

File No.: (VIS 2024-25)-PL424-374-505

TECHNO-ECONOMIC VIABILITY STUDY REPORT OF RECYCLED POLYESTER YARNS / CHIPS (27,000 MTPA)

**SETUP BY
M/S TEXFIL PRIVATE LIMITED**

REPORT PREPARED FOR

M/S TEXFIL PRIVATE LIMITED

- Corporate Valuers
- Business/ Enterprise/ Equity Valuations
- Lender's Independent Engineers (LIE)
- Techno Economic Viability Consultants (TEV)
- Agency for Specialized Agency Monitoring (ASM)
- Project Techno-Financial Advisors
- Chartered Engineers
- Industry/ Trade Rehabilitation Consultants
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TABLE OF CONTENTS

SECTIONS	PARTICULARS	PAGE NO.
Part A	Report Summary	4
Part B	INTRODUCTION	
	1. About the Report	6
	2. Executive summary	6
	3. Purpose of the Report	10
	4. Scope of the Report	10
	5. Methodology/ Model Adopted	11
	6. Data Information received from	11
	7. Documents/ Data Referred	12
Part C	Company Profile	
	1. Company Overview	13
	2. Current/Proposed Shareholding Pattern	14
	3. Promoters/Directors Profile	14
Part D	Proposed Infrastructure Details	
	1. Proposed Location	21
	2. Google Map Location	21
	3. Google Map Layout	22
	4. Layout Plan	22
	5. Land Details	23
	6. Site pictures	23
	7. Building & Civil Works	26
	8. Plant and Machinery/ Equipment details	26
	9. Utilities	36
Part E	Project Technical details	
	1. Capacity of Proposed Recycled Polyester Plant	38
	2. Production Process	38
	3. Process Flow Chart	39
	4. Technical Specification of the Proposed Plant	41
	5. Technology Used	44
	6. Technological Assessment	44

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[Red Circular Stamp: Techno Engineering Consultants Pte Ltd. R.K. Associates]

	7. Testing/ Quality Assurance	46
	8. Manpower	46
Part F	Product Profile	
	1. Introduction	47
	2. Product Category	47
	3. Pricing Strategy	49
	4. Marketing Plan	49
Part G	Feedstock Analysis	51
Part H	Industry Overview & Analysis	54
Part I	SWOT Analysis	61
Part J	Project Cost and Means of Finance	63
Part K	Project Schedule	65
Part L	Statutory Approvals Licenses NOC	67
Part M	Company's Financial Feasibility	69
Part N	Conclusion	89
Part O	Disclaimer Remarks	91

PART A

REPORT SUMMARY

S. No.	PARTICULAR	DESCRIPTION
1.	Name of the Company:	M/s Texfil Private Limited
2.	Registered Address:	43, Community Centre, New Friends Colony, New Delhi - 110025
3.	Project Name	Manufacturing of Recycled Polyester Yarn / Chips from PET Waste
4.	Project Location:	Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220
5.	Project Type:	Manufacturing of Recycled Polyester Yarn / Chips from PET Waste (Post-Consumer & Pre-Consumer Textile Waste)
6.	Project Industry:	Textiles (Technical)
7.	Product Type / Deliverables:	Recycled Polyester Yarns / Chips (Post-Consumer & Pre-Consumer Textile Waste)
8.	Report Prepared for Organization:	M/s Texfil Private Limited
9.	TEV Consultant Firm:	M/s. R.K Associates Valuers & Techno Engineering Consultants (P) Ltd.
10.	Report type:	Techno-Economic Viability Report
11.	Purpose of the Report:	To assess Technical & Economic Viability for the purpose of seeking external financial assistance to start a green field Project.
12.	Scope of the Report:	To assess, evaluate & comment on Technical, Economical & Commercial Viability of the Project

[Handwritten Signature]



		as per data information provided by the client, independent Industry research and data/ information available on public domain.												
13.	Date of Report:	12 th December, 2024												
14.	Documents referred for the Project:	<p>A. PROJECT INITIATION DOCUMENTS:</p> <ul style="list-style-type: none">1. Project Report2. Financial Projections of the Project3. Project Proposed Schedule4. Statutory Approval Details5. Layout Plan <p>B. PROCUREMENT DOCUMENTS:</p> <ul style="list-style-type: none">1. List of Plant & Machinery along with acquisition costs for the same2. Process Flow Chart3. Proposed Map of the site4. Sale Deed of the Land <p>C. STATUTORY APPROVALS, LICENSES & NOCs</p> <ul style="list-style-type: none">a. Land conversion to Industrial/Non agriculture												
15.	Means of Finance:	Equity & Debt (D/E Ratio 2.00)												
16.	Key Financial Indicators:	<table><tr><th>Key Indicators</th><th>Value</th></tr><tr><td>Average DSCR</td><td>3.03</td></tr><tr><td>Average EBITDA Margin</td><td>41.84%</td></tr><tr><td>Avg. PAT Margin</td><td>28.46%</td></tr><tr><td>NPV & IRR</td><td>INR 478.87 Cr. & 37.65%</td></tr><tr><td>Payback Period</td><td>3.75 years</td></tr></table>	Key Indicators	Value	Average DSCR	3.03	Average EBITDA Margin	41.84%	Avg. PAT Margin	28.46%	NPV & IRR	INR 478.87 Cr. & 37.65%	Payback Period	3.75 years
Key Indicators	Value													
Average DSCR	3.03													
Average EBITDA Margin	41.84%													
Avg. PAT Margin	28.46%													
NPV & IRR	INR 478.87 Cr. & 37.65%													
Payback Period	3.75 years													

Note: Above financial indicators are based on the financial projections of the proposed project provided by the firm and assessment and analysis of the same done by us.



PART B

INTRODUCTION

1. ABOUT THE REPORT:

This is a Techno-Economic Viability Study Report of the proposed recycled polyester yarn / chips manufacturing plant (~27,000 MTPA) at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220, to be setup by M/s Texfil Private Limited.

2. EXECUTIVE SUMMARY:

M/s Texfil Private Limited was incorporated on 25th June 2021 under the Company's Act, 2013 as per information available in public domain to carry on the business of manufacture of other textiles.

It is a wholly owned subsidiary of M/s Filatex India Ltd (FIL). FIL is promoted by the Bhageria family hailing from Dist. Jhunjhunu, Rajasthan. This company was incorporated on 8th August 1990. FIL is engaged in the business of manufacturing of polyester and polypropylene multifilament yarns (commonly known as PFY) at its exiting unit at Dadra UT of Dadra & Nagar Haveli through extruder based technology of manufacturing of yarns and backward Integration with installation of continuous polymerization plant with manufacturing of polyester chips and direct melt spinning of yarns at its existing unit at Dahej, Gujarat. FIL's equity shares are listed on National Stock Exchange & Bombay Stock Exchange.

At Dadra, FIL, initially started with a small capacity for manufacture of POY of 5,000 MT p.a. in 1996 and gradually increased the same to 62,633 MT p.a. by the end of financial year 2013-14. FIL has also started manufacturing of Polypropylene Crimps and Textured Yarn which is a high value added product and now contributes 15% approximately to total turnover. FIL also added another value added product namely Fully Drawn Yarn (FDY) in its product range and the company is able to cater to diversified needs of its customers under one roof. The Dadra plant of the company is fully automated and ISO 9001/2015.

Filatex India Limited (FIL) has put up another unit for manufacture of 216,000 MTs/pa of poly-condensation and 108,000 MTs/pa of POY at Dahej Industrial Area, GIDC Dist. Bharuch, Gujarat. The said plant has become fully operational during Sept 2012. The plant at Dahej, Bharuch has the locational advantage due to its proximity to market. Surat & Silvassa account for more than 45% of total demand of POY & more than 85% of total demand for

chips in India. The company experienced various major gradual expansion in capacities and value-added products since inception to till date and has overall saleable capacity of over 410,000 MT per annum including in house captive thermal power plant of 30 MW/hr and ISO 14001/2015, ISO 45001/2018 and OEKO-TEX Standard 100.

As per the data/information available in public domain, below table represents the existing product portfolio of the company:

Particular	Description/ Property & End Use
PET Chips (Textile Grade)	<ul style="list-style-type: none"> PET (polyethylene terephthalate) chips are produced by granulating polyester formed in a polycondensation reaction of purified terephthalic acid (PTA) and mono-ethylene glycol (MEG). Properties: High Reaction Speed, High Degree of Polymerization, Diversified Packaging – Can be packaged and shipped according to customers' specific requirements. End Use: Manufacturing Polyester Yarn such as Partially Oriented Yarn (POY) and Full Drawn Yarn (FDY)
Partially Oriented Yarn (POY)	<ul style="list-style-type: none"> Polyester Partially Oriented Yarn commonly known as Polyester POY refers to multi-filament yarn that is only partially stretched. It is the primary form of yarn made by spinning polyester melt/chips. Properties: More durable than cotton, Does not fade on exposure to sunlight or soap, Better abrasion resistance, Wrinkle Resistant, Longer colour and print retention End Use: Shirting and Suiting, Sarees and ladies' dress wear, Primary raw material used to manufacture DTY
Full Drawn Yarn (FDY)	<ul style="list-style-type: none"> Polyester Fully Drawn Yarn commonly known as Polyester FDY refers to a multi-filament yarn that is fully stretched. As the name suggests FDY does not need to be processed further and therefore can be directly used to make fabrics. FDY is spun at much higher speeds and is coupled with heated drawing at the same time. FDY is available in two lusters, Semi-Dull and Bright. Properties: Dyeing consistency is excellent, Light-weight, Product quality is consistent, Low price End Uses: Apparels, Fashion Fabrics, Sportswear, Home Furnishing Fabrics, Upholstery, Car seat covers
Polyester Drawn Textured Yarn	<ul style="list-style-type: none"> Polyester Drawn Textured Yarn commonly known as Polyester DTY is a manufactured by processing Polyester POY. The yarn develops a texture by twisting and drawing it at the same time using heat. The yarn develops texture by a process involving hot drawing, twisting, thermosetting and de-twisting. It can be Non-Intermingle (NIM), having 0 - 10 knots/meter or Semi-Intermingle (SIM) having 40 - 50 knots/meter or High-Intermingle (HIM) having 100 - 120 knots/meter.

	<ul style="list-style-type: none"> • Properties: Can be made in different colours using doped dyed technology or traditional dyeing, Good insulation properties, Light weight with good covering properties, Can give a woolly and mat appearance, High wear and tear resistance, Very low moisture content • End Uses: Outer/Inner Garments, Woven and knitted fabrics, Skin-clinging garments, Home Furnishings, Upholstery, Seat Covers, Bags
Air Textured Yarn (ATY)	<ul style="list-style-type: none"> • Air-jet texturing process is a mechanical method, where cold air stream is used to produce bulked yarns of low extensibility. In this technology, very wide variety of feed yarns can be used. Air-textured yarns has distinctive appearance and physical characteristics of spun yarns. • Properties: The air jet bulked yarn has permanent crimps and loops and interlacing of filaments in the jet can cause the loops to be locked firmly in the yarn structure, so that subsequent twisting process becomes redundant. Loop frequency, loop dimensions, loop stability and physical bulk are the important characteristics of air jet textured yarns. • End Uses: Automotive products, Furnishing fabrics, Sewing threads, Shirting and blouses, Shoelaces, Tarpaulins
Polypropylene Yarn (PPY)	<ul style="list-style-type: none"> • Polypropylene Yarn also known as PP yarn is a lightweight yarn. Like Polyester Yarns, Polypropylene yarns can be made into POY, FDT and DTY. They can be made in many different colours by introducing master batches during the extrusion process. • Properties: Lower melting point, Lower specific gravity, Lightweight, Water repellent, U.V. Stabilized, Retains more heat, Abrasion and mildew resistant • End Uses: Hosiery, Filtration Fabric, Laces, Swim wear, Sportswear, Under garments, All knitting applications, All weaving applications
Narrow Woven Fabrics (NWF)	<ul style="list-style-type: none"> • Narrow Fabrics are woven textile having a width of 12 inches or less and have a selvedge on either side. They are small strips of fabric, often designed for a specific purposes. Filatex has been rapidly growing in narrow fabric industry. • Properties: High strength, Lower elasticity, High durability, Fabrics ravel and fray and have grains • End Uses: Innerwear, Military Equipment such as body Armor, helmets, parachutes and pack wedding, Automobile Accessories such as seat belts, Zippers

Brief snapshot of the financial position of M/s Filatex India Ltd. as per the annual report of FY 2024 is as under:

Snapshot of Financial Position of M/s Filatex India Ltd.as of 31 st March 2024	
Particulars	Amount (INR Cr)
Net worth	₹1,204.09 Cr



Snapshot of Financial Position of M/s Filatex India Ltd.as of 31 st March 2024	
Particulars	Amount (INR Cr)
Property, plant & equipment	₹1,347.56 Cr
Total borrowings	₹231.72 Cr
Total Assets	₹2,097.65 Cr
Revenue for FY24	₹4,300.10 Cr
Profit after tax for FY24	₹110.66 Cr

The company has been availing credit facilities under consortium arrangement led by Punjab National Bank with member banks viz. Bank of Baroda, IndusInd Bank Ltd and Yes Bank Ltd. Company is enjoying various credit facilities with its consortium member banks at present as under:

(INR Crores)					
Facilities	PNB	BOB	IBL	YBL	Total
Fund Base working capital limits	50.00	35.00	28.00	35.00	198.00
Non- Fund Base working capital limits	275.00	200.00	175.00	200.00	850.00
Term Loans	24.01	-	-	-	24.01
Total	349.01	235.00	203.00	235.00	1022.01

Filatex India Limited (FIL) (Promoters), has established a new subsidiary company "M/s Texfil Private Limited" under which promoters has proposed to set up a Greenfield project at Bharuch in Gujarat, for production of recycled polyester yarn / chips stepping towards waste management of the industry. Company has gone through a long term R&D and developed a much-refined Chemical Recycling Process for producing r-PET for which M/s Filatex has secured a patent (IPR) *Patent No: 405512 Dated: 2nd June 2021* from Government of India.

The project aims to establish a sustainable manufacturing unit for the production of recycled polyester yarn/chips from both post-consumer and pre-consumer PET (polyethylene terephthalate) waste, specifically textile waste like yarn, fabric and garments along with PET bottle. This initiative will contribute to the global sustainability movement by reducing reliance on petroleum, lowering greenhouse gas emissions, reducing PET waste and promoting the circular economy.

The recycled polyester yarn / chips manufacturing plant is proposed to be setup with total investment of INR 300.00 Crore, which is proposed to be funded through promoter's equity of INR 100.00 Crore and bank loan of INR 200.00 Crore.



As per the sale deed shared by the client/company, the Company has purchased 58,643.00 sq. m. of land at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220. Application for Change of land use (CLU) has been filed with Collector/ District Magistrate, Bharuch on 14th October 2024, for setting up the proposed recycled polyester yarn / chips manufacturing plant.

As per data/information provided to us, the company is yet to obtain Statutory Approvals/NOC's such as Building Plan approval, Labour License, Consent to Establish etc. from the respective authorities (*Refer the section Statutory Approval in the later part of the report*).

During the site visit, we found that land is lying vacant, was waterlogged and land demarcation has not been done. Construction & civil works shall commence once CLU is approved. (*Kindly refer the site pictures captured during the survey attached in the later section of the report*).

The plant needs about 3000 KWA/hr of power at full capacity to meet process energy requirement. Company shall apply for temporary power connection to meet power needs for construction & civil works in near future. Company has planned to achieve the C.O.D by 01st July 2026 and installed capacity would be ~27,000 MTPA.

At present, the company is in discussion with bank to fund the project through a term loan of INR 200.00 Crore. In this regard M/s Texfil Private Limited has appointed R.K. associates to assess the Techno-Economic Viability of the proposed Plant for producing recycled polyester yarn / chips at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220. The company plans to achieve the financial closure by December 2024 (expected).

3. **PURPOSE OF THE REPORT:** To assess Project's Technical and Financial Feasibility for lender's requirement.
4. **SCOPE OF THE REPORT:** To only assess, evaluate & comment on Technical & Financial Feasibility of the proposed recycled polyester yarn / chips manufacturing plant being set up by M/s Texfil Private Limited as per the information provided by the Company.



NOTES:

- *Project status is taken as per the Site inspection carried out by our survey team.*
- *Scrutiny about the company, background check, and credibility, credit worthiness of the company or its promoters is out-of-scope of this report.*
- *Any verification of the documents/ information from originals/ source is out-of-scope of this report.*
- *This report is only an opinion in respect to Technical and Financial Feasibility of the project as per the future Projections provided by the firm and independent analysis done by us and doesn't contains any recommendations including taking decision on the loan or any other financial exposure.*
- *This is not an audit activity of any kind. We have relied upon the data/ information shared by the company in good faith.*
- *Any review of the existing business of the promoters is out of scope of this report.*
- *This is not a Detailed Project Report or a detailed design or architecture document. Land and property details mentioned in the report is only for illustration purpose as per the information provided to us by the client. The same doesn't tantamount for taking any responsibility regarding its legality, ownership and conforming to statutory norms.*

5. METHODOLOGY/ MODEL ADOPTED:

- a. Data/ Information collection.
- b. Review of Data/ Information collected related to TEV study.
- c. Independent review & assessment of technology used and financial projections provided by the company.
- d. Projections of Revenue, P&L, Balance Sheet, Working Capital Schedule, Depreciation Schedule, Loan Schedule as per the inputs given by the company and assessed by us.
- e. Calculation of key financial indicators and ratio analysis including DSCR, NPV & IRR and payback period of the project.
- f. Report compilation and Final conclusion.

- 6. DATA/ INFORMATION RECEIVED FROM:** All the data/Information has been received from Mr. Vikas Gupta and the required details about him shown in the below table:

Particulars	Details
Name	Mr. Vikas Gupta
Company	M/s Filatex India Ltd.



Email Address	vikas.gupta@filatex.com
Contact No.	+91-9891511122

7. DOCUMENTS / DATA REFERRED:

- Financial Projections of the proposed project up to FY 2035.
- Information memorandum and description of the company (DPR)
- Promoter's Details.
- Proposed Total project cost & Production flow chart
- Sale deed of the land, List of Plant and Machinery along with their acquisition cost.
- Quotations and Purchase Orders provided by the client/company.
- Site/Layout Plan.
- Manpower proposal.
- Certificates of Statutory approvals/NOC's.



PART C

COMPANY PROFILE

1. COMPANY OVERVIEW:

As per information available in public domain, M/s Texfil Private Limited was incorporated on 25th June 2021 under the Companies Act, 2013 as an unlisted company limited by shares. The company is incorporated with the objective to carry on the business of manufacture of other textiles as per information available in public domain. Below table shows the incorporation details of the company:

Incorporation Details of the Company	
Particular	Description
Company / LLP Name	M/s Texfil Private Limited
Date of Incorporation	25 th June 2021
CIN	U17299DL2021PTC382764
Company Category	Unlisted Company limited by Share
Company Subcategory	Non-govt. company
ROC	New Delhi
Registered Address	43, Community Centre, New Friends Colony, New Delhi - 110025
Authorized Capital	INR 10,00,000/-
Paid up Capital	INR 20,000/-

Source: Ministry of Corporate Affairs (MCA) website.

The Company is a wholly owned subsidiary of M/s Filatex India Ltd. M/s Filatex India Ltd. (FIL) is promoted by the Bhageria family hailing from Dist. Jhunjhunu, Rajasthan. This company was incorporated on 8th August 1990 and received its certificate of commencement of business on 5th September 1990.

FIL is engaged in the business of manufacturing of polyester and polypropylene multifilament yarns (commonly known as PFY) at its exiting unit at Dadra UT of Dadra & Nagar Haveli through extruder based technology of manufacturing of yarns and backward integration with installation of continuous polymerization plant with manufacturing of polyester chips and

direct melt spinning of yarns at its existing unit at Dahej, Gujarat. FIL's equity shares are listed on National Stock Exchange & Bombay Stock Exchange.

The Directors of the company are Mr. Madhu Sudhan Bhageria (DIN: 00021934), Mr. Purrshottam Bhageria (DIN: 00017938) and Mr. Madhav Bhageria (DIN: 00021953). In this company, the promoters have proposed to setup 75 MT per day or ~27,000 MT per annum Polyester Yarn/Chips manufacturing facility.

2. CURRENT/PROPOSED SHAREHOLDING PATTERN:

As per the data/information provided by the client, current shareholding pattern is as below:

Name of Shareholder	No. of shares held	% of holding
M/s Filatex India Ltd.	2,000 of Rs. 10/- each	100%

Source: Data/ Information provided by the company

3. KEY DIRECTOR'S PROFILE:

Mr. Madhu Sudhan Bhageria, Mr. Purrshottam Bhageria and Mr. Madhav Bhageria are the directors of M/s M/s Texfil Private Limited.

(A) Directors/Promoters Details					
Name	DIN	Age	Address	Designation	Contact Details
Mr. Madhu Sudhan Bhageria	00021934	65	10, Oak Drive, DLF Chattarpur Farms, Chattarpur, New Delhi - 110074	Director	Not available
Mr. Purrshottam Bhageria	00017938	63	2, Pine Drive, DLF Chattarpur Farms, Chattarpur, New Delhi - 110074	Director	Not available
Mr. Madhav Bhageria	00021953	61	6, Oak Drive, DLF Chattarpur Farms, Chattarpur, New Delhi - 110074	Additional Director	Not available
(B) Education & Experience					
Mr. Madhu	<ul style="list-style-type: none"> Appointed As Director on 25th June 2021. 				

Sudhan Bhageria	<ul style="list-style-type: none"> As per data/information shared by the client, is a Commerce graduate from Shri Ram College of Commerce, Delhi University and has experience of more than three decades in Polyester Industry. He is also Chairman of PHDCCI Textile Committee and holding directorship in various companies. He has over four decades of financial, operational and strategic planning experience in synthetic and polyester yarn, environment and energy conservation.
Mr. Purshottam Bhageria	<ul style="list-style-type: none"> Appointed As Director on 25th June 2021. As per data/information shared by the client, he is a MBA from Cornell University, USA. He is a member of Managing Committee of PHD Chamber of Commerce & Industry. He has diverse experience in corporate affairs, policy perspective, investments, compliance and legal issues.
Mr. Madhav Bhageria	<ul style="list-style-type: none"> Appointed as Director on 14th May 2024. As per data/information shared by the client, Mr. Madhav Bhageria is a commerce graduate from Hindu College, Delhi University and looks after plant operations and marketing functions of the Filatex based at Surat & Mumbai. He is also a Promoter Director of Tapti Valley Education Foundation which is an International School in Surat. He has over 37 years of experience in marketing, operations, insurance and contracts

Source: Data/ Information provided by the company and extracted from MCA website.

Below tables shows the information of the companies with which each Director is associated to give a basic background detail of the Directors as found on public domain in general/ tertiary category research.

MR. MADHU SUDHAN BHAGERIA

S. No	Company Name	Designation	Original Date of Appointment	Date Of Appointment at Current Designation
1	Azimuth Investments Limited (CIN: U52109DL1986PLC025061)	Director	30 th March 2021	13 th September 2021
2	Nouvelle Securities Private Limited (CIN: U67120DL1992PTC048715)	Director	16 th May 2011	29 th September 2011

3	Fargo Facilities Management Private Limited (CIN: U93091DL2006PTC149699)	Director	13 th June 2006	13 th June 2006
4	Fargo Developers and Infrastructure Private Limited (CIN: U74899DL2005PTC141551)	Director	15 th June 2015	28 th June 2015
5	Vrinda Farms Private Limited (CIN: U01403DL1992PTC050013)	Director	11 th March 2013	30 th September 2013
6	Hill Estates Private Limited (CIN: U70101DL1991PTC046936)	Director	10 th June 2015	30 th September 2015
7	SMC Yarns Private Limited (CIN: U74899DL1989PTC035449)	Director	13 th March 1989	13 th March 1989
8	Grand Estates Private Limited (CIN: U70101DL1995PTC070885)	Director	15 th June 2004	15 th June 2004
9	Filatex India Limited (CIN: L17119DN1990PLC000091)	Managing Director	30 th July 2003	30 th July 2003
10	Texfil Private Limited (CIN: U17299DL2021PTC382764)	Director	25 th June 2021	25 th June 2021
11	Vantage Buildwell Private Limited (CIN: U45201DL2006PTC144783)	Director	15 th June 2015	29 th September 2015
12	Nectar Infrastructure Private Limited (CIN: U45201DL2006PTC147142)	Director	06 th October 2006	06 th October 2006
13	Rajasthan Tilters Limited (CIN: U55101DL2010PLC200153)	Director	15 th March 2010	15 th March 2010

Source: Information extracted from MCA website & public domain.



MR. PURRSHOTTAM BHAGERIA

S. No	Company Name	Designation	Original Date of Appointment	Date Of Appointment at Current Designation
1	Cardiobionic Medtech Private Limited (CIN: U32500DL2024PTC435305)	Director	09 th August 2024	09 th August 2024
2	Azimuth Investments Limited (CIN: U52109DL1986PLC025061)	Additional Director	30 th November 2023	30 th November 2023
3	Texfil Private Limited (CIN: U17299DL2021PTC382764)	Director	25 th June 2021	25 th June 2021
4	Cardiobionic India Private Limited (CIN: U33125DL2021PTC378674)	Director	16 th March 2021	16 th March 2021
5	Blossom Infrastructure Private Limited (CIN: U45201DL2005PTC134717)	Director	12 th January 2012	28 th September 2012
6	Elevate Developers Private Limited (CIN: U45201DL2005PTC136383)	Director	01 st January 2008	29 th September 2008
7	Vantage Buildwell Private Limited (CIN: U45201DL2006PTC144783)	Director	01 st January 2008	29 th September 2008
8	Ardent Infrastructure & Developers Private Limited (CIN: U45201DL2006PTC147197)	Director	07 th March 2006	07 th March 2006
9	Rajasthan Tilters Limited (CIN: U55101DL2010PLC200153)	Director	06 th February 2017	29 th September 2017
10	Helios Infrastructure and Projects Ltd. (CIN: U70109DL2006PLC149704)	Director	13 th June 2006	13 th June 2006
11	Maan Softech Private Limited (CIN: U72300DL2007PTC160320)	Director	31 st March 2009	31 st March 2009
12	Vrinda Farms Private Limited	Director	08 th August 2022	30 th September 2022

	(CIN: U01403DL1992PTC050013)			
13	Fargo Estates Private Limited (CIN: U74899DL1994PTC060565)	Director	16 th March 2011	30 th September 2011
14	Fargo Developers And Infrastructure Private Limited (CIN: U74899DL2005PTC141551)	Director	06 th October 2005	06 th October 2005
15	Animate Infrastructure Private Limited (CIN: U74899DL2006PTC144439)	Director	23 rd January 2006	23 rd January 2006
16	Fargo Facilities Management Private Limited (CIN: U93091DL2006PTC149699)	Director	28 th March 2011	28 th September 2011
17	V.D.Estates Private Limited (CIN: U70101DL1996PTC080567)	Director	08 th May 2006	08 th May 2006
18	Filatex India Limited (CIN: L17119DN1990PLC000091)	Whole-Time Director	30 th July 2003	30 th July 2003
19	PHD Chamber Of Commerce and Industry (CIN: U74899DL1951NPL001947)	Director	26 th October 2017	26 th October 2017
20	Nouvelle Securities Private Limited (CIN: U67120DL1992PTC048715)	Director	24 th November 1993	24 th November 1993

Source: Information extracted from MCA website & public domain.

MR. MADHAV BHAGERIA

S. No	Company Name	Designation	Original Date of Appointment	Date Of Appointment at Current Designation
1	Texfil Private Limited (CIN: U17299DL2021PTC382764)	Additional Director	14 th May 2024	14 th May 2024
2	Tosca Electronics Private Limited (CIN: U32209MP1989PTC005491)	Director	10 th April 013	10 th April 013
3	Cardiobionic India	Director	16 th March 2021	16 th March 2021

	Private Limited (CIN: U33125DL2021PTC378674)			
4	Valour Properties Private Limited (CIN: U45200GJ2011PTC065959)	Director	18 th June 2011	18 th June 2011
5	Lustrous Properties Private Limited (CIN: U45200GJ2011PTC065960)	Director	18 th June 2011	18 th June 2011
6	Valor Procon Private Limited (CIN: U45200GJ2011PTC065990)	Director	20 th June 2011	20 th June 2011
7	Sky Scraper Constructions and Developers Private Limited (CIN: U45201MP1989PTC005458)	Director	10 th April 2013	10 th April 2013
8	Varuna Properties Private Limited (CIN: U45202GJ2011PTC065964)	Director	18 th June 2011	18 th June 2011
9	Rajasthan Tilters Limited (CIN: U55101DL2010PLC200153)	Director	15 th March 2010	15 th March 2010
10	Shah Poddar Nihlani Organisers Private Limited (CIN: U70100GJ2005PTC047317)	Director	22 nd May 2006	22 nd May 2006
11	Janus Properties Private Limited (CIN: U70101GJ2011PTC065891)	Director	14 th June 2011	14 th June 2011
12	Dabonaire Real Estate & Investment Private Limited (CIN: U70101MP1989PTC005441)	Director	10 th April 2013	10 th April 2013
13	Sparsh Property Private Limited (CIN: U74899DL1996PTC079041)	Director	05 th August 2022	30 th September 2022
14	Animate Infrastructure	Director	01 st May 2008	29 th September 2008

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(Circular stamp: Engineering Consultants Pvt. Ltd. R.K. Associates)

	Private Limited (CIN: U74899DL2006PTC144439)			
15	Amazer Global Trade Private Limited (CIN: U74999GJ2018PTC105070)	Director	02 nd November 2018	02 nd November 2018
16	Tapti Valley Education Foundation (CIN: U80301GJ2008NPL054071)	Director	28 th May 2008	28 th May 2008
17	Fabiola Farms & Dairy Products Private Limited (CIN: U01111MP1989PTC005264)	Director	31 st July 1989	31 st July 1989
18	Abhiruchi Fashion Garments Private Limited (CIN: U01810MP1989PTC005449)	Director	10 th April 2013	10 th April 2013
19	Gunjan Communications And Electronics Private Limited (CIN: U32205MP1989PTC005457)	Director	10 th April 2013	10 th April 2013
20	Galadiator Chemicals Pvt. Ltd. (CIN: U24117MP1989PTC005414)	Director	10 th April 2013	10 th April 2013
21	Filatex India Limited (CIN: L17119DN1990PLC000091)	Whole-Time Director	30 th July 2003	30 th July 2008

Source: Information extracted from MCA website & public domain.

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PART D

PROPOSED INFRASTRUCTURE DETAILS

1. PROPOSED LOCATION:

The proposed plant will be set up by M/s Texfil Private Limited at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220, over an area of 58,643.00 sq. m. as per the sale deed provided to us by the Company.

The property is having the proximity to the civic amenities such as railway station is situated ~37 km away and airport is situated ~112 km away from the proposed plant location. The proposed plant is near to chemical industrial zoning, Dahej Port and mutiple chemicals plants and is adjacent to 15 mtr. wide road.

Table: 1 is showing the Connectivity Details of the Proposed Location.

Table: 1 Connectivity Details of the Proposed Location	
Connectivity	Details
Road	Dahej-Bharuch Highway - ~2 km away
Rail	Bharuch Railway Station - ~37 km away
Airport	Vadodara Airport - ~112 km away

Source: Google Map

LOCATION MAP:

- a) **Google Map Location:** The proposed recycled polyester yarn / chips manufacturing plant will be set up at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220 with GPS coordinates 21°42'10.7" North and 72°42'27.3" East as per the Google map attached below:

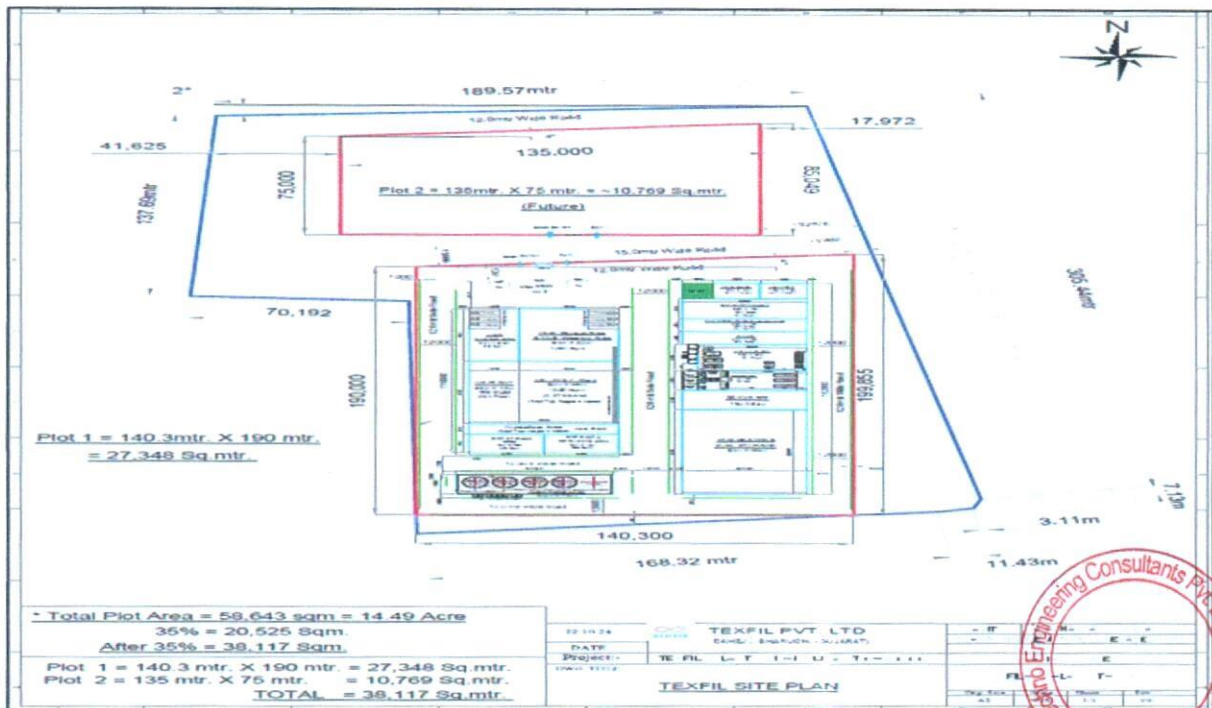


- b) **Google Map Layout:** Demarcation of the land with approximate measurement on the Google map is attached in the below picture:



2. LAYOUT PLAN:

As per the data/information provided by the Client/Company, the site/layout plan has been prepared by Mr. Anupam Acharya who is employed as Project Head in M/s Texfil Private Limited. Site/Layout approval is yet to be applied. For reference, layout plan has been attached below:



3. LAND DETAILS:

As per the sale deed executed on 21st August 2024, Company has purchased 5.8643 hectares (58,643 sq. m.) of land at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil Vagra Distt, Bharuch, Gujarat - 392220. Application for Change of land use (CLU) has been filed with Collector/ District Magistrate, Bharuch on 14th October 2024, for setting up the proposed recycled polyester yarn / chips manufacturing plant.

As per sale land deed, ~INR 10 Cr is the consideration for cost of land and other ancillary costs viz. viz. registration fees, stamp duty and other levies amount to ~INR 0.59 Cr. The actual total acquisition cost of land is Rs. 10.59 crores as per detail as under:

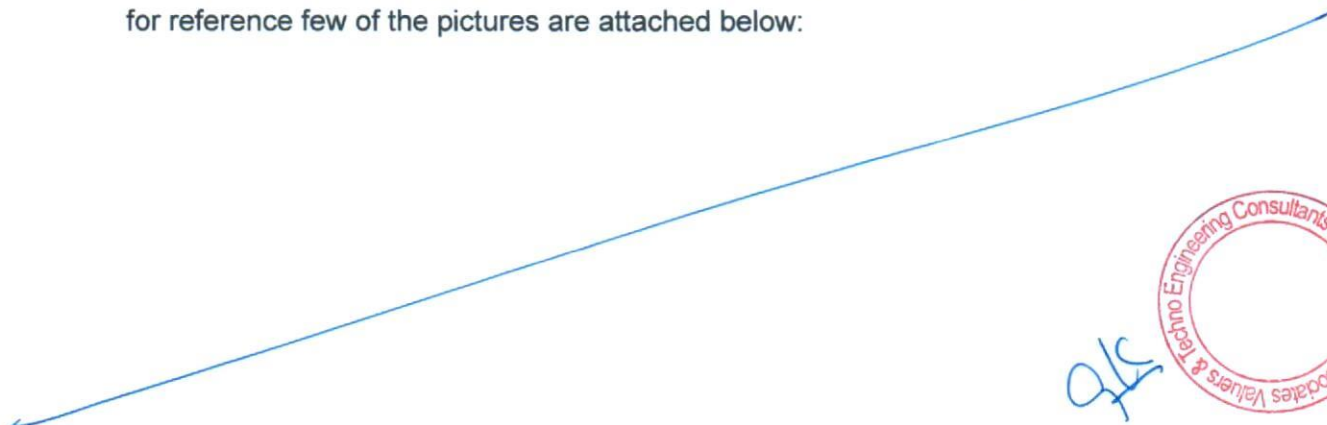
• Cost of Land	:	INR 9,99,84,400/-
• Stamp Duty	:	INR 48,99,300/-
• Registration fees	:	INR 10,00,750/
• Total Cost of acquisition	:	INR 10,58,84,450

Various other capital cost amounting to INR 1.41 Cr is expected to be incurred on account of other fees and charges for levelling and other necessary development on this land. Thus, the total estimated cost of land acquisition is Rs 12.00 Cr.

As per site plan, total ground coverage shall be 65% of total land area of 58,643 sq. mt. i.e. 38,117 sq. mt. Initially the plant shall be developed on 27,348 sq. mt. of land (Plot 1). 10,769 sq. mt. of land is left for future development (Plot 2). No further land would be required to be purchased for capacity expansion. Total covered area of plant on Plot 1 shall be 11,702 sq. mt.

Currently, the land is lying vacant, demarcation has not been done and cannot be used for industrial purposes.

4. **SITE PICTURES:** Site pictures were captured during the site survey on 29th October 2024, for reference few of the pictures are attached below:







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5. BUILDING & CIVIL WORKS:

According to the site/layout plan, the plant would be spreading over an area of 27,348 sq. mt. and covered area would be 11,702 sq. mt. The Company has estimated the total civil works cost at INR 35 Cr as shown in the table below:

S No.	Description	Size (Sq. Mt.)	Rate per Sq. Mt.	Amount (INR Cr)
1	Main Plant Building- Recycling Plant, G + 4, (2000 x 5 M ²)	10,000	17,000	17.00
2	Main Plant Building - Polymerization Plant G+4, (730x 5) M ²	3,650	17,000	6.20
3	Utility and HTM Heater Shade and ETP (1500 + 400 +600) + Tanks	2,500	12,000	3.00
4	Tank farm Area + Storage Tank Foundations (45 x 32), 6 Tanks	1,395	12,000	1.67
5	Raw Material Storage	2,000	12,000	2.40
6	Electrical Transformer, HT Panel Room etc.	1,800	12,000	2.16
7	Office Admin Block G+2 (400 x3)	1,200	12,000	1.44
8	Misc Others			1.13
	Total			35.00

As a TEV consultant, the estimated Building & Civil works cost has been verified independently by us, which we found reasonable & in the permissible range. Building construction cost depends upon type of building structure, floor height, type of flooring, finishing and other external factors.

The basic construction cost INR 17,000/- & INR 12,000/- per sq. mt. is taken by the client which is within the construction defined by the CPWD Plinth Area Rates 2023 & other industrial benchmark. During the site visit, we found that land is lying vacant, was waterlogged and land demarcation has not been done. Construction & civil works shall commence once CLU is approved.

6. PLANT & MACHINERY/ EQUIPMENTS DETAILS:

The broad heads under which major equipment, plant & machinery cost is expected to be incurred is shown in the table below:

S No.	Description	Amount (INR Cr)
1	Main Plant Machineries with Utilities - Recycle plant	145.00
2	Main Plant Machineries with Utilities - Polymerization Plant	47.00

3	Misc. Fixed Assets	3.50
4	Power & Water lines	16.00
5	Erection & Commissioning	16.00
6	Contingencies	10.00
	Total	237.50

a. MAIN PLANT MACHINERIES WITH UTILITIES - RECYCLE PLANT:

The company's management has finalized the vendors for some of these equipment, and the final negotiation with these vendors is in process as per information provided by the client. Below table shows the details of Main Plant Machineries with Utilities - Recycle plant along with expected cost and suppliers as per quotation of the respective vendor's shared by the client:

Cost Estimation of Main Plant Machineries with Utilities - Recycle plant				
S. No.	Equipment	Qty.	Amount	Expected Supplier
1.	Compressor	1	45,36,000	Chicago Pneumatic Compressors
2.	Compressor	2	54,000	Chicago Pneumatic Compressors
3.	Thermopack (Hot Oil Heater)	1	14,71,00,375	Heatex Industries Limited
4.	Cooling Tower	1	63,42,500	Nextjen Cooling Towers Pvt Ltd, Baroda
5.	Cooling Tower	1	22,12,500	Nextjen Cooling Towers Pvt Ltd, Baroda
6.	Centrifugal Chiller	1	1,32,19,540	Trane Technologies India Pvt Ltd
7.	Centrifugal Chiller	1	92,67,720	Trane Technologies India Pvt Ltd
8.	Centrifugal Chiller	1	18,88,000	Trane Technologies India Pvt Ltd
9.	Centrifugal Chiller	1	4,72,000	Trane Technologies India Pvt Ltd
10.	Chiller (VAM Type)	1	2,51,07,898	Broad Air Conditioning India Pvt. Ltd
11.	Softener Plant	1	53,10,000	Anil & Co.
12.	Effluent Treatment Plant	1	47,20,000	Anil & Co.
13.	D M Plant	1	47,20,000	Anil & Co.
14.	Nitrogen Plant	1	21,65,900	R. K. Engineering

15.	MVR Piller Comp	2	9,29,06,014	Piller Blower & Compressors Gmbh
16.	MVR Chemprocess	1	24,15,16,000	Chem Process systems P. Ltd
17.	De-polymerization Reactors, and Holding tanks with Agitators	Lot	10,75,53,661	Technofab Engineering Services
18.	Re- Polymerization Plant Reactors with Agitators and Vacuum System	Lot	17,25,16,000	Zhicheng Chemical Ltd
19.	Engineering Services	1	2,45,44,000	Shiva Engineering Services
20.	XB-JF800 Milling Shredder	1	1,34,90,350	Zhangjiagang Xinbei Machinery Co. Ltd
21.	Plug Valves	Lot	1,39,28,285	Valves Industries, Mumbai
22.	Valve	1	66,72,917	National Engineering Corporation
23.	BHS Rotary Pressure Filter	1	33,59,63,700	BHS Sonthofen Gmbh, Germany
24.	Valves	1	82,12,564	Shanghai Cando Machinery & Equipment Co Ltd
25.	TOV System Package	1	55,76,680	Mansco Products, USA
26.	Crystallizer for BHET Crystallization	3	1,73,46,000	V Tech Engineering
27.	Crystallizer for BHET Crystallization	18	4,35,42,000	V Tech Engineering
28.	Crystallizer for BHET Crystallization	6	1,09,74,000	V Tech Engineering
29.	100 M2 Sharplex Vertex Pressure Leaf Filter	9	6,37,06,500	Sharplex Filters (India) Pvt. Ltd
30.	Spare set of filter leaves for 100 M2 VPLF	1	21,78,000	Sharplex Filters (India) Pvt. Ltd
31.	100M2 Sherplex Pulsejet Candle Filter	9	10,78,11,000	Sharplex Filters (India) Pvt. Ltd
32.	Extra Cloth	1	4,35,600	Sharplex Filters (India) Pvt. Ltd



33.	Pumps	1	44,80,630	Rushabh Enterprises
Total			INR 1,50,05,05,421	

Source: Data/information provided by the client.

The total estimated cost for Major Plant Machineries with Utilities - Recycle plant is ~INR 150 Cr including the applicable GST, customs, freight and all other incidental expenses. However, the Company has considered cost for Main Plant Machineries with Utilities - Recycle plant at ~INR 145 Cr as final negotiation with the vendors is still in process. The estimated cost of the Recycle Plant has been provided to us by the client as per the quotations received by the Company.

b. Main Plant Machineries with Utilities - Polymerization Plant

Expect for the main plant, company's management is yet to finalize the vendors for rest of the equipment. Below table shows the details of Main Plant Machineries with Utilities - Polymerization Plant along with expected cost estimated by the client.

Cost Estimation of Main Plant Machineries with Utilities - Polymerization Plant				
S. No.	Equipment	Qty.	Amount	Expected Supplier
	Jacketed 3way plug valve pneumatic actuated	1	1,56,940	-
2.	Design-Supply of Structure Packed & try Column	1	14,16,000	-
3.	Supply of Paste transfer and Feed Pump 4 Nos	4	13,45,200	-
4.	Supply of Flush Bottom Valve & Flushing valve Feeding Sys	1	8,04,760	-
5.	Maag make Prepoly & Polymer Gear Pump	1	62,79,000	-
6.	Details Engineering and Stress Analysis Pipe -	1	21,53,500	-
7.	HTM Process and Dosing Centrifugal Pump	1	38,05,000	-
8.	Polymer Jacket Valves	1	64,91,000	-
9.	CS Bellow Seal Globe Valves for Hot Oil	1	65,20,000	-
10.	Dow Reboiler & Column Condenser	1	17,11,000	-
11.	SS CS MS Tank Mat & Fab Charges	1	1,01,34,000	-



12.	Chips Bagging M/c with Conveyor	1	22,42,000	-
13.	Spring Supports for HTM and Jacket Lines	1	2,35,000	-
14.	SS Seamless Pipe/Fitting Vapor Line	1	11,06,000	-
15.	Rotary Valve 2500mm for PTA Handling 7TP	1	3,89,000	-
16.	HTM CS Strainers & Process SS Strainers	1	36,58,000	-
17.	DM Water Band Filter System Conveyor type	1	3,91,000	-
18.	Safety Valves Leser	1	8,38,000	-
19.	MS Stru Mat Stripper Col P.F., HTM Pump Tank P.F.	1	31,08,000	-
20.	Polymer Transfer Line with CS Jacket Ma	1	83,02,000	-
21.	Radiography for HTM PL/SS PL/VL	1	6,60,000	-
22.	Jacketed 3way plug valve pneumatic actuated	1	1,56,940	-
23.	Supply of Paste transfer and Feed Pump 4 Nos	4	13,45,200	-
24.	Supply of Flush Bottom Valve & Flushing valve Feeding Sys	1	8,04,760	-
25.	Monomer Pump	1	38,46,800	-
26.	Under Water Strand Palletizing System	1	2,14,17,000	-
27.	Duplex CPF System	1	69,70,000	-
28.	HTM Process and Dosing Centrifugal Pump f	1	38,05,000	-
29.	PHE f	1	20,65,000	-
30.	Details Study & Hydraulic Bal HTM Net	1	2,95,000	-
31.	Rotary Valve 2500mm for PTA Handling 7TP	1	3,89,000	-
32.	HTM Cooler Fin Tube 40 NB	1	72,000	-
33.	SS Ball Valve Flanged Peak & CS Non Return Valve	1	54,80,000	-
34.	Safety Valves	1	8,38,000	-



35.	CS & SS piping Mat for OSBL	1	22,88,000	-
36.	Pre Poly & PGP Inlet/Outlet mating flange	1	4,72,000	-
37.	Steel Structure for Utility Pipe Rack & Staircase	1	70,00,000	-
38.	Flame Proof Hoist 2 /10Ton-3/1 Nos	1	14,14,000	-
39.	SS Ball Valve Flanged PTFE	1	29,58,000	-
40.	Rapture Disc for Reactors & Process	1	2,13,000	-
41.	Flame Arrester SS 304	1	1,33,000	-
42.	Expansion Bellow Joint SS 304	1	1,18,000	-
43.	Additive tanks agitator Qty 3 Nos	3	5,31,000	-
44.	Radiography for HTM PL/SS PL/VL	1	6,60,000	-
45.	Polymer Transfer Line with CS Jacket Ma	1	83,02,000	-
46.	Miscellaneous Items of Mech	1	20,46,000	-
47.	Painting of Structure & Pipe Rack	1	15,00,000	-
48.	SS Seamless Pipe/Fitting Vapor Line	1	11,06,000	-
49.	Spring Supports for HTM and Jacket Lines	1	2,35,000	-
50.	Add Qty of Spring Support	1	1,87,000	-
51.	Hot Insulation Material Charges	1	79,62,000	-
52.	Additive tanks agitator Qty 3 Nos	3	5,31,000	-
53.	Dynisco Adaptors	1	1,26,732	-
54.	Erection & Lab Charge	1	40,00,000	-
55.	Steel Structure for 7-14 Mtr Platform/Ladder	1	20,00,000	-
56.	Painting of Structure & Pipe Rack	1	9,46,000	-
57.	Add Qty of Spring Support	1	1,87,000	-
58.	CS & SS piping Mat for OSBL	1	22,88,000	-
59.	Pre Poly & PGP Inlet/Outlet mating flange	1	4,72,000	-



60.	Flame Proof Hoist 2 /10Ton-3/1 Nos	1	14,14,000	-
61.	Rapture Disc for ES1 & Process	1	2,13,000	-
62.	Flame Arrester SS 304	1	1,33,000	-
63.	Expansion Bello Joint SS 304	1	1,18,000	-
	Mechanical Total	1	15,87,83,832	
64.	Instrument Perforated Cable Tray	1	19,61,973	-
65.	Instrumentation Structural Steel CS ERW Pipe	1	6,91,654	-
66.	Instrument Material Takeoff (MTO)	1	13,17,622	-
67.	Instrument Signal Cables	1	50,00,000	-
68.	Flow Meter (Vam+Process)	1	16,27,810	-
69.	Instrument Erection Incl. Liffitng & Positioning	1	27,81,764	-
70.	Nucleonic Level Transmitter for CP Project	1	48,65,000	-
71.	Monomer and Polymer Melt Pressure Transmitter (Dynisco)	1	29,97,200	-
72.	Temperature Element Head Mount Transmitter and Thermowell	1	11,07,090	-
73.	Transmitters (GPT/FT/LT/DPT)	1	1,26,62,580	-
74.	TOV System	1	54,85,900	-
75.	TOV Adaptor MOC55304	1	1,77,000	-
76.	Various Inverters	1	33,33,500	-
77.	On Off Ball & Gate Valve for Cationic CP Proj	1	6,53,490	-
78.	Control Valve with Electro Pneumatic Po	1	53,69,000	-
79.	UPS	1	27,51,600	-
80.	Field Instruments (Level/Pressure & Temp)	1	11,86,230	-
81.	Battery Bank Finisher Agitator & PGP	1	8,00,000	-
82.	DCS System	1	82,60,000	-



83.	Temperature Element Head Mount Transmitter and Thermowell	1	11,07,090	-
84.	On Off Ball & Gate Valve	1	6,53,490	-
85.	Field Instruments (Level/Pressure & Temp)	1	11,86,230	-
86.	Dynisco Adaptors for Cationic CP Proj	1	1,26,732	-
87.	Instrumentation Structural Steel CS ERW Pipe	1	6,91,654	-
88.	Eco Karl Fisher auto Titrator and Dosimat	1	11,42,000	-
89.	Equipment /Instruments for General Lab	1	2,89,758	-
	Instrument Total	1	6,82,26,367	
90.	Portable AHU & Ducting	1	20,00,000	-
91.	Cooling Water Pipe, Fitting & Mat	1	36,97,000	-
92.	MS Stru Beam,Plate,H Bolt for 850 TR Hot Vapour VAM	1	5,37,000	-
93.	Mat & Lab Charges- Painting Steel Structure & PL -Co	1	3,18,000	-
94.	Mat & Lab -Chilled Water PL& Portable AHU Duct Cold Insulation	1	13,10,000	-
95.	Cooling Water Basket Filter 850 TR VAM for Cationic CP Proj	1	6,08,000	-
96.	Cooling Water Basket Filter 850 TR VAM for Cationic CP Proj	1	6,08,000	-
97.	MS Stru Beam,Plate,H Bolt for 850 TR Hot Vapour VAM Found F	1	5,37,000	-
98.	Cooling Water Pipe, Fitting & Mat	1	36,97,000	-
99.	Portable AHU & Ducting	1	11,26,000	-
100.	Mat & Lab Charges- Painting Steel Structure & PL -Cooling Li	1	3,18,000	-
	Utility Total	1	1,47,56,000	
101.	Earthing Pit	1	1,49,901	-
102.	Miscellaneous Item Electrical	1	9,19,068	-



103.	Lighting	1	12,40,180	-
104.	Cable Glands Lugs	1	3,30,400	-
105.	Cable Tray	1	8,01,024	-
106.	Electrification Work	1	17,83,500	-
107.	LT Switchgears	1	37,05,200	-
108.	LT Panel	1	29,50,000	-
109.	Motors	1	43,07,000	-
110.	Cable Tray Support Structure Steel	1	4,38,777	-
111.	Hydraulic Lift 3.5 Ton	1	20,35,500	-
112.	Cable Tray Support Structure Steel	1	4,38,777	-
113.	LT Cabel	1	41,30,000	-
114.	Electrification Work	1	30,00,000	-
115.	Lighting	1	20,00,000	-
	Electrical Total	1	2,82,29,327	
116.	Ultrasonic Cleaning M/c 2set	1	15,20,000	-
117.	Therminol	1	3,27,24,468	-
118.	Hypox system for Filer candle cleaning		34,22,000	-
	Process Total		3,76,66,468	
	Grand Total		30,76,61,994	
119.	Main Plant & Machinery (ZC)		15,85,30,000	Zhicheng Chemical Limited, Hongkong
Total			INR 46,61,91,994	

Source: Data/information provided by the client.

The Company has estimated cost for Main Plant Machineries with Utilities - Polymerization Plant at ~INR 47 Cr including the applicable GST based on its past experience. The estimated cost of the Polymerization Plant has been provided to us by the client basis its past experience and we have relied on same in good faith. It is to be noted here that Company is in the process of finalizing the vendors based on the reasonable quotations to be received by them, accordingly cost of the plant & machinery may change.



b. Misc. Fixed Assets:

The company has estimated INR 3.50 Cr towards misc. expenditure incurred toward ocean freight, insurance, duties & other statutory levies on the basis of import of its major machineries requirements, domestic levies and other expenditure which has been estimated as per management's past experience in the Industry.

c. Power & Water lines:

The manufacturing unit is required to lay the electric cables from existing GIDC substation located at Sua, Gujarat to plant, which is about 5.5 km away from the proposed plant. For laydown of cables for 11 KV transmission for 3000KVA/hr power load, the following charges have been estimated by the Management:

- Cable Charges at INR 3,450 per running meter x 4 number for 5,500 meters estimated at INR 7.59 Cr
- Cable laying charges at INR 3,500 per running meter for 5.5 km is estimated at INR 1.92 crores.
- Transformer plus bay at plant substation – Civil works estimated at INR 2.50 Cr.
- Pro-rata charges and GETCO Charges for 3000 KVA is estimated at INR 1.25 Cr

Thus, the total estimated cost for power lines is estimated at INR 13.50 Cr in other miscellaneous expenses. Further, for water requirement for the project is estimated at 500 Kilolitres per day. The contribution charges, laying line and Right of Use (ROU) charges have been estimated at estimated at INR 2.50 Cr. Thus, the total cost for power & water lines has been estimated at INR 16.00 Cr.

d. Erection & Commissioning:

The company has estimated INR 16.00 Cr towards erection & commissioning expenses.

e. Contingencies:

The Company has estimated contingencies of INR10.00 Cr on non-firmed costs.

Thus, total estimated cost of Plant & Machinery will be INR 237.50 Cr.



However, as a TEV consultant the cost of major plant & machinery has been verified by us independently, which we found reasonable & in the permissible range although the cost may change as per specifications & brand. With respect to Polymerization Plant, it is to be noted here that except for Main Plant & Machinery, Company is in the process of finalizing the vendors based on the reasonable quotations to be received by them, accordingly cost of the plant & machinery may change

7. UTILITIES: Details of Water, Electricity and other utilities are described as below:

a. ELECTRICITY:

As per the data/information provided to us by the client, Company shall apply temporary connections upon laying the required cables line from 66KV bay to factory substation. Total sanction load required for running the plant in future at full capacity would be 3000KVA. Power shall be provided by Gujarat Industrial Development Corporation (GIDC).

b. WATER:

As per the data/information provided by the client, the water requirements for running the plant would be 500 KL per day. Company shall apply for water connection closer to plant commissioning. Water shall be provided by Gujarat Industrial Development Corporation (GIDC).



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PART E

PROJECT TECHNICAL DETAILS

1. CAPACITY OF THE PROPOSED RECYCLED POLYESTER YARN / CHIPS MANUFACTURING PLANT:

As per the data/information provided by the client, the recycled polyester yarn / chips manufacturing plant is proposed to be set up with a designed capacity of 75 MT per day or ~27,000 MT per annum.

Capacity of the proposed recycled polyester yarn / chips manufacturing plant	
Particular	Capacity
Polyester Yarn / Chips	75 MT/ day

2. PRODUCTION PROCESS OF RECYCLED POLYESTER YARN / CHIPS:

The manufacturing process involves following steps:

a) WASTE PREPARATION:

The pre/post-consumer Polyethylene Terephthalate (PET) yarn / fabric waste is sorted from highly contaminated portion or foreign matters & put into a conveyor for shredding. The shredded waste is passed through a conveyor with magnet and/or metal detector to remove metallic impurities.

b) GLYCOLYSIS PROCESS:

Since PET is formed through a reversible polycondensation reaction, the polymer can be transformed back to its monomer or oligomers by shifting the reaction to the opposite direction by adding EG. This reverse reaction, called glycolysis. The waste is fed into the Glycolysis reactor having heating & agitation facility. The required quantity of Ethylene Glycol (EG) is fed into reactor vessel & heated to attain required results with addition of catalyst. This completes the process of conversion of PET waste into monomer. The reacted liquid product is then transferred to cooling tank for further process of filtration. Glycolysis of polyester waste generates polymerization intermediate BHET which is purified and repolymerized into polyester resin. It does not involve high handling of hazardous chemicals and is an energy saving process

c) FILTRATION & PURIFICATION:

The glycolyzed product has sub-micron impurities like TiO_2 , $Baso_4$ & any other type of foreign particles. These submicron particles are removed in a series of filtration systems till the required quality is achieved as judged by product transparency. Filtration system is also capable of removing light organic coloring impurities developed during glycolysis process. Finally, the product is washed with hot water, crystallized in a continuous manner & then filter pressed to separate solid monomer from liquid EG & water. The final monomer product is in the form of wet cake.

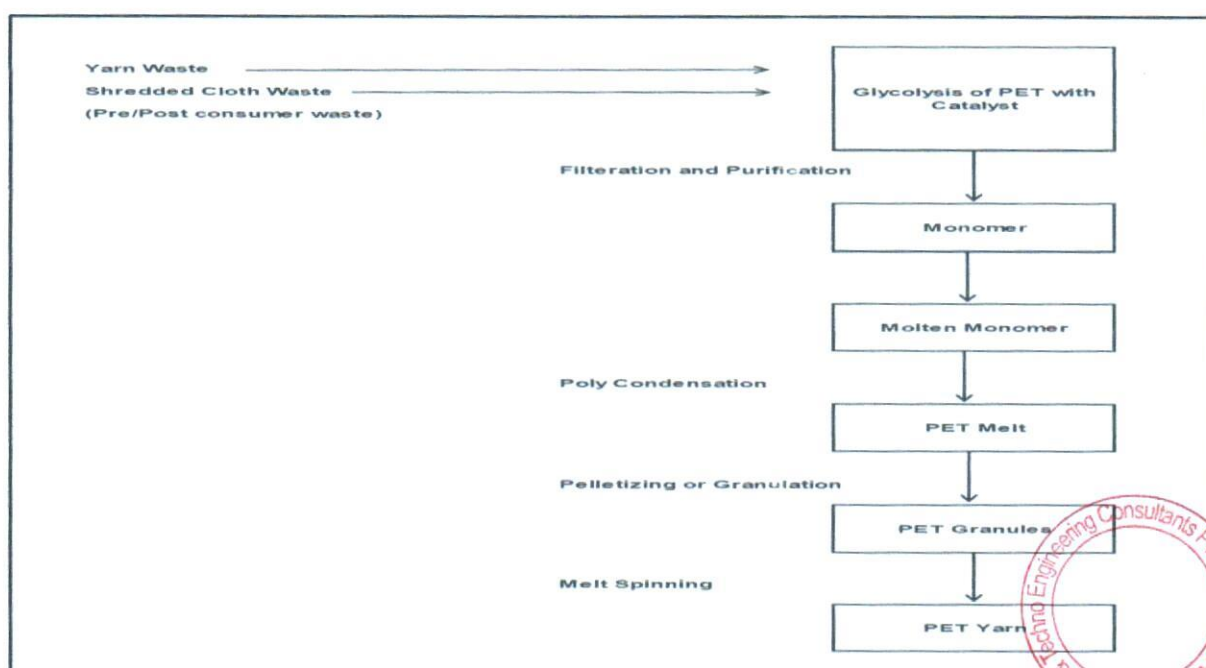
d) POLYMERIZATION:

The polymerization of wet monomer cake is done by a series of polymerization reactors. After achieving the required polymer viscosity, melt from finisher is fed to granulator through polymer gear pump & continuous polymer viscometer for measuring polymer viscosity. The r-PET chips produced are packed for further use.

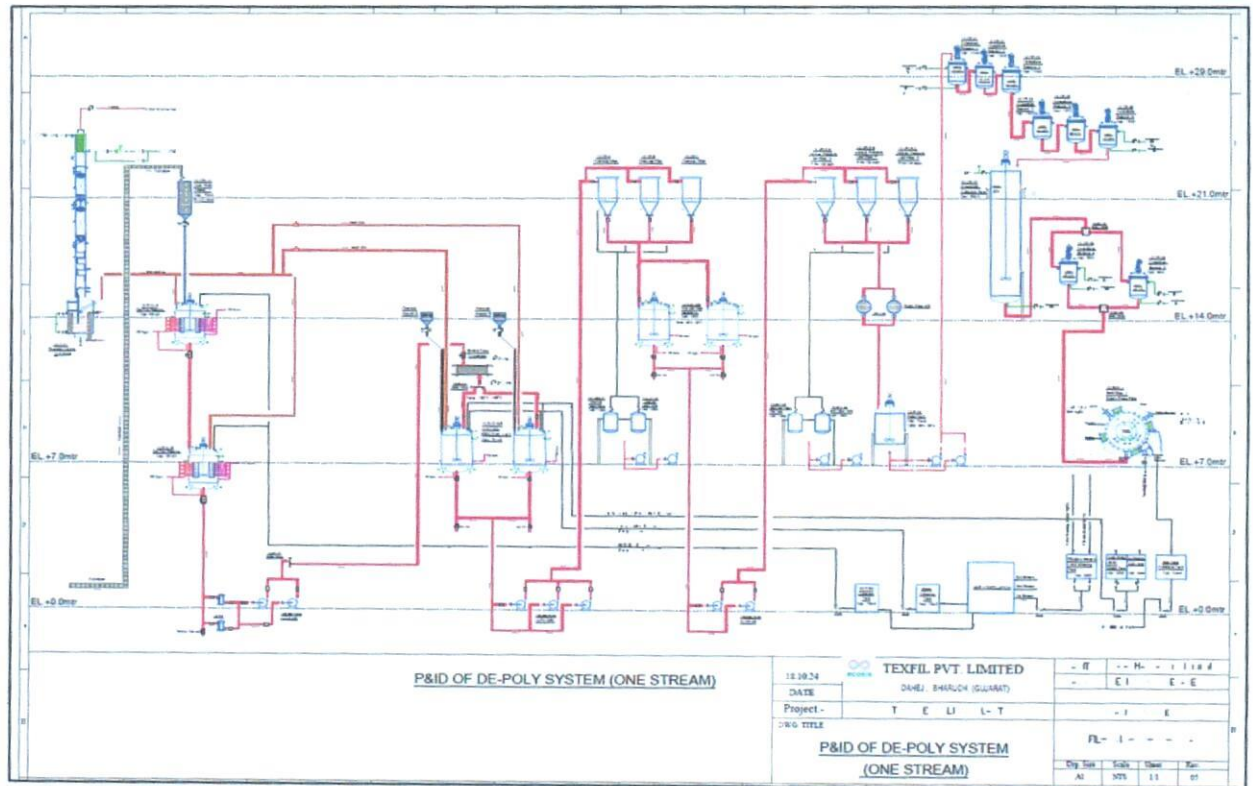
e) SPINNING:

The r-PET chips produced are melted and spun into a fiber and then into a yarn. As per discussions with the Management, existing facilities of M/s Filatex will be used to spin yarn from the r-PET chips manufactured by M/s Texfil.

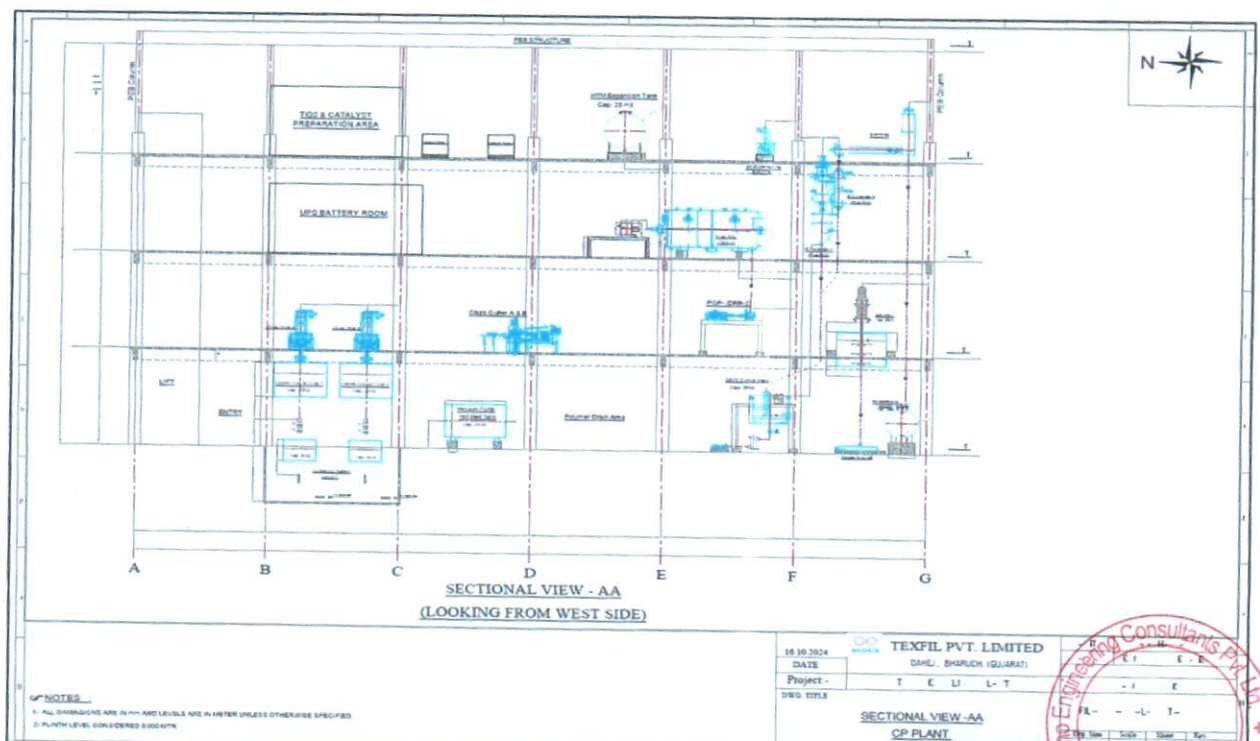
3. PROCESS FLOW CHART OF RECYCLED POLYESTER YARN / CHIPS:

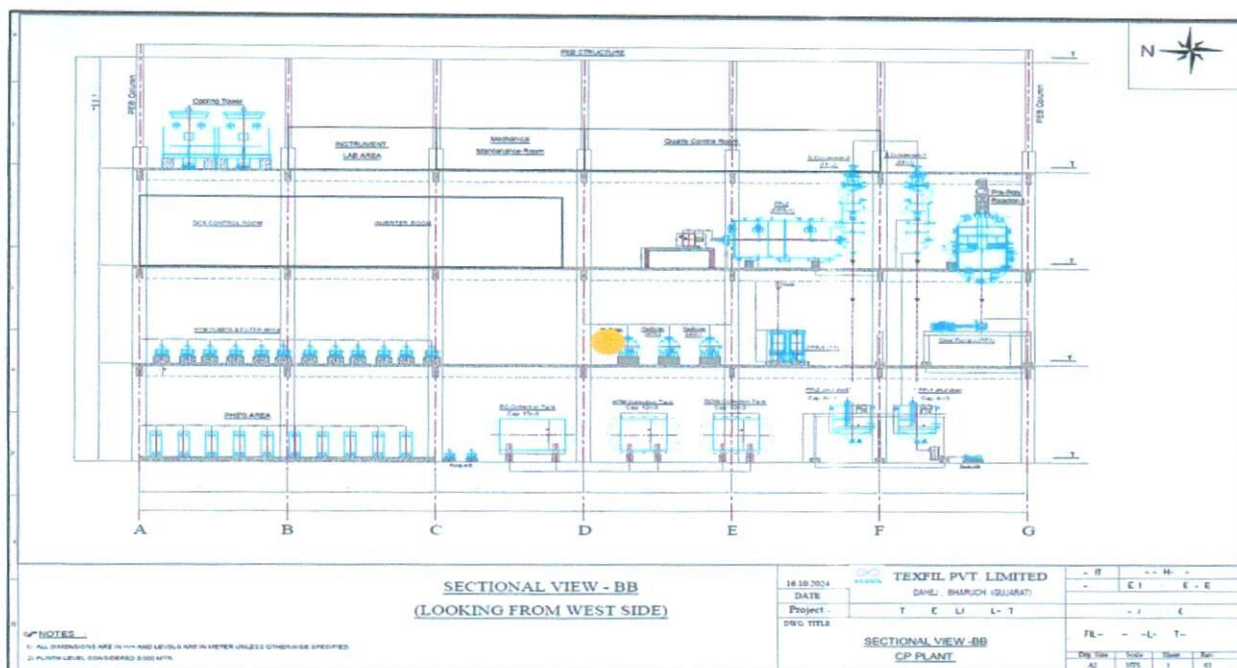


PROCESS FLOW CHART OF RECYCLE PLANT OR DEPOLYMERIZATION PLANT IS AS FOLLOWS:



PROCESS FLOW CHART OF POLYMERIZATION PLANT IS AS FOLLOWS:





4. TECHNICAL SPECIFICATIONS OF THE PROPOSED PLANT:

- a. **RECYCLE PLANT:** Technical specification of the proposed Recycle Plant is presented in the below table:

Recycle Plant Technical Specification			
S. No.	Machine/ Part Name	Make/ Model	Specification /Capacity
1	Compressor	Chicago Pneumatic Compressors	CO Oil Free Reciprocating Air Compressor Model HN215 NP (160 LW IE3 Motor, 1182 CFM, 7 Bar)
2	Compressor	Chicago Pneumatic Compressors	RECIP Lub Oil (20 Liter = 1 Can). 2 CAN Required Per Air Compressor
3	Thermopack	Heatex Industries Limited	Vertical 4000 U VTA (4 Pass) Thermic Fluid Heater with FBC system
4	Cooling Tower	Nextjen Cooling Towers Pvt Ltd, Baroda	500 M3/Hr. X 3 Cell i.e. 1500 M3/Hr.
5	Cooling Tower	Nextjen Cooling Towers Pvt Ltd, Baroda	500 M3/Hr. X 1 Cell i.e. 500 M3/Hr.
6	Centrifugal Chiller	Trane Technologies India Pvt Ltd	500 tr water cooled centrifugal chiller with wye delta starter
7	Centrifugal Chiller	Trane Technologies India Pvt Ltd	500TR water cooled screw chiller with VFD Saterter
8	Centrifugal Chiller	Trane Technologies India Pvt Ltd	Supply of refrigerant R-514A, adopter box, insulation and commissioning of 500 TR Centrifugal Chiller
9	Centrifugal Chiller	Trane Technologies India Pvt Ltd	Supply of Refrigerant R-134A, adopter box, insulation and commissioning of 500TR Screw Chiller

10	Chiller	Broad Air Conditioning India Pvt. Ltd	VAM Chiller (BDS181X1I10-39/32-7/12-400
11	Softner Plant	Anil & Co.	Filtration System : 100 m3/hr
12	Effluent Treatment Plant	Anil & Co.	ETP Plant : 100 KLD
13	D M Plant	Anil & Co.	DM System : 10 M3/hr
14	Nitrogen Plant	R. K. Engineering	PSA Nitrogen Plant : 50Nm3/hr @ 99.9% including Nitrogen Generator & Nitrogen receiver of Geometric Volume
15	MVR Chemprocess	Chem Process systems P. Ltd	MVR based multiple effect evaporation plant followed by distillation unit
16	De-polymerization Reactors, and Holding tanks with Agitators	Technofab Engineering Services	
17	Polymer Line or R-Pet with Standard Parts & accessories	Zhicheng Chemical Ltd	Polymer Line or R-Pet with Standard Parts & accessories
18	Engineering Services	Shiva Engineering Services	Engineering Services of Textile recycling project
19	XB-JF800 Milling Shredder	Zhangjiagang Xinbei Machinery Co. Ltd	XB-JF800 Milling Shredder
20	Valve	Valves Industries, Mumbai	Valve
21	Valve	National Engineering Corporation	Valve
22	MVR Piller Comp	Piller Blower & Compressors Gmbh	
23	BHS Rotary Pressure Filter	BHS Sonthofen Gmbh, Germany	BHS Rotary Pressure Filter with spare Parts
24	Valves	Shanghai Cando Machinery & Equipment Co Ltd	Valves
25	TOV System Package	Mansco Products, USA	TOV System Package
26	Cristaliser for BHET Crystallization	V Tech Engineering	Cristaliser for BHET Crystallization 60KL-3 Nos
27	Cristaliser for BHET Crystallization	V Tech Engineering	Cristaliser for BHET Crystallization 12KL-18 Nos
28	Cristaliser for BHET Crystallization	V Tech Engineering	Cristaliser for BHET Crystallization 6KL-6 Nos
29	100 M2 Sharplex Vertex Pressure Leaf Filter	Sharplex Filters (India) Pvt. Ltd	100 M2 Sharplex Vertex Pressure Leaf Filter in SS 304 with CS Jacket non contacts in carbon steel with fixed spray nozzle arrangement on top -slurry discharge type, without bottom discharge valve including 2 sets O-rings for filter leaves
30	Spare set of filter leaves for 100 M2	Sharplex Filters (India) Pvt. Ltd	Spare set of filter leaves for 100 M2 VPLF

	VPLF		
31	100M2 Sherplex Pulsejet Candle Filter	Sharplex Filters (India) Pvt. Ltd	100M2 Sherplex Pulsejet Candle Filter in SS 304, with CS Jacket, non-contacts in Carbon steel - Slurry discharge type including 2 sets O-rings
32	Extra Cloth	Sharplex Filters (India) Pvt. Ltd	Extra Cloth
33	Pumps	Rushabh Enterprises	48 pumps (backpull out type with closed impeller)

a. Polymerization Plant: Technical specification of the proposed Polymerization Plant is presented in the below table. Technical specifications of other machinery/equipment have not been disclosed by the Management on account of technology being patented.

Polymerization Plant Technical Specification			
S. No.	Machine/ Part Name	Make/ Model	Specification /Capacity
1	Main Plant & Machinery (ZC)	Zhicheng Chemical Limited, Hongkong	<p>Polymer Line Of R-Pet With Standard Parts And Accessories:</p> <ul style="list-style-type: none"> BHET Maker Reactor; Vertical Type ;1 Set Pre-polymerization-1 Reactor with Agitator ,two compartments; Vertical Type ;1 Set Spray Condenser Of PP1 With Pneumatic Scrapper; 1 Set Pre-polymerization-2 Reactor; DRR Type;1 Set Spray Condenser Of PP2 With Pneumatic Scrapper; 1 Set Final Polymerization Reactor With Sealing system; DRR Type;1 Set Spray Condenser Of Finisher With Pneumatic Scrapper; 1Set 2nd Stage Condenser Of Finisher, 1 Set MEG Ejector Unit With MEG Evaporator and four Liquid(MEG) Ring Vacuum Pumps, 1 Set



5. TECHNOLOGY USED:

a) TECHNOLOGY SUPPLIER:

M/s Filatex has designed its own Glycolysis (Chemical) recycling technology and has obtained patent of this Intellectual property from Government of India.

b) PROPOSED TECHNOLOGY:

Recycled PET (r-PET) yarn/chips will be produced using a unique chemical recycling technology involving Glycolysis.

6. LATEST TECHNOLOGY/TECHNOLOGICAL ASSESSMENT:

To make PET waste into re-useable products, recycling technologies can be grouped into two macro-categories: Mechanical and Chemical

- **Mechanical Recycling** refers to operations that aim to recover plastics via mechanical processes (grinding, washing, separating, drying, meting, re-granulating and compounding), thus producing recyclates that can be converted into plastics products, substituting virgin plastics. This mechanical process often leads to thermo-oxidative and thermo-mechanical degradation, resulting in lower molecular and impure polymer formation. According to the Food Safety Authority, granulate from mechanical recycling cannot be used in food packaging. Most importantly it limits the number of cycles the polymer can be subjected to further recycling process. De facto, in mechanical recycling after maximum one recycle, polymer no longer can be recycled and must be discarded in landfills.
- **Chemical Recycling** technologies are in accordance with sustainable development principles, bringing back waste to virgin PET raw materials. Chemical recycling involves depolymerization of the polyester by using reactants / solvents and reclaiming basic/intermediate raw materials from PET chains. Chemical recycling is a process to convert polymer into its original or intermediate monomer form so that it can eventually be repolymerized and remade into a virgin state polymer. Chemical recycling splits polymer chains into monomer which makes it possible to filter out fine particulate matters & purify the product better enabling production of high-quality product. It also provides possibility of feeding monomer that can be used in other applications of fossil-based alternatives. Chemical recycling provides utilization of wider range of waste PET than mechanical recycling.

Mechanical recycling is being mainly done by using bottle flakes, by waste sorting, removal of contaminants, crushing and grinding, and are directly sent to extrusion for producing generally low-grade fibers and filament. This mechanical process often leads to thermo-oxidative and thermo-mechanical degradation, resulting in lower molecular and impure polymer formation.

It limits the number of cycles the polymer cannot be subjected to further recycling process. After maximum one recycle, polymer no longer can be recycled and must be used for land filling. Chemical recycling technologies are in accordance to sustainable development principles, bringing back waste to virgin PET raw materials, which of course are of much higher quality compared to mechanically recycled PET.

Chemical recycling involves depolymerization of the polyester by using reactants/ solvents and reclaiming basic/intermediate raw materials from PET chains. Chemical recycling is a process to convert polymer into its original or intermediate monomer form so that it can eventually be repolymerized and remade into a virgin state polymer. Chemical recycling can help achieve circular economy of PET as it does not limit the number of recycling for the same product.

Chemical recycling can be done either by Hydrolysis or Methanolysis or Glycolysis.

- **Hydrolysis** depolymerizes PET to Terephthalic Acid (TPA) and Ethylene Glycol (EG) by reaction with water.
- **Methanolysis** degrades PET to Dimethyl Terephthalate (DMT) and EG by reaction with methanol.
- **Glycolysis** causes depolymerization by reaction with EG, to produce bis (2 hydroxyethyl) terephthalate (BHET), an intermediate formed at the first stage of PET production from the starting monomers.

Technology developed by Texfil Pvt Ltd. is a Glycolysis (Chemical) Recycling Process for producing r-PET. The developed process can handle the recycling of PET yarn waste & fabric waste along with bottle flakes waste. Only a few international chemical recycling processes (mostly in development stage) such as Syre & Carbios are designing such process which can handle textile waste along with bottle waste. M/s Filatex has also obtained Indian patent on "Chemical Recycling Technology" of PET which is valid from 20 years from 02nd June 2021.

Thus, as per the above technical assessment, M/s Texfil Private Limited is using a unique chemical textile recycling technology by introducing the first circular textile-to-textile recycling method which will India's first of its kind. M/s Filatex has spent almost 6 years on research and development of this new age patented technology. After successful lab trials, M/s Filatex have set up a pilot plant consisting of de-polymerization and polycondensation process. New technologies for chemical based recycling are being piloted in the country at present and are still in the nascent stage of development. Only a few international companies are using chemical based recycling technology. Technology & specification of the plant are matching with the need to run the plant smoothly and achieve the economies of scale.

7. TESTING STANDARDS FOR PRODUCTION:

As per communicated by client, company will be having a quality control Laboratory, wherein, they check the entire range on defined parameters like design, quality and finish. Production shall be done as per Standard Operating Procedures (SOP) based on various regulatory guidelines. Details of regulatory guidelines has not been provided to us by the client.

8. MANPOWER:

As per information shared by the client/company, basic structure of the manpower will require the ~250 workers to operate the plant 24 hours a day for 360 days a year. Details of manpower requirement allowing for leave, absenteeism, sickness and holidays for smooth and for efficient operation of different sections of the plant including its administrative and commercial departments on technical and management ground primarily to indicate the order of manpower requirement has not been provided to us by the client.



PART F

PRODUCT PROFILE

1. INTRODUCTION:

Synthetics are some of the most widely used materials in the fashion, apparel, and textile industry today. Inclusive of polyester, nylon, acrylic, and elastane, among others, materials in this category are conventionally made from fossil-fuel-derived resources including petroleum-based chemicals.

Polyethylene Terephthalate (PET) is a widely employed polyester having several applications due to its high strength and its physical and chemical properties, particularly in Textiles and Packaging. Recycled polyester, also known as rPET, is a sustainable polymer made from recycled plastic bottles, garments, and industrial plastic waste. Recycled polyester is used to make a variety of textile products, including clothing, accessories, and home furnishings.

With worldwide increase in population and increased per capita consumption of PET products, accumulation of its non-bio-degradable waste is generating a very big environmental and economic concern. All sorts of PET waste are being either incinerated or are used for land filling or are spread on grounds, water, rivers, canals, and seas damaging natural environment and creating a non-conducive atmosphere for habitation of Humans, animals and marine bio-diversities. Therefore, there is a growing interest in PET recycling technologies as PET & plastics can be recycled and reused.

rPET chips, or recycled PET chips, have many applications, including:

- **Food packaging:** rPET is used in a variety of food packaging because it's heat resistant, protects against cold, and is lightweight and strong.
- **Bottles and trays:** rPET chips can be used to make bottles and trays for food and non-food applications.
- **Fabrics and textiles:** rPET chips can be used to make fabrics and textiles, including high-end undergarments, sportswear, home furnishings, and hospital clothes.
- **Insulating flooring and carpeting:** rPET chips can be used to make insulating flooring and carpeting.
- **Wet tissues, sanitary napkins, and baby diapers:** rPET chips can be used to make wet tissues, sanitary napkins, and baby diapers.

rPET yarn, or recycled yarn chips is used in a variety of applications, including:

- **Apparel:** rPET yarn is used in many types of clothing, such as denim, shirts, T-shirts, and athleisure wear. It can also be blended with other yarns, such as cotton or viscose, to provide the benefits of multiple fibers.
- **Home textiles:** rPET yarn is used in home furnishings.
- **Workwear:** rPET yarn is used in workwear.

2. PRODUCT CATEGORY:

a) RECYCLED POLYESTER YARN/CHIPS:

The Company will manufacture recycled polyester yarn/chips from both post-consumer and pre-consumer PET (polyethylene terephthalate) waste, specifically textile waste like yarn, fabric and garments along with PET bottle.



Recycled product specifications is given as under:

Polyester (Bright) Chips (r-PET)			
S.No	Properties	Specifications	COA
1	I.V. (dl / gm) *	0.650 ± 0.01	0.645
2	COOH End Group (MEG/kg)	≤ 40	40
3	DEG Content (wt %)	1.40 ± 0.1	1.40
4	Melting Point (Deg.C) DSC Peak Temp.	≥ 255 ° C	256.5
5	Color Value L (Hunter)	> 42	42.00
	Color Value b (Hunter)	< 10.0	8.50
6	Ash Content (Wt. %)	0.040 ± 0.020	0.040
7	Moisture (wt %)	≤ 0.40	0.165

8	Chips per gram	60 +/-5	60
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Source: Detailed Project Report provided by the Company

POY Properties produced from r-PET chips									
Sr. no	Den/Fil	Denier	Tenacity (g/d)	% Elong.	D/F	DF cV%	%U(N)	%OPU	X-Sec
1	250/48	250.2	2.28	132.3	88.4	1.94	1.00	0.38	48-Cir
2	160/48	163.8	2.09	143.0	65.7	1.38	1.20	0.40	48-Cir

Source: Detailed Project Report provided by the Company

DTY yarn properties							
Sr. no	Den/Fil	Denier	Tenacity (g/d)	% Elong.	BWS %	CC %	OPU %
1	150/48 NIM	149.9	3.82	26.5	1.03	16.4	2.7
2	100/48 NIM	98.0	4.10	23.8	1.55	17.40	2.80

Source: Detailed Project Report provided by the Company

3. PRICING STRATEGY:

As per the data/information provided by the client, the company expects to sell recycled polyester yar/chips at INR 100 per kg.

As per the current market scenario, average rate of recycled R-PET Chips is ~ INR100/Kg. Thus, average sales price is in line with market price. (Ref: <https://www.indiamart.com/proddetail/recycled-pet-chips-11439899991.html?pos=1&DualProdsdual>).

4. SELLING, MARKETING AND DISTRIBUTION PLAN:

The great population growth, improvement of living standards and decreasing life cycle time of textile products are generating a significant amount of pre and post-consumer and industrial textile waste in the world. In addition, with the emergence of fast fashion, clothes became true fast moving consumer goods, easily accessible in great quantities and replaced frequently. Recycled global polyester market is expected to grow at a CAGR of 14.0% during 2024-2029. Recycled Indian polyester market is expected to grow at a CAGR of 35.8% during 2024-2029.



There is a growing demand for recycled polyester all around the world. In order to tackle this growing demand for recycled material, Texfil plans to market and sell their recycled material under the Ecosis brand.

Ecosis will offer a range of recycled polyester product to meet the needs of sustainable fashion and textile. International brands such as H&M Group, Zara, Puma, Decathlon etc. are among those turning to textile-to-textile recycled polyester. Company has already started discussions with a few international brands who have given positive feedback regarding the process and recycled material.

Ecosis will be positioned as one of the first textile to textile polyester recycled product brand which will cater to urgent need of many brands as they are facing mounting pressure to improve the recyclability of their own products in order to move towards a circular economy. Mechanical recycling which uses PET bottles as their raw material does not tackle the problem of textile waste and is not a circular solution.

Ecosis will deliver the characteristics of polyester while solving one of the biggest problems of waste handling. The production of Ecosis will be more energy efficient and can be carried out an infinite number of times achieving true circularity.

Currently, there is a big mismatch between the demand for recycled yarn versus the supply. This is especially true for recycled yarn manufactured via the chemical process which ensures better quality as well as circularity. Company will manufacture recycled yarn using a unique chemical recycling process.



PART G

FEEDSTOCK ANALYSIS

1. INTRODUCTION:

The major raw materials used to produce the recycled polyester yarn/chips are PET cloth waste (pre & post-consumer), mono ethylene glycol, de-poly catalyst (e.g.: catalyst zinc acetate), diatomaceous earth (celite) and metal-organic framework (MOF) (e.g. activated carbon).



2. FEEDSTOCK REQUIREMENT:

Major Constituents for producing recycled polyester yarn / chips are given below:

Major Constituents of a Flex Banner	
Materials	Composition (wt.%)
PET Cloth Waste (including process loss)	82.45%
Mono Ethylene Glycol (MEG)	6.99%
De-Poly Catalyst (consumables)	0.24%
Diatomaceous Earth (Consumables)	2.91%
MOF e.g. Activated Carbon (Consumables)	7.41%
Total	100%

Source: Detailed Project Report provided by the Company

As per discussion with the Management, yarn waste can also be used as feedstock in place of PET cloth waste.

MEG is required for depolymerization. It shall be recycled throughout the de-polymerization & re-polymerization process.

3. AVAILABILITY OF FEEDSTOCK:

The Company expects to procure raw materials domestically from different textile industries specially from Surat. As per discussions with the Management, the expected raw material suppliers have not yet been ascertained, but the Company expects to buy PET cloth & yarn waste from polyester spinning units, polyester fabric manufacturers, garment manufacturers etc (pre-consumer wastes). Yarn waste from Filatex can also be used as raw material along with external sourcing of fabric waste and garment waste (PET cloth waste). The Company is also in discussions with a few brands and they would also like to provide their own waste for recycling.

4. PRICING STRATEGY:

The cost estimated by the client is INR 35,072/Ton or INR 35.07/Kg as is shown in the table below:

Raw material Cost				
Materials	Composition (wt. %)	Quantity (in Kg)	Price per Kg	Amount (INR per Kg)
PET Cloth Waste (including process loss)	82.45%	1.1800	15.00	17.70
Mono Ethylene Glycol (MEG)	6.99%	0.1000	48.00	4.80
De-poly Catalyst (consumables)	0.24%	0.0035	185.00	0.65
Diatomaceous Earth (Consumables)	2.91%	0.0417	31.65	1.32
MOF e.g. Activated Carbon (Consumables)	7.41%	0.1061	100.00	10.61
	100.00%	1.4312		35.07

We have been provided with sample invoices for verifying PET cloth waste expected price. We have not been provided with the sample quotations for other raw materials & consumables from the expected suppliers for verifying their prices. As per our tertiary research, expected raw material cost per Kg of recycled polyester yarn / chips is as under:



Raw material Cost					
Materials	Composition (wt. %)	Quantity (in Kg)	Price per Kg	Amount (INR per Kg)	Reference
PET Cloth Waste (including process loss)	82.45%	118.00%	10.00	11.80	https://m.indiamart.com/proddetail/polyester-fabric-waste-2852854024362.html
Mono Ethylene Glycol (MEG)	6.99%	10.00%	65.00	6.50	https://www.indiamart.com/proddetail/mo-no-ethylene-glycol-2384861491.html?srltid=AfmBOorLEucvIYpus47e9rrbGPt4_9qT_n7lv3N-R7uA7QzYw2-biTBj
De-poly Catalyst (Catalyst Zinc Acetate)	0.24%	0.35%	150.00	0.53	https://dir.indiamart.com/impcat/zinc-acetate-dihydrate.html
Diatomaceous Earth	2.91%	4.17%	50.00	2.08	https://www.siliconactivatedcarbon.com/di-atomite-filter-aid.html
MOF (Activated Carbon)	7.41%	10.61%	150.00	15.91	https://www.indiamart.com/proddetail/activated-carbon-pellets-2245966697.html
	100.00%	1.4312		36.82	

Thus, unit rates for Mono Ethylene Glycol (MEG), Diatomaceous Earth and Activated Carbon seem to be lower than the market prices though the expected raw material cost per Kg of recycled polyester yarn / chips is in the permissible range. However, the overall cost has been estimated by the company on the basis of their best judgment on current prevailing prices during the pilot run and does not impact on overall viability of the project. Also, sensitivity analysis does not have any material impact. We recommend the lender to suggest the client to submit a futuristic plan in case the cost of raw materials variate adversely or goes up from the expected levels.



PART H

INDUSTRY OVERVIEW

1. INTRODUCTION:

The global market for polyester fiber chains is being driven by increasing population, fast industrialization, and urbanization. The demand for recycled polyester staple fibers is increasing as people become more conscious of environmental issues. The rising need for specialty mattresses is expected to drive market demand in the future, owing to consumers' growing preference for eco-friendly products. Recycled Polyester Filament Yarn Market include a notable increase in the use of polyester in the textile industry, including apparel and home furnishings, rising demand for the polyester filament in automotive textile manufacturing, expansion of the technical textile industry, favorable government policies, and positive movement in international raw material prices.

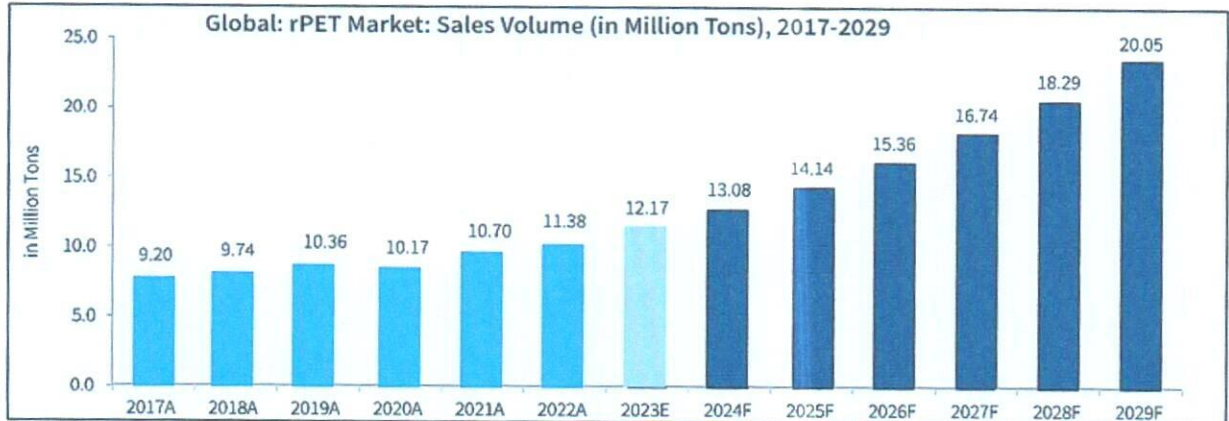
Polyester filament is adaptable and may be used in huge regions. (from clothing for the general public to heavy industrial purposes) Because of its better physical characteristics, cheaper price, adaptability, and recyclability, polyester is the most desired and demanded fiber in the textiles business, providing a fully unique combination of features unmatched by any other natural or synthetic fiber. Polyester filament yarn output was higher than the other polyester goods among all polyester products. Polyester fiber accounts for roughly half of the total manmade and natural fiber market worldwide. Polyester filament yarn is currently in demand from both domestic and imported sources. Demand for the polyester filament in the home furnishings and garment industries is expected to remain robust in the future years, boosting the market.

2. Global rPET Industry:

The global rPET market reached a value of USD 18.41 Billion in 2023, growing at a CAGR of 11.6% during 2017-2023. Moving forward, the global rPET market is expected to reach a value of USD 40.72 Billion by 2029, growing at a CAGR of 14.0% during 2024-2029.

In terms of volume, the global rPET market reached 12.17 Million Tons in 2023, growing at a CAGR of 4.8% during 2017-2023. Going forward, the global rPET market is expected to reach a volume of 20.05 Million Tons by 2029, growing at a CAGR of 8.9% during 2024-2029. Growing concern about plastic pollution and the environmental impact of single-use plastics significantly heightened the demand for recycled PET products. Consumers, educated by awareness campaigns and media coverage, are increasingly choosing

environmentally friendly options, making sustainability a key factor in purchasing decisions. Governments are implementing stricter regulations, such as bans on single-use plastics and incentives for recycling, which push manufacturers to adopt recycled PET.



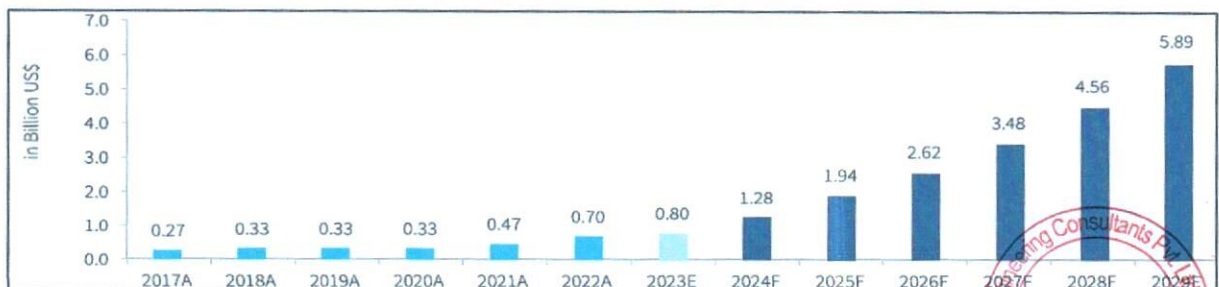
Source: Ganesha Ecosphere Annual Report

Corporations, responding to both ethical considerations and consumer demand, are setting ambitious sustainability goals, like in 2023, US-based bottled water brand Chlorophyll Water announced the launch of new bottles made using 100% rPET. Due to this, market growth is propelling across the globe.

The environmental benefits of recycled PET, including reduced energy consumption and lower greenhouse gas emissions, further drive its adoption. This trend is evident in industries like food and beverage, where recycled PET is widely used for packaging, and the fashion industry, which increasingly uses recycled PET for textiles, contributing to the circular economy and reducing reliance on virgin materials.

3. Indian rPET Industry:

The India rPET market reached a value of USD 0.80 Billion in 2023, growing at a CAGR of 19.5% during 2017-2023. Moving forward, the India rPET market is expected to reach a value of USD 5.89 Billion by 2029, growing at a CAGR of 35.8% during 2024-2029.



Source: Ganesha Ecosphere Annual Report

In terms of volume, the India rPET market reached 670 Kilo Tons in 2023, growing at a CAGR of 9.9% during 2017-2023. Looking forward, the India rPET market is expected to reach a volume of 2,759 Kilo Tons by 2029, growing at a CAGR of 24.5% during 2024-2029.



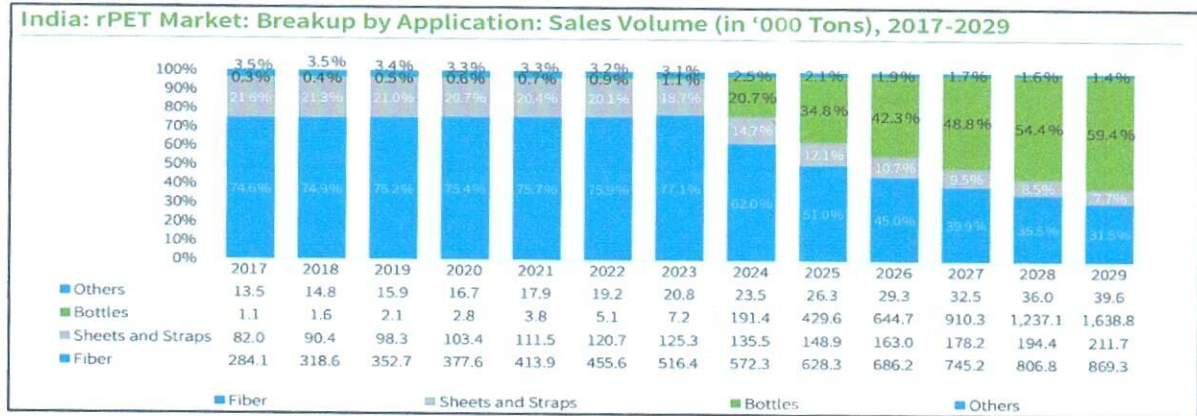
Source: Ganesha Ecosphere Annual Report

In 2023, non-food grade rPET dominated the market in India, comprising 98.9% of the total volume and reaching 662.5 kilotons, with a CAGR of 9.7% from 2017 to 2023. Within this category, fiber was the largest application, accounting for 77.1% of the volume and reaching 516.4 kilotons, exhibiting a CAGR of 10.5% during the same period. By 2029, food-grade rPET is expected to become the largest segment in India, accounting for 59.4% of the total market volume.

This will be followed by non-food grade rPET, which is expected to account for 40.6% of the market. Growth of rPET is fueled by rapid urbanization leading to increased consumption and waste generation, particularly in plastics. It is further elevated by favourable government regulations to compel industries to adopt sustainable practices.

Numerous companies are introducing recycled materials into their supply chain with the objective to adhere to their environment regulatory requirements in the short term while meeting their net zero targets in the long-term for aligning with global environmental initiatives and responding to consumer demand for greener options. The Government of India introduced the Extended Producer Responsibility (EPR) which mandates the use of 40 60% recycled plastic in their packaging.





4. GROWTH DRIVERS:

- Increasing Awareness About Environmental Sustainability is driving the market growth:** The growing awareness about environmental sustainability is one of the primary drivers of the recycled polyester filament yarn market. Consumers are becoming more conscious of the environmental impact of their purchasing decisions, leading to a rise in demand for eco-friendly and sustainable products.

The textile industry, known for its significant environmental footprint, is under increasing pressure to adopt sustainable practices. Recycled polyester filament yarn, made from post-consumer plastic bottles and other recycled polyester waste, offers a sustainable alternative to conventional polyester yarn.

It helps in reducing plastic waste, conserving natural resources, and lowering greenhouse gas emissions. The increasing awareness about the benefits of recycled polyester filament yarn among consumers, manufacturers, and retailers is driving its adoption in the textile industry, thereby fueling market growth.

- Advancements in recycling technologies:** advancements in recycling technologies and processes present opportunities for improving the quality and cost-effectiveness of recycled polyester filament yarn. Innovations in chemical recycling, for example, can enhance the efficiency of recycling processes and produce high-quality recycled yarn with minimal environmental impact. Chemical recycling involves breaking down plastic waste into its basic chemical components, which can be used to produce high-quality recycled polyester filament yarn. This technology offers several advantages, including the ability to recycle contaminated and mixed plastic waste and produce yarn with properties similar to virgin polyester.

- **Rising Demand for Sustainable Clothing is driving the market growth:** The demand for sustainable clothing is on the rise, driven by the growing consumer preference for environmentally friendly and ethically produced apparel. Sustainable fashion is becoming a significant trend in the fashion industry, with many brands and retailers incorporating recycled materials into their product lines. Recycled polyester filament yarn is widely used in the production of sustainable clothing due to its durability, versatility, and eco-friendly properties.

It is used to manufacture a wide range of apparel, including activewear, casual wear, and outdoor clothing. The rising demand for sustainable clothing is encouraging textile manufacturers to adopt recycled polyester filament yarn, driving market growth. Additionally, the increasing adoption of sustainable practices by major fashion brands and retailers is further boosting the demand for recycled polyester filament yarn in the apparel segment.

- **Rising demand by Automotive Industry:** One of the key opportunities lies in the increasing demand for sustainable materials in the automotive sectors. The automotive industry is increasingly adopting sustainable materials for interior applications, such as seat fabrics, upholstery, and carpets. Recycled polyester filament yarn offers an eco-friendly alternative to conventional materials, helping automotive manufacturers reduce their environmental footprint
- **Government Initiatives and Regulations Promoting Recycling is driving the market growth:** Governments and regulatory bodies worldwide are implementing initiatives and regulations to promote recycling and reduce plastic waste. These initiatives are aimed at addressing the environmental challenges posed by plastic pollution and encouraging the adoption of sustainable materials.

For instance, several countries have implemented plastic waste management policies, recycling targets, and extended producer responsibility (EPR) programs to promote the recycling of plastic waste. These regulations are driving the demand for recycled polyester filament yarn as manufacturers seek to comply with sustainability requirements and reduce their environmental impact.

Government incentives and subsidies for recycling projects are also encouraging investments in recycling infrastructure and technologies, further supporting the growth of the recycled polyester filament yarn market.

5. CHALLENGES:

- **High Production Costs are restricting the market growth:** One of the significant challenges faced by the recycled polyester filament yarn market is the high production costs associated with recycling and processing plastic waste. The recycling process involves collecting, sorting, cleaning, and converting plastic waste into usable polyester filament yarn.

These processes require specialized equipment, technology, and skilled labor, which contribute to higher production costs compared to conventional polyester yarn. Additionally, the cost of sourcing and transporting plastic waste for recycling can be substantial, further adding to the overall production expenses.

The higher production costs can make recycled polyester filament yarn less competitive in terms of pricing, especially in price-sensitive markets. The challenge for the market is to find ways to reduce production costs and improve the cost-effectiveness of recycling processes to make recycled polyester filament yarn more affordable and accessible.

- **Limited Availability of High-Quality Recycled Materials is restricting the market growth:** The limited availability of high-quality recycled materials is another significant restraint for the recycled polyester filament yarn market. The quality of recycled polyester filament yarn depends on the quality of the plastic waste used as raw material. Contamination and degradation of plastic waste during the recycling process can affect the quality and performance of the recycled yarn.

Ensuring a consistent supply of high-quality recycled materials is crucial for maintaining the quality standards of recycled polyester filament yarn. However, the availability of clean and high-quality plastic waste is limited, posing a challenge for manufacturers. The challenge for the market is to develop efficient recycling technologies and processes that can produce high-quality recycled polyester filament yarn from diverse and contaminated plastic waste sources.

- **Volatile Raw Material Prices:** rPET is derived primarily from raw materials such as PET cloth waste, Monoethylene Glycol (MEG), Catalyst Zinc Acetate, Diatomaceous Earth (Celite) and Activated Carbon. The prices of these raw materials and commodities have experienced significant fluctuations.

A circular red stamp with the text "R.R. Associates" and "Valuers & Techno Engineering Consultants Pvt. Ltd." around the perimeter. Inside the stamp, there is a handwritten signature in blue ink.

6. CONCLUSION:

The India rPET market reached a value of USD 0.80 Billion in 2023, growing at a CAGR of 19.5% during 2017-2023. Moving forward, the India rPET market is expected to reach a value of USD 5.89 Billion by 2029, growing at a CAGR of 35.8% during 2024-2029. The rising applications of polyester filament yarns among end-user are attributable to the market's growth. Growth of rPET is fueled by rapid urbanization leading to increased consumption and waste generation, particularly in plastics.

It is further elevated by favourable government regulations to compel industries to adopt sustainable practices. Numerous companies are introducing recycled materials into their supply chain with the objective to adhere to their environment regulatory requirements in the short term while meeting their net zero targets in the long-term for aligning with global environmental initiatives and responding to consumer demand for greener options.



PART I

SWOT ANALYSIS

SWOT ANALYSIS – RECYCLED POLYESTER YARN MARKET

STRENGTHS

- **Strategic Location:** Surat & Silvassa account for more than 45% of total demand of partially oriented yarn (POY) & more than 85% of total demand for chips in India. The plant is located at Bharuch and has the locational advantage due to its proximity to market.
- **Experience in Industry:** The promoters are having experience of more than 40 years in the POY industry which can prove to be a huge strength in the long run.
- **Advanced Technology:** Recycled PET (r-PET) yarn/chips will be produced using a unique chemical recycling technology. M/s Filatex has already obtained Indian patent on "Chemical Recycling Technology" of PET (Patent No: 405512). It has been also published in International PCT applications. M/s Filatex has also applied for patent recognition in US and European countries.
- **Reduction of Waste Material and Greenhouse Gas Emissions:** The proposed chemical recycling technology shall be a circular textile-to-textile recycling method. This innovative process allows textiles to be recycled back into new textiles, closing the loop and creating a true circular economy. This advancement not only reduces waste but also conserves resources and minimizes environmental impact.
- **Low Cost and Efficient Labour Force:** Skilled and efficient is available in India at a rather low cost as compared to other countries.
- **Carbon Credit:** The textile industry is a major polluter of the environment, responsible for producing large amounts of carbon emissions through processes like dyeing, bleaching, and finishing. Carbon credits serve as a potent market-driven incentive, effectively catalyzing the reduction of greenhouse gas (GHG) emissions. These credits, in turn, can be purchased by entities seeking to offset their own emissions, thereby showcasing their unwavering commitment to fostering sustainability. The Company is expected to earn carbon credits by practicing sustainable business.

WEAKNESSES

- **CAPEX:** The proposed Recycled Polyester Yarn / Chips manufacturing plant would be set up by a high initial investment, in which ~80% capital would be required for plant & machinery.
- **Infrastructure Requirements:** The project's power load and water

	consumption are significant, and ensuring uninterrupted power supply and adequate water resources may pose challenges.
OPPORTUNITIES	<ul style="list-style-type: none"> • Rising Demand for Sustainable Clothing: The demand for sustainable clothing is on the rise, driven by the growing consumer preference for environmentally friendly and ethically produced apparel. • Textile-to-Textile Recycling Enables a Circular Value Chain: Unlike the current linear model of bottle-to-fiber recycling, textile-to-textile enables a circular value chain, where textile fibers can be recycled again and again. • Increasing Demand for Textile-to-Textile Recycling: Less than 2 % of the recycled polyester today is produced by textile-to-textile recycling. The rest is produced by PET-bottles, which destroys a perfectly circular system. International brands such as H&M Group, Zara, Puma, etc. are among those turning to textile-to-textile recycled polyester. • Policy Requirements: The European Commission has proposed mandatory Extended Producer Responsibility (EPR) measures for textile waste in EU Member States. The regulation is intended to reduce textile waste and encourage more sustainable practices in the fashion industry. The regulation will be enforced on EU member states starting January 1, 2025.
THREATS	<ul style="list-style-type: none"> • Average Consumers' Attitudes Towards Recycled Material (Quality and Price Concerns): Most consumers know so little about recycle process and always doubt about the product safety of those made from the recycled materials. The price difference between recycled and virgin polyester can be high which may drive away the consumers from rPET.



PART J

PROJECT COST AND MEANS OF FINANCE

As per data/information shared by the client, the proposed recycled polyester yarn / chips manufacturing plant is proposed to be commissioned by making an investment of INR 300.00 Cr as shown in the below table along with Means of finance:

Total Project Cost		
S. No.	Capital Cost Head	Amount (INR Lakhs)
1	Land & Development Cost	₹ 1,200.00
2	Building	₹ 3,500.00
3	Main Plant Machineries with Utilities - Recycle plant	₹ 14,500.00
4	Main Plant Machineries with Utilities - CP plant	₹ 4,700.00
5	Power and water lines	₹ 1,600.00
6	Erection & Commissioning Expenses	₹ 1,600.00
7	Misc Fixed Assets	₹ 350.00
8	Interest During Construction (IDC)	₹ 701.50
9	Pre-Operative Expenses	₹ 98.50
10	Contingencies	₹ 1,000.00
11	Working Capital Margin	₹ 750.00
	TOTAL	₹ 30,000.00
Means of Finance		
S. No.	Particular	Amount (INR Cr)
1	Promoters' Equity	₹ 10,000.00
2	Loan from Banks	₹ 20,000.00
	TOTAL	₹ 30,000.00
	Total Loan	₹ 20,000.00

Source: Data/Information provided by the company.

Notes:

1. We have relied upon the data/information provided by the client regarding Total Project cost such as quotations, etc.
2. As per the sale deed executed on 21st August 2024, Company has purchased 58,643 hectares (58,643 sq. m.) of land at Block/Survey No. 87, (Old: 181-1), Village Koliyad, Tahsil

Vagra Distt, Bharuch, Gujarat - 392220. Application for Change of land use (CLU) has been filed with Collector/ District Magistrate, Bharuch on 14th October 2024, for setting up the proposed recycled polyester yarn / chips manufacturing plant.

3. As per sale land deed, ~INR 10 Cr is the consideration for cost of land and other ancillary costs viz. viz. registration fees, stamp duty and other levies amount to ~INR 0.59 Cr. The actual total acquisition cost of land is Rs. 10.59 crores. Various other capital cost amounting to INR 1.41 Cr is expected to be incurred on account of other fees and charges for levelling and other necessary development on this land. Thus, the total estimated cost of land acquisition is Rs 12.00 Cr.
4. The estimated cost Building & Civil works estimated by the Company ~INR 34 Cr. including the applicable GST. The estimated Building & Civil works cost has been verified independently by us, which we found reasonable & in the permissible range.
5. The cost of major plant & machinery has been verified by us independently, which we found reasonable & in the permissible range although the cost may change as per specifications & brand. The total estimated cost for plant & machinery will be ~INR 237.5 Cr including contingencies and the applicable GST & customs. However, company is in the process of finalizing the vendors through quotes received by them so the cost may vary accordingly.
6. As per working capital schedule, the company will be requiring a cash credit of INR 18.30 Cr from first year onwards (75% of net working capital) which will increase proportionately with increase in net working capital. Working capital margin for the purposes of estimating cost of project has been estimated by the Management as INR 7.5 Cr (25% of cash credit of INR 30 Cr).
7. As per our assessment, estimated project cost is lower as compared to industrial/sectoral capex data. Company is proposing ~INR 1.11 Lakhs per metric ton CAPEX for the proposed Recycled Polyester Yarn / Chips Manufacturing Plant including GST, pre-operative and preliminary expenses. As per our tertiary research and data/information available in the public domain, we found that the investment required can be anywhere from ~ INR 1.5 Lakhs to ~ INR 5 Lakhs per metric ton.

Thus, ~INR 1.11 Lakhs per metric ton will be the CAPEX for the proposed recycled polyester yarn / chips manufacturing plant including GST, pre-operative and preliminary expenses. As per our tertiary research and data/information available in the public domain, we found that the investment required can be anywhere from ~ INR 1.5 Lakhs to ~ INR 5 Lakhs per metric

ton. As per our assessment, estimated project cost is lower as compared to industrial/sectoral capex data. As per discussions with the Management, Loop Industries + Ester would be making DMT and MEG but Texfil would be directly making the polymer. That's the reason for capex being lower than Loop Industries + Ester.

However, as a TEV consultant, we have relied upon the data/information provided by the client regarding Total Project cost such as quotations, etc. Details with respect to some of the upcoming textile to textile recycling projects are as under:

Company	Project Details	Project Location	Capacity (MTPA)	Capex (INR Cr)	Capex per MTPA (INR Lakhs)	Reference
Loop Industries + Ester	Manufacturing 100% recycled virgin-quality DMT and MEG monomers using proprietary Infinite Loop technology	India	- 70,000 MT of r-DMT - 23,000 MT of r-MEG	1,385	1.49	https://www.indianchemicalnews.com/petro-chemical/ester-industries-and-loop-industries-jv-project-to-set-up-rs-1385-crore-rdmr-and-rmeg-plant-22871
Syre + Selenis	Textile-To-Textile Recycling Plant	North Carolina, USA	- 10,000 MT of r-PET	492	4.92	https://www.selenis.com/news/selenis-syre-form-a-strategic-partnership-to-establish-a-textile-to-textile-recycling-plant-in-north-carolina
Carbios	Manufacturing 100% recycled PET using an enzymatic depolymerization process	France	- 50,000 MT of r-PET	2070	4.14	https://www.carbios.com/en/strategic-update-2023/

8. The project is proposed to be funded through a term loan of INR 200.00 crores and promoter's equity of INR 100.00 crores.



PART K

PROJECT IMPLEMENTATION SCHEDULE

Company has planned to achieve the C.O.D by 01st July 2026, as per the proposed implementation schedule shown in the table below:

S. No.	Particulars	Activity	Expected completion date	Status
1.	Sanction of Rupee Term Loan	Sanction of Rupee Term Loan	December 2024	Pending
2.	Land	Land Acquisition	August 2024	Completed
3.	Building & Civil Works	Site Plan preparation	October 2024	Completed
		Building & Civil Works completion	December 2025	Pending
4.	Plant & Machinery	Finalization of P&M suppliers	June 2024	Completed
		Orders to P&M suppliers	December 2024	Pending
		Arrival of P&M	September 2025	Pending
		Installation of P&M	March 2026	Pending
		Utility Installation	March 2026	Pending
5.	Statutory Approvals, registrations & NOCs	From the respective authorities	June 2026	Pending
6.	Finishing & Trial Run	Informed by client	June 2026	Pending
7.	Commercial Operation Date	Informed by client	01 st July 2026	Pending



Notes:

1. Schedule has been made as per feasibility to achieve different milestones.
2. Achievement of Milestone will depend on sanction of term loan as per proposed timeline.
3. For current status of statutory approvals, kindly refer the "Section L" of this report.
4. As per this timeline, the expected C.O.D will be 01st July 2026.



PART L

STATUTORY APPROVALS | LICENSES | NOC

As shown in the below table along with current status, following major approvals are required. However, the list is not exhaustive, and State/District Authorities may be approached for further clearances required (if any):

S. No.	REQUIRED APPROVALS	DATE REFERENCE NO.	STATUS (Approved/ Applied For/ Pending)
1.	Certificate of Incorporation <i>Ministry of Corporate Affairs, Government of India</i>	25 th June 2021 CIN: U17299DL2021PTC382764	Approved
2.	Land conversion to Industrial/Non agriculture <i>Collector/ District Magistrate, Bharuch</i>	12 th December 2024 Ref: 1213/21/03/065/2024	Approved
3.	Labour License Registration & grant of license under The Factories Act, 1948 <i>Labour & Employment Department, Gujarat</i>	-	Pending
4.	Building and civil works Plan Sanction Approval <i>Concerned local development authority</i>	-	Pending
5.	Fire NOC <i>Fire Services Department</i>	-	Pending
6.	Non domestic /industrial Power Connection <i>Gujarat State Electricity Corporation Limited</i>	-	Pending
7.	Consent to Establish under Air (Prevention and Control of Pollution) Act, 1981 & Water (Prevention and Control of Pollution) Act, 1974 <i>Gujarat Pollution Control Board</i>	-	Pending



Observation Notes:

1. Above is the only illustration of the major approvals sought or to be sought by the company. It should not be construed as the exhaustive list and in case any approval is missed to be mentioned then it is the sole responsibility of the company to keep the unit compliant with the necessary statutory approvals/ NOCs.



PART M

COMPANY'S FINANCIAL FEASIBILITY

1. PROJECTIONS OF THE FIRM:

The financial projections of the project are prepared from FY 2024-25 to FY 2034-35 based on the expected COD and loan tenor as per the best practice in industry to assess the financial feasibility of the project are elaborated below:

A. PROJECTED PROFIT & LOSS ACCOUNT:

Below table shows the Projected Profit & Loss Account of the proposed Recycled Polyester Yarn / Chips Manufacturing Plant from the period FY 2026-27 to FY 2034-35. FY 2027 would be the implementation period of the project:

(INR Lakhs)

Financial Year	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Months	9	12	12	12	12
% Production	70%	80%	90%	90%	90%
Sale of R-PET Yarn/Chips	14883.8	23814.0	28130.3	29536.8	31013.6
Gross Annual Revenue	14883.8	23814.0	28130.3	29536.8	31013.6
1. Raw Materials	5220.0	8352.1	9865.9	10359.2	10877.1
2. Utilities & Energy	2451.1	3921.7	4117.8	4323.7	4539.9
3. Packing	59.5	95.3	100.0	105.0	110.3
4. Selling & Marketing	297.7	476.3	500.1	525.1	551.4
Total Variable Expenses	8028.3	12845.3	14583.8	15313.0	16078.7
1. Salary & Wages	893.0	1428.8	1500.3	1575.3	1654.1
2. Factory Overheads	59.5	95.3	100.0	105.0	110.3
Total Fixed Expenses	952.6	1524.1	1600.3	1680.3	1764.3
Total Production Cost	8980.9	14369.4	16184.1	16993.3	17843.0
EBIDTA	5902.9	9444.6	11946.2	12543.5	13170.7
Other Income	105.0	350.0	665.0	1050.0	1505.0
Interest on Term Loan	1364.7	1788.3	1610.0	1403.0	1150.0
Interest on CC Limit	63.0	184.9	222.0	248.4	260.8
Interest on Unsecured Loan	0.0	0.0	0.0	0.0	0.0
Depreciation	779.7	1039.5	1039.5	1039.5	1039.5
Preliminary Expenses	14.8	19.7	19.7	19.7	19.7
PBT	3848.8	6947.1	9941.9	11131.2	12466.4

Less : Current Tax	154.8	1147.0	2026.2	2432.5	2859.8
Less: Deferred Tax	813.8	601.4	476.0	369.0	277.7
PAT	2880.1	5198.6	7439.7	8329.7	9328.9

(Continued)

Financial Year	FY 2032	FY 2033	FY 2034	FY 2035
Months	12	12	12	12
% Production	90%	90%	90%	90%
Sale of R-PET Yarn/Chips	32564.3	34192.5	35902.2	37697.3
Gross Annual Revenue	32564.3	34192.5	35902.2	37697.3
1. Raw Materials	11421.0	11992.0	12591.6	13221.2
2. Utilities & Energy	4766.9	5005.2	5255.5	5518.3
3. Packing	115.8	121.6	127.7	134.0
4. Selling & Marketing	578.9	607.9	638.3	670.2
Total Variable Expenses	16882.6	17726.7	18613.1	19543.7
1. Salary & Wages	1736.8	1823.6	1914.8	2010.5
2. Factory Overheads	115.8	121.6	127.7	134.0
Total Fixed Expenses	1852.5	1945.2	2042.4	2144.6
Total Production Cost	18735.1	19671.9	20655.5	21688.3
EBIDTA	13829.2	14520.6	15246.7	16009.0
Other Income	2030.0	2590.0	3220.0	3990.0
Interest on Term Loan	874.0	575.0	253.0	11.5
Interest on CC Limit	273.8	287.5	301.9	317.0
Interest on Unsecured Loan	0.0	0.0	0.0	0.0
Depreciation	1039.5	1039.5	1039.5	1039.5
Preliminary Expenses	4.9	0.0	0.0	0.0
PBT	13940.7	15496.1	17174.1	18948.0
Less : Current Tax	3308.8	3766.8	4246.0	4741.0
Less: Deferred Tax	199.8	133.2	76.4	27.9
PAT	10432.1	11596.0	12851.8	14179.2

B. PROJECTED BALANCE SHEET:



Below table shows the Projected Balance Sheet of the proposed Recycled Polyester Yarn / Chips Manufacturing Plant from the period FY 2024-25 to FY 2034-35. FY 2027 would be the implementation period of the project:

(INR Lakhs)

Financial Year	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Months	Cons.	Cons.	9 M	12 M	12 M	12 M
Equity	2500.0	7500.0	10000.0	10000.0	10000.0	10000.0
Reserve & Surplus	0.0	0.0	2880.1	8078.7	15518.5	23848.2
Secured Loan	0.0	10500.0	18500.0	16500.0	14000.0	11000.0
Unsecured loan	2500.0	2500.0	0.0	0.0	0.0	0.0
Deferred Tax Liability	0.0	0.0	813.8	1415.3	1891.3	2260.3
Trade Payables	0.0	0.0	958.2	1149.8	1298.7	1363.6
Term liabilities payable within one year	0.0	0.0	1500.0	2000.0	2500.0	3000.0
CC Limit	0.0	0.0	1826.7	2192.0	2634.0	2765.7
Total Equity & Liabilities	5000.0	20500.0	36478.8	41335.8	47842.4	54237.8
Land	1200.0	1200.0	1200.0	1200.0	1200.0	1200.0
Civil Works	1400.0	3548.3	3548.3	3548.3	3548.3	3548.3
Plant & Machinery	2400.0	15596.7	24403.2	24403.2	24403.2	24403.2
Total Gross Block	5000.0	20345.0	29151.5	29151.5	29151.5	29151.5
Depreciation	0.0	0.0	779.7	1819.2	2858.7	3898.3
Net Block	5000.0	20345.0	28371.8	27332.3	26292.8	25253.2
Trade Receivables	0.0	0.0	1653.8	1984.5	2344.2	2461.4
Inventories	0.0	0.0	1740.0	2088.0	2466.5	2589.8
Advance to Suppliers	0.0	0.0	200.0	200.0	200.0	200.0
Investments	0.0	0.0	3000.0	7000.0	12000.0	18000.0
Cash & Bank	0.0	56.5	1429.5	2667.0	4494.7	5708.8
Current Assets	0.0	56.5	8023.2	13939.5	21505.3	28960.0
Preliminary Expenses W/off	0.0	98.5	83.7	64.0	44.3	24.6
Total Assets	5000.0	20500.0	36478.8	41335.8	47842.4	54237.8

(Continued)

Financial Year	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
Months	12 M	12 M	12 M	12 M	12 M
Equity	10000.0	10000.0	10000.0	10000.0	10000.0
Reserve & Surplus	33177.1	43609.2	55205.3	68057.0	82236.2
Secured Loan	8000.0	4500.0	1000.0	0.0	0.0

Unsecured loan	0.0	0.0	0.0	0.0	0.0
Deferred Tax Liability	2538.1	2737.9	2871.1	2947.5	2975.4
Trade Payables	1431.8	1503.4	1578.5	1657.5	1740.3
Term liabilities payable within one year	3000.0	3500.0	3500.0	1000.0	0.0
CC Limit	2904.0	3049.2	3201.6	3361.7	3529.8
Total Equity & Liabilities	61050.9	68899.6	77356.5	87023.7	100481.7
Land	1200.0	1200.0	1200.0	1200.0	1200.0
Civil Works	3548.3	3548.3	3548.3	3548.3	3548.3
Plant & Machinery	24403.2	24403.2	24403.2	24403.2	24403.2
Total Gross Block	29151.5	29151.5	29151.5	29151.5	29151.5
Depreciation	4937.8	5977.4	7016.9	8056.4	9096.0
Net Block	24213.7	23174.1	22134.6	21095.1	20055.5
Trade Receivables	2584.5	2713.7	2849.4	2991.8	3141.4
Inventories	2719.3	2855.2	2998.0	3147.9	3305.3
Advance to Suppliers	200.0	200.0	200.0	200.0	200.0
Investments	25000.0	33000.0	41000.0	51000.0	63000.0
Cash & Bank	6328.5	6956.5	8174.6	8588.9	10779.4
Current Assets	36832.3	45725.5	55221.9	65928.7	80426.2
Preliminary Expenses W/off	4.9	0.0	0.0	0.0	0.0
Total Assets	61050.9	68899.6	77356.5	87023.7	100481.7

C. PROJECTED CASH FLOW STATEMENT:

(INR Lakhs)

Financial Year	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Particulars	Cons.	Cons.	9 M	12 M	12 M	12 M
Net Profit	0.0	0.0	2880.1	5198.6	7439.7	8329.7
Deferred Tax	0.0	0.0	813.8	601.4	476.0	369.0
Increase in Equity / Share Capital	2500.0	5000.0	2500.0	0.0	0.0	0.0
Increase in TL	0.0	10500.0	9500.0	0.0	0.0	0.0
Increase in CC	0.0	0.0	1826.7	365.3	442.0	131.7
Increase in Unsecured Loan	2500.0	0.0	0.0	0.0	0.0	0.0
Depreciation	0.0	0.0	779.7	1039.5	1039.5	1039.5
Preliminary Expenses w/off	0.0	0.0	14.8	19.7	19.7	19.7
Trade payables	0.0	0.0	958.2	191.6	148.8	64.9

TOTAL	5000.0	15500.0	19273.2	7416.3	9565.8	9954.6
Capital Expenses	5000.0	15345.0	8806.5	0.0	0.0	0.0
Decrease in Term Loan	0.0	0.0	0.0	1500.0	2000.0	2500.0
Decrease in Unsecured Loan	0.0	0.0	2500.0	0.0	0.0	0.0
Investments	0.0	0.0	3000.0	4000.0	5000.0	6000.0
Trade Receivable	0.0	0.0	1653.8	330.8	359.7	117.2
Inventory	0.0	0.0	1740.0	348.0	378.5	123.3
Advance to suppliers	0.0	0.0	200.0	0.0	0.0	0.0
Preliminary Expense	0.0	98.5	0.0	0.0	0.0	0.0
TOTAL	5000.0	15443.5	17900.3	6178.8	7738.1	8740.5
Opening Balance	0.0	0.0	56.5	1429.5	2667.0	4494.7
Net Surplus/ Deficit	0.0	56.5	1373.0	1237.5	1827.7	1214.1
Cumulative Balance	0.0	56.5	1429.5	2667.0	4494.7	5708.8

(Continued)

Financial Year	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
Particulars	12 M	12 M	12 M	12 M	12 M
Net Profit	9328.9	10432.1	11596.0	12851.8	14179.2
Deferred Tax	277.7	199.8	133.2	76.4	27.9
Increase in Equity / Share Capital	0.0	0.0	0.0	0.0	0.0
Increase in TL	0.0	0.0	0.0	0.0	0.0
Increase in CC	138.3	145.2	152.5	160.1	168.1
Increase in Unsecured Loan	0.0	0.0	0.0	0.0	0.0
Depreciation	1039.5	1039.5	1039.5	1039.5	1039.5
Preliminary Expenses w/off	19.7	4.9	0.0	0.0	0.0
Trade payables	68.2	71.6	75.2	78.9	82.9
TOTAL	10872.3	11893.2	12996.5	14206.7	15497.5
Capital Expenses	0.0	0.0	0.0	0.0	0.0
Decrease in Term Loan	3000.0	3000.0	3500.0	3500.0	1000.0
Decrease in Unsecured Loan	0.0	0.0	0.0	0.0	0.0
Investments	7000.0	8000.0	8000.0	10000.0	12000.0
Trade Receivable	123.1	129.2	135.7	142.5	149.6
Inventory	129.5	136.0	142.8	149.9	157.4
Advance to suppliers	0.0	0.0	0.0	0.0	0.0
Preliminary Expense	0.0	0.0	0.0	0.0	0.0
TOTAL	10252.6	11265.2	11778.4	13792.4	13307.0

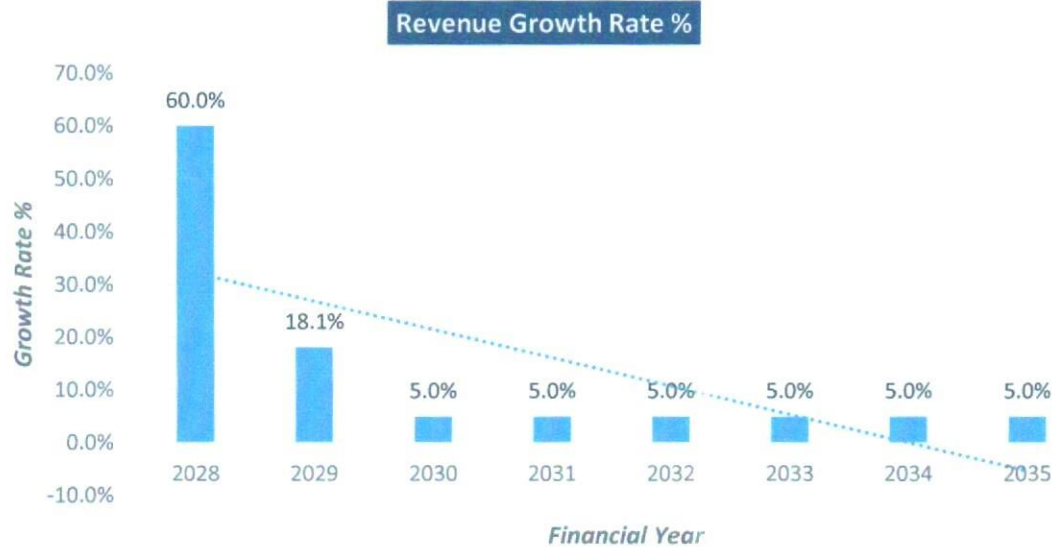
Opening Balance	5708.8	6328.5	6956.5	8174.6	8588.9
Net Surplus/ Deficit	619.8	628.0	1218.0	414.4	2190.5
Cumulative Balance	6328.5	6956.5	8174.6	8588.9	10779.4

D. KEY FINANCIAL RATIO:

YEAR	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
EBITDA									
Margin %	39.7%	39.7%	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%
EBIT Margin									
%	34.4%	35.3%	38.8%	38.9%	39.1%	39.3%	39.4%	39.6%	39.7%
PAT Margin									
%	19.4%	21.8%	26.4%	28.2%	30.1%	32.0%	33.9%	35.8%	37.6%
Revenue									
Growth %	-	60.0%	18.1%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

E. GRAPHICAL REPRESENTATION OF KEY RATIOS:





F. ESTIMATED KEY FINANCIAL METRICS:

DEBT SERVICE COVERAGE RATIO (DSCR)

Particular	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035*
PAT (Profit After Tax)	2880.1	5198.6	7439.7	8329.7	9328.9	10432.1	11596.0	12851.8	3544.8
Depreciation	779.7	1039.5	1039.5	1039.5	1039.5	1039.5	1039.5	1039.5	259.9
Deferred Tax	813.8	601.4	476.0	369.0	277.7	199.8	133.2	76.4	7.0
Preliminary Expenses	14.8	19.7	19.7	19.7	19.7	4.9	0.0	0.0	0.0
Interest on term loan	1364.7	1788.3	1610.0	1403.0	1150.0	874.0	575.0	253.0	11.5
Interest on CC	63.0	184.9	222.0	248.4	260.8	273.8	287.5	301.9	79.3
Subtotal	5916.0	8832.4	10807.0	11409.4	12076.7	12824.2	13631.4	14522.6	3902.4

Interest on term loan	1364.7	1788.3	1610.0	1403.0	1150.0	874.0	575.0	253.0	11.5
Interest on CC	63.0	184.9	222.0	248.4	260.8	273.8	287.5	301.9	79.3
Loan Repayment	0.0	1500.0	2000.0	2500.0	3000.0	3000.0	3500.0	3500.0	1000.0
Subtotal	1427.7	3473.1	3832.0	4151.4	4410.8	4147.8	4362.5	4054.9	1090.8
DSCR	4.1	2.5	2.8	2.7	2.7	3.1	3.1	3.6	3.6
Average DSCR	3.03								
Maximum DSCR	4.14								

* Considered till June 2034



G. SENSITIVITY ANALYSIS OF D.S.C.R:

The proposed project is found comparatively more sensitive with respect to the revenue, than the cost of raw material and any surge in the interest rate. Sensitivity analysis of the project with respect to 10% decrease in the revenue, 10% increase in the raw material cost and 2% increment in the proposed interest rate has been shown in the below table:

Sensitivity Analysis of D.S.C.R			
S. No.	Particular	Average D.S.C.R	Max. D.S.C.R
1.	If the projected revenue /capacity utilisation decreased by 10%	2.44	3.37
2.	If the projected raw material cost increased by 10%	2.83	3.86
3.	If interest rate is increased by 2%	2.87	3.57

H. NPV, IRR AND PAYBACK PERIOD OF THE PROJECT:



Free Cash Flow for the project						
Particulars	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
EBIT	0.0	0.0	5276.4	8920.2	11773.9	12782.6
Less: Taxes	0.0	0.0	514.2	1643.6	2487.2	2848.1
Add: Depreciation & Amortisation	0.0	0.0	779.7	1039.5	1039.5	1039.5
NOPAT	0.0	0.0	5541.9	8316.1	10326.2	10974.1
+/- WCC	0.0	0.0	2435.6	487.1	589.3	175.6
Capex	5000.0	15345.0	8806.5	0.0	0.0	0.0
Free Cash Flow to Firm (FCFF)	-5000.0	-15345.0	-5700.1	7829.0	9736.9	10798.5
Discount Period	0.4	1.4	2.4	3.4	4.4	5.4
Discount Factor	0.94	0.82	0.71	0.61	0.53	0.46
PV Of FCFF	-4708.6	-12511.5	-4023.9	4785.0	5152.5	4947.4
TV	0.0	0.0	0.0	0.0	0.0	0.0
PV Of TV	0.0	0.0	0.0	0.0	0.0	0.0
PV(FCFF+TV)	-4708.6	-12511.5	-4023.9	4785.0	5152.5	4947.4

(INR Lakhs)

Free Cash Flow for the project					
Particulars	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
EBIT	13877.2	15088.6	16358.6	17729.1	19276.5
Less: Taxes	3214.9	3597.7	3983.9	4385.6	4823.6
Add: Depreciation & Amortisation	1039.5	1039.5	1039.5	1039.5	1039.5
NOPAT	11701.9	12530.4	13414.3	14383.0	15492.4
+/- WCC	184.4	193.6	203.3	213.4	224.1
Capex	0.0	0.0	0.0	0.0	0.0
Free Cash Flow to Firm (FCFF)	11517.5	12336.8	13211.0	14169.5	15268.3
Discount Period	6.4	7.4	8.4	9.4	10.4
Discount Factor	0.40	0.34	0.30	0.26	0.22
PV Of FCFF	4568.7	4237.0	3928.3	3647.9	3403.3
TV	0.0	0.0	0.0	0.0	142287.4
PV Of TV	0.0	0.0	0.0	0.0	31715.4
PV(FCFF+TV)	4568.7	4237.0	3928.3	3647.9	35118.7

Key Input for NPV & IRR		
S. No.	Key Input	Description
1.	Market Risk Premium	6.80% (Damodaran ERP India July 2024)
2.	Company Specific Risk Premium	5%
3.	Discount Rate	15.50%
4.	Perpetual Growth Rate	5.0%
NPV		INR 47,887.35 Lakhs
IRR		37.65%

Payback Period of the Project		
Financial Year	Cash Accrual	Accumulated Cash Accrual
2025	0.00	0.00
2026	0.00	0.00
2027	4473.58	4473.58
2028	6839.60	11313.18
2029	8955.32	20268.51
2030	9738.32	30006.82
2031	10646.15	40652.97
2032	11671.46	52324.43
2033	12768.84	65093.26
2034	13967.71	79060.97
2035	15246.56	94307.54
Total	94307.54	
TPC	INR 30000.00 Lakhs	
Payback Period	3.75 Years	

Thus, the project will be having a payback period of **3.75 years** and NPV & IRR of the project as on COD will **INR 47,887.35 Lakhs & 37.65%** respectively, which indicates worthiness of the project.

I. OTHER FINANCIAL RATIOS:

Financial Year	2027	2028	2029	2030	2031	2032	2033	2034	2034
Return On Revenue (%)	19%	22%	26%	28%	30%	32%	34%	36%	38%
Return On Capital (%)	17%	25%	29%	28%	27%	25%	24%	22%	21%
Return On Investment	10%	20%	31%	40%	52%	72%	105%	129%	142%
Return On Net Worth	22%	29%	29%	25%	22%	19%	18%	16%	15%
Fixed Assets Coverage	1.5	1.7	1.9	2.3	3.0	5.1	22.1	-	-
Interest Coverage Ratio	4.3	5.3	7.4	8.9	11.5	15.8	25.3	60.3	-
Current Ratio	1.3	1.5	1.9	1.9	2.1	2.0	2.2	4.4	8.1

TOL / TNW	1.6	1.1	0.7	0.5	0.3	0.2	0.1	0.0	0.0
Debt - Equity Ratio	2.0	1.9	1.7	1.4	1.1	0.8	0.5	0.1	0.0

J. BREAK-EVEN ANALYSIS:

(INR lakhs)

Financial Year	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenue	14883.8	23814.0	28130.3	29536.8	31013.6	32564.3	34192.5	35902.2	37697.3
Variable Expenses	8028.3	12845.3	14583.8	15313.0	16078.7	16882.6	17726.7	18613.1	19543.7
Contribution	6855.4	10968.7	13546.5	14223.8	14935.0	15681.7	16465.8	17289.1	18153.6
Fixed Expenses	3096.9	4351.9	4249.8	4122.9	3953.9	3766.1	3559.7	3335.0	3195.6
Profit / PBT	3758.5	6616.8	9296.6	10100.9	10981.1	11915.7	12906.1	13954.1	14958.0
PV RATIO	46.1%	46.1%	48.2%	48.2%	48.2%	48.2%	48.2%	48.2%	48.2%
BEP Revenue	6723.6	9448.4	8825.1	8561.4	8210.5	7820.6	7392.0	6925.3	6635.9
BEP%	45.2%	39.7%	31.4%	29.0%	26.5%	24.0%	21.6%	19.3%	17.6%

K. TERM LOAN INPUTS:

Term Loan Repayment Inputs	
Total loan amount	INR 200 Cr
Rate of Interest	9.20%
1st Disbursement	Jul-25
IDC Start & End Month	July-25 to June-26
IDC Period (construction period)	12 Months
Commencement /Operation Start	Jul-26
Moratorium Start & End Month (only interest to pay)	July-25 to June-27
Moratorium Period after COD	12 Months
Repayment Start	Jul-27
Repayment End	Jun-34
Repayment Period	84 Months

(INR lakhs)

Financial Year (FY)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Op. Bal	0.0	10500.0	20000.0	18500.0	16500.0	14000.0	11000.0	8000.0	4500.0	1000.0
Disbursement	10500.0	9500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rep.	0.0	0.0	1500.0	2000.0	2500.0	3000.0	3000.0	3500.0	3500.0	1000.0
Closing balance	10500.0	20000.0	18500.0	16500.0	14000.0	11000.0	8000.0	4500.0	1000.0	0.0
Interest	345.0	1721.2	1788.3	1610.0	1403.0	1150.0	874.0	575.0	253.0	11.5
IDC	345.0	356.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TL Interest	0.0	1364.7	1788.3	1610.0	1403.0	1150.0	874.0	575.0	253.0	11.5
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L. DEPRECIATION SCHEDULE (STRAIGHT LINE METHOD):

(INR lakhs)

Financial Year (FY)	2027	2028	2029	2030	2031	2032	2033	2034	2035
Building/Civil Works	3,590.1	3,590.1	3,590.1	3,590.1	3,590.1	3,590.1	3,590.1	3,590.1	3,590.1
Depreciation - Building/Civil Works	85.4	113.8	113.8	113.8	113.8	113.8	113.8	113.8	113.8
Plant & Machinery	24,361.4	24,361.4	24,361.4	24,361.4	24,361.4	24,361.4	24,361.4	24,361.4	24,361.4
Depreciation - P&M	694.3	925.7	925.7	925.7	925.7	925.7	925.7	925.7	925.7
Total SLM Depreciation	779.7	1,039.5	1,039.5	1,039.5	1,039.5	1,039.5	1,039.5	1,039.5	1,039.5

M. WORKING CAPITAL REQUIREMENT:

(INR lakhs)

Financial Year (FY)	2027	2028	2029	2030	2031	2032	2033	2034	2035
Net WC	2435.6	2922.7	3512.0	3687.6	3872.0	4065.6	4268.8	4482.3	4706.4
Working Cap Margin	608.9	730.7	878.0	921.9	968.0	1016.4	1067.2	1120.6	1176.6
CC Loan	1826.7	2192.0	2634.0	2765.7	2904.0	3049.2	3201.6	3361.7	3529.8

2. KEY ASSUMPTIONS & BASIS:

S. No.	Item	Assumptions and Basis
1.	General	<p>a. The projections of the Company are done for the period from FY 2025 to FY 2035, ~10.5 years, to cover the term loan period as per the industry best practices. It is assumed that the unit will be achieving on 01st July 2026.</p> <p>b. We have considered both Revenue & cost-based model (top to bottom approach) while making the future financial projections.</p>
2.	Revenue Build up	<p>a. In general, we assume the plant to be operational for 300-330 days while estimating future projections of a project. But in this case, after deliberations with the management of M/s Texfil, we have assumed the plant to be operational for 360 days for 24 hours annually. As per the Management, M/s Texfil is proposing to set up a continuous process plant which shall run</p>

		<p>24*7 and shall require minimal maintenance. Since shut down and start-up costs for a continuous process plant can be significant, it has been assumed that maintenance shall be carried out once a year and the plant shall be shut for 5 days on average during that period. With reference to the existing plant which are being run by the parent company, Filatex, the plant has been non-operational for just 11 days during the past 5 years (except covid mandatory shutdown), the assumption for 360 operational days seems justified and reasonable.</p> <p>b. Total income for the financial years during the forecasted period will be generating from sale of sale of Recycled Polyester (R-PET) yarn / chips.</p> <table><tr><th colspan="4">Revenue @100% capacity</th></tr><tr><th>Products</th><th>Unit Price</th><th>Annual Quantity</th><th>Amount (INR)</th></tr><tr><td>Sale of R-PET Chips</td><td>1,00.00</td><td>INR/Kg</td><td>2,70,00,00,000</td></tr><tr><td colspan="3">Total Revenue (INR)</td><td>2,70,00,00,000</td></tr></table> <p>c. Thus, the company is expected to generate INR 14883.8 Lakhs (@ 70% Capacity Utilization) in the initial year. Further it is expected to increase up to INR 37697.3 Lakhs till FY 2034-35.</p>	Revenue @100% capacity				Products	Unit Price	Annual Quantity	Amount (INR)	Sale of R-PET Chips	1,00.00	INR/Kg	2,70,00,00,000	Total Revenue (INR)			2,70,00,00,000
Revenue @100% capacity																		
Products	Unit Price	Annual Quantity	Amount (INR)															
Sale of R-PET Chips	1,00.00	INR/Kg	2,70,00,00,000															
Total Revenue (INR)			2,70,00,00,000															
3.	Pricing (Average Price Per Unit)	<p>a. Proposed selling price per unit of R-PET Chips in the below table:</p> <table><tr><th colspan="2">Selling price per unit</th></tr><tr><th>Products</th><th>Unit prices</th></tr><tr><td>Sale of R-PET Chips</td><td>INR 100.00 /Kg</td></tr></table> <p>b. As per the current market scenario, average rate of recycled R-PET Chips is ~ INR 100/Kg. Thus, average sales price is in line with market price. (Ref: https://www.indiamart.com/proddetail/recycled-pet-chips-11439899991.html?pos=1&DualProdsdual;)</p>	Selling price per unit		Products	Unit prices	Sale of R-PET Chips	INR 100.00 /Kg										
Selling price per unit																		
Products	Unit prices																	
Sale of R-PET Chips	INR 100.00 /Kg																	

		<p>https://www.millenniumpolyester.com/recycled-pet-chips.html#recycled-pet-chips).</p> <p>c. At present, the price for recycled polyester chips has been in the range of INR 75-130 per kg. (Ref: https://www.fibre2fashion.com/news/yarn-news/cotton-yarn-steady-in-north-india-recycled-polyester-fibre-prices-up-298498-newsdetails.htm)</p> <p>d. Given these current trends, the INR 100/kg rate for recycled polyester chips seems reasonable for projecting revenue. It aligns with the range observed in recent years, reflecting market conditions and sustainable demand. As environmental regulations and consumer preferences continue to support growth in recycled materials, the price of recycled polyester could increase further, making INR 100/kg a competitive and realistic figure in current and future market projections.</p> <p>e. As escalation factor of 5% has been considered in the prices of the products during the forecasted periods considering the micro and macro-economic factors. Such as, the growing global demand for sustainable and eco-friendly products, driven by increasing awareness of environmental issues, supports a steady rise in the use of recycled polyester.</p> <p>f. Second, the fashion and textile industries are progressively adopting sustainable practices, which is expected to increase the consumption of recycled polyester yarn and chips.</p> <p>g. Additionally, government regulations and initiatives aimed at reducing plastic waste and promoting recycling further encourage the use of recycled materials, boosting demand. While the market for recycled polyester is expected to expand, a conservative growth estimate of 5% accounts for potential market fluctuations, competition, and the gradual adoption of</p>
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		<p>new technologies in the sector. This growth rate reflects a balanced and realistic expectation of market conditions over the forecasted period.</p> <p>h. Apart from that, the inflation rate in India has varied from 4.9% in 2020 to around 6.7% in 2022, with 2023 estimates around 5.5%. These fluctuations point to a typical inflation rate range of 5%-6%.</p> <p>i. Thus, 5% price escalation is justified considering the above-mentioned factors. Further the plant is expected to be operational from 1st July 2026 i.e., after ~1.5 years.</p>
4.	Capacity Utilization	<p>a. For the proposed recycled polyester plant, initially we have assumed a 70% capacity utilization in the first year. As informed by the company, Existing units for Filatex are running for nearly 90-100% for the past couple of years which indicates strong market demand and suggests that the company is effectively meeting current market needs. Given that the industry is projected to grow at a CAGR of 14.0% during the forecast period, the company can anticipate a steady increase in orders for the new plant.</p> <p>b. Due to the company's strong market positioning and the increasing demand in the industry, the plant is expected to reach 70% utilization faster than typical new units. The presence of established supply chains, customer agreements, and operational efficiencies should support this higher-than-expected capacity utilization.</p> <p>c. Additionally, based on our market and tertiary research, to the extent that data was available in the public domain, there is a clear demand for recycled polyester yarn/chips. Given the growing global awareness of the environmental impact of polyester usage, the demand for recycled PET is expected to</p>

		<p>increase over time.</p> <p>d. Since the Commercial Operations Date (COD) is set for July 2026, which is still 1.5 years away, the company has ample time to prepare the market and secure orders in advance.</p> <p>e. In accordance to the above listed reasons, the capacity utilisation has been projected @ 70% in 1st year, increase to 80% in 2nd year, 90% in 3rd year and constant thereafter as the new proposed unit will take some time to achieve the economies of scale and is expected to operate at a higher capacity in the later years.</p> <p>f. We have considered the capacity utilization on conservative basis to keep a mark-up for future market & economic risks in the Project.</p>
5.	Capital Expenditure	<p>a. As per sale land deed, ~INR 10 Cr is the consideration for cost of land and other ancillary costs viz. viz. registration fees, stamp duty and other levies amount to ~INR 0.59 Cr. The actual total acquisition cost of land is Rs. 10.59 crores. Various other capital cost amounting to INR 1.41 Cr is expected to be incurred on account of other fees and charges for levelling and other necessary development on this land. Thus, the total estimated cost of land acquisition is Rs 12.00 Cr.</p> <p>b. The estimated cost of the Civil works has been estimated by the Company at ~INR 34.00 crores including applicable GST The estimated Building & Civil works cost has been verified independently by us, which we found to be reasonable and within permitted range.</p> <p>c. The cost of Plant & Machinery/Equipment has been estimated at Rs. 237.50 crores, including purchases of all the required equipment for the proposed unit as per the quotations received from the vendors by the Company and cost estimated by the</p>

		<p>Company. The cost of major plant & machinery has been verified by us independently, which we found reasonable & in the permissible range although the cost may change as per specifications & brand.</p> <p>d. Estimated cost of Pre-Operative Expenses has been estimated by the Company at INR 0.99 crores.</p> <p>e. We have relied upon the data/information provided by the client in this regard as quotations has been shared by the client.</p> <p>f. As per our assessment, estimated project cost is lower as compared to industrial/sectoral capex data. Company is proposing ~INR 1.11 Lakhs per metric ton CAPEX for the proposed Recycled Polyester Yarn / Chips Manufacturing Plant including GST, pre-operative and preliminary expenses.</p> <p>g. As per our tertiary research and data/information available in the public domain, we found that the investment required can be anywhere from ~ INR 1.5 Lakhs to ~ INR 5 Lakhs per metric ton. Capex estimated is approx. 35% lower than INR 1.49 Lakhs/MT capex in case of Loop Industries + Ester. As per discussions with the Management, Loop Industries + Ester would be making DMT and MEG but Texfil would be directly making the polymer. That's the reason for capex being lower than Loop Industries + Ester.</p>												
6.	Expenses	<p>a. The cost of the raw material @ 100% capacity has been shown in the below table:</p> <table><tr><th colspan="4">Raw material Cost @ 100% capacity</th></tr><tr><th>Raw Material</th><th>INR/Kg</th><th>Annual Quantity</th><th>Amount INR</th></tr><tr><td>PET Cloth Waste (including process loss)</td><td>15.00</td><td>3,18,60,000</td><td>47,79,00,000</td></tr></table>	Raw material Cost @ 100% capacity				Raw Material	INR/Kg	Annual Quantity	Amount INR	PET Cloth Waste (including process loss)	15.00	3,18,60,000	47,79,00,000
Raw material Cost @ 100% capacity														
Raw Material	INR/Kg	Annual Quantity	Amount INR											
PET Cloth Waste (including process loss)	15.00	3,18,60,000	47,79,00,000											

			Mono Ethylene Glycol (MEG)	48.00	27,00,000	12,96,00,000
			De-poly Catalyst (consumables)	185.00	94,500	1,74,82,500
			Diatomaceous Earth (Consumables)	31.65	11,25,000	3,56,06,250
			MOF e.g. Activated Carbon (Consumables)	100.00	28,63,575	28,63,57,500
			Total		INR 94,69,46,250	
		b.	As per our tertiary research and data available in the public domain, we found the unit rates for Mono Ethylene Glycol (MEG), Diatomaceous Earth and Activated Carbon to be lower than the market prices. (Please refer section G of the report). Escalation of 5% is considered during forecasted period.			
		c.	As per information provided by the client, estimated annual consumption of the power for Depolymerization Section will be 96,76,800 Kwh at 100% capacity and the applicable per unit charges will INR 7 per Kwh. Estimated annual consumption of the power for Polymerization Section has not been provided to us. Average cost for utilities & energy has been estimated at INR 16.47/ Kg. As per discussions with the Management, these are provisional estimates based on their experience. Bank may ask client the final power consumption estimates closer to plant commissioning.			
		d.	A 5% escalation rate has been considered during the forecasted period, on Utilities & Energy, Packing, Factory Overheads, salary & wages of the proposed manpower, selling and marketing expenses and repair & maintenance considering the long term historical average inflation rate in India.			
		e.	Company is expected to have a higher EBITDA as compared to industry trends and peer's scales. EBITDA margins of peers are			

		in the range of ~10%-15%, whereas EBITDA of Company is expected to be in the range of ~40%-43%. As per discussions with the Management, all of its peers are only using bottle waste for their process which is significantly more expensive than textile waste. Plus, all reputed international brands have expressed firm commitments and readiness to establish a supply chain from textile to textile recycled polyester and are willing to pay a substantial price premium for the same. Therefore, profitability cannot be compared to existing players.
7.	Partial Loan	<p>a. The project is proposed to be funded through a term loan of INR 200 crore and promoter's equity of INR 100.00.</p> <p>b. First disbursement shall be in July 2025 and total tenure of term loan will be 108 months from July 2025 to June 2034. Total moratorium period is 24 months (moratorium period after COD is 12 months). As per discussion with bank, Interest rate has been considered as 9.2%. Repayment period shall be 84 months.</p> <p>c. As per working capital schedule, the company will be requiring a cash credit of INR 18.27 Cr from first year onwards (75% of net working capital) which will increase proportionately with increase in net working capital.</p>

Key Findings:

1. Average DSCR, EBITDA margin, EBIT margin is 3.03, 41.84%, and 38.28% respectively during the estimated period.
2. Company is expected to have a higher EBITDA as compared to industry trends and peer's scales. EBITDA margins of peers are in the range of ~10%-15%, whereas EBITDA of Company is expected to be in the range of ~40%-43%. As per discussions with the Management, the overall cost and expected revenue has been estimated by the company on the basis of their best judgment on current prevailing prices during the pilot run. Therefore, profitability cannot be compared to existing players.

3. The company is having a positive NPV and IRR as on COD, of INR 47,887.35 Lakhs and 37.65% respectively at the base cases while it may vary with changes in the assumptions & micro and macro-economic trends considered as on date.
4. The proposed project is having a payback period of 3.75 years.
5. Based on the above key financial ratios of the proposed Project during the forecasted period shows that the project appears financially viable if the promoters of the project are able to maintain assumed capacity utilization, revenue and can contain cost as assumed above in the calculation.



PART N

CONCLUSION

Based on the technological, economic and market analysis done above, various assumptions of sectoral trends taken, product pricing to be adopted by the company, the Project appears to be Techno-commercially viable subject to the risks, threats, weaknesses, limitations of the product as detailed previously.


As per financial projections for the estimated period, **Average DSCR, EBITDA Margin and EBIT Margin** of the project are **3.03, 41.84%, and 38.28%** respectively, where higher DSCR is the indicator of the project capability to pay out its outstanding debt and EBITDA margin shows the capability of the project to generate the operating profits over the forecasted period. Also, the project is having the payback period of **3.75 Years** in the line with sectoral trends.

The proposed Plant is having a positive **NPV and IRR** as **INR 47,887.35 Lakhs and 37.65%** respectively at a 90% capacity utilization as the industry is expectedly growing at a CAGR of 14.0% during the forecasted period. While it is not avoidable that the future projections may change in the upcoming years due to various micro-macro market factors impacting the operation, managerial, financial efficiency and economies of scale of the project.

While it would be depending on the management's capability in future that how efficiently company adopts marketing and advertisement strategy, supply chain and carry out inventory & resource management to achieve higher profitability. After considering the foreseen demand of the recycled polyester yarn/chips domestically and globally, various initiatives taken by the government, financial analysis of the project based on the assumptions taken over the projected period, it appears reasonable to comment that the proposed project is "**Technically and Economically**" Viable subject to current assumptions considered and occurring the same in the upcoming years same as the forecasted period which is dependent on the sincerity and efforts of the management and various micro and macroeconomic & industry situation.

We have tried our level best to analyse the Project techno-economic feasibility of the Project based on the Industry research, Project information and various futuristic assumption taken within the limitations and challenges came in front of us. However achieving the financial milestones depends on the ability, sincerity and efforts of the company, promoters and its key management to maintain the projected revenue and EBITDA levels Y-o-Y basis keeping the fact in mind that the project is found sensitive with respect to the down side fluctuation in the revenue and is expected to have higher EBITDA margins compared to the industry.

Declaration	<p>i. The undersigned does not have any direct/indirect interest in the above property/project/Company.</p> <p>ii. The information furnished herein is true and correct to the best of our knowledge, logical and scientific assumptions.</p> <p>iii. This TEV Report is carried out by our Financial Analyst team on the request from M/s Texfil Private Limited.</p> <p>iv. Meeting of Financial projections will be subject to the market & economy stability factors, judicious business operations and proper & timely implementation of the project and putting proper plan for achieving high productivity, efficiency and achieving cost saving benefits to increase profitability.</p> <p>v. We have submitted TEV report to M/s Texfil Private Limited.</p>
Number of Pages in the Repost	97
Enclosed Documents	Disclaimer & Remarks 91-94
Place	Noida
Date	12 th December 2024

FOR ON BEHALF OF M/S. R.K. ASSOCIATES VALUER & TECHNO ENGINEERING CONSULTANTS PVT. LTD.		
SURVEYED BY	PREPARED BY	REVIEWED BY
Mr. Abhinav Chaturvedi	Mr. Aneesh Mallick	Mr. Gaurav Kumar
		



PART O

DISCLAIMER | REMARKS

1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
2. This report is prepared based on the copies of the documents/ information which the Bank/ Company has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. The client/owner and its management/representatives warranted to us that the information they supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. I/We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the owner, company, its directors, employee, representative or agents. Verification or cross checking of the documents provided to us from the originals or from any Govt. departments/ Record of Registrar has not been done at our end since this is beyond the scope of our work. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
3. Legal aspects for e.g. investigation of title, ownership rights, lien, charge, mortgage, lease, sanctioned maps, verification of documents, etc. have not been done at our end and same has to be taken care by legal expert/ Advocate. It is assumed that the concerned Lender/ Financial Institution has satisfied them with the authenticity of the documents, information given to us and for which the legal verification has been already taken and cleared by the competent Advocate before requesting for this report. I/ We assume no responsibility for the legal matters including, but not limited to, legal or title concerns.
4. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document or DPR. All the information gathered is based on the facts seen on the site during survey, verbal discussion & documentary evidence provided by the client and is believed that information given by the company is true best of their knowledge.
5. This Techno Economic-Viability study is prepared based on certain futuristic assumption which are intra dependent on economic, market and sectorial growth condition in future and socio-economic, socio-political condition at macro and micro level.



6. Meeting of assumption and financial ratio will entirely depend on the sincerity and efforts of the company, promoters and its key managerial performance.
7. Detailed cost verification is out of scope of the project and we have relied upon the data/information provided by the client regarding Total Project cost and same has been verified by us.
8. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
9. This report has been diligently prepared by our techno-financial team to the best of their ability. However, it's important to note that the recommendations provided in this Total Economic Viability (TEV) assessment do not imply an endorsement, validation, or certification of the accuracy or completeness of the disclosed information by the involved stakeholders. Furthermore, we do not claim or endorse that the opinions presented herein are the sole best course of action for decision-makers to follow. There may exist additional approaches and inputs that have not been covered within this report or fall outside the scope of this report.
10. Bank/FII should **ONLY** take this report as an Advisory document from the Financial/ Chartered Engineering firm and its specifically advised to the creditor to cross verifies the original documents for the facts mentioned in the report which can be availed from the borrowing company directly.
11. In case of any default in loans or the credit facility extended to the borrowing company, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
12. The documents, information, data provided to us during the course of this assessment by the client are reviewed only up to the extent required in relation to the scope of the work. No document has been reviewed beyond the scope of the work.
13. This report only contains general assessment & opinion as per the scope of work evaluated as per the information given in the copy of documents, information, data provided to us and/ and confirmed by the owner/ owner representative to us at site which has been relied upon in

[Handwritten signature and red circular stamp of R.K. Associates]

good faith. It doesn't contain any other recommendations of any sort including but not limited to express of any opinion on the suitability or otherwise of entering into any transaction with the borrower.

14. We have relied on data from third party, external sources & information available on public domain also to conclude this report. These sources are believed to be reliable and therefore, we assume no liability for the truth or accuracy of any data, opinions or estimates furnished by others that have been used in this analysis. Where we have relied on data, opinions or estimates from external sources, reasonable care has been taken to ensure that such data has been correctly extracted from those sources and /or reproduced in its proper form and context, however still we can't vouch its authenticity, correctness or accuracy.
15. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
16. This is just an opinion report and doesn't hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.
17. All Pages of the report including annexure are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.
18. Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within **15 (Fifteen) days** in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client up to their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.
19. Defect Liability Period is **15 DAYS**. We request the concerned authorized reader of this report to check the contents, data and calculations in the report within this period and intimate us in writing if any corrections are required or in case of any other concern with the contents or opinion mentioned in the report. Corrections only related to typographical,

calculation, spelling mistakes, incorrect data/ figures/ statement will be entertained within the defect liability period. Any new changes for any additional information in already approved report will be regarded as additional work for which additional fees may be charged. No request for any illegitimate change in regard to any facts & figures will be entertained.

20. R.K Associates encourages its customers to give feedback or inform concerns over its services through proper channel at valuers@rkassociates.org in writing within **15 days** of report delivery. After this period no concern/ complaint/ proceedings in connection with the Techno- Economic Viability Study Services will be entertained due to possible change in situation and condition of the subject Project.
21. Our Data retention policy is of **ONE YEAR**. After this period, we remove all the concerned records related to the assignment from our repository. No clarification or query can be answered after this period due to unavailability of the data.
22. This Techno Economic Viability Study report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.
23. R.K Associates never releases any report doing alterations or modifications from pen. In case any information/ figure of this report is found altered with pen then this report will automatically become **null & void**.
24. If this report is prepared for the matter under litigation in any Indian court, no official or employee of R.K Associates will be under any obligation to give in person appearance in the court as a testimony. For any explanation or clarification, only written reply can be submitted on payment of charges by the plaintiff or respondent which will be 10% of the original fees charged where minimum charges will be Rs. 15,000/.



EXTRACTS OF IMPORTANT STATUTORY APPROVALS PROVIDED BY THE CLIENT

पारिशिष्ट - १

મહેસૂલ વિભાગના તા. ના પરિપત્ર ક્રમાંક : નું બિડાણ

પ્રતિ,

જીલ્લા કલેક્ટરશ્રી, ભરૂચ

વિષય : જમીન મહેસૂલ અધિનિયમની કલમ-૬૫(બ) મુજબ ખરેખર ઔદ્યોગિક હેતુ માટે પરવાનગી માટેની અરજી

(૧) અરજદારનું નામ: **TEXFIL PRIVATE LIMITED** અધીકૃત વ્યક્તિ **સીમપ્રકાશ રામચંદ્ર દવે**

અરજદારનું સરનામું: સી-૫૦૩, શાસિગ્રામ હાઈટસ અલયાન અલયાન કેનાલ રોડ, સુરત

સુરત - 395017

મોબાઈલ નંબર: xxxxxxx975

ઈ-મેઇલ એડ્રેસ: xxxxxxxxxxxxxxxxxxxxxx@gmail.com

(૨) જે જમીનમાં પરવાનગી મેળવવા અરજી કરેલ છે તેની વિગત.

ગામનું નામ: કોલીયાદ

તાલુકાનું નામ: વાગરા

જીવ્હાનું નામ: ભરુચ

ટી. પી. સ્કીમ નંબર: ...

ક્રાઇમલ પ્લોટ નંબર: ---

સીટી સરવે નંબર: ---

સરવે નંબર	જુનો સરવે નંબર	૭/૧૨ મુજબ લેટરફળ (ચો.મી.)	ચરજીનું લેટરફળ (ચો.મી.)	સત્તા પ્રકાર (૭/૧૨ મુજબ)
87	184-૧	58,643.00	58,643.00	જુની સરત (જુ.શ)

(૩) જમીનનો સત્તા પ્રકાર (અરજદારના જણાવ્યા મુજબ) : જુની સરત (જુ.સ.)

(૪) કંપની/ પેઢી/ સંસ્થા / સોસાયટી / મંડળી નું નામ : **TEXFIL PRIVATE LIMITED**

(૫) જમીન જુની શરત સિવાયના સત્તાપ્રકારની જમીન છે ? [ના]

(૬) જાલના ગામ નમૂના નં.૩ મુજબના કબજેદાર કઇ રીતે રેકૉર્ડ આવેલ છે. નોંધ નં. 2034 નોંધ તારીખ: 28/08/2024

(૭) જે ખરેખર ઔદ્યોગિક હેતુ માટે જમીનનો ઉપયોગ કરવામાં આવ્યો હોય તેની વિગત.

TEXFIL PRIVATE LIMITED

(૮) જમીનનો પ્રવેશન ઔદ્યોગિક હેતુ માટે ઉપયોગ શરૂ કર્યા તારીખ: ૩૦/૦૮/૨૦૨૪

(૯) બાંધકામનો વિસ્તાર, પરવાનગી ફેઝબની જમીનના ચોથા ભાગથી વધુ છે કે કેમ ? [ના]

ઉક્ત વિગતો વાળી જમીનનો પ્રવેશર ઔદ્યોગિક હેતુ માટે બિનપ્રેતી પરવાનગી મેળવવા માટે અમોએ જે લેખિત વિગતો આપેલ છે તે સાચી છે આ સંદર્ભે સરકારશ્રીની તમામ શરતો હશે તથા છે તેનું પાલન કરવા અમો બંધાયેલા છીએ.

સ્થળ : મુરલ

તારીખ : 14/10/2024

કલ્પજેદાર/ કલ્પજેદારોના નામ અને સહી (૩/૧૨ મુજબ)

1. TEXFIL PRIVATE LIMITED

For, **TEXFIL PRIVATE LIMITED**

Authorised Signatory



મુખ્ય: ૩૧૨ મુજબના તમામ કબજેદારો કબજેદારો ખાતેદારોની સહીથી જ બરજી કરવી. જો થેક કરતા વધુ સરવે નબર હોય તો સરમ નિબર વાર બદલમ બરજી કરવી.

Application No. 32103202403035 Confirmation No. 33318697

Page 1 of 1



**INTELLECTUAL
PROPERTY INDIA**
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS



भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 74 of The Patents Rules)

क्रमांक : 022119663
SL No :



पेटेंट सं. / Patent No. : 405512
आवेदन सं. / Application No. : 202121024616
फाइल करने की तारीख / Date of Filing : 02/06/2021
पेटेटी / Patentee : Filatex India Limited

प्रमाणित किया जाता है कि पेटेटी को, उपरोक्त आवेदन में यथाप्रकटित A PROCESS FOR RECYCLING OF POLYETHYLENE TEREPHTHALATE (PET) WASTE नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख जून 2021 के दूसरे दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled A PROCESS FOR RECYCLING OF POLYETHYLENE TEREPHTHALATE (PET) WASTE as disclosed in the above mentioned application for the term of 20 years from the 2nd day of June 2021 in accordance with the provisions of the Patents Act, 1970.



अनुदान की तारीख : 01/09/2022
Date of Grant :

(Signature)
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बचकर रखा जाता है, जून 2023 के दूसरे दिन को और उसके परवर्तक प्रत्येक वर्ष में उसी दिन देना होगा।
Note - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 2nd day of June 2023 and on the same day in every year thereafter.



કલેક્ટર અને જિલ્લા મેજિસ્ટ્રેટની કચેરી, ભરૂચ

બ્રહ્મકુમારી સર્કલ પાસે, કણબીવગા, કોર્ટ રોડ, ભરૂચ - ૩૬૨૦૦૧

ફોન નંબર : ૦૨૬૪૨-૨૪૦૬૦૦

ઇ-મેઇલ : collector-bha@gujarat.gov.in

ગુજરાત જમીન મહેસૂલ અધિનિયમ-૧૯૭૯ ની કલમ-૬૫ હેઠળ (બિનખેતી - ઔદ્યોગિક)

ફાઇલ નં. 1213/21/03/065/2024

તા. ૦૬/૧૨/૨૦૨૪

વંચાણે લીધા :-

- (૧) અરજદારશ્રી TEXFIL PRIVATE LIMITED અધિકૃત વ્યક્તિ સોમપ્રકાશ રામચંદ્ર દવે
રહે. સી-૫૦૩, શાંતિગ્રામ હાઇટેસ, અલયાન, અલયાન કેનાલ રોડ, સુરત, સુરત-૩૯૫૦૧૭ ની તા.૦૭/૧૧/૨૦૨૪ ની ઓનલાઇન
અરજી (નં.૩૨૧૦૩૨૦૨૪૦૩૨૩૭) તથા સોગંદનામું
- (૨) મુંબઇ જમીન મહેસૂલ કાયદો ૧૯૭૯ ની કલમ - ૪૮, ૬૫, ૬૬ તથા ૬૭
- (૩) ગુજરાત જમીન મહેસૂલ નિયમો, ૧૯૭૨ ના નિયમ ૮૧, ૧૦૦, ૧૦૧, ૧૦૨
- (૪) સરકારશ્રીના મહેસૂલ વિભાગનાં હરાવ નં. બખપ/૧૦૦૬/૪૨૫/૬ તા.૦૧/૦૩/૨૦૦૮
- (૫) સરકારશ્રીના મહેસૂલ વિભાગનાં પરિપત્ર ક્રમાંક: બખપ/૧૦૨૦૧૮/૩૨૭/૬ તા.૦૮/૦૫/૨૦૧૮
- (૬) સરકારશ્રીના મહેસૂલ વિભાગનાં હરાવ ક્રમાંક: એસ/ટીપી/૧૨૨૦૮/૭૬૮/૧૧/૬.૧ તા.૩૧/૦૩/૨૦૧૧
- (૭) સરકારશ્રીના મહેસૂલ વિભાગનાં હરાવ ક્રમાંક: બખપ/૧૦૨૦૧૮/૪૨૫/૬ તા.૦૮/૦૧/૨૦૧૮
- (૮) સરકારશ્રીના મહેસૂલ વિભાગનાં પરિપત્ર ક્રમાંક: બખપ/૧૦૨૦૧૮/૪૨૫/૬ તા.૧૨/૦૨/૨૦૧૮
- (૯) નાયબ કલેક્ટર શ્રી (સ્ટેમ્પ ડ્યુટી) નો તા.૧૯/૧૧/૨૦૨૪ નો અભિપ્રાય
- (૧૦) ITCMS પોર્ટલ પરની કેસ વિગત

ફકમ :-

વંચાણે લીધેલ ફકમ (૧) ની અરજી તથા સોગંદનામા થી અરજદારશ્રી TEXFIL PRIVATE LIMITED અધિકૃત વ્યક્તિ સોમપ્રકાશ રામચંદ્ર દવે એ મોજે કોલીયાદ તા. વાગરા જિ. ભરૂચ ના સરવે/બ્લોક નં. ૮૭ ના હેત્રફળ ૫૮.૬૪૩.૦૦ ચો.મી. ની જમીન અંગે ગુજરાત જમીન મહેસૂલ અધિનિયમ-૧૯૭૯ ની કલમ-૬૫ હેઠળ બિનખેતીના હેતુ માટે પરવાનગી આપવા વિનંતી કરેલ છે.

૨. સવાલવાળી જમીનના ગામ નમૂના નં. ૭/૧૨ માં કબજેદારોની વિગત નીચે મુજબ છે.

સરવે/બ્લોક નંબર	મોગણીનું હેત્રફળ (ચો.મી.)	કબજેદારોના નામ (ખાતા નં. ૩૩૬)	જમીનનો સત્તાપ્રકાર (૭/૧૨ મુજબ)
સરવે/બ્લોક નં. : ૮૭	58.643.00	TEXFIL PRIVATE LIMITED	જૂની શરત (જુ.સ)
જુની સરવે/બ્લોક નં. : 184-૧			



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રવાના કયાં,

Signature Not Verified

Signed by Somani Pankajkumar Jivanlal
Date: 2024.12.06 13:14:24 +05:30

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Courtesy: NIC, Gujarat

Application No. 32103202403237

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Page 1 of 4

