

Private Equity / Investment Capital Case Studies

Case Study #1 (Technical and Operational Due Diligence)

The client was interested in acquiring a process manufacturing production facility and needed a technical and operations assessment as part of their due diligence. TAS was retained to evaluate the facility's performance capabilities (equipment capacity, process design and control, asset reliability). TAS completed an onsite review of physical assets and documentation (production records, maintenance log), interviewed key operating personnel, and prepared a due diligence report, highlighting areas of strength and potential issues to be addressed. Based on TAS's findings, client revised their valuation analysis and offer price. Client then re-engaged TAS to perform due diligence and evaluate additional investment prospects.

Case Study #2 (Investment Due Diligence - Operability, Reliability, Risk Assessment)

Client retained TAS to complete a due diligence review of a potential investment, with a specific focus on technical, operational and economic validation of power generation technology and performance. TAS completed a comprehensive assessment of the technology and the onsite operating performance and reliability history. TAS's report identified key concerns and significant risks which had the potential to prevent value realization; this provided the private equity investors with actionable intelligence and mitigation strategies so these factors could be incorporated into a risk-weighted offer and go/no-go concerns could be proactively resolved as part of the valuation and negotiation cycle.

Case Study #3 (Investment Due Diligence – Site Evaluation, Portfolio Ranking, Buy vs. Build)

Client retained TAS to evaluate and benchmark a portfolio of target greenfield acquisition sites. TAS developed a set of technical, operational and economic criteria as ranking metrics for each site and provided detailed overviews and summary recommendations which led to selection of a preferred location. The TAS team prepared a detailed cost to build and operate estimate and then further evaluated the business case for greenfield development vs. buying existing, equivalent scale, competitively advantaged, production capacity. Following the initial engagement, TAS completed a series of investment prospect due diligence site evaluations for the client.

Case Study #4 (Due Diligence - Repurposing Assets, Technology Licensing, Market Assessment)

Client engaged TAS to perform technical, operational and commercial due diligence in support of strategically repurposing production facilities to better position themselves for evolving market conditions. TAS performed detailed site reviews, process technology assessments, and market analysis to identify and validate a preferred operational configuration platform. TAS developed work scope plans and cost forecasts to implement, prepared investment justifications for approvals by client's Board, and supported client's executive team in subsequent technical and commercial negotiations with 3rd parties.

Case Study #5 (Technical and Operational Due Diligence, Market Analysis, Commercial Viability)

Client desired technical due diligence and a supporting market study to better inform a prospective investment decision. TAS reviewed market and company data to analyze the target's competitive position and determine its relative strength and future potential. TAS completed an operational risk review and technology assessment to determine the reliability of company operations and viability of its products and services offer. TAS prepared a detailed analysis on the target company, with factored recommendations consistent with the stated risk profile of the private equity investors and their forward target thresholds for the business. TAS worked closely with the transaction team over the duration of the engagement to ensure deliverables aligned with expectations and to provide timely guidance and improved optionality throughout the investment consideration process.

Case Study #6 (Technical and Operational Due Diligence, Capacity Utilization)

Client retained TAS to complete a technical and operational due diligence review for a prospective investment in the battery recycling sector. TAS reviewed investment prospectus materials, developed detailed validation checklists, assessed performance characteristics and operating history at production facilities, and interviewed operating company leadership. TAS's due diligence report provided prospective private investors with assurance on production capacity, operational reliability, technology processes, organizational capabilities, and performance track record and highlighted key risks associated with achieving future operating projections and target investment thresholds. This enabled client to refine its valuation, risk weight a revised offer, and position itself for final round negotiations.

Case Study #7 (Technical and Operational Due Diligence, Commercial Readiness Assessment)

Client was considering an investment in an early-stage process manufacturing company focused on converting greenhouse gases to bio-based materials and plastics. TAS was engaged to complete a technical analysis of the process technology (feasibility, operability, scalability, risks), assess key organizational strengths and capabilities (leadership team, functional bandwidth, customer relationship proof points), and evaluate commercial readiness for pursuing a first production facility. TAS reviewed pilot and demonstration scale campaign data, interviewed senior leadership, and evaluated process design parameters (mass balance / flow, equipment, catalyst, stability, maintainability). TAS provided the investors with conclusions on viability / readiness / scalability, an assessment on cost to build and produce, and a perspective on technical and operational risks to better inform the investment decision.

Case Study #8 (Due Diligence – Technical Assessment, Operability, Validating Production Economics)

Client retained TAS to conduct due diligence and provide investment transaction support for a proposed investment in a company commercializing a new process technology for producing industrial chemicals in an environmentally-friendly manner. TAS analyzed pilot and demonstration scale production run data, evaluated performance curves (yield, on-spec consistency, run time, reliability), and assessed robustness of process design (process flows, technical constraints, operating control limits, production unit flexibility, causes of downtime). TAS reviewed cost to build and cost to operate forecasts, analyzed performance benchmarks (gas usage, electricity consumption, target efficiency improvements), and interviewed operating company leadership to validate modeling assumptions. TAS provided the private equity investors with conclusions on key technical, operational, and economic factors as drivers for valuation, input on primary risks to be mitigated and recommendations for follow-up onsite validation. TAS's findings helped client determine that the prospect company did not fit with its risk/return profile.

Case Study #9 (Market Assessment, Customer Prospecting, Business Development)

Client wanted to extend its operational footprint by establishing / increasing its business scale within regional shale gas markets. TAS was engaged to identify facility owner/operators as prospective partners / customers. TAS researched industry activity and assets in each of the target geographies, developed screening criteria (location, facility type, project scale), itemized active and planned future projects by area and company, and categorized prospects by business type, size, and points of connectivity for fit with client's defined business objectives. TAS shortlisted high potential opportunities to client as recommendations for near term routes to market entry and further business development efforts.