

PET Bottle Recycling -

*Manufacturing Plant Detailed Project Report,
Profile, Business plan, Industry Trends,
Market research, survey, Manufacturing Process,
Machinery, Raw Materials, Feasibility study,
Investment opportunities, Cost and Revenue*

Introduction

Polyethylene terephthalate or PET (also known as PETE) is one of the most common types of plastic. Most single-serve plastic bottles, including those for water, soft drinks and juices, are made with PET. Designated by the recycling code “1”. Being extremely light, PET bottles help to reduce the emission of contaminants during their transport.

Since they require less fuel during transport, they also help saving energy. PET is globally recognized as a safe, recyclable packaging material. PET is the main constituent in a variety of consumer and industrial products including plastic fibers, videotape, audiotape, film, engineered resin, food containers.



PET recycling is the process of reprocessing plastic that already has been used before and giving it some new reusable form. For instance, this could mean melting down soft drink bottles and then casting them as plastic chairs and tables. Typically a plastic is not recycled into the same type of plastic, and products made from recycled plastics are often not recyclable. Thus, it is a good project for entrepreneurs to invest.

Few Indian Major Players are as under

- Allen Laboratories Ltd.
- Dhunseri Petrochem & Tea Ltd.
- F C L Technologies & Products Ltd. [Merged]
- Filaments India Ltd.
- Futura Polymers Ltd. [Merged]
- Garden Polymers Pvt. Ltd.
- Jauss Polymers Ltd.
- L-Pack Polymers Ltd.



- **Mold-Tek Packaging Ltd.**
- **Pearl Engineering Polymers Ltd.**
- **Pearl Polymers Ltd.**
- **Polycon International Ltd.**
- **Radico Khaitan Ltd.**
- **Sachi Molding Solutions Pvt. Ltd.**
- **Sen Pet (India) Ltd.**
- **Shripet Cybertech Systems Ltd.**
- **South Asian Petrochem Ltd. [Merged]**
- **Sunrise Containers Ltd.**

Project at a Glance

PROJECT AT A GLANCE				(Rs. in lacs)			
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	40.00	40.00	Capital	0.00	112.85	112.85
Buildings	0.00	127.25	127.25	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	129.82	129.82	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	8.00	8.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	62.00	62.00	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	25.00	25.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	338.54	338.54
Preliminary & Pre-operative Exp	0.00	3.00	3.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	13.00	13.00	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	43.32	43.32				
TOTAL	0.00	451.39	451.39	TOTAL	0.00	451.39	451.39

Project at a Glance

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS				Per Share	Per Share				
	Rs	Rs	Rs	Rs	Rs	%	Rs	%	Rs	No.of Times	%
1-2	4.35	8.26	14.35	24.00	0.00	100.00	4.35	0.00	4.35	1.00	0.00
2-3	7.65	11.08	22.00	18.00	0.00	100.00	7.65	0.00	7.65	1.00	0.00
3-4	10.85	13.88	32.85	12.00	0.00	100.00	10.85	0.00	10.85	1.00	0.00
4-5	13.89	16.57	46.74	6.00	0.00	100.00	13.89	0.00	13.89	1.00	0.00
5-6	16.74	19.11	63.48	0.00	0.00	100.00	16.74	0.00	16.74	1.00	0.00



Project at a Glance

Year	D. S. C. R.			Debt / - Deposits Debt	Equity as- Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contrib ution	P/V Ratio		
	(Number of times)			(Number of times)	%	%	%	%	%	%				
Initial				3.00	3.00									
1-2	1.24	1.24		1.67	1.67	2.92	10.13%	4.19%	2.96%	536.41	32.39%	2.71	1.00	
2-3	1.59	1.41		0.82	0.82	1.75	11.87%	6.81%	4.47%	625.80	32.39%	2.91	1.19	
3-4	2.00	1.59	1.99	0.37	0.37	1.08	13.03%	8.65%	5.55%	715.20	32.39%	2.93	1.44	
4-5	2.47	1.78		0.13	0.13	0.69	13.80%	9.93%	6.31%	804.60	32.39%	2.84	1.73	
5-6	3.03	1.99		0.00	0.00	0.46	14.30%	10.82%	6.85%	894.00	32.39%	2.67	2.47	

Project at a Glance

BEP

BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	63.60%
Total BEP (% of Installed Capacity)	66.59%

IRR, PAYBACK and FACR

Internal Rate of Return .. (In %age)	26.12%
Payback Period of the Project is (In Years)	2 Years 4 Months
Fixed Assets Coverage Ratio (No. of times)	11.807

Table of Contents of the Project Report

1. District Profile & Geotechnical Site Characterization

1.1. General

1.2. Physical Characteristics

1.3. Climate

1.4. Transportation and Communications

1.5. Map

1.6. Economy

1.7. Culture & Attitudes

2. Introduction

3. Uses & Applications

4. Facts on PET Bottle & Its Recycling

- 4.1. Weight Analysis of PET Bottles**
- 4.2. Plastic Container Code**
- 4.3. Modernization of PET Bottle**

5. Advantage & Benefits

6. B.I.S. Specifications

- 6.1. 2828:1964 Glossary of terms used in the plastics industry**
- 6.2. 7019:1982 Glossary of terms in plastics and flexible packaging, excluding paper (first revision)**
- 6.3. 14534:1998 Guidelines for recycling of plastics**

7. Types of Plastic Recycling

8. Market Survey

8.1. PET and Containers

8.2. PET Containers

8.3. Market Structure

8.4. PET Bottle Recycling: Cash the Trash

8.5. Export

8.6. Global Demand

9. Financials & Comparison of Major Indian Players/Companies

9.1. About Financial Statements of CMIE Database

9.2. Profits & Appropriations

9.3. Total Liabilities

9.4. Total Assets

9.5. Net Cash Flow from Operating Activities

9.6. Section – I

9.6.1. Name of Company with Contact Details

9.6.2. Name of Director(S)

9.6.3. Plant Capacity

9.6.4. Location of Plant

9.6.5. Capital Expenditure Projects

9.6.6. Name of Raw Material(S) Consumed With Quantity

& Cost

9.7. Section – II

9.7.1. Income & Expenses

9.7.2. Profits

9.7.3. Forex Transaction

- 9.7.4. Liabilities**
- 9.7.5. Assets**
- 9.7.6. Growth in Assets & Liabilities**
- 9.7.7. Growth in Income & Expenditure**
- 9.7.8. Liquidity Ratios**
- 9.7.9. Profitability Ratio**
- 9.7.10. Return Ratios**
- 9.7.11. Cost as % ge of sales**
- 9.7.12. Working Capital & Turnover Ratios**
- 9.7.13. Structure of Assets & Liabilities(%)**
- 9.7.14. Cash Flow**

10. Export & Import Statistics Data of India

10.1. Export Statistics Data for Empty Pet Bottle

10.2. Import Statistics Data for Empty Pet Bottle

- 11. Present Manufacturers**
- 12. Specification of Machinery & Equipments**
- 13. Manufacturing Process**
 - 13.1. Process Description:**
- 14. Process Flow Diagram**
- 15. Suppliers of Raw Material**
- 16. Suppliers of Plant & Machinery**

17. Product, Machinery & Raw Material Photographs

17.1. Product Photographs

17.2. Machinery Photographs

17.3. Raw Material Photographs

18. Plant Layout

19. Quotation of Plant, Machinery and Equipments from Supplier

Project Financials

• Project at a Glance	Annexure
• Assumptions for Profitability workings	1
• Plant Economics.....	2
• Production Schedule.....	3
• Land & Building.....	4
Factory Land & Building	
Site Development Expenses	

- **Plant & Machinery.....5**
 - Indigenous Machineries**
 - Other Machineries (Miscellaneous, Laboratory etc.)**

- **Other Fixed Assets.....6**
 - Furniture & Fixtures**
 - Pre-operative and Preliminary Expenses**
 - Technical Knowhow**
 - Provision of Contingencies**

- **Working Capital Requirement Per Month.....7**
 - Raw Material**
 - Packing Material**
 - Lab & ETP Chemical Cost**
 - Consumable Store**

- **Overheads Required Per Month and Per Annum.....8**
 Utilities & Overheads (Power, Water and Fuel Expenses etc.)
 Royalty and Other Charges
 Selling and Distribution Expenses

- **Salary and Wages9**

- **Turnover Per Annum10**

- **Share Capital.....11**
 Equity Capital
 Preference Share Capital

- **Annexure 1 :: Cost of Project and Means of Finance**
- **Annexure 2 :: Profitability and Net Cash Accruals**
 - **Revenue/Income/Realisation**
 - **Expenses/Cost of Products/Services/Items**
 - **Gross Profit**
 - **Financial Charges**
 - **Total Cost of Sales**
 - **Net Profit After Taxes**
 - **Net Cash Accruals**

• **Annexure 3 :: Assessment of Working Capital requirements**

- **Current Assets**
- **Gross Working Capital**
- **Current Liabilities**
- **Net Working Capital**
- **Working Note for Calculation of Work-in-process**

• **Annexure 4 :: Sources and Disposition of Funds**

- **Annexure 5 :: Projected Balance Sheets**

- **ROI (Average of Fixed Assets)**
- **RONW (Average of Share Capital)**
- **ROI (Average of Total Assets)**

- **Annexure 6 :: Profitability Ratios**

- **D.S.C.R**
- **Earnings Per Share (EPS)**
- **Debt Equity Ratio**

• **Annexure 7 :: Break-Even Analysis**

- **Variable Cost & Expenses**
- **Semi-Variable/Semi-Fixed Expenses**
- **Profit Volume Ratio (PVR)**
- **Fixed Expenses / Cost**
- **B.E.P**

• **Annexure 8 to 11 :: Sensitivity Analysis-Price/Volume**

- **Resultant N.P.B.T**
- **Resultant D.S.C.R**
- **Resultant PV Ratio**
- **Resultant DER**
- **Resultant ROI**
- **Resultant BEP**

- **Annexure 12 :: Shareholding Pattern and Stake Status**
 - **Equity Capital**
 - **Preference Share Capital**
- **Annexure 13 :: Quantitative Details-Output/Sales/Stocks**
 - **Determined Capacity P.A of Products/Services**
 - **Achievable Efficiency/Yield % of Products/Services/Items**
 - **Net Usable Load/Capacity of Products/Services/Items**
 - **Expected Sales/ Revenue/ Income of Products/ Services/ Items**

- **Annexure 14** :: **Product wise Domestic Sales Realisation**
- **Annexure 15** :: **Total Raw Material Cost**
- **Annexure 16** :: **Raw Material Cost per unit**
- **Annexure 17** :: **Total Lab & ETP Chemical Cost**
- **Annexure 18** :: **Consumables, Store etc.**
- **Annexure 19** :: **Packing Material Cost**
- **Annexure 20** :: **Packing Material Cost Per Unit**

- **Annexure 21** :: **Employees Expenses**
- **Annexure 22** :: **Fuel Expenses**
- **Annexure 23** :: **Power/Electricity Expenses**
- **Annexure 24** :: **Royalty & Other Charges**
- **Annexure 25** :: **Repairs & Maintenance Expenses**
- **Annexure 26** :: **Other Manufacturing Expenses**
- **Annexure 27** :: **Administration Expenses**
- **Annexure 28** :: **Selling Expenses**

- **Annexure 29 :: Depreciation Charges – as per Books (Total)**
- **Annexure 30 :: Depreciation Charges – as per Books (P & M)**
- **Annexure 31 :: Depreciation Charges - as per IT Act WDV (Total)**
- **Annexure 32 :: Depreciation Charges - as per IT Act WDV (P & M)**
- **Annexure 33 :: Interest and Repayment - Term Loans**
- **Annexure 34 :: Tax on Profits**
- **Annexure 35 :: Projected Pay-Back Period and IRR**

**Niir Project Consultancy Services (NPCS)
can provide Detailed Project Report on
PET Bottle Recycling**

See more

<http://goo.gl/dGjgmU>

<http://goo.gl/CDYie3>

<http://goo.gl/RIY2Nz>





Visit us at

www.entrepreneurindia.co





**Take a look at
NIIR PROJECT CONSULTANCY SERVICES
on #Street View**

<https://goo.gl/VstWkd>





Locate us on Google Maps

<https://goo.gl/maps/BKkUtq9gevT2>





NIIR PROJECT CONSULTANCY SERVICES

An ISO 9001:2008 Company



Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*

Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

Niir Project Consultancy Services

106-E, Kamla Nagar, New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886

Mobile: +91-9811043595

Fax: +91-11-23841561

Website : www.entrepreneurindia.co

Take a look at NIIR PROJECT CONSULTANCY SERVICES on #StreetView

<https://goo.gl/VstWkd>





➤ <https://www.linkedin.com/company/niir-project-consultancy-services>



➤ <https://www.facebook.com/NIIR.ORG>



➤ <https://www.youtube.com/user/NIIRproject>



➤ <https://plus.google.com/+EntrepreneurIndiaNewDelhi>



➤ https://twitter.com/npcs_in



➤ <https://www.pinterest.com/npcsindia/>





For more information, visit us at:

www.entrepreneurindia.co