
Case Study Summary:

Technical and Commercial Due Diligence for a 25K ha Biomass Platform

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Project Description: Technical and commercial due diligence for a large-scale biomass plantation and wood pellet investment.

Key Outcome: Identified material execution and return risks in a USD 100M biomass investment, enabling the client to avoid a potentially suboptimal capital allocation.

Client Type: International biomass user.

Location: Brazil.

Value: USD 100 million.

Scale: 25K ha.

Other Stakeholders: Brazilian forest product company, local landowners.



The challenge: The proposed investment relied on unproven eucalyptus clone performance, accelerated plantation timelines, rapid land acquisition, and non-traditional harvesting systems at industrial scale.

Approach: Conducted field validation of plantation trials and land assets, alongside integrated technical, operational, and financial due diligence. Developed DCF and sensitivity models, benchmarked assumptions against industry best practice, and assessed execution risks under multiple deployment scenarios.

- Technical validation
- Financial modelling
- Risk assessment
- Scenario analysis
- Benchmarking against industry best practice
- Sustainability and land use assessment
- Logistical and infrastructure assessment



Recommendation: Following the detailed analysis, project modification was recommended including:

- Phased project deployment to establish operational capability and validate assumptions before full-scale expansion.
- Optimising productivity and NPV through a modified silvicultural plan and clone usage.
- Adjusted project timeline to improve likelihood of achieving targets.

Result: The due diligence identified risk-adjusted returns that were less attractive than alternative opportunities within the client's global biomass investment portfolio, resulting in the project not proceeding beyond the evaluation phase.