

NIIR PROJECT CONSULTANCY SERVICES (NPCS)

Asia's Leading Industrial Knowledge & Consultancy Ecosystem

CLIENT CASE STUDY

Establishment of an
ETHYL ACETATE MANUFACTURING UNIT

for

M/s. CHEMINO PHARMA LIMITED

Mumbai, Maharashtra, India

"Transforming Industrial Investment Ideas into Profitable, Sustainable Manufacturing Ventures"

Techno-Economic Feasibility

Market Research & Demand
Analysis

Detailed Project Report (DPR)

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ABOUT NIIR PROJECT CONSULTANCY SERVICES (NPCS)

NPCS is part of Asia's leading industrial knowledge ecosystem with thousands of project profiles and global consulting expertise. For over three decades, NPCS has been the trusted partner for entrepreneurs, MSMEs, corporates, and institutional investors seeking technically sound and financially viable manufacturing investment opportunities.

Core Services

Detailed Project Reports (DPR)	Techno-Economic Feasibility Studies	Market Research & Demand Analysis	Engineering & Strategic Advisory
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NPCS Authority — By the Numbers

30+ Years of Industrial Expertise	30,000+ Project Reports Published	50+ Countries Served	250,000+ Industrial Projects Delivered
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NPCS combines decades of industrial experience, proprietary research databases, and a multidisciplinary team of engineers, economists, and market analysts to deliver consulting reports that stand up to the scrutiny of banks, investors, and government bodies.

CLIENT OVERVIEW & INVESTMENT OBJECTIVE

PROJECT SNAPSHOT

Client Name	M/s. Chemino Pharma Limited
Location	Mumbai, Maharashtra, India
Industry	Large-Scale Industrial Manufacturing
Project Recommended	Ethyl Acetate Manufacturing Unit
Services Delivered	Techno-Economic Feasibility Study, DPR, Market Assessment, Financial Viability Analysis, Strategic Advisory
Implementation Status	Client Confirmed Proceed — Manufacturing Investment Approved

M/s. Chemino Pharma Limited, a Mumbai-based enterprise operating in the pharmaceutical and specialty chemicals space, approached NPCS with the objective of diversifying its business portfolio through a large-scale manufacturing investment. The client required a commercially viable project aligned with sustainable demand, strong ROI potential, and operational scalability.

Client's Investment Criteria

- Sustainable long-term returns on investment capital
- Strong institutional and industrial demand across multiple end-use sectors
- Technical feasibility with scalable, phased production capabilities
- Favourable raw material availability and regional supply-chain access
- Moderate-to-large capital investment with viable financial metrics
- Future expansion, diversification, and export opportunities

CHALLENGE & PROBLEM STATEMENT

Identifying the right manufacturing investment in India's complex industrial landscape involves navigating multiple dimensions of risk and uncertainty. M/s. Chemino Pharma Limited faced the following strategic challenges:

Market Intelligence Gap Limited visibility into which manufacturing sectors offered the strongest demand-supply dynamics and growth potential.	Technical Complexity Evaluating manufacturing processes, infrastructure requirements, and technology options without an internal engineering team.
Financial Risk Quantification	Regulatory & Compliance Landscape

Estimating realistic CapEx, OpEx, and return metrics for a large-scale greenfield investment.

Raw Material & Supply Chain Uncertainty

Assessing the reliability and cost-competitiveness of regional raw material sources.

Navigating environmental approvals, industrial licensing, and chemical manufacturing regulations.

Strategic Alignment

Ensuring the new venture complemented the client's existing pharmaceutical business and diversification goals.

OUR APPROACH & METHODOLOGY

NPCS deployed its proprietary six-phase consulting methodology to deliver a rigorous, data-driven assessment that guided M/s. Chemino Pharma Limited from initial investment brief through to a confident, risk-mitigated manufacturing decision.

NPCS CONSULTING METHODOLOGY		
Phase 1	Discovery & Scoping	Client investment brief, sector screening, opportunity shortlisting
Phase 2	Market Intelligence	Demand analysis, competitive landscape, regulatory environment review
Phase 3	Technical Feasibility	Process engineering, plant layout, technology selection, infrastructure audit
Phase 4	Financial Modelling	CapEx/OpEx estimation, revenue projections, IRR, NPV, payback analysis
Phase 5	DPR Preparation	Bankable project report: specifications, machinery list, cost schedules
Phase 6	Strategic Advisory & Sign-off	Investment decision support, risk mitigation, implementation roadmap

SCOPE OF SERVICES DELIVERED

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01	Manufacturing Opportunity Identification	Identified ethyl acetate as the optimal investment aligned with market trends & client goals
02	Techno-Economic Feasibility Study	Comprehensive technical and commercial viability assessment of the proposed unit
03	Detailed Project Report (DPR)	Bankable DPR covering plant layout, machinery selection, and technical specifications
04	Market Potential Assessment	Industry trends, demand forecasts, competitive landscape, and growth drivers
05	Raw Material Availability Analysis	Regional sourcing, supply-chain logistics, and procurement strategy
06	Financial Viability Evaluation	Cost estimation, revenue projections, IRR, ROI, and payback period analysis
07	Implementation Planning Inputs	Phased execution roadmap and operational readiness framework

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08	Strategic Advisory Support	Continuous expert guidance for informed, risk-mitigated investment decisions

TECHNICAL INSIGHTS — ETHYL ACETATE MANUFACTURING

Manufacturing Process Overview

Ethyl acetate is produced primarily through the Fischer esterification of ethanol and acetic acid, or via the Tishchenko reaction using acetaldehyde. The standard commercial production pathway involves:

Step 1	Raw material receipt and quality control — ethanol and acetic acid storage and blending
Step 2	Esterification reaction in reactor vessels under controlled temperature and acid catalyst conditions
Step 3	Azeotropic distillation to separate ethyl acetate, water, and unreacted components
Step 4	Washing and neutralisation to remove catalyst traces and acid residuals
Step 5	Purification distillation to achieve technical or pharmaceutical-grade ethyl acetate
Step 6	Quality testing — purity, moisture content, refractive index, and density verification
Step 7	Storage in stainless steel or certified chemical tanks; drum or ISO-tanker dispatch

Key Machinery & Infrastructure

- Esterification reactor (stainless steel, with temperature and pressure controls)
- Distillation columns — azeotropic and purification stages
- Heat exchangers, condensers, and reboilers
- Storage tanks (raw material and finished product, certified for flammable chemicals)
- Effluent treatment plant (ETP) for water and chemical waste compliance
- Boiler, chilling units, and utilities infrastructure
- Quality control laboratory with analytical instruments
- Material handling, loading, and dispatch systems

Infrastructure & Location Advantage — Mumbai, Maharashtra

Maharashtra is one of India's premier industrial states, offering a well-developed chemical manufacturing ecosystem. Mumbai's strategic location provides efficient port access for both raw material imports and finished product exports, chemical-grade utility supply, and proximity to key downstream customers in pharmaceuticals, paints, and packaging.

MARKET ANALYSIS & DEMAND OUTLOOK

The ethyl acetate market in India and globally is underpinned by strong structural demand across diverse industrial end-uses. The following sector analysis confirms the commercial attractiveness of the investment:

END-USE SECTOR DEMAND MATRIX	
Pharmaceuticals	Solvent applications in API and formulation manufacturing
Paints & Coatings	Urbanisation & infrastructure boom driving demand
Printing Inks	Packaging and publishing sector expansion
Adhesives & Sealants	FMCG, automotive, and construction applications
Flexible Packaging	E-commerce and logistics growth accelerating usage
Food Processing	FSSAI-approved usage in food-grade applications
Cosmetics & Personal Care	Rising domestic consumption and premiumisation
Export Markets	India's growing specialty-chemical export footprint

Key Market Drivers

- India's pharmaceutical sector — one of the world's largest — drives consistent solvent-grade demand.
- Rapid urbanisation and construction activity is expanding the paints, coatings, and adhesives market.
- The flexible packaging boom, driven by e-commerce growth, continues to increase ethyl acetate consumption.
- India's specialty chemicals export push creates significant opportunities for domestic producers.
- Low-toxicity profile and biodegradability make ethyl acetate a preferred solvent in sustainability-focused formulations.

FINANCIAL & INVESTMENT ANALYSIS

FINANCIAL & INVESTMENT OVERVIEW	
Capital Investment	Land, factory, plant & machinery, utilities
Working Capital	Raw materials, operational expenses, logistics
Capacity Scalability	Phased expansion aligned with demand growth
Revenue Model	Domestic B2B supply + export to SE Asia & Middle East

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Return Indicators	Favourable IRR & payback period (per DPR analysis)
Break-Even Outlook	Projected within standard manufacturing investment cycle

NPCS conducted a detailed preliminary investment analysis confirming that the proposed ethyl acetate manufacturing unit demonstrated commercially attractive financial metrics. The investment structure, when evaluated against prevailing market prices and demand volumes, yields a viable business case suitable for bank financing and institutional investment.

RESULTS & OUTCOMES

NPCS's engagement with M/s. Chemino Pharma Limited delivered measurable and strategic outcomes across all dimensions of the investment decision-making process:

<p>Strategic Project Identification</p> <p>Optimal manufacturing opportunity identified with high market demand and commercial viability.</p>	<p>Risk-Mitigated Investment Decision</p> <p>Comprehensive feasibility analysis eliminated uncertainty and guided a confident capital commitment.</p>
<p>Bankable Project Report</p> <p>Client received a comprehensive, financier-ready DPR suitable for banking and investor presentations.</p>	<p>Market Validation</p> <p>Confirmed robust multi-sector demand for ethyl acetate across domestic and export markets.</p>
<p>Technical Blueprint</p> <p>Detailed manufacturing process, machinery specifications, and plant layout delivered.</p>	<p>Financial Clarity</p> <p>Investment cost structure, revenue model, and return metrics clearly established.</p>
<p>Implementation Readiness</p> <p>Phased execution roadmap provided, enabling smooth transition from planning to operations.</p>	<p>Long-Term Growth Positioning</p> <p>Client secured entry into a high-demand industrial segment with diversified revenue potential.</p>

Client Decision

Following review of NPCS's comprehensive feasibility study, market assessment, and financial modelling, M/s. Chemino Pharma Limited expressed full confidence in the project's viability and formally confirmed its decision to proceed with the implementation of the Ethyl Acetate Manufacturing Unit.

CLIENT TESTIMONIAL

"NPCS provided us with valuable techno-economic insights and a well-structured project assessment that enabled us to evaluate a new manufacturing investment opportunity with clarity and confidence. Their strategic approach and technical expertise added substantial value to our decision-making process."

— M/s. Chemino Pharma Limited, Mumbai, Maharashtra

WHY CHOOSE NPCS

30+ Years of Industrial Expertise	Decades of hands-on experience across 100+ manufacturing sectors in India and globally.
30,000+ Project Reports Published	Unmatched repository of validated industrial intelligence — a knowledge base without parallel.
250,000+ Industrial Projects Delivered	Proven track record across chemicals, FMCG, agro, textiles, engineering, and more.
Clients in 50+ Countries	Global reach with local understanding — trusted by entrepreneurs, MSMEs, and corporates worldwide.
Data-Driven Feasibility	Every recommendation backed by primary research, real market data, and financial modelling.
End-to-End Project Support	From opportunity identification to implementation roadmap — one partner for the full journey.
Risk Mitigation Approach	Structured due diligence methodology designed to reduce investment uncertainty.
Bankable Project Reports	DPRs prepared to banking and investor standards, suitable for loan applications and board approvals.

CONCLUSION

The NPCS engagement with M/s. Chemino Pharma Limited demonstrates how rigorous industrial consultancy transforms investment uncertainty into informed, confident action. By deploying its end-to-end feasibility methodology — from market intelligence through to financial modelling and implementation planning — NPCS equipped the client with the insights needed to commit capital responsibly to a commercially viable manufacturing venture.

The ethyl acetate manufacturing unit represents not only a strong standalone investment but also a strategically aligned diversification into India's growing specialty chemicals and industrial solvents sector — a sector underpinned by megatrends in pharmaceuticals, packaging, infrastructure, and export-oriented manufacturing.

This case study exemplifies NPCS's commitment to delivering investor-grade, technically sound, and commercially validated project intelligence to its clients worldwide.

READY TO BUILD YOUR NEXT INDUSTRIAL PROJECT?

Partner with NPCS to transform your investment idea into a profitable industrial venture.

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DPR | Feasibility Studies | Market Research | Engineering Advisory | Financial Viability