NIIR PROJECT CONSULTANCY SERVICES

Industrial Intelligence | Feasibility | Project Reports | Strategic Advisory

CLIENT CASE STUDY

Strategic Industrial Investment Advisory

Setup of Industrial Waste Management Project

Transforming Industrial Compliance into Long-Term Competitive Advantage

Prepared for

M/s. Shirdi Industries Ltd

Mumbai, Maharashtra, India

Industry: Industrial Waste Management | Consultancy: NPCS

Status: Feasibility Reviewed — Project Implementation Proceeding

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ABOUT NIIR PROJECT CONSULTANCY SERVICES (NPCS)

Who We Are

Niir Project Consultancy Services (NPCS) is one of Asia's most trusted industrial consultancy organisations, providing research-driven guidance to entrepreneurs, MSMEs, corporates, and institutional investors seeking to establish new industrial ventures or expand existing operations.

NPCS is part of Asia's leading industrial knowledge ecosystem with thousands of project profiles and global consulting expertise.

Core Services

- Detailed Project Reports (DPR)
- Techno-Economic Feasibility Studies
- Market Research & Demand Analysis
- Engineering Advisory
- Financial Viability Evaluation
- Investment & Strategic Planning
- Manufacturing Process Consultancy

NPCS — AUTHORITY & TRACK RECORD

150K+	85	30+	150K+
Successful Projects Delivered	Countries Served	Years in Consulting	Clients Served

PROJECT SNAPSHOT

Client Name	M/s. Shirdi Industries Ltd
Location	Mumbai, Maharashtra, India
Industry Segment	Industrial Waste Management
Project Recommended	Setup of Industrial Waste Management Facility
Consultancy Scope	Techno-Economic Feasibility Study, Detailed Project Report (DPR), Market Assessment, Technical Evaluation, Financial Viability Analysis, Strategic Advisory
Implementation Status	Feasibility Reviewed — Client Proceeding with Project Implementation Planning

CLIENT OVERVIEW

M/s. Shirdi Industries Ltd, headquartered in Mumbai, Maharashtra, is a growth-oriented industrial enterprise with a clear vision for long-term, sustainable business expansion. Recognising the increasing complexity of India's industrial landscape — marked by tightening environmental regulations, rising sustainability expectations, and a rapidly evolving waste management ecosystem — the client sought a trusted consultancy partner capable of identifying a technically sound and financially viable investment pathway.

Client Investment Objectives

- Identify a commercially sustainable industrial investment with long-term revenue potential
- Align investment with regional industrial infrastructure and emerging regulatory requirements
- Achieve efficient utilisation of available capital and operational resources
- Build scalable operational capabilities with room for future expansion
- Establish a future-ready enterprise aligned with sustainability and circular-economy principles

NPCS was engaged to evaluate suitable industrial opportunities and recommend the most technically feasible and economically viable project aligned with the client's strategic goals.

PROBLEM STATEMENT & KEY CHALLENGES

Market & Regulatory Challenges

- Rapidly evolving environmental compliance standards requiring expert navigation
- Lack of structured, bankable feasibility data for waste management investments
- Fragmented market intelligence on waste generation trends and processing demand
- Uncertainty around regulatory approvals and licensing timelines

Technical & Financial Risks

- High capital sensitivity requiring accurate equipment and infrastructure cost modelling
- Complex supply-chain considerations for industrial waste feedstock
- Limited visibility on long-term ROI and payback period without detailed financial modelling
- Technology selection challenges — matching processes to waste types and volumes

OUR APPROACH & STRATEGY

NPCS deployed its proven five-phase consultancy methodology to deliver a rigorous, data-backed investment blueprint for M/s. Shirdi Industries Ltd.

01 **Opportunity Identification & Scoping**
Evaluated multiple industrial sectors and identified Industrial Waste Management as the optimal investment category based on market pull, regulatory tailwinds, and available resources in the Mumbai region.

02 **Market Research & Demand Analysis**
Conducted comprehensive analysis of industrial waste generation patterns, processing infrastructure gaps, institutional demand drivers, and long-term growth indicators across Maharashtra and key Indian industrial corridors.

03 **Technical Feasibility Assessment**
Evaluated waste processing technologies, plant layout requirements, machinery selection, operational workflows, and regulatory compliance frameworks applicable to industrial waste management facilities.

04 **Financial Modelling & Viability Evaluation**
Built detailed financial projections including capital expenditure estimation, working capital analysis, revenue modelling, break-even analysis, ROI, IRR, and payback period calculations.

05 **Implementation Roadmap & Strategic Advisory**
Developed a phase-wise implementation strategy covering regulatory approvals, site readiness, procurement, commissioning, and market entry, alongside risk mitigation recommendations.

SCOPE OF CONSULTING SERVICES DELIVERED

Core Deliverables

- Detailed Project Report (DPR) — bankable-quality
- Techno-Economic Feasibility Study
- Plant layout design and infrastructure planning
- Machinery selection and technology evaluation
- Raw material & waste feedstock availability analysis
- Market validation and demand quantification

Advisory & Planning

- Comprehensive financial modelling and viability analysis
- Revenue projection and cost structure analysis
- Implementation roadmap (phase-wise milestones)
- Regulatory compliance and approval pathway guidance
- Risk assessment and mitigation framework
- Strategic advisory support throughout the engagement

PROJECT EXECUTION TIMELINE

Phase	Milestone	Deliverable / Outcome
Phase 1	**Project Scoping & Brief**	Client objectives captured; project parameters defined; engagement roadmap finalised
Phase 2	**Market & Industry Research**	Industrial waste demand analysis; competitive landscape; growth outlook report
Phase 3	**Technical Evaluation**	Process selection, equipment list, plant layout, technology benchmarking
Phase 4	**Financial Modelling**	Capital cost estimate, P&L projections, ROI/IRR/Payback analysis, sensitivity modelling
Phase 5	**DPR Preparation**	Bankable Detailed Project Report compiled and reviewed with client
Phase 6	**Strategic Advisory**	Implementation roadmap, risk framework, regulatory pathway guidance delivered

TECHNICAL INSIGHTS

The recommended Industrial Waste Management facility encompasses an integrated system for collection, segregation, processing, resource recovery, and safe disposal of industrial waste streams. The technology selection was guided by waste type, volume, regulatory requirements, and revenue optimisation potential.

Manufacturing & Processing Workflow

▸ **Step 1 — Waste Collection & Segregation**
Industrial waste streams are collected from manufacturing units, categorised by type (hazardous, non-hazardous, recyclable, organic) and directed to appropriate processing lines.

▸ **Step 2 — Pre-Treatment & Size Reduction**
Waste is pre-treated through physical and chemical processes including shredding, crushing, and neutralisation to prepare it for downstream processing.

▸ **Step 3 — Resource Recovery & Recycling**
Recoverable materials — metals, plastics, solvents, and organic matter — are extracted through mechanical and chemical separation, maximising resource recovery value.

▸ **Step 4 — Waste Treatment Processing**
Residual waste undergoes biological treatment, thermal processing, or chemical treatment depending on composition, ensuring regulatory compliance and environmental safety.

▸ **Step 5 — Residue Management & Safe Disposal**
Non-recoverable residues are processed into inert forms and managed through approved disposal channels, including co-processing in cement kilns or engineered landfills.

▸ **Step 6 — Quality Assurance & Compliance Reporting**
All processes are monitored against regulatory standards with real-time quality checks, compliance documentation, and environmental reporting maintained throughout operations.

Key Machinery & Technology

- Industrial waste shredders and crushers
- Magnetic and eddy current separators
- Chemical treatment and neutralisation systems
- Biological treatment reactors (aerobic/anaerobic)
- Solvent recovery distillation units
- Thermal treatment and incineration systems
- Effluent treatment plant (ETP)
- Automated segregation conveyor systems
- Environmental monitoring and SCADA controls
- Secure hazardous waste storage infrastructure

FINANCIAL & MARKET ANALYSIS

Market Opportunity & Growth Drivers

India Waste Mgmt Market	Industrial Waste Generated	Recycling Opportunity	Regulatory Demand Driver
Growing at >8% CAGR	~7 Million MT/Year (India)	30–40% Value Recovery Potential	Hazardous Waste Rules 2016 & EPR mandates

Investment & Financial Overview

Investment Range	Revenue Model	Payback Period
Moderate-to-Large Scale Capital	**Service Contracts + Material Recovery**	**Competitive Payback Timeline**
Balanced capital deployment with strong asset-backed security	Recurring industrial contracts + recovered material sales	Strong ROI potential driven by recurring demand and resource recovery

Key Market Drivers

- Rapid expansion of India's manufacturing base driving waste volumes
- Stringent enforcement of environmental compliance norms
- Corporate ESG mandates creating institutional demand for certified waste management
- Import substitution — reducing dependence on foreign waste processing capacity
- Circular economy policies driving resource recovery investments
- Maharashtra Industrial Development Corporation (MIDC) cluster demand
- Growing pharma, chemical, and automotive waste streams in Mumbai region
- Recurring revenue model insulated from commodity price volatility

RESULTS & OUTCOMES

Informed Investment Decision
Client received a bankable, research-backed DPR enabling confident capital allocation without guesswork.

Risk Mitigation
Comprehensive technical and financial modelling significantly reduced investment risk exposure.

Sustainability Positioning
Client positioned for long-term competitive advantage in the growing green industrial economy.

Recurring Revenue Opportunity
Dual revenue streams — service contracts and resource recovery — identified for operational resilience.

Regulatory Readiness
Approval pathway mapped; client entered implementation phase with full regulatory clarity.

Strategic Confidence
Management proceeded with implementation planning backed by NPCS's data-driven advisory framework.

CLIENT TESTIMONIAL

"NPCS provided us with valuable techno-economic guidance and a comprehensive project evaluation framework that helped us assess a sustainable industrial opportunity with confidence. Their expertise in feasibility studies and strategic advisory significantly strengthened our investment planning process."

— Management Team, M/s. Shirdi Industries Ltd, Mumbai

WHY CHOOSE NPCS

For over 30 years, NPCS has been the trusted consultancy partner for industrial entrepreneurs, MSMEs, large corporates, and institutional investors across Asia and beyond. Our end-to-end service offering transforms investment ideas into investment-ready industrial ventures.

Proven Industrial Expertise	30+ years and 150k+ project reports spanning all major industrial sectors.
Global Market Understanding	Clients in 85 countries; deep knowledge of international and domestic market dynamics.
Data-Driven Feasibility	Every recommendation is backed by rigorous market research, technical analysis, and financial modelling.
End-to-End Project Support	From opportunity identification through DPR, implementation planning, and beyond.
Risk Mitigation Approach	Proactive identification of technical, financial, and regulatory risks before capital is committed.
Client-Centric Advisory	Tailored consulting that aligns with each client's unique investment goals, risk appetite, and timeline.

CONCLUSION

The successful delivery of a comprehensive Techno-Economic Feasibility Study and Detailed Project Report for M/s. Shirdi Industries Ltd exemplifies NPCS's ability to convert strategic intent into investment-ready industrial plans. This engagement demonstrates the critical value of expert consultancy in navigating the complexity of new industrial ventures — from opportunity identification through market validation, technical evaluation, and financial modelling to confident implementation.

The Industrial Waste Management sector, driven by India's industrial expansion and strengthening environmental governance, represents a compelling long-term investment opportunity. With NPCS's guidance, M/s. Shirdi Industries Ltd is now positioned to enter this high-potential sector with a clear strategic roadmap, reduced execution risk, and institutional confidence.

Whether launching a new industrial business, diversifying operations, or evaluating a greenfield project, NPCS helps businesses move forward confidently — backed by 30+ years of expertise, 150k+ project reports, and a truly global industrial intelligence network.

READY TO BUILD YOUR NEXT INDUSTRIAL PROJECT?

Partner with Niir Project Consultancy Services (NPCS) to transform your investment idea into a profitable, sustainable industrial venture.

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DPR | Feasibility Studies | Market Research | Financial Modelling | Strategic Advisory