Assessing Carbon Credits Opportunity

Project Duration: 6 weeks

Role: Project Leader and Analyst

Project Overview: This project evaluated the feasibility of generating carbon credits by substituting sulfuryl fluoride (SF), a fumigant with extremely high global warming potential, with ethanedinitrile (EDN). The objective was to quantify the environmental and financial benefits of this substitution, enabling the client to align with sustainability trends and capitalize on voluntary carbon markets.

Challenges: The primary challenge was to validate the significant reduction in greenhouse gas emissions while ensuring compliance with carbon crediting methodologies. The project required the development of a robust business case and highlighting technical and regulatory complexities in introducing EDN as an alternative.

Solutions Implemented: Using modern tools, including AI-enabled ones, we conducted a thorough desk-based analysis of the environmental impact, applying conservative emission estimates to ensure credibility. This analysis supported the development of a robust business case, projecting substantial financial returns driven by trends in the voluntary carbon market.

Results: The study demonstrated that switching from SF to EDN could reduce greenhouse gas emissions very significantly. The financial model indicated an attractive net present value over five years, with substantial long-term growth potential. By following up on these findings, the client would position itself as a leader in sustainable fumigation practices, ready to leverage carbon credits as a revenue stream.

We are now working with the client on a follow-up project to implement these findings.

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