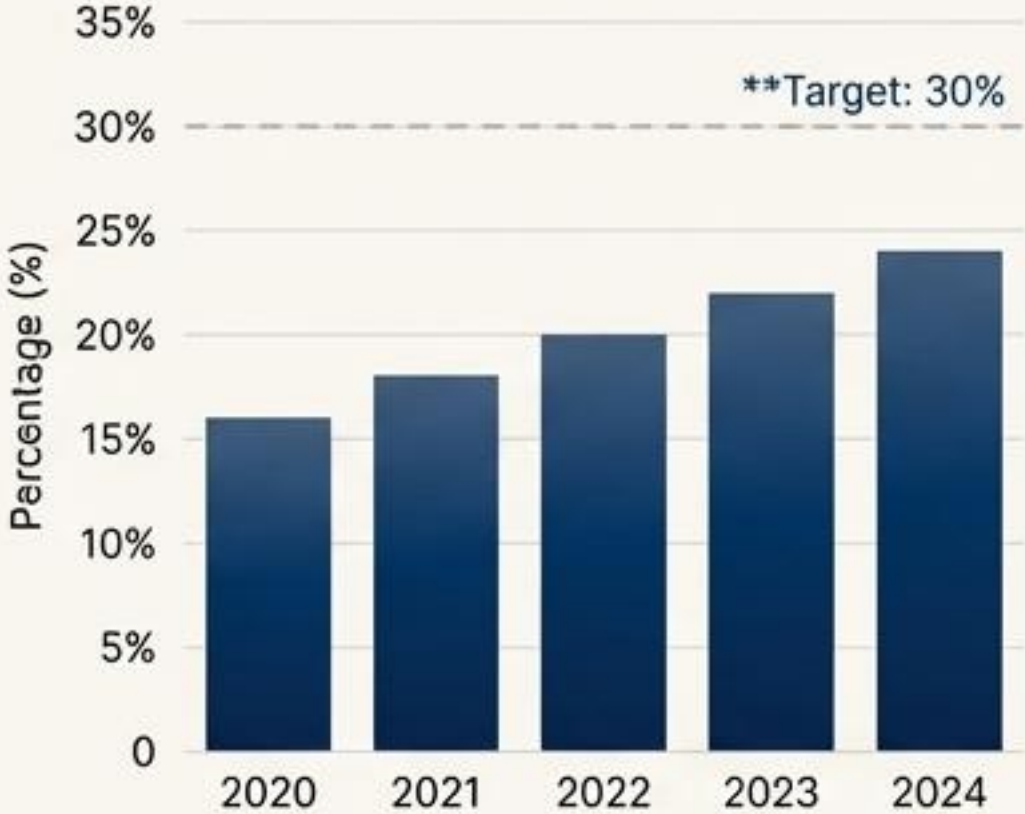
A Climate Stress Test Reveals a ₹2,168 Cr. Liability in Our Supply Chain



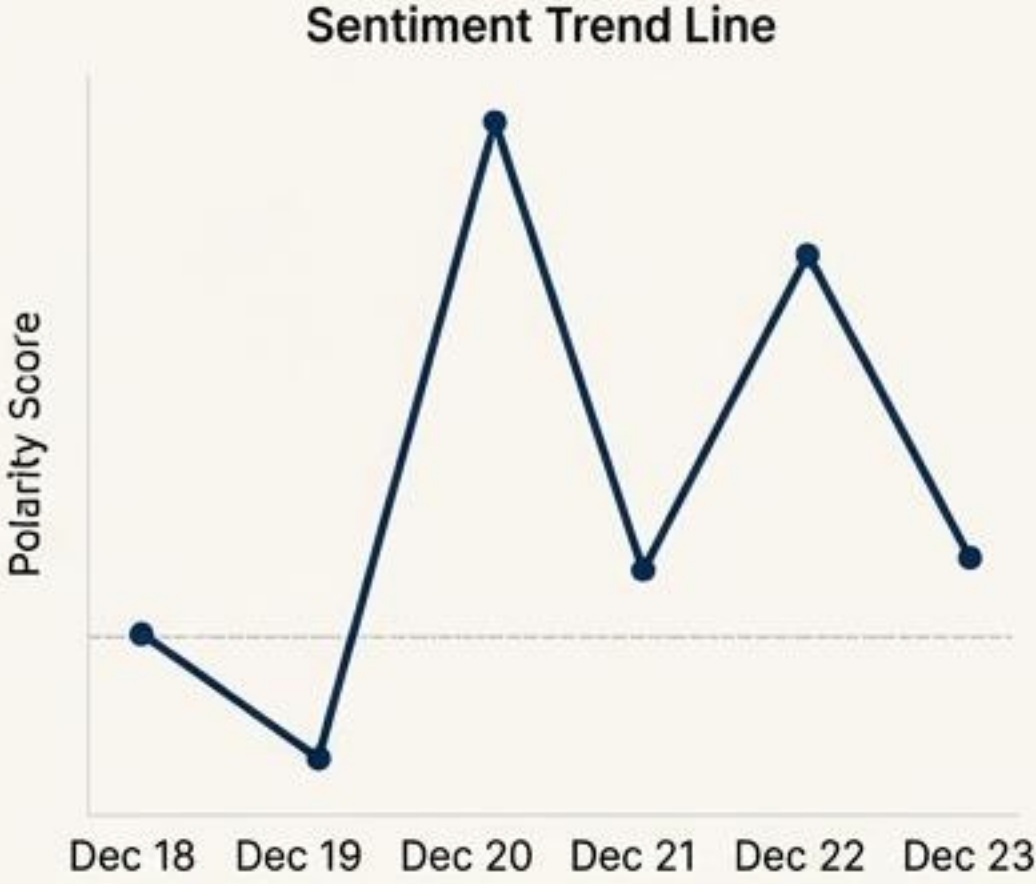
Our analysis reveals that total potential revenue loss from climate related supplier disruptions stands at 2,168 Crores. The concentration of risk in Ankleshwar our own operational hub is an immediate and critical threat to operational continuity.

From News Sentiment to Boardroom Language, ESG Risks are Everywhere

Internal Social Progress



External Perception



Reporting & Governance Risk



Insight Box

While making progress on social metrics, we must **actively manage external perception** and **internal governance**. **Vague language in our reporting creates a 'greenwashing' risk** that can erode investor trust and attract regulatory scrutiny.

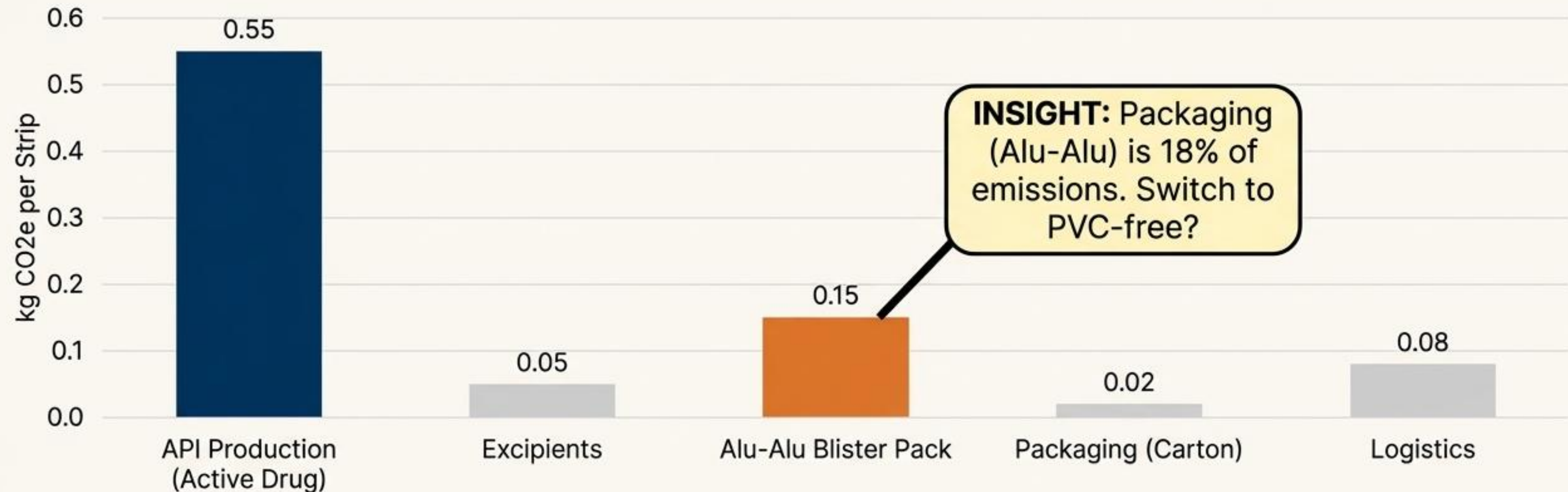
The Double Materiality Matrix: Focusing on the Critical Intersection of Financial and Societal Impact



Our engine's first output is clarity. Instead of tackling every ESG issue, we prioritize those in the top-right quadrant. 'Water Scarcity' and 'Carbon Tax' emerge as the most critical threats and opportunities for RPG.

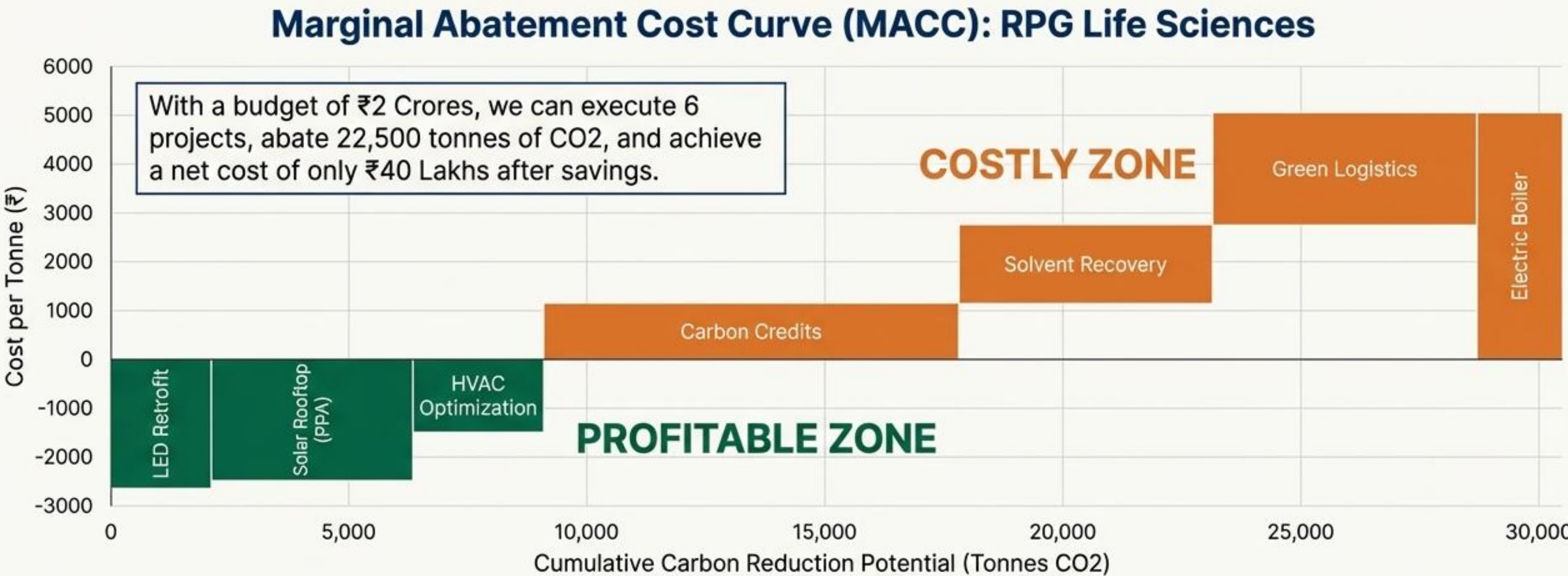
A Product Life Cycle Assessment (LCA) Pinpoints an Unseen Hotspot: Packaging

Product Carbon Footprint: Azathioprine (10 Tabs)



INSIGHT BOX: Drilling down to the product level reveals that beyond the active ingredient, packaging is a major source of emissions. This presents a clear opportunity for innovation in materials science that can reduce our footprint and potentially lower costs.

Our Roadmap to Decarbonization is Both Clear and Economical



The MACC provides our optimal decarbonization strategy. We should immediately execute the three profitable projects LED Retrofit, Solar Rooftop (PPA), and HVAC Optimization as they generate positive returns. This helps fund the next tier of cost-effective abatement.

Quantifying the Unseen: Carbon Tax Poses a ₹5.65 Crore Annual Risk

Monte Carlo Simulation: Financial Risk from Carbon Tax (N=10,000)



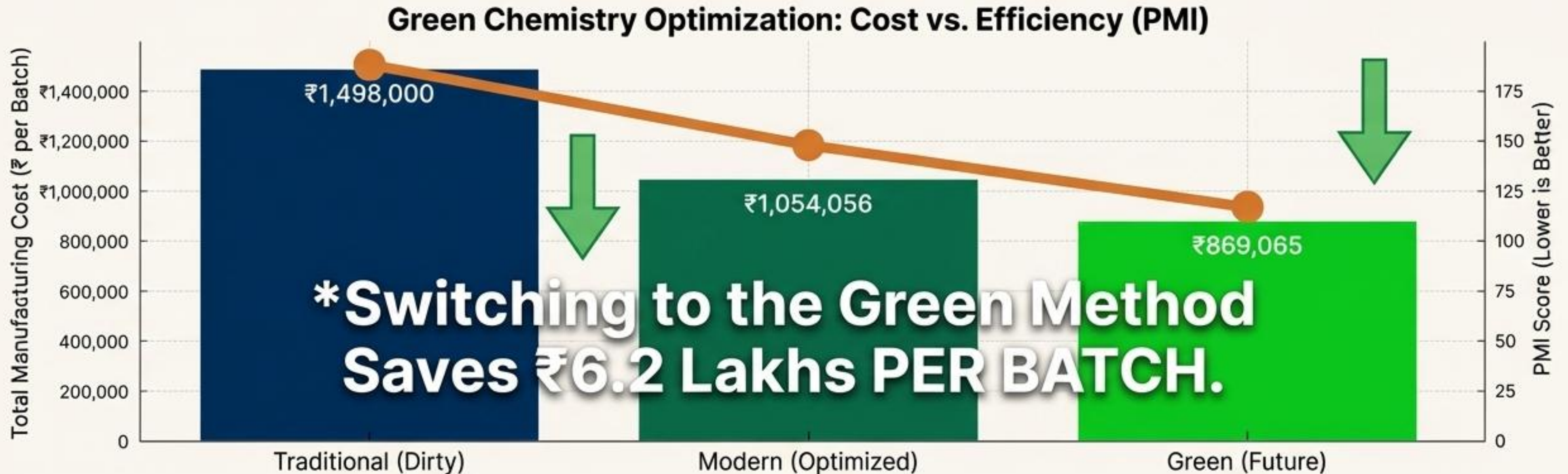
****Value at Risk (95% Confidence):**

There is a 5% chance that a future carbon tax will cost our P&L more than

₹5.65 Crores per year.**

Business Case 1: The Green Chemistry 'Win-Win'

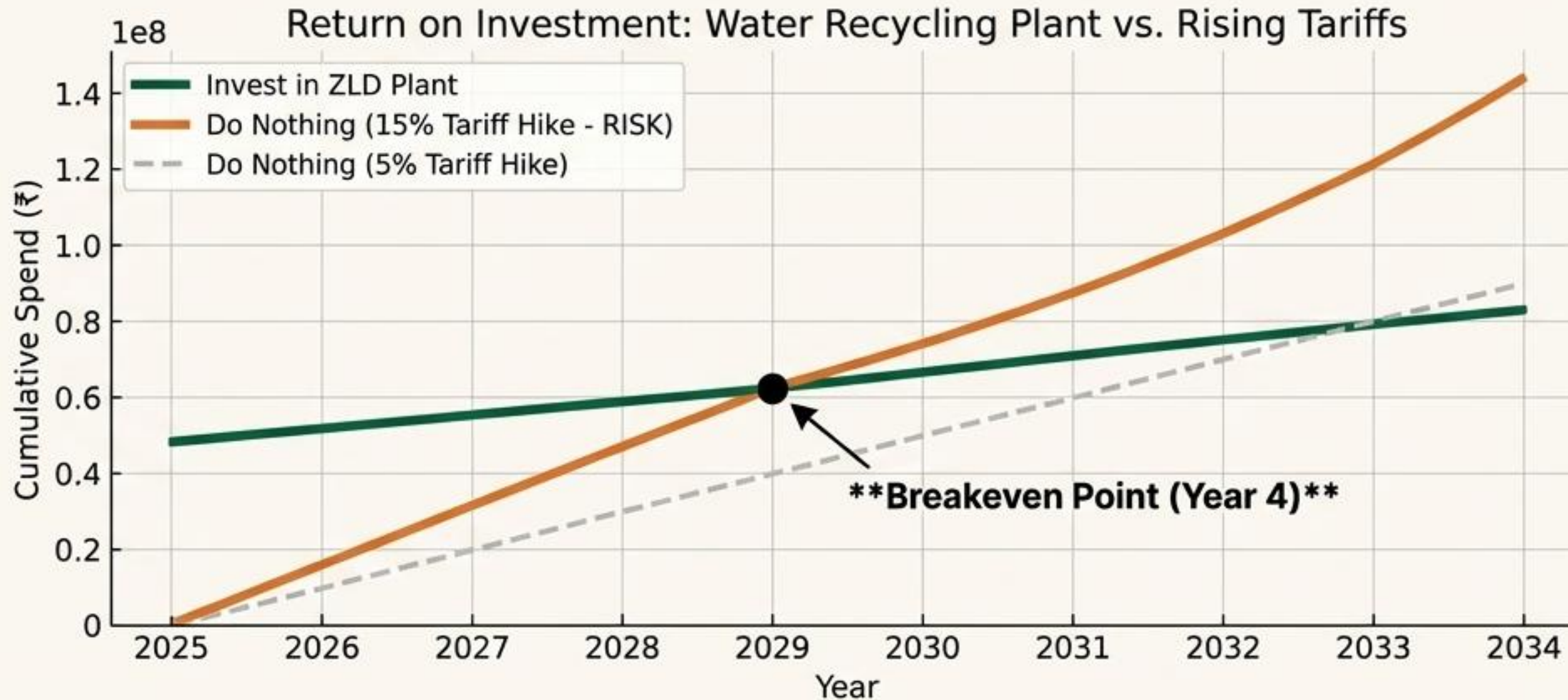
Optimizing Our Chemistry to Reduce Cost and Carbon Simultaneously



This analysis proves that 'green' does not mean 'expensive.' By switching to a modern, greener solvent, we not only reduce waste and emissions significantly but also lower our operational costs due to cheaper disposal. This is a clear financial and environmental victory.

Business Case 2: Turning Water Risk into a Financial Asset

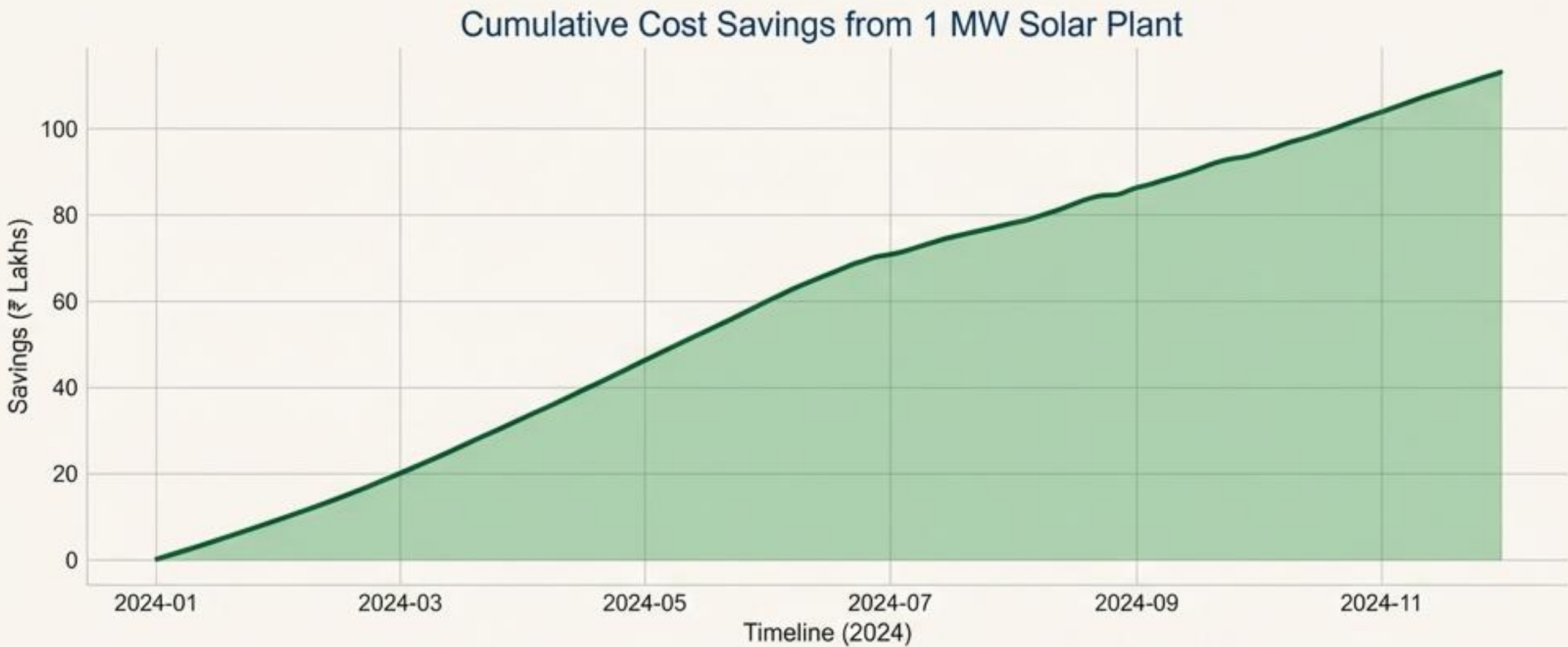
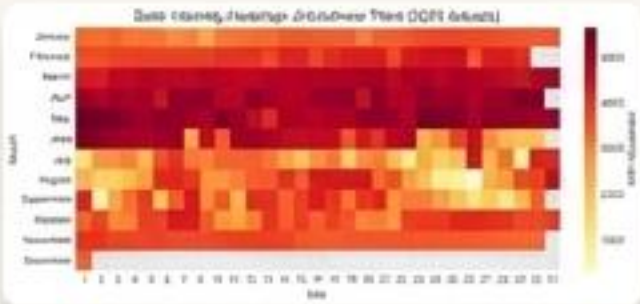
The ROI of Resilience: Why a Water Recycling Plant is a Strategic Investment



Investing **₹5 Cr.** in a ZLD (Zero Liquid Discharge) plant is not a compliance cost; it's a hedge against volatile and rising water tariffs. The investment breaks even in **4 years** under a likely risk scenario and secures our most critical manufacturing input.

Business Case 3: A Live Feasibility Study for On-Site Solar

Harnessing Real-Time Satellite Data to Model Our Solar Potential in Ankleshwar



Estimated Annual Savings

₹1.13 Crores

Carbon Avoided Annually

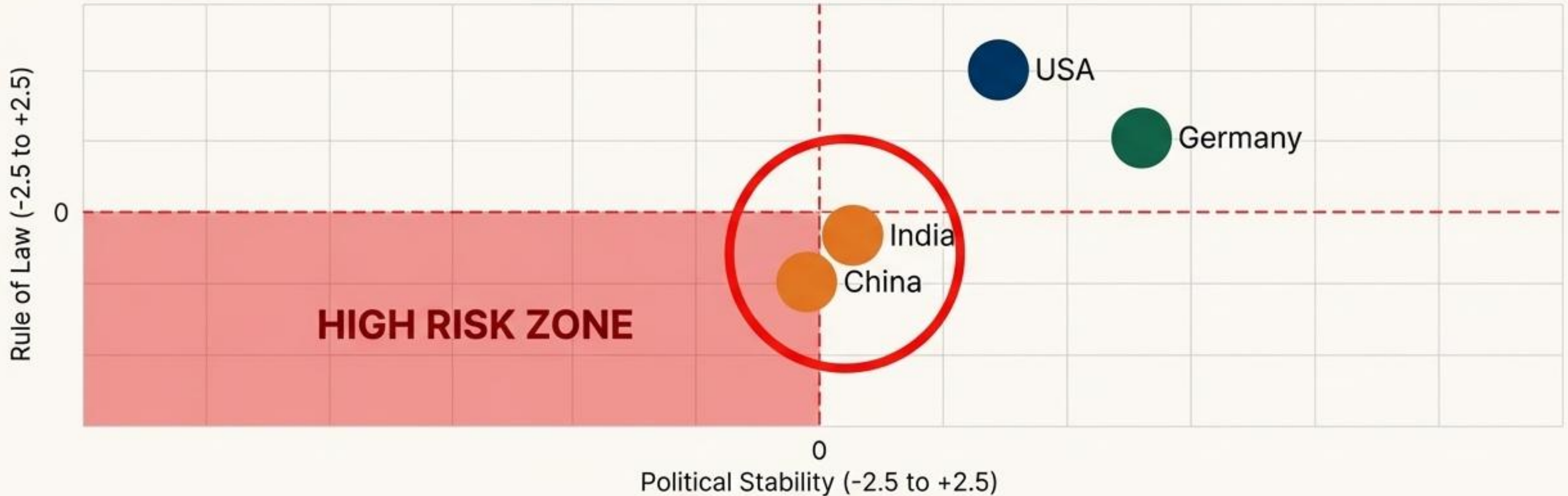
944 Metric Tonnes

Insight Box: Live satellite data for our Ankleshwar plant confirms the viability of a 1 MW rooftop solar project. While the yield is just below our 'High' threshold, the project still delivers significant cost savings and carbon abatement, making it a key part of the MACC strategy.

Fortifying Our Supply Chain with Live Intelligence

Using Real-Time World Bank Data to Dynamically Map Sovereign Risk

Live Supply Chain Risk Map (World Bank Data)



Insight Box:

Our engine connects to live global risk data, providing an up-to-the-minute view of supply chain stability. The negative governance scores for key sourcing hubs like China and India are a direct signal to increase safety stock and trigger human rights audits, preventing future disruptions.

From Data to Decision: Our Top 3 ESG Imperatives



Water & Energy Resilience

Action:

Fund the Ankleshwar ZLD Plant & Rooftop Solar project.

Impact:

Secure operations, hedge against price volatility, save **>₹2 Cr. annually.**



Supply Chain Fortification

Action:

Launch deep-dive audits for '**Zone of Death**' suppliers; diversify sourcing away from **Ankleshwar concentration.**

Impact:

Mitigate a portion of the **₹2,168 Cr.** Value-at-Risk.



Green Product Innovation

Action:

Approve CapEx for Green Chemistry scale-up; mandate LCA for all new products.

Impact:

Reduce OpEx, lower product carbon footprint, build a competitive brand advantage.

Recommendations & Request for Approval

Decision Required

- Approve CapEx for the ZLD plant and Green Chemistry reactor.
- Approve OpEx for third-party supply chain audits.

Next 90 Days

- Establish a cross-functional team to oversee implementation.
- Rewrite high-risk sections of the Annual Report (CEO Message, Supply Chain) with specific, data-backed targets.
- Integrate the 'Petrochemical Proxy' model into procurement decisions.

Investing in this data-driven ESG strategy is an investment in a more resilient, efficient, and profitable future for RPG Life Sciences.