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Executive Summary



Executive Summary

	Project Snapshot				
Name of the Entity	M/s. The Company ('THE COMPANY')				
Date of incorporation	April X0, X00X				
Constitution	Private Limited Company (CIN - XXX)				
Registered address	XXX, Patparganj Industrial Area, Patparganj, De	elhi – XX00XX			
	The Company Pvt Ltd (Unit X)				
Existing factory Location	xxx				
	xxx	()			
	The Company Pvt Ltd (Unit X)				
New factory Location	Village – XXX, Tehsil- XXX				
	Distt- XXX Dehat -X0XX0X, Uttar Pradesh, IN	NDIA			
Industry	Packaging Industry				
Nature of activity	BOPET Film Manufacturing				
Promoters & Directors	Mr. XXX, Mr. XXX XXX, Mr. XXX XXX,				
Tromotors & Directors	Mr. XXX XXX				
Estimated project cost	INR XXX.00 Cr.				
Debt-Equity ratio	X.XX: X				
	Promoter's Contribution/ Internal Accrual:	INR XXX.00 Cr.			
Means of Finance	Domestic Term Loan:	INR XX.00 Cr.			
	Principal Lender Term Loan:	INR XXX.00 Cr.			
	As per Industry assessment during FYXX to FY	XX,			
	for the debt servicing of INR XXX.00	Cr. (Principal Lender –			
	INR XXX Cr. and Domestic Loan - INR XX Cr.)				
	 at rate of interest of X.X0% (0.X0% margin for Principal Lender TL+ X0% Hedging rate) and 				
Techno Economic Viability	B 1 ()()(0)((1				
	the average DSCR is X.0X and corresponding	the average DSCR is X.0X and corresponding IRR is XX.X0%			
	which indicates that the project offers adequ	which indicates that the project offers adequate safety to lenders on			
	standalone basis.				
•	(Subject to the technical assessment & Critical Success Factors, various scenarios				
	mentioned in sensitivity analysis, SWOT and Risk analysis and current market scenario)				



Brief Background

M/s The Company (hereinafter referred to as "THE COMPANY" or "Company") was incorporated on X0th April X00X with an aim to manufacture and market Biaxially Oriented Polyethylene Terephthalate (BOPET) films and PET resins. It commenced operations with commissioning of its first BOPET manufacturing line of capacity X0,000 tons per annum in February X0XX with German Technology at UPSIDC Industrial Area, XXX, XXX, Uttar Pradesh. The Existing Installed Capacity is depicted below:

Exhibit: Existing Installed Capacity						
Installed Capacity (MTPA)	CoD	FYXX	FYXX	FYXX	FYXX	FYXX
BOPET Film						
Polyester Line X	X.X.X0XX	X0000	X0000	X0000	X0000	X0000
Polyester Line X	X.X0.X0XX			XX000	XX000	XX000
Total BOPET Film		X0000	X0000	XX000	XX000	XX000
Chips Plant						
Polyester Chips Plant	XX.X.X0XX		XXX00	XXX00	XXX00	XXX00
Total Polyester Chips			XXX00	XXX00	XXX00	XXX00
<u>Metallizer</u>						
Metallizer – X	XX.XX.X0XX		X000	X000	X000	X000
Metallizer – X	X.X.X0XX					X000
Total Metallized Film		_	X000	X000	X000	XX000

THE COMPANY projects under execution (Unit X)

THE COMPANY presently in the process of setting up following manufacturing facilities at the existing location at XXX: -

Cast Polypropylene (CPP) film Plant (X no.) supplied by M/s XXX, Italy

Installed capacity: X,X00 MTPA

• Vacuum Metallizers (X nos.) from XXX UK

Combined Installed capacity: XX,000 MTPA

Vacuum Metallizer (X No.) from M/s XXX, Japan

Installed capacity: X,000 MTPA

Specialty Coating plant set up

Installed capacity XXX0 MTPA for below products

Holography Paper: X,X00 MTPA
DG Yarn: X,X00 MTPA
Stamping Foils: XX0 MTPA



Upcoming Projects (Location- THE COMPANY Unit X)

A. Al Foil Project

THE COMPANY is diversifying and setting-up a facility to manufacture Aluminum foils of Light Gauge & Medium Gauge for captive use, domestic market and export market at new location (XX kms away from existing manufacturing unit) with an installed capacity of XXXXX MTPA (X0X00 MTPA of X microns + X0XX MTPA of XX microns SRC Stock). Main plant machinery is being supplied by M/s XXX, Germany.

B. BOPET Film/ Chip Plant

THE COMPANY is further setting up BOPET film lines and Chip plants in X phases as shown below:

Phase X (Project Under Consideration)

- BOPET Film manufacturing line (Line-X)- X No. from M/s XXX, Germany.
 - Installed Capacity: XX,XX0 MTPA.
- PET Resin Plant (CP-X) X No. from M/s XXX, Germany.
 - Installed capacity: XX,000 MTPA.
- CP-X capacity is planned with higher capacity keeping in mind the future execution of BOPET Line -X
 in phase X i.e. CP-X will take care of raw material (Direct Polymer / PET granules) for BOPET LX &
 LX cumulatively. Till BOPET LX comes in operation, excess PET granules will be sold directly to market.

Phase X

THE COMPANY has planned for setting up of BOPET Line X after successful start-up of BOPET LX and overall business stabilization.



Project Cost

The total cost of the proposed THE COMPANY project for BOPET line X & Chip Plant under Phase X is estimated at INR XXX.00 Cr based on estimates provided by the company for various cost components of the project. The different heads of the project cost are detailed in the following table:

Exhibit: Project Cost (INR Cr.)				
Particulars	Total	%		
Building And Civil Works	XX.X0	X.X%		
Plant & Machinery And Other Fittings	XXX.0X	XX.X%		
Miscellaneous Fixed Assets	X0.XX	XX.X%		
Contingency	X.XX	0.X%		
Preliminary & Pre-op Expenses	XX.XX	X.X%		
Margin For Working Capital	XX.XX	X.X%		
IDC - Principal Lender	X.XX	0.X%		
IDC - Domestic TL	0.XX	0.X%		
Total Project Cost	XXX.00	X00%		

Source: THE COMPANY and APKA India Assessment

Means of Finance

Means of finance of phase X is mentioned in the table below as proposed by the Company. The propose Debt: Equity ratio is X.XX:X.

Exhibit: Means of Finance (INR Cr.)						
Particulars Particulars	INR Cr.	%				
Promoter's Contribution/ Internal Accrual	XXX.00	XX%				
Principal Lender TL	XXX.00	XX%				
Domestic Term Loan	XX.00	XX%				
Total	XXX.00	X00%				

Source: THE COMPANY and APKA India Assessment

Debt Profile

Principal Lender TL

The Company proposes to raise INR XXX.00 Cr. as term loan from Principal Lender towards debt financing for the project. The broad terms of the proposed term loan are as given below.

Particulars	Princip	al Lender TL Terms	Conversion	INR Cr.
Principal Lender TL Amount	€	XX,XXX,X00.00	XX.X0	XXX.00
Insurance Premium Hermes	€	X,XXX,000.00	XX.X0	X0.00
Total Foreign TL				XXX.00
Disbursement	Start Mon	th Envisaged		Sept X0X0#
Proposed Margin	per annum	1		0.X0%
Proposed Hedge Cost	Per annum	1		X.X%
Moratorium from COD	Months			Х
Repayment	Semi annu	ally		XX
Tenor from COD of BOPET LX	Years			X.00
Door to Door Tenure	Years			X0.00

^{*}As per loan agreement the disbursement can be for XX months, however, considering the proposed delivery schedule of imported machinery and considering the COD of BOPET Line X by X_{st} Oct X0XX, the actual disbursement is envisaged within X0 months.



Domestic TL

The Company proposes to raise INR XX.00 Cr. as term loan from domestic Indian banks towards debt financing for the project. The broad terms of the proposed term loan are as given below.

Nature of Borrowing	Debt Component		
Term Loan Amount	INR XX.00 Cr.		
Disbursement Start	Jun X0XX		
Interest Rate Proposed	X.X0%		
Moratorium from Xst Disbursement	XX months		
Repayment XX quarters			
Tenor from COD of BOPET LX	X.X0 years		
Door to Door Tenure	X0.00 Years		



The Company

Financial Highlights

The financial highlights of the propsoed BOPET Film Line X project is mentioned in the table below;

				Fina	ncial Highlights						
Description	UoM	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Revenue	INR Cr.	XX0.X0	XXX.XX	XXX.0X	X0X.XX	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
EBIDTA	INR Cr.	XX.XX	XX.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX
EBIDTA Margin	%	XX.0%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%
Contribution	INR Cr.	XX.XX	XX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.XX
Contribution Margin	%	XX.X%	XX.X%	XX.X%	XX.0%	XX.X%	XX.X%	XX.X%	XX.0%	XX.0%	XX.X%
BEP Margin of Sales	%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	X0.X%	XX.X%	XX.X%	XX.X%	XX.X%
Cash Break Even Margin	%	XX.0%	XX.X%	XX.X%	X0.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.0%	XX.X%
Margin of Safety of % of Sales	%	XX.0%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	XX.X%	X0.X%	XX.0%	XX.X%
Net Profit	INR Cr.	(X.XX)	(X.XX)	XX.XX	X0.XX	XX.XX	X0.XX	XX.XX	X0.0X	XX.XX	XX.0X
Net Profit Margin	%	-X.0%	-X.X%	X.X%	X.X%	X.X%	X.X%	X.0%	X.X%	X.X%	X.X%
Promoter Contribution	INR Cr.	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00
Reserves and Surplus	INR Cr.	(X.XX)	(XX.X0)	X.XX	XX.0X	X0.0X	XX0.X0	XXX.XX	XXX.XX	XX0.XX	XXX.XX
Tangible Net Worth (TNW)	INR Cr.	XXX.XX	XXX.X0	XXX.XX	X0X.0X	XXX.0X	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Domestic Term Loan	INR Cr.	XX.00	XX.00	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	X.XX	-
Principal Lender TL	INR Cr.	XXX.00	X0X.XX	XXX.XX	XXX.0X	XXX.XX	XX.XX	XX.XX	XX.XX	XX.XX	-
Debt Equity Ratio	Ratio	X.X0	X.XX	X.XX	X.0X	0.X0	0.XX	0.XX	0.XX	0.0X	-
Total Outside Liability (TOL)	INR Cr.	XXX.X0	XXX.XX	XXX.XX	XXX.XX	X0X.XX	XXX.XX	XXX.XX	X00.0X	XXX.XX	XXX.XX
TOL/ TNW	Ratio	X.XX	X.XX	X.X0	X.XX	X.XX	0.XX	0.XX	0.XX	0.XX	0.XX
Closing Cash Balance	INR Cr.	XX.X0	XX.XX	XX.X0	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.0X
DSCR	Ratio	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.0X	X.XX	X.XX	X.XX
Avg. DSCR	Ratio	X.0X									
IRR	%	XX.X0%									



Sensitivity Analysis

A sensitivity analysis was carried out to assess the impact of the following scenarios on the major financial parameters. The summary of sensitivity analysis is provided in the following exhibit:

Scenarios	Sensitivity	DSCR	Min DSCR	IRR	Post Tax CoC
Base Case		X.0X	X.XX	XX.X0%	X.XX%
Decrease in Utilization	X0.00%	X.X0	X.XX	XX.XX%	X.XX%
Decrease in Selling Price	X.00%	X.XX	X.XX	X.XX%	X.XX%
Increase in Raw Material Price	X.00%	X.XX	X.XX	X0.XX%	X.XX%
Decrease in Raw Material Price	X.00%	X.X0	X.X0	X0.0X%	X.XX%
Increase in Project Hard Cost	X0.00%	X.XX	X.XX	XX.XX%	X0.0X%
Increase in Term Loan Interest	X.00%	X.X0	X.XX	XX.XX%	XX.XX%

The sensitivity analysis shows that the Project IRR and DSCR are more sensitive to reduction in Selling Price and increase in Raw Material Cost. The Company has to ensure that any escalation in raw material prices has to be passed on to end users. D&B India recommends the Company to plan their sales appropriately to avoid erosion in profit.

Risk Analysis & Mitigation

The risk analysis, allocation & mitigation are shown in the following table:

Key Risks	Risk Carrier	Proposed Mitigation of risk
Experience & Capability	THE COMPANY	The promoters are experienced businessmen who have been working in the printing and packaging industry for more than two decades. The Company has been manufacturing BOPET films since FY X0XX and PET Chip in FY X0XX. The proposed plant will be the third BOPET line manufacturing set-up. The Company's operations are supported by experienced team of technical & commercial professionals. The Company has to ensure hiring and retaining competent technical staff for smooth operation of the proposed project.
Funding Risk	THE COMPANY	The project will be funded with debt equity ratio of X.XX:X. The Company is already running profitably, and the Company's promoters do not envisage any difficulty in bringing in their margin. The Company has to arrange funds on time for smooth implementation and operation of the unit. At present it has been



		considered that entire promoter contribution will be funded by
		internal accrual/ equity.
Implementation Risk	THE COMPANY	 Implementation risks could arise on account of the following factors: Management Experience Delay/ uncertainty in funding Delay / non-receipt of statutory approvals Not providing a reasonable timeframe for project implementation The Company has to complete building structure for the project and reputed supplier have been identified for main imported P&M. The Company has provided a reasonable timeframe for implementation. The Company has already placed order for main imported P&M which had longer delivery period. Balance indigenous machinery vendor selection and negotiation is under process. As per information submitted, the first expected shipment for imported machineries from XXX for BOPET Line X is estimated from Oct X0X0. Implementation schedule seems achievable considering Company will obtain required approvals, fund and P&M at site on time.
Cost /Time Over-run	THE COMPANY	Cost overrun could arise on account of three principal factors: a) Escalation in the estimated capital cost b) Unforeseen additional capital cost c) Time over-run The Company has made comprehensive estimates of the capital cost. The Company is in process acquiring quotations for indigenous Plant & Machinery while for main imported machinery order has already been placed. Provision of X% as contingency has also been considered to take of
		any cost overrun on domestic machinery purchase and civil works.



		Since reasonable time period is reckoned for project implementation, time over-run is not expected at this point in time, subject to disbursal of funds on time by the lenders and timely receipt of the requisite approvals and P&M at site. The Company should be able to meet these timelines subject to stringent monitoring of machinery procurement & delivery schedules. Any cost over run over and above the contingency amount needs to be
		funded through promoter contribution.
Infrastructure Risk	THE COMPANY	Power: Power will be sourced from the grid, and the Company will apply for the power connection. A dedicated feeder line is proposed for the project. Water: The entire requirement of water will be sourced from borewells at the site. Labor: Situated in an industrial area near XXX, the unit is not expected to face challenges in getting skilled & unskilled manpower. Connectivity: There is good connectivity by road to its end-consumers.
Raw Material Availability and Prices	THE COMPANY	THE COMPANY proposes to procure the main raw material Pure Terephthalic Acid (PTA) and Mono Ethylene Glycol (MEG) from existing suppliers. There is reasonable availability of the raw materials in both domestic and international markets. The raw materials are available in open market and the Company has already identified reputed suppliers for the same. However, price of raw materials is volatile in nature being petroleum products and therefore the Company has to device proper strategy for procurement of the raw materials.
Technology Risk	THE COMPANY	The manufacturing technology for these products is well established and there are a series of such plants operational in India and abroad.
Statutory approvals	THE COMPANY	All the Approvals are pending till date. The Company has planned to obtain all relevant approvals at appropriate stages as per the



		requirement. APKA India advises the Company to monitor the same to avoid any adverse impact on the project.
Foreign Exchange Risk	THE COMPANY	The main P&M for the project is proposed to be imported the same comprises almost XX% of the budgeted P&M and MFA cost. In this regard THE COMPANY has made provision of X.X% hedge cost towards Foreign Currency Term Loan being proposed. Similarly, being already in operation for similar products, the Company already have existing hedging policy in place to take care of price fluctuation in raw material price of imported PTA and MEG. THE COMPANY proposes to maintain the similar strategy for the proposed project. Also, Company informs that since the Company is also exporting the finished BOPET Film, thus the impact of currency fluctuation is likely to set off.
Force Majeure	THE COMPANY/Lender	The Company needs to take adequate insurance cover for all insurable Force Majeure risks. The Company needs to ensure insurance of new building as well as for other assets like plant & machinery during implementation stage before attaining COD.



SWOT Analysis

Strength & Opportunity

- The proposed location for the project is XX KM away from the existing operations of the THE COMPANY, which will enable close supervision of project implementation.
- THE COMPANY already has its established contacts for marketing and selling of flexible packaging which the Company can leverage for the future projects.
- The main P&M supplier chosen by the Company is a renowned supplier and the technology is well proven to produce the required BOPET Film.
- The packaging industry in India is estimated to be reach USD XX Bn in X0X0, up from USD XX Bn in X0XX. The industry is estimated to have witnessed a compounded growth rate of XX% during X0XX-X0.
- This strong demand from consumer segments
 have helped the Indian Flexible packaging
 segment grow by a CAGR of nearly XX%, from
 USD X Bn in X0XX or USD XX Bn in X0X0.
- High growth in India's flexible packaging industry
 has driven this end use sector with projected
 growth of X.X% p.a. during X0X0 to X0XX. The
 global BOPET film market has seen demand grow
 by X.X% p.a. over the last five years reaching just
 over X Mt (million tons) in X0XX, resulting in a
 \$XX billion industry.
- The global packaging films market for BOPET is projected to expand at a CAGR over X%. The global BOPET packaging films market is expected to expand X.Xx in terms of market volume by the end of X0XX.

Weakness & Threat

price.

- PTA) are petroleum-based products, and any increase in petroleum prices may consequently lead to price increase of raw materials for Project, which may affect the Project margins.

 The Company have a network of raw material suppliers in diverse markets, to ensure ready availability at competitive prices for its operations in case of such an event. Also, Company has a robust mechanism wherein historically sales prices are adjusted suitably in case of change in RM
- Owing to the high demand in the packaging sector, the threat of new entrants by existing players in flexible packaging is possible.
 - The Company is an established player in this market and has a network of customers across industries. With this project under consideration, it would have better control on costs and can sustain any short-term price wars in the market.
- The generic threat of domestic and global economic slowdown may impact operations/ demand for the finished products.

Conclusion

Please refer to page no. XX



Report



Scope of Work

M/s. The Company has appointed APKA India to prepare the project report for the proposed plan of Biaxially-oriented Polyethylene Terephthalate (BOPET) Film and polyethylene terephthalate (PET) chips manufacturing plant. THE COMPANY is planning proposed project with approx. XXXX0 MTPA capacity, of XX-micron BOPET Film and XX000 MTPA of PET Chips. The study would be assessing the technical, commercial and economic viability of the proposed project through a detailed techno financial analysis of the proposed venture and evaluation of the constraints and future potential.

The scope of work was finalized as under:

- Physically visit the proposed location
- Validate the cost of the proposed project, given the specifications on civil works, building and plant and machinery
- Validate the cost and revenue assumptions related to the proposed project
- Analyze the revenue and cost estimates for the proposed project. Various tools, such as debt service coverage ratio, IRR, sensitivity analysis will be used to arrive at a conclusion on the viability of the project

Date of Inspection

The APKA India technical team visited the proposed project site at Village: XXX, Tehsil: XXX, District: XXX Dehat, Uttar Pradesh on Xnd May X0XX to obtain first-hand information of the current status of the proposed The Company Pvt. Ltd, (herein after also referred as THE COMPANY or the company).

Furthermore, the purpose of site visit was also to assess availability of various basic infrastructure facilities like land, electric power, water, approach road, effluent disposal proposed, and manpower etc. The visit was also to have management discussion about their proposed project and understand the rationale behind taking up the proposed project, at the proposed location.

Team for Consultants

The Team of Consultants, who has worked on the project and visited the project site have been summarized below-

Mr. Kallol Debnath

Mr. K D Fatnani



Methodology

The project report assigned to APKA India was carried out in the following sequence:

- Verification of the documents provided by the client, identification of missing information, and requesting for the revised list of documents required from the client.
- 2. Visit to the proposed location at Village: XXX, Tehsil: XXX, District: XXX.
- 3. Assessment of the project cost reasonableness for the proposed project
- 4. Assessment of revenue and cost estimates of the project.
- 5. The technical assessment comprised of review of the proposed plot layout, building plan, plant and machinery and other related aspects
- 6. Secondary research to understand industry specific benchmarks
- 7. Assessment of financial projection and to derive various financial ratios to assess viability of the financial project.
- 8. To carry out sensitivity analysis & SWOT analysis and to identify risk & its mitigation pertaining to the project.



Project Overview

M/s The Companyis proposing of setting up of an BOPET File Line X manufacturing unit to cater the needs of flexible packaging sector with high quality products. Objective of the proposed project is setting up facility to produce packaging material based on various types mainly for food, pharmaceutical FMCG products as targeted market segments.

The Main Object of the company, as narrated in their Memorandum & Articles of Association is as below;

"To involve in the business activity of manufacturing, producing, fabricating, designing, developing, processing, assembling, refining, making, converting, importing, exporting, trading, buying, selling, whether as a retailer, wholesalers, suppliers, indenters, packers, stockiest, agents, merchants, distributors, consignor, jobbers, brokers or otherwise dealing in all shapes, sizes, specification and varieties of Aluminium packing materials, parts, equipment's, accessories etc. And also deal in the same manner in respect of other metals."

The proposed project has been conceptualized to set up line X for BOPET Film manufacturing with installed capacity with approx. XXXX0 MTPA capacity of XX-micron BOPET Film and XX000 MTPA of PET Chips under phase I future projects plan.

The proposed project location of *Mls The Company Pvt. Ltd -UNIT X is about XX kms away from existing unit (Unit X). At proposed site of Unit X*, all basic infrastructure facilities are available, and the promoters of the proposed project will have synergy of close supervision and required Co-ordination during the project implementation, which will make possible to expedite the project execution for the proposed project as planned.

Project Rationale

The project rationale for setting up the project as informed by THE COMPANY and as per APKA India assessment is discussed hereunder.

As per secondary research by APKA India it is noted that, Indian packaging industry is estimated to account for X % of global packaging industry. However, unlike global industry, Indian packaging industry is dominated by rigid packaging (paper, glass, metal, and rigid plastic). Flexible packaging segment is estimated to account for less than quarter of the overall packaging industry.

- The packaging industry in India is estimated to be reach USD XX Bn in X0X0, up from USD XX Bn in X0XX. The industry is estimated to have witnessed a compounded growth rate of XX% during X0XX-X0.
- This strong demand from consumer segments have helped the Indian Flexible packaging segment grow by a CAGR of nearly XX%, from USD X Bn in X0XX or USD XX Bn in X0X0.
- High growth in India's flexible packaging industry has driven this end use sector with projected growth of X.X%
 p.a. during X0X0 to X0XX
- The global BOPET film market has seen demand grow by X.X% p.a. over the last five years reaching just over X Mt (million tons) in X0XX, resulting in a \$XX billion industry.



• The global packaging films market for BOPET is projected to expand at a CAGR over X%. The global BOPET packaging films market is expected to expand X.Xx in terms of market volume by the end of X0XX.

Moreover, THE COMPANY historical production as well as present production of existing BOPET line X and line X and PET chip plant shows that the plants already running at over X00%, XX% and X0X% capacity utilization respectively.

Production Data - (MTPA)	UoM	FYXX	FYXX	FYXX	FYX0
Polyester Line X – Capacity	MTPA	X0000	X0000	X0000	X0000
LineX (equivalent to XX micron) – Production	MTPA	XX0XX	XXXXX	XXXXX	×X00XX
Capacity Utilization Line X	%	X0%	XX%	XX%	X00%
	MEDA	\/\/000)///nnn)///000	>///000
Polyester Line X – Capacity	MTPA	XX000	XX000	XX000	XX000
Line X – Production	MTPA	XXXX0	XXXXX	XXXXX	X0XXX
Capacity Utilization Line X	%	XX%	XX%	XX%	XX%
Unit X – Total BOPET					
BOPET Film Total Capacity	MTPA	XX000	XX000	XX000	XX000
BOPET Films manufactured	MTPA	XXXXX	XXXXX	XXXXX	X0XXX
Capacity Utilization BOPET Plant (LX & LX)	%	XX%	XX%	XX%	XX%
Chips Plant – X					
Polyester Chips Plant – Capacity	MTPA	XXX00	XXX00	XXX00	XXX00
Chips Production	MTPA	XXXXX	XXX0X	XXX0X	X0XXX
Capacity Utilization PET Chip Plant	%	XX%	XX%	XX%	X0X%

Thus, in order to fulfill additional demand from customers, THE COMPANY has envisaged the proposed project.

Diagram



Company's Background

M/s The Company

M/s The Company was incorporated with an aim to manufacture and market BOPET films and PET resins. It commenced operations with commissioning of its first BOPET manufacturing line of capacity X0,000 tons per annum in February X0XX with German Technology at UPSIDC Industrial Area, XXX, XXX, Uttar Pradesh.

Company Details				
Name	The Company ('THE COMPANY')			
Date of Incorporation	X0 April X00X			
Constitution	Private Limited Company (CIN – XXX)			
New factory Location	The Company Pvt Ltd (Unit X), Village – XXX, Tehsil- XXX, Distt- XXX Dehat - X0XX0X, Uttar Pradesh, INDIA			

Source: THE COMPANY

Project Configuration

The project configuration of THE COMPANY is as depicted in diagram below:

Diagram



Directors' Profile

The director's details of the company are depicted below:

Name	Address	Designation
Mr. XXX	X/XX Tilak Nagar XXX X0X00X UP	Managing Director
Mr. XXX XXX	A-XX, Swasthya Vihar Delhi XX00XX DL	Director
Mr. XXX XXX	X/XX Tilak Nagar XXX X0X00X UP	Director
Mr. XXX XXX	A-XX, Swasthya Vihar Delhi XX00XX DL	Director

Source: MCA & THE COMPANY

The main promoters of the Company are Mr. XXX and family. A brief profile of the promoters as provided by the Company is mentioned below:

Mr XXX, Managing Director

Mr. XXX, age XX a postgraduate in Science, is experienced in managing the Company for more than X0 years. He started his career in trading business owned by his father, Mr. Murlidhar XXX.

Mr. XXX set up a printing and lamination unit called XXX Packaging in XXX, in FY XXXX. He further established seven more units in flexible packaging related industries, including THE COMPANY. Apart from being the Managing Director in the Company, he also handles all sales, marketing and purchase activities in the Company, as well as identifying new areas for expansion and diversification. He has driven the vertical integration of the Company, by establishing a PET chip and a metallizer plant within the premises, thereby attempting to strengthen the Company's presence in Uttar Pradesh.

Mr. XXX XXX, Director

Mr. XXX XXX, age XX years, has a Master's degree in Economics, Banking and Finance from Cardiff University, Wales (UK) and a B. Com (Hons.) degree from Shri Ram College of Commerce, University of Delhi. With professional experience of XX years, expertise lies in handling finance function for all Group Companies. He has been involved in the Group Companies for more than X years and has led the Group's foray in the real estate business.

Mr. XXX XXX, Director

Mr. XXX XXX, age XX years, a graduate in Commerce, has been working with various Group Companies for more than XX years. He is currently involved in handling manufacturing operations of all units located in XXX along with liaison work. His expertise lies in manpower and machine management as well as general management activities of the Group.

Mr XXX XXX, Director

Aged XX years and son of Shri XXX XXX, (brother of Shri XXX XXX, Managing Director of the Company). He is MBA by qualification and has been looking after various Group Companies for more than X years. He is currently involved in export marketing operations of the Company.



Key Management Personnel

The Company has a team of qualified and experienced professionals in respective key functional areas, who that are responsible for various functions/aspects of the Company. A brief profile of the key management personnel has been given below.

Name	Designation	Qualification	Experience
Mr. XXX XXX	CEO	B. Tech., Diploma in International Marketing	More than XX years
Mr. XXX	Head (Finance & Accounts)	Chartered Accountant	More than XX years
Mr. XXX	Company Secretary	ACS	More than X0 years
THE COMPANY – existing			
plant			
Mr. XXX	Head (Production)	B.E. (Chemical)	More than XX years
Mr. K.K. XXX	Head (Sales & Marketing)	B.Com.	More than X0 years
Mr. P.K. XXX	Senior VP (Sales & Marketing)	M.Sc. Diploma in Marketing Management	More than XX years

Source: THE COMPANY

The brief profile of key personnel for the project under consideration of THE COMPANY is discussed below:

Mr. XXX XXX (CEO)

Mr. XXX XXX, CEO of The Company Private Limited, is a graduate engineer and diploma in International Marketing. He has professional experience of more than XX years and has successfully handled manufacturing operations, international marketing, business development, technical support and product development domains. He has worked on various products including Polyester Films, Specialty Polymers for Flexible & Rigid packaging and Yarn, and has knowledge of forward and backward processes, technologies and application areas.

In the past, Mr XXX has worked with reputed companies like Ester Industries Ltd, Futura Polyesters Ltd and Obeette Textiles Pvt Ltd. He has an instinct with Gerson Lerhman Group, USA and provided them consulting services for an overseas flexible packaging project.

Mr. XXX is associated with The Company since its inception in the year X00X and took front lead to ensure successful execution of green field project and its startup. He is responsible for factory operations, business development & expansion, project strategy & management, purchase of plant, machinery, technology, and various raw materials & chemicals etc.



Shareholding Pattern

The shareholding pattern of the Company as on XXst March X0X0 is as mentioned below.

S. No.	Name of the Shareholder	Amount	% Holding
X	XXX	X,0X,XX00	X.XX
X	XXX	XX0,000	0.XX
X	XXX	X,XX0,000	X.XX
X	XXX	XX,XX0,000	XX.XX
X	XXX	X,XX0,000	X.X0
X	XXX	X,XX0,000	0.XX
x	XXX	X,XX0,000	0.XX
X	XXX	XXX,000	0.XX
X	XXX	X0,XXX,000	X.XX
X 0	XXX	XX0,000	0.0X
XX	XXX	X,XXX,000	X.XX
ХХ	XXX	XX,XX0,000	X.XX
XX	XXX	XX,XX0,000	XX.XX
XX	XXX	XX,XX0,000	XX.XX
XX	XXX	X,XX0,000	0.XX
XX	XXX	X,XX0,000	0.XX
XX	XXX	X,X00,000	0.XX
ХХ	XXX	X,XX0,000	0.XX
XX	XXX	X,000,000	X.XX
X 0	XXX	XX,XX0,000	XX.XX
XX	XXX	XX,X00,000	X.XX
XX	XXX	X,X00,000	X.X0
XX	XXX	X,X00,000	X.XX
XX	XXX	X,XX0,000	X.XX
XX	XXX	X,X00,000	X.XX
XX	XXX	X,X00,000	X.XX
XX	XXX	X,XXX,000	0.XX
XX	XXX	X,XXX,000	0.XX
хх	XXX	X00	0.00
		XXX,XXX,000	X00.00



Organisation Chart

The prevailing organization chart of THE COMPANY is shown below:

Diagram



Product Range & Application

The various products manufactured by THE COMPANY and its application is shown below:

Diagram

Source: THE COMPANY

Existing Operations Synergy

Considering the Company's existing capacity at XXX, XXX, UP and after the implementation of the CPP Plant & Coating Section project, the overall capacities (metric tons per annum) and synergy in operations in existing setup are as exhibited below.

Diagram



Historical Performance - THE COMPANY Existing Plant

Historical Production

The historical production of the Company for the existing setup is indicated below:

Production Data - (MTPA)	FYXX	FYXX	FYXX	FYXX	FYX0
BOPET Plant X & X					
LineX	XXXXX	XX0XX	XXXXX	XXXXX	X00XX
LineX		XXXX0	XXXXX	XXXXX	X0XXX
PET Films manufactured (MTPA)	XXXXX	XXXXX	XXXXX	XXXX0	X0XXX
Capacity Utilization PET Film	XX%	X0%	XX%	XX%	XX%
Chips Plant					
Chips Production (MTPA)	XXXXX	XXXXX	XXX0X	XXX0X	X0XXX
Capacity Utilization PET Chip Plant	XX%	XX%	XX%	XX%	X0X%
Metallizer – X & X					
Metallized Film (MTPA)	X0XX	XXXX	XXXX	XX0X	X0XXX
Capacity Utilization Metallizer	XX%	XX%	XX%	XX%	XX%
Prices	FYXX	FYXX	FYXX	FYXX	
Avg. Selling Price-Domestic (INR/Kg)					
Plain Film	XX	XX	XX	XXX	XXX
Metallized Film	X0X	XXX	XXX	XXX	XX0
Chips	X0	XX	XX	XX	X0
Avg. Selling Price-Exports (INR/Kg)					
Plain Film	XX	XX	XX	XXX	XXX
Metallized Film	X0X	X0X	X0X	XXX	XXX
Volume Sales	FYXX	FYXX	FYXX	FYXX	
PET Plain Film					
Total Units Sold (MTPA)					
Domestic	XX0XX	XXXXX	XXXXX	X0XXX	XXXXX
Exports	XXXX	XX0X	XXXX	XXXX	XXXX
Metallized Film - X & X					
Total Units Sold (MTPA)					
Domestic	XXXX	XXXX	X0XX	XXX0	X0XXX
Exports	XXX	XX0	XXX	XXX	XX0
Chips					
Total Units Sold (MTPA)	XXXX	X0XX	xxxx	XXXX	-

Source: THE COMPANY

It is to be noted, the BOPET and Chip plants in the existing plants are running more than XX% capacity utilization.



Historical Financials

The snapshot of past two year audited financials for the project and FYX0 provisional is shown below:

Particulars (Figures in INR Cr.)	X0XX-XX	X0XX-XX	X0XX-X0
r articulars (rigures in fixit Cr.)	(Audited)	(Audited)	(Provisional)
Sales & Other Income	XXX.XX	XXX.XX	XXX.XX
EBIDTA	X0.XX	XXX.XX	XXX.XX
Profit before Taxes	X.XX	X0.XX	XXX.XX
Profit after Taxes	-X.XX	X0.XX	XXX.XX
Cash Accruals	XX.XX	XXX.XX	XX0.XX
Share Capital	XX.XX	XX.XX	XX.XX
Reserves & Surplus	X0.XX	XX0.XX	XXX.0X
Book Value per Share of Rs X0/- each	XX.X0	XX.XX	XX.XX

It is to be noted that, the avg. EBITDA during FYXX to FYX0 is XX.XX% and BOPET film plants is running at XX% capacity utilization. The negative PAT during FYXX-FYXX can be attributed to the fact that the Company is making provision of Depreciation on WDV method (Companies Act X0XX), however FYXX onwards with margins improving the same has seen an improvement to above X% PAT margin.

Historical Key Profitability & Liquidity Ratios:

Particulars	UoM	FYXX	FYXX	FYX0
ROCE	%	X.XX%	XX.XX%	XX.XX%
EBITDA Margin	%	XX.XX%	X0.X0%	XX.XX%
PAT Margin	%	-0.X0%	X.XX%	XX.0X%
Debt: Equity	Ratio	X.XX	X.XX	0.XX
Current Ratio	Ratio	X.X0	X.XX	X.XX
Quick Ratio	Ratio	0.XX	X.0X	X.0X
Inventory Turnover Ratio	Days	X0.XX	X0.XX	XX.XX
Interest Coverage Ratio	Ratio	X.XX	X.XX	X.XX



Project Details

Project Location

BOPET Film Line X and Chip Plant Line X manufacturing project of THE COMPANY is proposed at Village: XXX, Tehsil: XXX, District XXX Dehat, Uttar Pradesh. The land acquisition and registration is under process thus the Survey No. and other details of land will be made available post registration and Change of Land Use (CLU). The promoters of THE COMPANY are in process of acquiring and registration of the land of approx. XX.XX acres (approx. XXX,XXX.X0 sq. m.). at the proposed location for multiple future projects. It has been assumed that the land will be leased to THE COMPANY by the promoters. The terms of lease agreement are also under process with the promoters. As informed by the Company approx. INR X lakh/yr. of lease rent will be charged with an escalation of XX% every Xrd year.

Based on draft layout submitted by THE COMPANY, it is noted that the proposed built-up area for the main shed for BOPET Film Line X and Chip Plant Line X is total XX,000 Sq. m.

- Cover Area ~XX,X00 sq. m
- Open Area ~ X,X00 sq. m. with Silo Area, Husk storage, HTM Heater equipment & Piping and Roads

Thus, the envisaged land parcel is considered to reasonable and adequate for the proposed size of the project.

The project location is directly connected to National highway NHX originally and NHXX part of NH XX connecting XXX and Delhi, an all-weather road constructed by NHAI, as part of New Delhi-XXX-Lucknow National highway project. The project location is well connected through Road, Rail and to Sea through XXX-ICD, to Mundra/ Kandla and Nhavseva ports Mumbai for Import and Export purpose. Many Industrial projects of Food processing, packaging material manufacture are already operating and also coming up in the region.

There are several units operating and newly coming up for Food processing, especially for Soybean processing and Flexible packaging around XXX region in Uttar Pradesh, which are at X0-X0 km distance from the proposed location. Furthermore, the proposed location has availability of Technical and Managerial Manpower as well as skilled and unskilled manpower for the proposed project.

Connectivity

Land is situated on Asian Hi-way no 00X which is also known as XXX- Agra hi-way. The connectivity and distances of important pints from proposed project location of THE COMPANY project are shown in the following table:

Details	Distance
XXX City & Jhansi City	XX Km & XXX Km
XXX Railway Station	XX Km
XXX Airport	XX Km
Chaudhary Charan Singh International Airport, Lucknow	XXX kms
Kandla / Mundra Port and	XX0X / XXXX Kms
Mumbai Port - Maharashtra	XXX0 kms
Dry Port – ICD at XXX	XX kms



Source: APKA India Assessment



The Proposed Location are depicted in the following figures:

Image

Source: Google Maps

Few pictures of current status of The Company Pvt. Ltd proposed project site is given here below;

Live location Co-ordinates for Proposed Project Site	Village XXX Board Near Project Site
Image	Image

Source: THE COMPANY Site Visit on Xnd May, X0XX Photos by D & B

Other locational parameters are discussed here below;

Availability of Raw Material and Other Input Materials

The proposed THE COMPANY project location is one of the developed industrial areas of the Uttar Pradesh on NH X connecting XXX and Delhi. There are couple of Industrial units, including those for required input materials for proposed manufacturing unit such as cooling oil, lubricants, and packing material wooden crates manufacturers XXX Dehat District. THE COMPANY will be getting their main input raw material PTA and MEG form from existing reputed domestic manufacturers or import it. It is therefore envisaged that proposed unit will be able to source it's required Raw materials and other input materials for the proposed unit easily.

Availability of Manpower

As mentioned above, the proposed project location, which is one of the fast developing industrial areas of Uttar Pradesh on out skirt of XXX town. Furthermore, there are couple of operational units of Food processing, Foot wares and Flexi packaging industry, in this well-developed industrial region and therefore there is ample skilled and unskilled manpower availability for the proposed project. The proposed site is near to XXX town, therefore due to industrial development of the said area, there is also development of residential and other support infrastructure



in the area and this will help in attracting and retaining the required Technical and Managerial manpower for the proposed THE COMPANY project.

During the site visit it was observed that there is ITI (Industrial Training Institute) at XXX and colleges working near to XXX and near to the project site, hence this will also become source for required skilled and semi- skilled manpower for the operation of proposed manufacturing unit.

Site Plan

The proposed site plan for the BOPET Line X and Chip Plant X project is shown below:

Image

Source: THE COMPANY

Above plot plan shows Al Foil project, proposed BOPET LX & CP X under Phase X followed by phase X planning of BOPET LX at new land location of THE COMPANY at XXX.



Implementation schedule

Estimated project implementation schedule for BOPET Line X and Chip Plant X are shown separately below.

BOPET Line X				
Nature of Activity / Months		End Date	Day s	
Land Acquisition, N.A Industrial Approval of Long Lease Basis agreement / possession				
Building & Civil Work of Main Bldgs.	XX-May-X0	XX-Mar- XX	X0X	
Ordering of Plant & Machineries				
Imported	XX-Nov- XX	X0-Sep-X0	XX0	
Indigenous	XX-Jun-X0	X0-Nov-X0	XXX	
Supply of Plant & Machineries				
Imported		XX-Mar- XX	xxx	
Indigenous	X-Jan-XX	X0-Jun-XX	XX0	
Installation & Fabrication of Plant & Machineries	X-Aug-X0	XX-Jul-XX	XXX	
Electric power and HT/ LT Electrification	X-Jan-XX	XX-Jul-XX	XXX	
Power Connection For running the Plant	X-Apr-XX	XX-Jul-XX	XXX	
Trial Run	X-Aug-XX	X0-Sep-XX	X0	
Commercial Production (COD) - BOPET Line X		X-Oct-XX		

Source: THE COMPANY and APKA India Assessment

Chip Plant X			
Nature of Activity / Months	Start Date	End Date	Days
Building & Civil Work of Main Bldgs.	X-Sep-X0	XX-May-XX	XXX
Ordering of Plant & Machineries			
Imported	XX-Oct-XX	XX-Oct-X0	XX0
Indigenous	X-Jan-XX	XX-Jun-XX	XXX
Supply of Plant & Machineries			
Imported	X-Jan-XX	X-Sep-XX	XXX
Indigenous	X-May-XX	X0-Oct-XX	XXX
Installation & Fabrication of Plant & Machineries	X-Mar-XX	XX-Feb-XX	XXX
Electric power and HT/ LT Electrification	X-Sep-XX	XX-Mar-XX	XXX
Power Connection For running the Plant	X-Jan-XX	X-May-XX	XX0
Trial Run	X-May-XX	X0-Jun-XX	X0
Commercial Production (COD) - CPX		X-Jul-XX	

Source: THE COMPANY and APKA India Assessment

As depicted in implementation schedule, it is estimated that commercial production of the BOPET Line X project would commence from October X0XX and Chip Plant X from Xst July X0XX, considering the Company will obtain all necessary / statutory approvals and permissions in time, complete the civil works and would procure all critical plant and machineries including delivery of all imported plant and machineries as indicated in the implementation schedule.

In this regard, APKA India note that the Polymerization Plant for Chip Plant has the longest delivery schedule of XX months and considering transit time and erection the same itself may take almost XX months. Accordingly, the Chip Plant has been considered to commissioned at a later date. APKA India advises the Company to strictly adhere



to the implementation schedule, obtain necessary approvals, funds, plant and machineries on time to avoid any time over-run.

Current Status of the Project

Current status of the proposed project of THE COMPANY is as summarized below:

- The Company proposes to make long term lease agreement with existing landowners and CLU will be obtained by the landowner.
- As indicated in the Implementation Schedule, construction work for the Main Factory Building is likely to start by Mid-June X0X0. THE COMPANY has already engaged XXX Engineering India Pvt. Ltd. to prepare residual basic engineering, detail engineering, design / drawings for proposed project and it has already prepared Site lay-out drawings and detailed machinery / Equipment Lay-out drawing for the proposed project in consultation with Technical persons of the company and Technology suppliers.
- As indicated in the Implementation Schedule Purchase orders for imported plant and machineries, and
 Utility equipment will be placed and completed by Sept-Oct X0X0, depending upon the Delivery period
 indicated by the plant and machinery / utility equipment suppliers. THE COMPANY has already paid
 advance towards main critical imported P&M.
- It is targeted by the company to order all critical indigenous Plant and machineries and Utility equipment by January X0XX for BOPET Line X and by Dec X0XX for Chip Plant X, depending on delivery time.
- THE COMPANY is planning to do trial runs for proposed Plant and Machineries in Jul X0 Sep X0XX and start commercial production from Oct X0XX for BOPET Line X. Also for CPX, the P&M is proposed to supplied to plant within Jan XX to Oct XX and trail run in May XX to achieve COD of Xst Jul X0XX for CPX.
- Looking to the present progress of project, this seems to be realistic schedule, provided with proper planning and promoters' experience in setting up similar industries, it is achievable and technically possible target, subject to availability of all required resources as per implementation schedule.

Status of Statutory License / Registration / Approvals

The status of statutory approvals and registrations is provided below:

S. No	Statutory License / Registration / Approvals	Present Status	Details / Remark
1.	Incorporation of Private Limited Company	Completed	X0 th April X00X CIN - XXX
2.	Income Tax-PAN Number	Obtained	AAMCSXXXXD
3.	Income Tax-TAN Number	Obtained	DELSXXXXXA
4.	GST Registration	Obtained	0XAAMCSXXXXDXZW



S. No	Statutory License / Registration / Approvals	Present Status	Details / Remark
5.	Industrial entrepreneur's memorandum- IEM for proposed unit from SIA Govt. Of India	To be Obtained	For Proposed THE COMPANY BOPET Line X & Chip Plant X project
6.	RBI Export import code	Obtained	
7.	EPCG registration with DGFT for duty free import of plant and machineries.	To be obtained	At appropriate stage of import, but much before custom clearance timeline
8.	Goods and Service Tax (GST) Registration	To be Obtained	Registration for THE COMPANY BOPET Line X Project
9.	Non Agricultural Permission for Industrial Land and Plan Approval	To be Obtained	CLU for the proposed land
10.	State Pollution Control Board (UPPCB-XXX Dehat)	To be Obtained	To be Applied for Consent To Establish (CTE) for proposed project
11.	Application for HT power from DCVVNL through XX/XX KVA Electric Supply line	To be Obtained	To be applied to Concerned DCVVNL office for HT power Temporary Power connection is being obtained.
12.	Factory Inspector Approval	To be Obtained	To be Applied at appropriate stage of proposed project before Commercial Production in Oct, X0XX

Source: THE COMPANY and APKA India Assessment

The operations are subject to various employees, health and safety laws and regulations. Any failure to comply with environmental laws and regulations in India, including improper handling of raw materials, may result in adverse effect on the business, financial condition and results of operations. APKA-India advises the Company to complete the process in timely manner to avoid any adverse impact on project.



Technical Assessment

This section covers technical assessment for the proposed THE COMPANY BOPET Line X and PET Chip Plant Line X Project for manufacturing.

Proposed Manufacturing Capacities

THE COMPANY is proposing for new XXX make BOPET Film Pant for the project and XXX make Pet Chip Plant.

THE COMPANY has entered into a Contract with XXX in this regard dated XXth Mar X0XX for supply and supervision of erection & commissioning and provision of required technology. The XXX contract was signed on XXth Oct X0XX for supply of the Chip Plant of X00 TPD capacity.

Based on the technical specs of XXX, the Installed Capacity for the main BOPET Film line of proposed project is shown below: -

microns	TDO Outlet width (mm)	speed (m/min)	density (g/cc)	kg/min	kh/h	efficiency	hours of operation	TPD	Trim Waste	Jumbo Width (mm)	Slit Waste	TPD	Days	TPA - Packed Film
XX	X0X00	XXX	X.XXX	XXX.XX X	XX0X.XX X*	X00.00%	XX	XXX	X%	X0X00	X.X0%	xxx	XX0	XX.XX0.00

^{*} Maximum (gross) throughput of line approx. XX00 kg/h

Source: THE COMPANY and APKA India Assessment

The waste generated during the process are re-processed and recycled.

Plant Capacity	Capacity Calculation		
Particulars	TPH	TPD	TPA
BOPET Line X	x.xx	XXX	XXXX0
Pet Chips Line X	XX.X	X00	XX000



Machinery Details for THE COMPANY Proposed Plant

The plant and machinery proposed for this project is mainly include main plant BOPET Line, PET Chip Plant, Slitter, Offline Grinder and Jumbo Core.

Proposed plant and machineries and Utilities is as summarized as below. As per APKA India assessment the proposed P&M and MFA considered is adequate.

List of Major Equipment proposed to be installed is as follows: -

Primary Equipment

- i) Raw material Storage & Feed System
- ii) Chips Plant
- iii) BOPET Line -- LX & Primary Slitter
- iv) Recycling Plant

Secondary Equipment -

- i. Secondary Slitters
- ii. Offline grinder
- iii. Pneumatic Conveying equipment
- iv. Filter equipment
- v. Thermic Fluid heater & Hot oil distribution and recycling system.
- vi. Stainless Steel Silo for Chips Storage
- vii. Boiler & accessories

Service Equipment.

- i) E.O.T. Cranes
 - ii) Mechanical Workshop Equipment.
 - iii) Laboratory
- iv) Raw Water receiving, storage, treatment and distribution system
- v) Cooling water recycling system
- vi) Fire Protection & hydrant system
- vii) Chilled water generation & distribution system
- viii) Compressed Air generation, drying and distribution system
- ix) Furnace oil system for Thermic fluid heater
- x) Ventilation & air conditioning systems
- xi) ETP & STP
- xii) Electric Power receiving and distribution system
- xiii) Power wiring, Lighting and Earthing System

Source: THE COMPANY and APKA India Assessment

Utility & Auxiliary Section will comprise of:

The following Auxiliary and Utility facilities / buildings are to be constructed/installed for the proposed Plant: The civil BoQ for various buildings is under preparation.

- a) Water complex comprising of Treatment Plant, Pumps, Cooling Towers and piping system.
- b) Compressed Air generation, storage and distribution system.
- c) Fuel oil storage and distribution System.
- d) Chilled water Generation storage and distribution system.
- e) Material Handling Equipment including EOT Cranes and Lifting tackles.
- f) Effluent Treatment Plant.



- g) Ventilation and Air Conditioning systems.
- h) Plant lighting system including Lighting of Shops and surrounding areas.
- i) HT & LT Power Distribution system and control including Emergency power & Earthing system.
- j) Material weighing facilities and Fire Fighting system.
- k) Bill of material of piping of various utility services including interplant and in shop pipelines up to equipment battery limit (excluding interconnecting piping) for initial procurement.
- l) Piping of various utility services within battery limit (Battery limit Yard piping i.e. Piping from source of utility up to one meter distance from plant building and Shop piping I.e., piping inside the plant building on building columns from the TOP of utility outside the plant building up to X.X0 meter above the FFL.
- m) Cabling and earthing system within battery limit (Battery limit Cabling between Sub-station, plant transformer & PDB and Cabling between PDB to Utilities MCC).
- n) Bill of material of cabling and earthing including interplant and in shop cables up to equipment battery limit (excluding interconnecting cabling).
- Bill of material of cabling and accessories for lighting.

All interconnecting Cabling and piping between Process equipment and respective Drive panel/ MCC shall be as per drawings/ information from respective equipment suppliers. As per initial assessment and plant layout prepared the following area statement has been computed.

Particulars	Area	Width	Length
Building X			
Filter Room	XX0	XX	
Chips Feeding	XX0	XX	X0
LX+Primary & Secondary Slitter	X0XX	XX	XXX
Sub Total	XXXX		
Building X	Area	Width	Length
PTA Charge-up	X00	XX	X0
Chip Plant X	XXX0	X0	XX
Panel Room X	X00	X0	X0
Electrical Bay (PCC / MCC Panel + DG +Rotary UPS +VCB & Transformers)	XXX0	X0	XX
Utility Bay	XX0	X0	XX
Recycling +Panel Room X	XX0	X0	XX
Offline Grinder + Engg. Workshop	XX0	X0	Х
Lab + meeting room	XX0	X0	Х
Packing & Finished Good area (Optional Spare Primary Slitter)	XXX0	X0	XX
Sub Total	XX00		
HTM heater + Other Misc.	X0XX		
Total Area for PEB Structure	XXX00		
Silo - open area	X00	XX	X0
Total Plant Area	XX000		
Open area required for Husk storage, HTM Heater equipment & Piping + Roads	X000		
Total Plot Area	XX000		



Technical Consultant

M/s XXX Engineering India Pvt. Ltd. is the technical consultants for the project. The scope will include residual basic engineering, detailed engineering, procurement assistance and construction supervision.

Aiding in project implementation by way of co-ordination with Project staff in resolving technical problems and discrepancies (if any). Also aiding THE COMPANY for co-ordination with suppliers of Technology/Production equipment's, utilities & auxiliary equipment, etc. for items under XXX's Scope of Engineering. Provide expert supervision of construction and carry out inspection of items under XXX's Scope of Engineering as per THE COMPANY's requirement

XXX Consultants comprise experts from various fields of engineering including civil, structural, mechanical, metallurgical and electrical currently involved in detailed engineering of metallurgical and other industries. Their expertise involves engineering experience on Mini, and Integrated Iron and Steel Plants, Chemical Plants, Power Plants and General Engineering Works in India and abroad.

They are also experts in providing the innovative solution for Intelligence, Water, Infrastructure, Renewal, Discovery and Mobility

Supplier Credential

Lindauer XXX GmbH

XXX Film production Lines are supplied for the production of biaxially oriented polyester (BOPET) and polypropylene (BOPP) film. Other applications include the processing of PS, PA, PVC, PE, PEN and different thermoplastic materials. XXX stretching equipment is also used for special applications such as geotextiles and biaxial oriented nets.

XXX has developed and manufactured BOPET and BOPP Film Production Lines since XXXX and as a pioneer in this field, has extensive experience in the design and manufacturing of complete Film Production Lines. In XXX0, Lindauer XXX GmbH was founded by Peter XXX, son of the famous aviation pioneer Claude XXX. Initially Lindauer XXX GmbH began building specialty machines as well, including dryers for the cardboard, paper and construction panel industry. In the mid-XXX0s, the product range was expanded to include foil stretching systems for the packaging and plastic foil industry and textile finishing machines for circular knitted goods.

The rapier weaving machine developed in XXXX and the air-jet weaving machine introduced in XXXX were the most important milestones in the company's rise to become the Germany's only weaving machine manufacturer of international standing.

XXX Engineering GmbH

XXX Engineering is a flexible engineering company which has set several milestones in the polyamide and polyester technology. The polymers produced with XXX Engineering technology are processed to textile and technical filaments, fibers, BCF, films, compounds, master batch and bottles.



XXX Engineering GmbH was founded mid XXXX in Berlin (Germany) by Mr. Wolf Karasiak with the main shareholder.

The XXX Group, main shareholder of XXX Engineering GmbH, has developed in the last years to one of the leading companies for Polyamide X polymer-, filament- and BCF-production in Europe. Since many years XXX Group is the leader of the European PAX BCF market with a share of more than XX%.

JKampf

In XXX0 is the foundation year of KAMPF by Erwin Kampf in Wiehl, manufacture of slitters and winders for the paper-processing industry. KAMPF slitting and winding technologies have been an important success factor in the production and processing of web-shaped materials for many decades.

Proposed Manufacturing Process

Objective: To produce resin granule of polyester – Polyethylene Terephthalate (PET). This resin (chips)/ molten chip is used as raw material for Film plant (BOPET film).

Manufacturing Process of PET Chips

Raw material: PTA (Purified Terephthalic Acid (Powder from)) and MEG (Mono ethylene glycol (liquid from))

Other Additive / catalyst: Antimony tri oxide (catalyst), Poly-phosphoric acid (heat stabilizer), Magnesium acetate (pinning agent)

Process description

PTA is transferred to storage silo through conveyor belt as well as MEG which is a clear liquid transferred from storage tanks is automatically pumped to the CP plant in various processes stages.

Paste (slurry) prepared by using a defined quantity of PTA and MEG along with catalyst in paste preparation vessel.

The paste is fed into the esterification reactor Up Flow Pre-Polymeriser (UFPP) zone -X which enables to maintain a perfect mole ratio under high temperature and pressure. About X0-XX% reaction is completed in UFPP-X and is further transferred to UFPP-X where esterification reaction completed called monomer (DGT).

The esterification product then is transferred from second ester zone to the pre-poly reactor. The transfer is made without pump by pressure difference and the Pre-Poly reactor at a vacuum. Before transfer the monomer into the pre-poly reactor the stabilizer solution and other additives are either dosed into the second ester zone or into the connection line between ester-X and Pre-poly reactor. In Pre-Poly rector polymerization gets started and is discharged to Finisher. On exiting the UFPP the pre-polymer gravity flows through a level valve equipped loop seal to the finisher.

Finely in the Finisher the required property of polymer is maintained by adjusting the temperature, vacuum, finisher agitator rpm and level valve.



From finisher the polymer transfers with the polymer pump (gear pump) through filter either transferred to Film plant via melt pump to embossing & chill roll or transferred through die-head for granulation.

There is an underwater granulation system, where the polymer cut up to Xmm size called chips. The chips further dried in chips dryer where moisture is removed and passed through classifier and then transfer to internal storage silo. In case drying of the chips is required, a fluidized bed type crystallizer is used. Here the raw material is being treated to reduce the moisture content of the chips. Wet chips at ambient temperature are fed into the continuous fluid bed pre-crystallizer, where they are heated in air and at the same time given a higher degree of agitation to prevent the formation of any agglomerates. From this silo chips it is transfer to chips bagging stations.

The PET Chip production process flow is depicted below:





Exhibit: PET Chip Process Flow

Image

Source: THE COMPANY and APKA India

Assessment



Manufacturing Process of BOPET

PET film is manufactured from Cast Stenter Process. The main steps of the PET film manufacturing process to be used are described below:

- 1. Extrusion: Extrusion is a process consisting of transforming polymer into melt, moulding it to the required shape (in this case film) and cooling it below the melting temperature. The mixed material for each of the layer is melted and plasticide to achieve the require homogeneous state with the requisite characteristics and then is filtered and transported to the die unit.
- 2. **Die casting** the respective melted materials of each of the layers are cast in the die unit producing a flat layered cast sheet, which is then cooled.
- 3. **Machine direction orientation (vertical stretching)** the cast sheet is then heated up by preheating the rolls. The heated cast sheet is then vertically stretched before annealing the cast sheet annealing is the process of heat-setting to stabilize the stretched sheet.
- 4. **In-**line coater- To produce chemically treated films a coating station will be installed. Coated products provide higher bond strength to laminates due to improved anchoring with inks & adhesives.
- 5. Transversal direction orientation (horizontal stretching) after vertical stretching, the cast sheet is horizontally stretched before annealing again: this determines the width and most of the properties of the PET film. Orientation is the act of drawing film at melting temperature. In this process the film crystallizes, which results in a change in its properties. Most importantly, high strength of the film is achieved, and its ductility is reduced. The tensile strength properties of biaxial-oriented films make them an ideal material for flexible packaging, electrical-insulation materials, bandages, separation layers and film-type sandwich structures so-called laminates
- 6. **Pull roll station** after horizontal stretching, the film is trimmed, measured for thickness and the surface treated by the corona treatment unit. Corona treatment is the process that enables the PET film to become receptive to printing. At the pull roll station, continuous feedback on the thickness of the PET film is relayed back to the die unit, which therefore ensures consistency in the thickness of the film.
- 7. Winder the final PET film is then wound onto metal rolls in the mill roll by the winder.
- 8. **Slitter** the wound film is then allowed to cool and unwound from the metal rolls, slit to the requisite width and wound again onto paper cores for delivery to customers.

The process flow diagram for BOPET Film is shown below:





Exhibit: BOPET Film Process Flow

Image

Source: THE COMPANY and APKA India Assessment



Raw Material Requirement

The main raw material is PTA and MEG which is required for PET Chip production, then PET chip is processed further for BOPET Film production. The raw material handling is used to ensure continuous supply of the raw material to the extrusion system. Main tasks are conveying, drying (if applicable) and dosing of the different material streams to the extrusion system. Estimated Raw material quantity and cost per annum basis are summarized in the following table;

Raw Material Estimated Cost based on Consumption Norm

Particulars	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX onward
XX Microns BOPET Film —							
Consumption Norm				101101	1011011		
BOPET Film Capacity	MTPA	XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0
Operating Months	Month	Х	XX	XX	XX	XX	XX
Capacity utilization	%	XX%	X0.00%	XX.00%	X0.00%	XX.00%	XX.00%
BOPET Film Production		XX,XXX	XX,0XX	XX,XX X	XX,XX0	XX,XX X	XX,XX X
PET Requirement Calculation							
Invisable Process Wastage	%	X%	X%	X%	X%	X%	X%
PET Chip Requirement	TPA	XX,XXX	XX,XX X	XX,XX X	XX,XX0	XX,XX X	XX,XX X
Chip Plant Production							
PET Produced	TPA		XXXXX	XXX00	XXXX0	XXX00	XXXX0
Outside PET Sales	TPA)	XXXX	XXXXX	XXXX0	XXXXX	XXXXX
Chip Plant RM Requirment							
MEG for PET chips Ton/Ton PET chip production	Tons	0.XXXX	0.XXXX	0.XXXX	0.XXXX	0.XXXX	0.XXXX
PTA for PET chips Ton/Ton PET chip production	Tons	0.XXXX	0.XXXX	0.XXXX	0.XXXX	0.XXXX	0.XXXX
RM Consumption							
MEG	TPA		XX,0XX	XX,XX X	XX,XX X	XX,XX X	XX,0XX
PTA	TPA		XX,0XX	XX,0XX	XX,XX X	XX,XX X	XX,XX X
Assumed Rate							
MEG	INR/ MT		XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0
РТА	INR / MT		XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0
PET chips for BOPET – Outside Purchase	TPA	XX.XXX					
PET Chip Outside Purchase	INR/ MT						
Raw Material Consumed	INR Cr.	XXX.XX *	XXX.X X	XXX.X X	XXX.X X	XXX.X X	XXX.X X

^{*}Xst year outside purchase of PET chips considered since in CPX will be commissioned in FYXX.

Source: THE COMPANY and APKA India Assessment

Raw Material Sourcing Arrangement



In the previous paragraph, we have discussed about Raw material requirement in terms of quantity and value for the proposed product group in their new project. Since, THE COMPANY is already in this business and they have established contacts with all major Raw material and other input material suppliers within Uttar Pradesh, as well as on all India and global basis. As discussed with them, they are planning to Source their main Raw materials and consumables from existing suppliers itself.

Utilities Details

Power Requirement and Availability

Major utility required for the proposed project is electric power, which will be provided by state electricity board through DVVNL (Dakshinachal Vidhut Vitran Nigam Limited), to unit located at Tehsil XXX, District XXX Dehat, Uttar Pradesh. Proposed THE COMPANY project will have different sections for carrying out manufacturing including Raw material Storage and handling, intermediate Rolling mill/ Final Rolling Mill, Annealing section and Final Quality control and packing section. Section wise Power requirement and also total power requirement in terms of connected load is estimated at X000 KVA. Section wise Details of connected load is under progress.

The power consumption per ton of finished product production for the Project, the break-up is provided below. The per unit consumption is based on consumption of power in the existing set up. The same needs to be validated based on connected load break-up which is under preparation.

S. No.	Production process	UoM	Units (kWh)
X	BOPET	kWh / ton of production	XXX
X	PET chips	kWh / ton of production	XXX
X	Lighting and fixtures & Utilities	kWh / day	X00

Source: THE COMPANY and APKA estimates

Along with the same for power back-up arrangement THE COMPANY proposes to have X nos. of Rotary UPS (approx. X000 KVA) and X*X000 KVA DG Sets.

Fuel

The Company uses husk fired thermic fluid heater for heating thermal media (HTM). Hot HTM is used for heating of polymer lines and other process requirements for the PET chip plant-X and BOPET Line X. Rice husk is used as the preferred fuel and is easily available from the nearby rice mills. A total of ~X0 tons per day of rice husk would be used for the PET chip & BOPET Line plant once operations stabilize.

Water

The total water requirement for the Project would be made available from the borewells in the factory premises.

Manpower Requirement and Availability

As indicated previously in the locational analysis for the proposed project of THE COMPANY, the project region is a well-established industrial hub of XXX Dehat district of Uttar Pradesh state. The region has good availability of



skilled and unskilled labors. The unit shall be operational for minimum XX0 days in a year. As indicated previously, the proposed project location is well connected through Road and Rail.

As summarized in the following table, the proposed THE COMPANY project will require about XXX manpower. This includes manpower for, all manufacturing sections of the unit and also manpower for Quality Control, Marketing and Administration. Category wise Manpower estimate with their Annual Wage Bill estimates is summarized in following table;

Manpower Requirement for THE COMPANY BOPET LX Project

BOPET LX + CP X + Engineering & Utilities	Head of Section	Engineers / Shift In- charge / Supervisors	Operators/ Fitters / Welders / Technicians	P&A / HR / Safety / Commercial & Account staff	Total manpower
Process LX	X	X	XX		XX
Slitting	•	X	X0	-	XX
Process CP X	X	X	X	-	XX
Mechanical	Х	X	X) · -	XX
Electronics	X	X	X	-	X0
Electrical	X	X	X	-	XX
Utilities	Х	Х	X	-	X0
TFH / Boiler	Х	X	X	-	×
Safety	X	X	<u>_</u> -	-	Х
Packing & Dispatch (Film + Chips)	X	×	_	-	X
Total	X	xx	xx	x	XXX
Avg CTC/ month	X0,000	XX,000	XX,000	XX,000	-
Manpower cost/ month	XX0,000	X,XXX,000	X,XX0,000	XXX,000	X,XX0,000

N.B: The Estimated Manpower requirement and Estimated Annual Wage Bill estimate, is for the manpower requirement of proposed Greenfield project of THE COMPANY.

Source: THE COMPANY and APKA India Assessment

The above manpower estimate is based on the prevailing wages and salaries rates in the project region and for the proposed project. It is worth to mention here that, promoters of this project are operating an industrial unit of packaging materials, hence they have availability of required Technical and Managerial manpower for different manufacturing divisions and operational areas.

THE COMPANY will also hire experienced technical and Managerial manpower also from the market as and when required, and at appropriate stage of the proposed project execution.

As indicated previously, required Technical and Managerial Manpower, and skilled, Semi-skilled and Un-skilled manpower is easily available for the THE COMPANY project.

Effluent Treatment Plant

Details and designing of ETP proposed for the project is still under preparation.



Market Assessment

Profile

Indian packaging industry accounts for X% of the global packaging industry, making it the sixth largest in the world. It is dominated by rigid packaging, which accounts for XX - X0% of the total packaging industry. Although the share of flexible packaging in Indian packaging industry is currently low, however, its usage is picking up fast.

Flexible packaging involves packaging using plastic/polymer sheets such as BoPET (biaxially-oriented polyethylene terephthalate), biaxial oriented polypropylene (BOPP), metalized BOPP films, films made from polyethylene, polyvinyl chloride, nylon and cellophane. Flexible packaging materials can be manufactured through three techniques: blown film manufacturing, cast film manufacturing, and co-extrusion process.

Indian Flexible Packaging Sector							
Flexible Packaging Materials	Type of Flexible Packs Used	Advantages	Area of Applications				
Polyethylene,	Laminates	Barrier protection from	Food Packaging				
Polyvinyl Chloride,	Shrink sleeves	moisture, chemicals, light etc.	Pharmaceutical Packaging				
Polyethylene	Pouches,	Cost effective and ease of	Personal Care Product				
Terephthalate	Wraparound labels	convenience, Longer shelf life	Packaging				
BOPP (Transparent &	Zip bags		Agricultural Packaging (Food				
Metallized) &			Grains)				
BOPET (Transparent &			Industrial Packaging				
Metallized),			(Fertilizers, Cement)				

Flexible packaging materials are widely used in food packaging, mostly for packing convenience foods whose demand is increasing steadily. Additionally, usage of flexible packaging materials is also picking up in personal care, pharmaceutical and industrial segments.

PET film is a flexible and a transparent / translucent plastic film made from PET resin. Compared to plastic films made from other polymers, PET film has higher tensile strength, higher durability, superior gas barrier properties and chemical inertness to name a few.

PET film is available in varying thickness, width and other attributes, depending upon the requirement of its end user. Desired properties can be imparted into the PET film during the stage of polymerization by addition of suitable chemicals to the PET resin.

Few of the types of PET films include plain PET films, Biaxially oriented PET films (BOPET), electric insulation PET films, aluminium metallized PET film and chemical coated PET film.



Regulatory Scenario

Manufacturing of flexible packaging materials is open to private sector participation, with no Government restrictions in production, sales, and pricing. This relatively market friendly environment has ensured the dominance of private enterprises in this sector.

New Food Packaging Regulations

In January X0XX, the Food Safety and Standards Authority of India (FSSAI) announced new regulations in the domain of food packaging. The Food Safety and Standards (Packaging) Regulations X0XX replaces The Food Safety and Standards (Packaging) Regulations X0XX which was regulating food packaging in India.

The new regulations lay out specific guidelines regarding the type of material that could be used for food packaging, the tolerable limit for contaminants in the packaging material, as well as quality compliance standards that must be maintained. In terms of quality standards, the packaging material should adhere to the Indian Standards (IS) listed in schedule I, II and III. In the earlier regulatory regime, this compliance to IS quality standard was not mandatory. Additionally, the new regulation also categorically bans the usage of recycled packaging for food packaging in India.

This new set of standards would bring much more clarity on the quality standards in Indian flexible packaging material. It is estimated that nearly X0% of flexible packaging material consumed in India for packaging in food & beverage industry. Hence any regulatory changes with respect to food packaging will have a direct impact on the flexible packaging industry.

The clear definition of quality standards as well as tolerance limits for permissible contaminants will help in improving the quality check landscape in flexible packaging industry. The presence of well-defined guidelines would help Companies in improving their internal quality purposes to manufacture a product that adhere to the regulatory guidelines. So, it could be commented that the introduction of new regulations would help in improving the quality standards in Indian flexible packaging industry. Standardization of packaging norms & improved quality will give more confidence to consumers and hence will push further demand for flexible packaging.

Furthermore, the tighter regulations would also lower the demand for low quality imports. There is a fair bit of flexible packaging materials being imported to India, a significant proportion from low cost destinations, and of substandard quality. Tighter quality standards would discourage consumers from opting for those cheaper imports, thereby benefitting the domestic industry and a boost for exports as well.



Packaging Industry

The changes in consumer lifestyle across the globe has fueled the growth of convenience-oriented packaging, predominantly flexible packaging and PET bottles. Plastic based flexible packaging today has become the packaging material of choice in food & beverage packaging. The light weight and convenience offered by this product has led to its dominance. Furthermore, the attribute of customizability and cost-effective manufacturing have added to the attractiveness of flexible packaging.

According to a study commissioned by The Association of Packaging and Processing Technologies, nearly X.X trillion units of packaging products is consumed globally per annum. These include flexible plastic packaging products, PET bottles, metal cans, folding cartons, HDPE bottles, glass bottles, among others. Flexible packaging products is estimated to account for XX - XX% of the total global consumption, underlining the dominance of this packaging product.

Although North America and Western Europe are the dominant markets, the growth rate in these two mature markets is stabilizing as it moves to a stable growth rate. The next wave of growth is expected to be driven by Asia Pacific market, led by emerging economies like India and China, both of which are experiencing a boom in consumer production demand.

Indian Packaging Industry

Packaging is the fifth largest economic sector in the country and is one of the fastest growing. The strong demand for packaged products coupled with lower cost of manufacturing (compared to European and US markets) have particularly aided in the growth of this industry.

As per a study conducted by ASSOCHEM, the packaging industry in India is estimated to be reach USD XX Bn in X0X0, up from USD XX Bn in X0XX. The industry is estimated to have witnessed a compounded growth rate of XX% during X0XX-X0, as increase in population, changing lifestyle and higher disposable income increased the demand for packaged products.

Diagram Industry Sources

Flexible packaging has become the preferred packaging material across developed markets. The packaging trends in India is undergoing a change, favoring flexible packaging segment. The increasing popularity of packaged food & beverage products, and higher demand for FMCG products have increased the popularity of flexible packaging products. This strong demand from consumer segments have helped the segment grow by a CAGR of nearly XX%, from X0XX till X0X0. This growth rate is higher than that experienced by the overall packaging sector. It is estimated that the flexible packaging segment in India would reach USD XX Bn in X0X0, up from nearly USD X Bn in X0XX.

Diagram

Industry Sources



Packaging and Metallizing segment accounts for just over XX% of all volume for BOPET Film consumption and the same has been growing at just over X0% p.a. over the last five years during X0XX to X0XX.

High growth in India's flexible packaging industry has driven this end use sector with projected growth of X.X% p.a. over the next five years during X0X0 to X0XX.

Export - Import

Flexible Packaging

India exported approximately INR X0X.X Bn worth of plastic & flexible packaging products and films in FY X0XX. During the time FY X0XX-XX the value of flexible packaging films exported to India is estimated to have increased by a CAGR of XX%. The US is the single largest export market for Indian flexible packaging industry. In FY X0XX it accounted for nearly XX.X% of total value of flexible packaging products exported. UAE, South Korea and Germany are the other major export markets. In FY X0XX, the value of flexible packaging products exported to these four markets accounted for nearly X0% of the total.

Diagram

Source: DGFT

The Company



The value of flexible packaging films imported to India is estimated to be INR XXX Bn. The value of imports has increased by a CAGR of nearly XX% during FY X0XX-XX. China is the dominant exporter of flexible packaging films to India. In FY X0XX the value of those products imported from China accounted for nearly XX.X% of the total value of flexible packaging films imported to India. India also imports flexible packaging films from South Korea, Thailand, and USA, among others. Nearly X0% of imports is concentrated among the four markets of China, Thailand, South Korea and USA.

Diagram

Source: DGFT

PET Chips

India is a net exporter of PET products. In FY X0XX, the total volume of PET exported from India is estimated to be nearly X,0XX thousand tons while the export revenue was nearly INR XX Bn. The volume of PET exported from India has increased by a CAGR of nearly X0% during FY X0XX-XX. Italy is the largest export market for PET exporters from India. In FY X0XX the value of PET exported to Italy accounted for nearly X0% of the total PET exports. Japan, UAE, Israel and Bangladesh are the other major markets.

Meanwhile the volume of PET imported to India is estimated to be XXX thousand tons in FY X0XX, which is estimated to be valued at INR XX.X Bn. The volume of PET imported to India has increased by a CAGR of nearly XX% during FY X0XX-XX. China is the largest exporter of PET to India, accounting for nearly XX% of the total value of PET imports in FY X0XX.

Diagram

Source: Directorate General of Foreign Trade



Global BOPET Market

The global production of BOPET films is estimated to have reached nearly X.X million tons per annum by X0XX, which is valued at nearly USD XX Bn. The global demand for the product has increased by a compounded rate of nearly X.X% in the last five years (X0XX-XX), fueled by increasing application across consumer segments. Meanwhile the global installed production capacity for BOPET films increased by a compounded rate of nearly X.X% during the same period to reach X.X million tons in X0XX. During X0XX-XX, nearly X.X million tons of new capacity was installed in the industry, two thirds of which has come up in China. Asia now dominates the BOPET production in the world, with significant capacity additions in China and India in the last X0 to XX years.

The significant increase in production in these geographies could also be attributed to the shift in consumption pattern, which has slowly shifted from developed markets to emerging economies in Asia Pacific. The growing population together with higher disposable income and changing lifestyle is creating demand for packaged consumer products. Since BOPET is the primary packaging materials used by consumer products industry, the higher demand has naturally translated into higher demand for BOPET and other flexible packaging materials.

Diagram

Wood Mackenzie Chemicals Report

Regional Scenario

China has seen massive capacity addition in BOPET films in the recent years, and the wave of investment is expected to continue in the years to come. Thus, China is expected to hold on to its dominant position. A thriving domestic market fueled by increasing consumerism coupled with massive exports have justified the massive investment in this sector.

The South East Asian market is driven by India, which is witnessing massive growth in demand for fast moving consumer products. The country is witnessing a boom in consumer product consumption, with demand for packaging food & beverage products increasing strongly. This strong demand has encouraged Indian companies to step up investment in domestic BOPET manufacturing capacities. In addition, strong growth is expected to happen in other Asian economies, Eastern Europe, Russia, and South America.

However, the investment in mature markets of North America and Western Europe is expected to be moderate. Both these markets would continue to see stable growth in demand for BOPET films, but rather than domestic manufacturing imports is expected to play a major role in meeting this demand.

Diagram

Wood Mackenzie Chemicals Report

Consumption Pattern

Annual consumption of BOPET film exceeded X million tons per annum, with nearly XX% of the consumption happening in China alone. Countries in Asia accounts for nearly XX% of the total global BOPET consumption. This



market is expected to remain the dominant consumer of BOPET in the coming years. Although demand from Europe and North America is steady, their share in the total global demand is diminishing.

Diagram

Wood Mackenzie Chemicals Report

Demand Scenario

The past X0 to XX years have witnessed a change in BOPET film demand trend, due to multitude of changes. Traditionally, the base film demand was highest from imaging and magnetic tape industries. However, the innovations in storage technology has reduced the demand for magnetic tape and imaging products, resulting in lower demand from these segments. Meanwhile demand has spiked from flexible packaging and electronics industry. Currently the demand is highest for thin BOPET films, with applications surging in packaging and metallizing sectors as well as newer applications like twist wrap and heat sealable films. As of X0XX, flexible packaging industry accounts for nearly X0% of the BOPET films consumed worldwide.

Diagram

Wood Mackenzie Chemicals Report

Demand from Packaging & Metallizing Segment

Nearly X million tons of BOPET film was consumed by packaging & metallizing segment in X0XX, with demand for the film increasing by X to X% per annum over the past few years. The shift in packaging trends from rigid packaging to flexible packaging, world over, as well as increased demand for convenience packaging have driven the demand for flexible packaging.

China dominates the global flexible packaging market, with volume demand growing by nearly X% per annum. The annual growth rate in demand for BOPET film from packaging sector in India is estimated to be in the range of XX% per annum, but the volumes are lower than that of China. Demand continues to be stable in mature markets like the US and European Union.

Diagram

Wood Mackenzie Chemicals Report

Domestic Demand Drivers

Flexible Packaging

Food & beverage industry is the largest consumer of flexible packaging products, accounting for nearly X0% of the total consumption. Pharmaceutical sector followed by personal care products are the other two major consumers of flexible packaging products. The demand for flexible packaging products is thus linked to the demand scenario prevalent in these three end user segments.

Indian Food & Beverage Industry



Consumption of packaging food & beverage products have picked up in India, owing to a shift in consumer profile, favorable changes in discretionary spending pattern, and overall transition in consumption behavior. According to industry estimates, India is one of the top X packaged food markets in the world, and the second largest in Asia. According to a study by The Associated Chambers of Commerce and Industry of India (ASSOCHEM), flexible packaging materials accounted for nearly one fourth of the total food packaging industry. This include food packaging laminates as well as packaging foils.

However, nearly X0% of the current packaged food market is concentrated in the urban areas. Additionally, at XX kg/ year, the per capita consumption of packaged food in India is also low. Thus, it could be commented that despite the rapid strides the country has made in packaged food & beverage industry, the growth potential is immense. Similarly, with the packaged food industry, the consumption of ready-to-eat, dairy products, canned food, and probiotic foods are witnessing rapid growth. The usage of flexible packaging material is highest among these products.

Rapid growth in demand for packaged food products coupled with increasing shift to flexible packaging from other traditional packaging have helped in increasing the demand for flexible packaging products. Considering the growth potential inherent in Indian packaged food industry, the future demand for flexible packaging products from food & beverage sector looks strong.

Pharmaceutical Packaging

In pharmaceutical sector, packaging plays multiple roles, including protecting the products, meeting regulatory compliance, as well as adhere to changing regulations. Packaging is thus an integral part in pharmaceutical industry, and flexible packaging materials is widely used.

India has a well-developed pharmaceutical industry, which has been growing at a steady rate. The Country has emerged as the generic drug manufacturing capital of the world, meeting the generic drug requirement of both domestic as well as international market. In terms of volume of drugs manufactured, India is ranked as the third largest pharmaceutical market in the world.

The presence of such a strong pharmaceutical industry has benefitted the flexible packaging industry. The demand from pharmaceutical industry for flexible packaging products has been growing by a strong rate and is expected to continue in the coming years.

Personal Care Products

Introduction of lower volume SKUs, especially in detergents and hair care products have increased the usage of flexible packaging products in the personal care segment. The superior barrier properties that have increased the usage of flexible packaging in food & beverage sector is also a major factor behind its acceptance in personal care product segment.

Personal care segment have witnessed rapid growth, on the back of a combination of changes in lifestyle pattern, and higher dipsoable income. The sales of body care & hair care products, hygiene products and cosmetics have increased as the disposable income spending among Indian middle class saw a shift.



Globally the growth in the middle class consumer segment have invariably resulted in higher sales of personal care products. India too is following this trend as the spending power of middle class increases.

Organized retail and e-Commerce segment

Organized retail and e-commerce are two of the leading users of flexible packaging products. Both these segments are witnessing strong growth in India, on the back of improved purchasing power and changing consumption habits.

e-Commerce transaction has increased at a rapid scale in the country. Increasing smart phone penetration coupled with affordable data plans have fueled the growth of e-commerce transactions in the country. Billions of dollars' worth of transactions are currently happening in Indian e-Commerce space, including goods as diverse as high-end electronics to furniture to everyday staples. The number of e-Commerce transactions have increased significantly. Flexible packaging product is one of the preferred packaging mode in e-Commerce segment, and this increase in e-Commerce transaction volume have resulted in equally high growth in consumption of flexible packaging materials.



PET Chip

PET manufactured is sub-divided into three categories: bottle grade chips, textile grade chips, and biaxial film grade chips. As the name implies, the bottle grade chips are used to manufacture PET bottles that find applications in food & beverage sector. Textile grade chips are used to manufacturing synthetic yarn, which is then converted into synthetic textile products.

Biaxial film grade chips are used to manufacture BOPET films that are used in flexible packaging sector. The demand for each of the variants of PET is dependent on the consumption pattern prevailing in end use industry. Globally, about X0% of PET manufactured is used to manufacture synthetic fiber while bottle production is estimated to account for nearly X0% of the total PET usage.

As per marketing strategy of THE COMPANY, the Company plans to sell PET Chip to other BOPET Film manufacturers.

Demand from flexible packaging sector

PET film is used as flexible packaging materials for food products, cosmetic products / personal care products and pharmaceutical products. Food consumption pattern in India has undergone a sea change, as consumption of convenience and ready-to-eat food increased. This shift in consumption pattern, prevalent mainly in urban market emerged because of multiple factors, chief of them being a rise in disposable income, exposure to consumption patterns in developed economies and easier access to convenience foods.

Role of packaging too has undergone a transition, with attributes like ease of handling, ability to preserve nutritional value, aroma, and taste, flexibility in transportation & storage, and aesthetic / outward appearance gaining prominence. Flexible packaging materials which meet all these attributes has emerged as a nature fit for food packaging.

Growth in organized retail has played a significant role in the rising consumption of processed and convenience foods. Food chains and supermarkets in urban areas improved the accessibility of customers to these food items, which are packed in flexible packaging products. Further, organized retail also increased the variety of convenience foods available to consumers, indirectly leading to higher demand for flexible packaging materials.

This has helped in increasing the demand for PET chips used to make biaxially oriented PET films, used to manufacture flexible packaging products.

Growth Forecast

Indian Flexible Packaging Industry

Flexible packaging products has been the fastest growing segment within the packaging industry. The growing popularity of packaged food products along with the convenience offered by flexible packaging materials have propelled the industry segment. Furthermore, the steady growth in organized retail and e-Commerce have also helped, as flexible packaging materials are widely in both these sectors. This acceptance has helped the industry



grow by a compounded rate of XX% in the past few years, nearly X0 percentage point more than the growth rate in traditional rigid packaging sector.

All the factors that are currently propelling the flexible packaging industry in India, are expected to remain strong in the coming years. The shift towards packaged food products is only going to strengthen as the consumption spreads from predominantly urban consumers to much wide rural markets. Also, the demand from pharmaceutical industry would remain stable, thanks to the steady growth in Indian pharmaceutical industry.

The highest growth in demand is currently observed in the e-Commerce segment, and this is set to continue soon. Despite the massive popularity of e-Commerce, the number of people using e-Commerce route is lower when compared to developed economies. The base of e-Commerce consumers is expected to grow in the coming years, which in turn would help increase the transaction volume. Subsequently the consumption of flexible packaging materials from e-Commerce segment would continue to grow.

On the back of these factors, the Indian market for flexible packaging product is expected to reach USD XX Bn by X0XX, from USD XX Bn in X0X0.

Diagram

Consultant Research

Global BOPET Market

By X0XX the global demand for BOPET film is estimated to reach nearly X.X million tons per annum, growing by a CAGR of nearly X% during X0XX-X0XX. The additional growth in demand, in volume terms, is expected to be nearly X.X million tons. Meanwhile the installed capacity base in the world for this product is expected to grow by nearly XX0 thousand tons (0.X million tons) during the same period.

The strong demand from packaging sector, from China and India will be the driving force behind this expected growth in demand. Bulk of the expected capacity would be coming up in China and India, which has emerged as the key production and consumption centers.

Diagram

Wood Mackenzie Chemicals Report

Domestic Competitive Scenario

Indian flexible packaging industry is fragmented with large number of small and medium sized players and few large players. These large players are characterized by conversion capacities above X000 tons per annum, equipped with modern facilities, as well as offer printing solutions to films ranging from co-extruded to sophisticated multi-layer laminates.

Food & beverage, and consumer products are two of the largest consumers of flexible packaging. The packaging solutions demanded by these two customer segments tend to be very specific with regular frequency of upgradation.

The Company



These demands can be met only by companies who have access to superior technology capable of providing a wide range of packaging films, which in turn requires high capital investment. Thus, it could be commented that high capital investment does act as an entry barrier in the organized segment, a segment which is currently controlled by few large players.

Meanwhile the small and medium sized players tend to concentrate on the unorganized segment of food & beverage industry. The packaging demands by small / regional food & beverage companies as well as other consumer segments tend to be very standard. Moreover, the volume requirement too would be low, when compared to similar demand from established players in the customer segment. Hence smaller players / unorganized segment in the flexible packaging industry is well positioned to meet the demand. However, due to the lack of product differentiation, price tend to play a major role in shaping competition. Manufacturers tend to undercut each other in terms of product price to gain business, as the switching cost among unorganized customer segment tend to be low. This would lead to erosion in profitability.

The organized segment of Indian flexible packaging industry is dominated by few large Indian players as well as multinational players who have entered India through joint ventures or acquisitions. Amcor, Constantia, and Huhtamaki are three of the notable global players who have entered India through inorganic route. Major Domestic players are enlisted below:

S. No.	Company Name	Install	Installed in	Planned in	Upcoming in	Total
5. No.	Company Name	Capacity (TPM)	FY X0XX-X0	FY X0X0-XX	FY X0XX-XX	Capacity
Х	Jindal Poly Films	XX00	X000			XXX00
Х	Uflex Ltd.	XX00				XX00
Х	Ester Industries Ltd.	XX00				XX00
Х	Garware Polyester Limited	XXX0				XXX0
Х	Polyplex Corporation Ltd.	XX00				XX00
Х	SML Films Ltd.	×000	XX00			XX00
Х	The Company Ltd.	X000			X000	X000
Х	Vacmet India Ltd	XX00			X000	X0X00
Х	Sumilon Industries Ltd.	XX00		XX00		XX00
X0	Chiripal Industries Limited	XX00				XX00
XX	Tapadia Polyesters Private Limited	X000				X000
XX	SRF Limited	×000				X000
		XXXX0	XX00	XX00	X000	XXXX0

Cumulative capacity
Required capacity for @X0% CAGR

XX0X0	XXXX0	XXXX0
XXX0X	XXXXX	XXXXX

Source: THE COMPANY and APKA India Research

The market share of major domestic players is shown below:

Diagram



THE COMPANY Marketing Plan

THE COMPANY has been successfully implemented the Line X and Line X facilities for BOPET Film production and over the years have expanded the sales and distribution network across India with geographic spread across PAN India. Though their major market is India, THE COMPANY also has been exporting to the neighboring countries.

The market distribution of THE COMPANY across the four zones in India based of FYXX sales is depicted below:

Diagram

Source: THE COMPANY and APKA India Assessment

Based on the prevailing sales and potential sales estimates prepared by THE COMPANY based on order book and orders not fulfilled due lack of additional capacity, the projected sales has been envisaged by THE COMPANY. The marketing plan across various regions projected by THE COMPANY is represented below:

Diagram

Source: THE COMPANY and APKA India Anlaysis

The detailed list of customers is enlisted in annexure.

Regarding the export sales for THE COMPANY, historically the Company have been exprting to Srilanka, Nepal, Bangladesh, Nigeria and Europe.

Diagram

Diagram

Source: THE COMPANY and APKA India Analysis

The exports sales customers list is exhibited in annexure.

THE COMPANY Exports have been on declining trend in past 0X years owing to increase in domestic demand as well better net realization from domestic market. The Total Exports in last 0X years have been as under:

a) FY X0XX-XX XXXX MT

b) FY X0XX-XX XX0X MT

c) FY X0XX-X0 XX0X MT

The customer base taken in projections is realistic since every customer has been dealt with, one time or other in last 0X years. The marketing team along with their associates in different parts of the world enjoy excellent relationship with all customers listed above in sales plan. The sales projections are totally based on factual situation that these customers require regular supplies from THE COMPANY subject to timely delivery which will be possible on start of addition capacity of X0X0 MT per month.



Project Cost

The total cost of the proposed THE COMPANY project is estimated at INR XXX.00 Cr. based on estimates provided by the company for various cost components of the project. APKA India have received quotation & PO for major imported machinery. The different heads of the project cost are detailed in the following table:

Exhibit: Project Cost (INR Cr.)					
Particulars Particulars	Total	%			
Building And Civil Works	XX.X0	X.X%			
Plant & Machinery And Other Fittings	XXX.0X	XX.X%			
Miscellaneous Fixed Assets	X0.XX	XX.X%			
Contingency	X.XX	0.X%			
Preliminary & Pre-op Expenses	XX.XX	X.X%			
Margin For Working Capital	XX.XX	X.X%			
IDC - Principal Lender	X.XX	0.X%			
IDC - Domestic TL	0.XX	0.X%			
Total Project Cost	XXX.00	X00%			

Source: THE COMPANY and APKA India Assessment

Land & Land Development Cost

THE COMPANY project is proposed at Village: XXX, Tehsil: XXX, District XXX Dehat, Uttar Pradesh and THE COMPANY promoters are in process of acquiring and registration of approx. XX.XXX acres of land which will be part of a private Industrial estate being proposed by THE COMPANY group. The proposed land is about X Kms from XXX, XXX Dehat and about XX Km from the existing unit of M/s. The Company Pvt. Ltd at UPSIDC, XXX, XXX Dehat, Uttar Pradesh. The land development will be carried out by THE COMPANY post hand over land from promoters.

The land acquisition and registration is under process thus the Survey No. and other details of land will be made available post registration and CLU.

It has been assumed that the land will be leased to THE COMPANY by the promoters, thus land cost has not been considered.

However, land development will be under scope of THE COMPANY. A lump sum cost has been envisaged to towards land leveling, excavation, internal roads, drainage, boundary wall etc. has been considered for a total development of land parcel. Detailed architect estimates for the same is under preparation. At present the land development cost is considered part of civil and building woks. The bifurcation of cost and BoQ is still under preparation.



Building and Civil Works Cost

As per initial estimation Building and Civil works cost for this THE COMPANY project, in following table, however detailed BoQ is still under progress which will be finalized post building plan approval.

S. No	Description of Building	Approx. Area sq. m	Material Supply & Erection Rate INR/ Sq. m.	Total Estimated Cost INR Cr.
×	Main Factory Building X + CPX + Utility + Open Area Civil works	XXX00	X000	XX.X0
Х	PEB Structure and Foundation - Main Shed + CPX + Utility (Covered areas)	XXX00	X0000	XX.X0
×	Land Development + Roads + Boundary Wall	XX000	X00	X.00
	Total		Total	X0.X0
			Say	X0.00
		GST @ XX%	X.X0	
			Total	XX.X0

Source: THE COMPANY and APKA India Assessment

Main Factory building area for proposed project is approx. XX,X00 Sq. m, as per dimensional details given in the area statement provided based on draft layout submitted by the company. The main Factory PEB structure building and civil works cost as well as land development cost has been estimated at INR X0.00 Crores including material and erection cost plus GST and other expenses as applicable.





Plant & Machinery Cost

The Company has estimated total cost of **INR XXX.0X Cr.** towards Imported and Indigenous Plant & Machineries, Utilities and Material handling equipment for the proposed project. An Overview of estimated plant and machinery cost is given in following table;

Proposed Plant and Machinery Cost Estimates for THE COMPANY BOPET LX & CPX Project

S. No	BOPET LX - Main Equipment & Accessories	Supplier	Supplie r	Basic Rate	Insurance Premium	INR Cr.	GST	Total INR Cr.
Х	BOPET Line	XXX	Euro	€ XX,XXX,000	€ X,XXX,XXX	XXX.XX	-	XXX.XX
X	Slitter-Primary (X) + Secondary (X)	JKampf	Euro	€ X,0XX,000	€ XXX,XXX	XX.XX	-	XX.XX
Х	Jumbo Core (X0000 USDX X0 Cores)	CDZD	USD	\$ X00,000.00		X.XX	-	X.XX
X	EOT Cranes + Mono Rails (XxX0MT + XxXMT + XxXMT etc.)	Under Negotiation	INR			X.X0	0.XX	X.XX
X	Filter Discs Gaskets (XX00 discs x XXX USD/pc + Gaskets)	Under Negotiation	INR			X.00	0.XX	X.XX
X	Roll Handling Conveyor + Jumbo core stand	Under Negotiation	INR			0.X0	0.XX	0.XX
X	Valves + Pumps	Under Negotiation	INR			0.X0	0.0X	0.XX
X	Secondary loop for LX (Pumps & accessories)	Under Negotiation	INR			0.XX	0.0X	0.XX
X	General Tool & Equipment	Under Negotiation	INR			0.×0	0.0X	0.XX
X0	Table Turner for Jumbo Core	Under Negotiation	INR			0.X0	0.0X	0.XX
XX	Core Cutting Machine	Under Negotiation	INR			0.0X	0.0X	0.0X
xx	Online coating system (Vessels + Valves + Pumps+ strainers+ Piping)	Under Negotiation	INR			0.X0	0.0X	0.XX
XX	Site fabrication material - SS X0MT @XX0 Rs/Kg	Under Negotiation	INR			0.X0	0.XX	0.XX
XX	Freight & Transportation	@X.X%	INR	X.X%		X.XX	0.X0	X.XX
	sub total			Α		XXX.X X	X.X X	XXX.X X



The Company

Source: THE COMPANY and APKA India Assessment

S. No.	CP X- Main Plant / Accessories	Supplier	Currency	Basic Rate		INR Cr.	GST	Total INR Cr.
Х	CP main plant	XXX Engineering	Euro	€ X,X00,000	€ XXX,X0X	XX.XX	-	XX.XX
Х	Mechanical Equipment & Accessories	Under Negotiation	INR			XX.XX	X.X0	XX.XX
Х	Electronics + Electricals + Instrumentations+ DCS	Under Negotiation	INR			X.XX	0.XX	X.XX
Х	Dowtherm XXKL @ X USD/KL	Under Negotiation	INR			0.X0	0.0X	0.XX
Х	Laboratory	Under Negotiation	INR			0.X0	0.XX	0.XX
Х	Material handling equipment - Cranes / Chain Pulley blocks	Under Negotiation	INR			0.X0	0.0X	0.XX
Х	Chemicals / Consumables / Lubricants	Under Negotiation	INR			0.0X	0.00	0.0X
Х	ETP System	Under Negotiation	INR			0.X0	0.XX	0.XX
	Freight & Transportation	@X.X%		X.X%		X.XX	0.XX	X.XX
			INR	В		XX.0X	X.XX	XX.XX

Source: THE COMPANY and APKA India Assessment

The detailed break-up of P&M list is enlisted above. APKA India has received PO/ quotation for all major imported machinery which contribute almost XX% in value terms. The balance P&M quotations are under negotiations from THE COMPANY. Also, it is to be noted that THE COMPANY has considered freight, loading/ unloading cost as part of Plant & machinery cost.

The balance of plants & equipment cost has been estimated based on historic prices considered during Line X and Line X and suitable escalation cost has been considered. THE COMPANY is under negotiation with the said suppliers. Since these are proposed to be procured indigenously thus there is sufficient time to finalize the same.

As per APKA India estimate the estimated cost is in line with industry standard for similar projects as well as in comparison to the existing project implemented by the Company.



Miscellaneous Fixed Assets

The Miscellaneous Fixed Assets (MFA) cost has been estimated at INR X0.XX Cr., however supporting quotations for the same is under negotiations. As per APKA India estimate it is noted that the same is reasonable considering the size of the project and as per industry standard. The budgeted estimate for the same is depicted below:

MFA	Foreign Currency Rate	Insurance Premium	INR Cr.	GST	Total INR Cr.
Heater & HTM System			X0.X0	X.XX	XX.XX
HTM (Santotherm XX & Therminol VPX)			X.XX	0.XX	X.XX
Utilities			X.X0	0.XX	X.XX
Electricals for BoP			X.XX	X.XX	X.XX
Rotary UPS (XXX0 KVA xX)	€ X,X00,000	€ XXX,XXX	XX.XX	-	XX.XX
DG Set (X000 KVA x X)		-	X.00	0.XX	X.XX
Insulation (Heater + Common HTM line+ LX + CPX)			X.X0	0.XX	X.XX
Solar system @ X000 KVA			X.XX	0.XX	X.XX
Material Handling equipment - balance			0.X0	0.0X	0.XX
Fire Fighting hydrant & complete system			0.X0	0.0X	0.XX
Electrical line from Feeder		9	X.00	0.XX	X.XX
Office furniture / Telephone EPBAX / computers / Printers & office appliances	0-		0.XX	0.0X	0.X0
Freight & Transportation	X.X%		0.XX	0.XX	X.X0
Total	С		XX.0X	X.XX	X0.XX

Source: THE COMPANY and APKA India Estimate

Contingency Provision

In the proposed THE COMPANY Project provision of contingency has been taken at X% of Building and civil works estimated cost, indigenous Plant and Machinery and utility cost. This provision is required as the implementation period for the proposed project will take approx. XX months and hence there can be increase in Imported and indigenous Plant and Machinery and utility equipment etc.

APKA India has estimated contingency provision of X% on domestic P&M cost and civil works for INR X.XX Cr.

Preliminary & Pre-operative Expenses

Since this is a greenfield project, there will be Preliminary and pre-operative expenses for the proposed THE COMPANY project. The estimated cost of Preliminary cost and preoperative expenses consists of items like upfront fees, administrative expenses, cost incurred to obtain statutory approvals and clearances, technical consultancy charges, Project staff salaries & travelling expenses, supervision & inspection charges, and cost of Trial run and commissioning of proposed plant and machineries and Utility equipment. The preliminary and pre-operative expenses is considered to be INR XX.XX Cr. as per details provided below:



	Details Of Preliminary & Preoperative Expenses.					
S. No.	Particulars	Amount				
		(In Crore)				
X	Preliminary Expenses including Travelling	0.XX				
X	Establishment Expenses	0.X0				
X	Approvals & Taxes	0.XX				
X	Consultancy Fee	X0.XX				
X	LC Interest for X Months @ .X% for Imported M/c TL	0.XX				
X	Up Front FessX% of TL	0.XX				
X	For Principal Lender Loan	X.XX				
a	Agreement Fee	0.XX				
b	Management Fee	X.0X				
С	Commitment Fee	0.XX				
	Total	XX.XX				

The terms of Principal Lender the pre-operative expenses towards disbursement for INR XXX Cr. loan is estimated as per assumptions depicted below, the management fee and commitment fee may reduce after final

pogotistica		
Particulars Particulars	Details	Conversion
Agreement Fee	€ XX,000	XX.X0
Management Fee	of loan amount	0.X0%
Commitment Fee	Quarterly on not yet disbursed amount	0.XX%

The basis of consultancy fee is depicted below, please note that except for XXX Engineers, THE COMPANY is yet to finalize the contracts of consultants as considered below:

Contractor + Consultant Fee						
BOPET LX - Main Equipment & Accessories	INR Cr.	GST	Total INR Cr.			
Mechanical contractor- Machine installation & fabrication	X.00	0.XX	X.XX			
CP X- Main Plant / Accessories						
Mechanical Contractor	X.0X	0.XX	X.XX			
Detailed engineering consultant + Process consultant	0.X0	0.0X	0.XX			
Electrical / Electronic contractor	0.X0	0.0X	0.XX			
Common Capex BOPET X & CPX						
Electrical Contractor	0.X0	0.0X	0.XX			
Project Finance consultant			0.XX			
Technical Consultant			0.XX			
EPCM Consultant (LX + CPX+ Utilities +Electricals+ Civil+ PEB)			X.XX			
Total Contractor + Consultant Fee			X0.XX			

Interest during Construction

Interest on term loan up to the commissioning of the project has been capitalized. The drawdown period considered for calculating interest during construction is assumed for the period till Xst Oct X0XX i.e. COD for BOPET Line X. The interest during construction is calculated on average balance for the project construction period. The total interest during construction is bifurcated into IDC for Principal Lender ad IDC for domestic bank and the same is calculated at INR X.XX Cr details for the same is as given below;



The Company

Principal Lender TL

The IDC for Principal Lender TL of INR XXX.00 Cr. is shown

	Particulars	Mar-XX	Mar-XX
Op Bal		-	XX0.00
Additions		XX0.00	XX.00
Repayment		-	-
CI Bal		XX0.00	XXX.00
Interest		0.XX	X.X0
Interest to P&L		-	0.XX
IDC		0.XX	0.XX

The bank finance proposed for Principal Lender TL is shown below:

S. No.	Company Name	Plant / Machine	Contract Price	Total Advance paid	German Bank TL	Premium Proportion	Disbursem ent Schedule	Remarks
			Million Euro	Million Euro	Million Euro	INR Cr.	INR Cr.	
X	M/s Lindauer XXX GbmH	BOPET Line No X	XX.XXX	x.xx	XX.0X	XXX.00	XXX.00	QX FYXX As per Contract
X	Kampf Schneidund Wickeltechnik GmbH & Co. KG	Slitters	X.0XX	0.XX	x.xx	XX.00	XX.00	Sep-X0 As per proposed delivery
X	Piller Germany Gmbh & Go .KG	Rotary UPS	X.X00	0.XX	x.xx	XX.00	XX.00	Mar-XX As per proposed delivery
X	XXX Engineering GmbH	Polymerization Plant	X.X00	X.XX	x.xx	XX.00	XX.00	May-XX Considering X months before delivery of Nov X0XX
			XX.XX0	X.XX	XX.XX	XXX.00	XXX.00	
	Insurance Premium	Hermes		_	X.XX		X0.00	Jun-XX
							XXX.00	

Note: As per Principal Lender loan agreement, the Company needs to create as Debt Service Reserve Account (DSRA) wherein the DSRA shall be fully funded to the required level which means that the initial amount to be paid into the DSRA is X installment plus X month interest (including X0% F/X buffer), to be increased in monthly intervals of X/XX of the additional amount (being one instalment plus interest due on the first Repayment Date), starting either one month after Starting Point or March X0th, X0XX (being X months before the Latest Date), whatever occurs earlier, and to be completed on the second repayment date.



Domestic TL

The IDC for domestic term loan of INR XX.00 Cr. is shown below:

Particulars Particulars	Mar-XX
Op Bal	-
Additions	XX.00
Repayment	-
CI Bal	XX.00
Interest	X.XX
Interest to P&L	X.0X
IDC	0.XX

Margin money for working capital

Estimated Margin money for Working capital for proposed THE COMPANY project will be INR XX.XX Cr for Xst year of full year operation i.e. FYXX, which is included in the project cost. Details of Working capital estimates and Margin thereof has been summarized in exhibit below:

Details	HP Days	FYXX
Raw Material	XX	XX.XX
Consumables	X0	X.XX
WIP	X	X.0X
Finished Goods	XX	XX.XX
Debtors	XX	XX.XX
Total Current Assets		X0X.XX
Creditors	Х	X.XX
Creditors for expenses	X0	X.X0
Total Current Liabilities		XX.XX
Working Capital Gap		XX.XX
Margin		XX.XX
On Inventory	XX%	X.XX
on Debtors	X0%	XX.XX
Bank Borrowing Permissible		X0.XX

Source: APKA India Assessment

Project Cost Reasonableness

APKA India has received the quotations for all major imported machinery which accounts for almost X0% of overall project cost. Balance cost has been estimated based on assumptions provided by technical consultant of THE COMPANY, M/s XXX Engineers. However, the supporting BoQ of civil estimate and quotations for balance P&M cost is under preparation and negotiation.

Based on APKA India estimate the overall cost of INR XXX.00 Cr. is assumed to be reasonable as per industry standards.



Means of Finance

The means of finance for the project is estimated as follows:

Exhibit: Means of Finance (INR Cr.)					
Particulars Particulars	INR Cr.	%			
Promoter's Contribution/ Internal Accrual	XXX.00	XX%			
Principal Lender TL	XXX.00	XX%			
Domestic Term Loan	XX.00	XX%			
Total	XXX.00	X00%			

Source: THE COMPANY and APKA India Assessment

Promoters' Contribution

The promoter contribution/ internal accrual for the project is estimated at INR XXX.00 Cr. The same is proposed to be brought in the form of equity (including share premium) or internal accrual or unsecured loan (quasi equity). The Debt: Equity ratio is proposed to be X.XX: X.

Term Loans

Principal Lender TL

The Company proposes to raise INR XXX.00 Cr. as term loan from Principal Lender towards debt financing for the project. The broad terms of the proposed term loan are as given below.

Particulars Particulars	Principal Lender TL Terms	INR Cr.
Total Foreign TL		XXX.00
Disbursement	Start Month Envisaged	Sept X0X0#
Proposed Margin	per annum	0.X0%
Proposed Hedge Cost	Per annum	X.X%
Moratorium from COD	Months	X
Repayment	Semi annually	XX
Tenor from COD of BOPET LX	Years	X.00
Door to Door Tenure	Years	X0.00

^{*}As per loan agreement the disbursement can be for XX months, however, considering the proposed delivery schedule of imported machinery and considering the COD of BOPET Line X by X^{st} Oct XOXX, the actual disbursement is envisaged within X0 months.

Domestic TL

The Company proposes to raise INR XX.00 Cr. as term loan from domestic Indian banks towards debt financing for the project. The broad terms of the proposed term loan are as given below.

Nature of Borrowing	Debt Component
Term Loan Amount	INR XX.00 Cr.
Disbursement Start	Jun X0XX
Interest Rate Proposed	X.X0%
Moratorium from Xst Disbursement	XX months
Repayment	XX quarters
Tenor from COD of BOPET LX	X.X0 years
Door to Door Tenure	X0.00 Years



The Company

Debt Repayment Schedule

The proposed term loan repayment schedule is provided below:

Principal Lender TL

The repayment for Principal Lender TL of INR XXX.00 Cr. for XX semi-annual repayments is shown

Doubles law	M. VV	Man VV	Man VV	Mari VV	Man VV	M- VV	Marr VV	Man VV	Man VV	Man VO	Man VV
Particulars	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-XX	Mar-X0	Mar-XX
Op Bal	-	XX0.00	XXX.00	X0X.XX	XXX.XX	XXX.0X	XXX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Additions	XX0.00	XX.00	-	-	-). '	-	-	-	-	-
Repayment	-	-	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
CI Bal	XX0.00	XXX.00	X0X.XX	XXX.XX	XXX.0X	XXX.XX	XX.XX	XX.XX	XX.XX	XX.XX	-
Interest	0.XX	X.X0	X.XX	X.XX	X.XX	X.X0	0.XX	0.XX	0.XX	0.XX	0.0X
Interest to P&L	-	0.XX	X.XX	X.XX	X.XX	X.X0	0.XX	0.XX	0.XX	0.XX	0.0X
IDC	0.XX	0.XX	-								
Hedge Cost	-	-	XX.XX	XX.XX	XX.XX	X0.XX	X.XX	X.XX	X.0X	X.XX	0.XX

Domestic TL

The repayment of domestic term loan of INR XX.00 Cr. for XX quarterly instalments is shown below:

Particulars	Mar-XX	Mar-X0	Mar-XX							
Op Bal	-	XX.00	XX.00	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	X.XX
Additions	XX.00	-		-	-	-	-	-	-	-
Repayment	-	-	X.XX							
CI Bal	XX.00	XX.00	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	X.XX	-
Interest	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	0.XX
Interest to P&L	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	0.XX
	0.107									



Economic Viability

It is necessary to understand the reasonableness of the revenue, cost assumptions and consequently the margins and the relevant ratios. The relevant industry benchmarks are studied and applied using APKA India's research and industry expertise. APKA India has projected financial performance of the Company along with sensitivity analysis for the period between FY X0XX and FY X0X0.

Capacity & Capacity Utilisation

The details for Installed Capacity and Annual Production is provided in the exhibit below:

Description	Units	FYXX	FYX0	FYXX							
BOPET-LX Capacity per annum	TPA	XX,XX0									
No. of working days per annum	Days	XXX									
No. of months of operation	Months	Х	XX								
Total no. of months	Months	XX									
No. of operational days per annum	Days	XXX	XX0								
BOPET-LX Installed capacity per day	TPD	XXX									
No. of hours of operation per day	No.	XX									
BOPET-LX Installed capacity per hour	Tons	X.XX									
Capacity utilization	%	XX%	X0.00%	XX.00%	X0.00%	XX.00%	XX.00%	XX%	XX%	XX%	XX%
BOPET-LX production per annum	TPA	XX,XXX	XX,0XX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX
BOPET-LX available for external sale	TPA	XX,XXX	XX,0XX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX
PET chip Wastage during BOPET production	%	X%									
PET chips required for BOPET-LX production	TPA	XX,XXX	XX,XXX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX

Source: APKA Analysis

Description	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
PET chips Installed capacity per day	TPD		X00								
No. of hours of operation per day	No.		XX								
PET chips Installed capacity per hour	Tons		XX.X								
No. of operational days per annum	Days		XXX	XX0							
No. of working days per annum	Days		XXX								
No. of months of operation	Months		X	XX							
Total no. of months	Months		XX								
PET chips Capacity per annum	TPA		XX,000								



Description	Units	FYXX	FYX0	FYXX							
Capacity utilization	%		XX%	X0.0%	XX.0%	X0.0%	XX.0%	XX%	XX%	XX%	XX%
PET chips production per annum	TPA	-	XX,XXX	XX,X00	XX,XX0	XX,X00	XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0
PET chips issued to BOPET-LX production	TPA	XX,XXX	XX,XXX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX
PET chips available for external sale	TPA	-	X,XXX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX

Based on current market prices, prevailing prices attained by the Company in last X months of FYX0 and competitor pricing, the selling price has been considered. The same are tabulated below:

Selling Prices	Domestic INR/MT	Export INR/MT
BOPET Grade PET Chips	XXXX0	XXXX0
BOPET Film	X0X000	X0X000

Revenues

The total available for sales based on product mix and production shown:

Market Mix														
Description	Units	FYXX	FYX0											
Domestic														
BOPET	%	XX%												
PET chips	%	X00%												
Exports														
BOPET	%	XX%												
PET chips	%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Total														
BOPET	%	X00%												
PET chips	%	X00%												

The revenue projection for the project is shown below:

				Sales R	evenue						
Description	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Domestic											
PET chips	INR Cr.	-	XX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	0X.XXX	XXX.X0	XXX.X0	XXX.X0
BOPET	INR Cr.	XXX.XX	XXX.XX	XXX.X0	X0X.XX	XXX.0X	XX0.XX	XX0.XX	XX0.XX	XX0.XX	XX0.XX
Total	INR Cr.	XXX.XX	XXX.XX	XX0.XX	XXX.XX						



				Sales R	evenue						
Description	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Exports											
PET chips	INR Cr.	-	-	-	-	-	-	-	-	-	-
BOPET	INR Cr.	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total	INR Cr.	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total	INR Cr.	XX0.XX	XXX.XX	XXX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
PET chips	INR Cr.	-	XX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.X0	XXX.X0	XXX.X0
BOPET	INR Cr.	XX0.XX	XXX.XX	XX0.XX	XXX.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX

Source: APKA Analysis

Thus at XX% of utilization the maximum revenue of INR X0X.XX Cr. is estimated based on current market selling prices.

Operating Costs

Raw Material

The product wise raw materials consumption requirement is projected below:

Description	Units	FYXX	FYX0	FYXX							
Consumption norms											
MEG for PET chips	Ton/Ton PET chip production	0.XXXX									
PTA for PET chips	Ton/Ton PET chip production	0.XXXX									
PET chips for BOPET											
Raw material consumption											
MEG for PET chips	TPA	-	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,0XX	XX,0XX	XX,0XX	XX,0XX	XX,0XX
PTA for PET chips	TPA	-	XX,XXX	XX,0XX	XX,XXX						
PET chips for BOPET	TPA	XX,XXX	XX,XXX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX

Source: APKA Analysis

The raw material price has been considered based on average price of last X months attained by THE COMPANY, prevailing market price and competitor pricing as follows:

Purchase Prices	INR/MT
	DOMESTIC
PTA	XX,XX0.00
MEG	XX,XX0.00
BOPET Grade PET Chips	XX,X0X.00



The total raw material costs are provided below:

Description	Units	FYXX	FYX0	FYXX							
MEG for PET chips	INR Cr.	-	XX.X0	X00.XX	X0X.XX	XXX.XX	XXX.X0	XXX.X0	XXX.X0	XXX.X0	XXX.X0
PTA for PET chips	INR Cr.	-	XXX.X0	XXX.00	XX0.XX	XXX.XX	XXX.0X	XXX.0X	XXX.0X	XXX.0X	XXX.0X
PET chips for BOPET	INR Cr.	XXX.XX	XX.XX	-	-	-		-	-	-	-
Raw material consumption cost	INR Cr.	XXX.XX	XX0.XX	XXX.XX							

Source: APKA

Analysis

| Description | Units | FYXX | FYX0 | FYXX |
|------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|
| BOPET | INR / ton of production | XX0 |
| PET chips | INR / ton of production | X00 |
| Consumables cost | INR Cr. | 0.XX | X.XX |

Packaging Cost

Description	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
BOPET	INR / ton of production	X00	X00	X00	X00	X00	X00	X00	X00	X00	X00
PET chips	INR / ton of production	XX00	XX00	XX00	XX00	XX00	XX00	XX00	XX00	XX00	XX00
Packaging cost	INR Cr.	0.XX	X.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX

Power and Fuel cost

The power and fuel cost has been considered based annual projected power consumption based on the assumption of per unit power consumptions and power cost (an escalation of X.X% considered) has been provided below:

Description	Units	FYXX	FYX0	FYXX							
BOPET	kWh / ton of production	XXX									
PET chips	kWh / ton of production		XXX								
Lighting and fixtures & Utilities	kWh / day	X00									
Power consumption	Cr. kWh / annum	X.X	X.0	X.X	X.X	X.X	X.0	X.0	X.0	X.0	X.0
Grid power tariff	INR / kWh	X.X0	X.X	X.X	X.XX						
Escalation every X year	X.X0%										
Power Requirement	KW	X,000.00									
Fixed Cost/ KVA	Paisa	X00									
Power cost	INR Crores / year	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX



Source: APKA Analysis

Fuel Requirement

Description	Units	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Fuel (rice husk) requirement - BOPET	T per Tons production	0.XXX0 X	0.XXX0X								
Fuel (rice husk) requirement – PET	T per Tons production	0.X0XX X	0.X0XXX								
Total production - BOPET		XX,XXX	XX,0XX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX
Total production- PET		-	XX,XXX	XX,X00	XX,XX0	XX,X00	XX,XX0	XX,XX0	XX,XX0	XX,XX0	XX,XX0
Total production	TPA	XX,XXX	XX,XXX	XX,XXX	XX,XX0	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX
Fuel (rice husk) requirement per annum	TPA	X,XXX	X0,X00	XX,XXX							
No. of days of operation	days	XXX	XX0								
Rice husk requirement per annum	TPA	XXX,XX X	X,XXX,0 0X	X,X0X,X XX	X,XXX,X XX	X,XXX,X XX	X,XXX,X 0X	X,XXX,X 0X	X,XXX,X 0X	X,XXX,X 0X	X,XXX,X 0X
Rice husk cost per ton	INR	X,X00	X,X00	X,X00	X,X00	X,X00	X,X00	X,X00	X,X00	X,X00	X,X00
Fuel cost	INR Crores / year	X.XX	X.XX	xx.xx							



Manpower Requirement

| Description | Units | FYXX | FYX0 | FYXX |
|--------------------------|-------|------|------|------|------|------|------|------|------|------|------|
| BOPET | No. | XX |
| PET chips | No. | | XX |
| Utilities + Common Admin | No. | XX |
| Total | No. | XX | XXX |

Description	Units	FYXX	FYX0	FYXX							
BOPET	total CTC INR /	XXX000	XXXXX0	X0XXXX	XXXXXX	XXXXX0	XXXX0X	XXXXXX	XXXXXX	XXXXXX	XXXXXX
BOPET	month	0	0	X	0	X	X	X	X	X	0
PET chips	total CTC INR /		XXX000	XXXXX0	XXXXXX	XXX0XX	XXXXXX	XXXXXX	X0XXXX	XXX0XX	XXXXXX
FET Chips	month		0	0	X	X	X	X	X	X	X
Utilities + Common Admin	total CTC INR /	XXX000	XXXXX0	XXXXXX	XXX0XX	XXXXXX	XXXX0X	XXXXXX	XXXXXX	X0XXXX	XXXXXX
Othities + Common Admin	month	0	0	X	X	X	X	X	X	X	X
Total	total CTC INR /	XXX000	XXX0X0	XXX00X	XXXXXX	XXXXXX	X0XX0X	XXXXXX	XXXXXX	XXXXXX	XXXXX0
lotai	month	0	0	X	X	X	X	X	X	X	X
No. of months of	Months	X	XX	XX							
operation	1 1011013		707	701	701	707	707	701	707	<i>/</i> //	707
Salaries and wages cost											
Description	Units	FYXX	FYX0	FYXX							
BOPET	INR Cr.	X.XX	X.XX								
PET chips	INR Cr.	-	X.XX	X.XX	X.XX	X.X0	X.XX	X.XX	X.X0	X.XX	X.XX
Utilities + Common Admin	INR Cr.	0.XX	X.XX	X.XX	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX
Salaries and wages cost	INR Cr.	X.X0	X.X0	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX

APKA India has considered the escalation of X% on manpower cost.

Other Operating Expenses

The other operating expenses envisaged in the project is indicated below, figures in INR Cr.

Description	Units	FYXX	FYX0	FYXX							
Other manufacturing expenses	% of total sales	X.00%									
Insurance Cost	% of net fixed assets	0.XX%									
Repairs and Maintenance	% of gross fixed assets		0.X0%	X.00%	X.0X%	X.XX%	X.XX%	X.XX%	X.XX%	X.XX%	X.X0%
Administrative overheads	% of total sales	0.XX%	X.00%								



Description	Units	FYXX	FYX0	FYXX							
Sales and marketing expenses	% of total sales	X.00%									
Other operating cost estimates								7			
Description	Units	FYXX	FYX0	FYXX							
Other manufacturing expenses	INR Cr.	X.X0	XX.X0	XX.XX							
Insurance Cost	INR Cr.	0.X0	X.0X	X.00	0.XX						
Repairs and Maintenance	INR Cr.	-	X.XX								
Administrative overheads	INR Cr.	0.XX	X.XX	X.XX	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX
Sales and marketing expenses	INR Cr.	X.X0	X.XX	XX.0X	XX.XX	XX.0X	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX

It is to be noted that the lease rent cost for land has been considered part of other manufacturing expenses.



Depreciation Rates Assumption

Description	SLM (As per Companies Act, X0XX)	WDV rates (As per Income Tax Act)	WDV (As per Companies Act, X0XX)
Land & Land Development	0.00%	0.00%	0.00%
Civil & Structural Works	X.XX%	X0.00%	X.X0%
Plant and Machinery	X.00%	XX.00%	XX.X0%
MFA	X.XX%	X0.00%	X.XX%

Accelerate depreciation of X0% considered on P&M cost while calculating WDV rates as per IT Act.

Income Tax Rate Assumption

Considering being existing Company, THE COMPANY is not opting for revised tax rates, thus the prevailing rates has been considered.

Particulars	Up to INR X Crore	Up to INR X0 Crore	Above INR X0 Crore
Corporate Tax Base Rate	XX.00%	XX.00%	XX.00%
MAT Base Rate	0.00%	0.00%	0.00%
Income Tax Surcharge	X0.00%	X0.00%	X0.00%
Education Cess	X.00%	X.00%	X.00%
Effective Corporate Tax Rate	XX.XX%	XX.XX%	XX.XX%
Effective MAT rate	0.00%	0.00%	0.00%



Projected Financial Statements

Projected financial statements are indicted below for the standlaone BOPET Line X and Chip Plant(CP) X project:

Standalone Projected Profitability

The projected Profitability statement of BOPET Line X & CPX project is shown below:

			Exhibit: Pro	fit & Loss Acc	ount (Figures	in INR Cr.)				
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Income from BOPET Line X	XX0.XX	XXX.XX	xxx.xx	X0X.XX	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx
Other Income	0.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Total Revenue	XX0.X0	XXX.XX	XXX.0X	X0X.XX	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Raw Material	xxx.xx	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Consumables & Packing Cost	X.XX	XX.XX	XX.XX	XX.XX	XX.XX	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0
Manpower	X.X0	X.X0	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX
Power & Fuel	XX.XX	XX.XX	xx.xx	XX.XX	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Other Manufacturing Expenses	X.X0	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total Direct Cost	XXX.X X	XXX.XX	XXX.0X	XXX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX	XXX.XX
Opening WIP		X.0X	X.0X	X.XX	X.XX	X.X0	X.0X	X.0X	X.0X	X.0X
Closing WIP	X.0X	X.0X	X.XX	X.XX	X.X0	X.0X	X.0X	X.0X	X.0X	X.0X
Cost of Production	XXX.X0	xxx.xx	xxx.xx	xxx.xx	X0X.X0	xxx.xx	xxx.xx	xxx.xx	XX0.XX	xxx.xx
Opening Stock - FG	_	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.0X	XX.0X	XX.X0



			Exhibit: Pro	fit & Loss Acc	ount (Figures	in INR Cr.)				
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Closing Stock - FG	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.0X	XX.0X	XX.X0	XX.XX
Cost of Goods Sold	XXXX X	XXX.XX	XX0.XX	XXX.XX	X00.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX	XXX.XX
Repairs & Maintenance	-	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Insurance Cost	0.X0	X.0X	X.00	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX
Selling & Distribution	X.X0	X.XX	XX.0X	XX.XX	XX.0X	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX
Admin & General	0.XX	X.XX	X.XX	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX
Cost of Sales	XXX.X X	X0X.XX	xxx.xx	XX0.XX	xxx.xx	xxx.xx	xxx.xx	XX0.XX	xxx.xx	xxx.xx
EBITDA	xx.xx	XX.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX
Depreciation/Amortization	xx.xx	xx.xx	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	×0.0×
EBIT	X.XX	XX.XX	XX.XX	XX.XX	XX.X0	X0.XX	XX.XX	XX.XX	XX.XX	X00.XX
Interest										
Term Loan	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	0.XX
Interest on CC	X.0X	X.XX	x.xx	x.xx	x.xx	X0.XX	X0.XX	X0.XX	X0.XX	X0.XX
Interest on Principal Lender	0.XX	X.XX	X.X0	X.XX	X.0X	0.XX	0.XX	0.X0	0.XX	0.0X
Hedge Cost	-	xx.xx	XX.0X	XX.0X	X.XX	X.XX	X.XX	X.XX	X.XX	0.0X
Total Interest	X.0X	XX.X0	X0.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX
PBT	(X.XX)	(X.XX)	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Provision for Tax Provision for Deferred Taxes/Others	0.XX	_	X.XX	XX.0X	xx.xx	XX.0X	xx.xx	XX.XX	xx.xx	XX.X0



			Exhibit: Prof	it & Loss Acco	ount (Figures i	n INR Cr.)				
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
PAT	(X.XX)	(X.XX)	XX.XX	X0.XX	XX.XX	X0.XX	XX.XX	X0.0X	XX.XX	XX.0X
Gross Margin	XX.X0%	X0.XX%	X0.XX %	X0.XX%	X0.XX %	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%
EBITDA Margin	XX.0X%	XX.X0%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%
EBIT Margin	X.XX%	X.XX%	X.XX%	X.XX%	XX.0X%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%
PBT Margin	-0.XX%	-X.X0%	X.XX%	X.XX%	X.XX%	X.XX%	X.XX%	X0.0X%	X0.XX%	XX.XX%
PAT Margin	-X.00%	-X.X0%	X.X0%	X.X0%	X.XX%	X.XX%	X.0X%	X.XX%	X.X0%	X.XX%



Standalone Projected Cash Flow Statement

The projected cash flow statement for standalone BOPET Line X and CPX project is shown below:

	Exhibit: Pro	jected Cas	h Flow Sta	tement (Fig	gures in INF	R Cr.)				
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Cash flow from operating activities										
PBT	(X.XX)	(X.XX)	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Add: Depreciation	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	X0.0X
Add: (increase)/ decrease in Inventory & Receivable	(XX.XX)	(XX.XX)	(XX.X0)	(XX.XX)	(X0.XX)	(X.XX)	(0.XX)	(0.0X)	(0.0X)	(0.0X)
Less: increase/ (decrease) in CL/ ST Provisions	X.XX	X.XX	X.0X	0.X0	0.XX	0.XX	0.00	0.0X	0.0X	0.X0
Less: Tax paid	(0.XX)	-	(X.XX)	(XX.0X)	(XX.XX)	(XX.0X)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.X0)
Net cash from operating activities	(XX.XX)	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX
Cash flow from investing activities			<2							
Less: (increase)/ decrease in Capital expenditure	(XXX.XX)	0.00	-	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)
Less: (increase)/ decrease in Investments/NCA	-		,	-	-	-	-	-	-	-
Net cash from investing activities	(XXX.XX)	0.00	-	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)	(X.00)
Cash flow from financing activities										
Equity (Promoter's Contribution/ Internal Accrual/ Quasi Equity)	XXX.00	_	-	-	-	-	-	-	-	-
Add: increase/(decrease) in Foreign Term Loan	XXX.00									
Repayment of Foreign TL	<u> </u>	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)
Add: increase/(decrease) in Domestic Term Loan	XX.00									
Repayment of Domestic TL	-	-	(X.XX)	(X.XX)	(X.XX)	(X.XX)	(X.XX)	(X.XX)	(X.XX)	(X.XX)
Increase / Decrease in WC Loan	XX.XX	XX.XX	X0.XX	X.XX	X.XX	X.XX	0.XX	(0.0X)	(0.0X)	(0.0X)
Net cash from financing activities	XXX.XX	(X.X0)	(X.0X)	(XX.X0)	(X0.XX)	(X0.XX)	(XX.0X)	(XX.XX)	(XX.XX)	(XX.XX)
Opening cash balance	-	XX.X0	XX.XX	XX.X0	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Additions	XX.X0	X0.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.X0	XX.XX



Closing Cash Balance	XX.X0	XX.XX	XX.X0	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.0X	

The net cash flow and clsoing cash flow for the projected years is estimated to be possitive.

Standalone Projected Balance Sheet

The projected balance sheet for the standalone BOPET Line X and CP X project is exhibited below:

		Exi	hibit: Project	ed Balance SI	heet (INR Cr	.)				
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Shareholder's Funds										
Equity (Promoter's Contribution/ Internal Accrual/ Quasi Equity)	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00	XXX.00
Reserves & Surplus	(X.XX)	(XX.X0)	X.XX	XX.0X	X0.0X	XX0.X0	XXX.XX	XXX.XX	XX0.XX	XXX.XX
Total	XXX.XX	XXX.X0	XXX.XX	X0X.0X	XXX.0X	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Long Term Loans										
Term Loan from Banks	XX.00	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	X.XX	-	-
Term Loan from Foreign Banks	X0X.XX	XXX.XX	XXX.0X	XXX.XX	XX.XX	XX.XX	XX.XX	XX.XX	-	-
Total	XXX.XX	XXX.0X	X0X.XX	XXX.XX	XXX.XX	XX.XX	X0.XX	XX.XX	-	
Current Liabilities										
Trade Creditors	X.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Current Portion of Long Term Loan	-	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	-
Current Maturity German Term Loan	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	-
Bank CC	XX.XX	X0.XX	X00.X0	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Total	XX.0X	XXX.0X	XXX.XX	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Total Sources of Funds	XXX.XX	XXX.0X	XXX.XX	XXX.XX	XX0.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Fixed Assets										
Fixed Assets	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX



Total Application of Funds	XXX.XX	XXX.0X	XXX.XX	XXX.XX	XX0.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Total	X0X.0X	XXX.XX	X0X.XX	XX0.XX						
Cash & Bank	XX.X0	XX.XX	XX.X0	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.0X
Receivables	XX.XX	XX.XX	XX.XX	XX.XX	X0X.XX	X0X.X0	X0X.XX	X0X.XX	X0X.XX	X0X.XX
FG	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.0X	XX.0X	XX.X0	XX.XX
WIP	X.0X	X.0X	X.XX	X.XX	X.X0	X.0X	X.0X	X.0X	X.0X	X.0X
Consumables	0.XX	X.XX								
RM	X.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.0X	XX.0X	XX.0X
Inventory	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.XX
Current Assets										
Total	-		-	-		-	-	-		
Advances										
Non-Current Assets										
CWIP	XXX.XX									
Total	X0X.XX	XXX.XX	X0X.XX	XXX.0X	XXX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.0X	XXX.00
Less: Accumulated Depreciation	XX.XX	XX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.0X	XXX.XX	XXX.0X	XXX.X0	XXX.XX

Positive closing cash balance is envisaged during FYXX to FYXX.



Financial Analysis

The financial analysis and ratios indicted below are for standalone BOPET Line X and CP X project

Debt Service Coverage Ratio

The average debt service coverage ratio is estimated as X.0X which indicates that the project offers adequate safety to lenders.

DSCR	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
PAT	(X.XX)	(X.XX)	XX.XX	X0.XX	XX.XX	X0.XX	XX.XX	X0.0X	XX.XX	XX.0X
Add: Depreciation	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	X0.0X
Add: Interest on Domestic TL	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	0.XX
Add: Interest on Principal Lender TL	0.XX	X.XX	X.X0	X.XX	X.0X	0.XX	0.XX	0.X0	0.XX	0.0X
Add: Hedge Cost	-	XX.XX	XX.0X	XX.0X	X.XX	X.XX	X.XX	X.XX	X.XX	0.0X
Total Available (A)	XX.X0	XX.XX	XX.XX	XX.X0	XX.00	XX.XX	XX.0X	XX.XX	X0.0X	XX.XX
Interest Payment TL	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	0.XX
Interest Payment Principal Lender TL	0.XX	X.XX	X.X0	X.XX	X.0X	0.XX	0.XX	0.X0	0.XX	0.0X
Hedging Cost	-	XX.XX	XX.0X	XX.0X	X.XX	X.XX	X.XX	X.XX	X.XX	0.0X
Principal Repayment - domestic TL	-	-	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Principal Repayment - Principal Lender TL	-	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total Obligation (B)	X.0X	XX.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0	X0.XX	XX.XX
DSCR (A/B)	X.XX	X.XX	× X.XX	X.XX	X.XX	X.XX	X.0X	X.XX	X.XX	X.XX
Min DSCR Repayment Period	X.XX									
Average DSCR Repayment Period	X.0X									
			l .					I	l	



Internal Rate of Return

The project IRR for standalone BOPET Line X project, during FYXX to FYXX is estimated at XX.X0% which is more than Post tax COC of X.XX%

Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Cash outflow										
Capital employed	XXX.00									
Increase in Capital			-	X.00						
Total (a)	XXX.00	-	-	X.00						
Cash Inflow										
PAT	(X.XX)	(X.XX)	XX.XX	X0.XX	XX.XX	X0.XX	XX.XX	X0.0X	XX.XX	XX.0X
Finance Cost	X.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.XX	X.XX	X.XX	0.XX
Depreciation	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	X0.0X
Total (b)	XX.X0	XX.XX	XX.XX	XX.X0	XX.00	XX.XX	XX.0X	XX.XX	X0.0X	XX.XX
Terminal Value										XXX.00
Net Cash inflow	(XXX.X0)	XX.XX	XX.XX	XX.X0	XX.00	XX.XX	X0.0X	XX.XX	XX.0X	X0X.XX
IRR (after tax)	XX.X0%				•	•	•	•	•	

The post-tax COC for the project is shown below:

Loans	Amount	ROI	Effective Tax Rate	Post tax cost of capital (%)	Proportion	Weighted Average Cost of Capital (WACC)
Promoter Contribution	XXX.00	XX.00%		XX.0%	XX%	X.XX%
Term Loan	XX.00	X.X0%	XX.XX%	X.X%	XX%	X.0X%
Principal Lender TL + Hedging Cost	XXX.00	X.X0%	XX.XX%	X.X%	XX%	X.0X%
	XXX.00					X.XX%



Breakeven Analysis

The breakeven analysis for the proposed project is shown in the exhibit below:

			Exhibit: E	Break Even P	oint					
Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Total Revenue	XX0.X0	XXX.XX	XXX.0X	X0X.XX	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Capacity Utilization	XX%	X0%	XX%	X0%	XX%	XX%	XX%	XX%	XX%	XX%
Variable Expenses										
Raw Material	XXX.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Consumables	X.XX	XX.XX	XX.XX	XX.XX	XX.XX	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0
Stores & Packing Material										
Manpower	X.X0	X.X0	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX	X.XX
Power & Fuel	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Other Manufacturing Expense	X.X0	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Adj: WIP	(X.0X)	(0.XX)	(X.XX)	(0.XX)	(0.XX)	(0.XX)	(0.0X)	(0.0X)	(0.0X)	(0.0X)
Adj: Finished Goods	(XX.XX)	(X.0X)	(X.XX)	(X.XX)	(X.XX)	(X.XX)	(0.0X)	(0.0X)	(0.0X)	(0.0X)
Working Capital Funding - Interest	X.0X	X.XX	X.XX	X.XX	X.XX	X0.XX	X0.XX	X0.XX	X0.XX	X0.XX
Total Variable Cost	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX	XXX.XX	XXX.00	XX0.0X	XX0.XX	XXX.XX
Contribution	XX.XX	XX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.XX
Fixed / Semi Variable Expenses										
Repairs & Maintenance	- (X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Insurance cost	0.X0	X.0X	X.00	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX
Selling & Distribution	X.X0	X.XX	XX.0X	XX.XX	XX.0X	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX
Admin & General	0.XX	X.XX	X.XX	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX
Interest on Term Loan	X.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.XX	X.XX	X.XX	0.XX
Depreciation/Amortization	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	X0.0X
Total Fixed Cost	XX.XX	X0X.0X	X0X.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX



PV Ratio	XX.XX%	XX.XX%	XX.XX%	XX.0X%	XX.XX%	XX.XX%	XX.XX%	XX.0X%	XX.XX%	XX.XX%
Break Even Point Sales	XXX.XX	XX0.XX	XXX.XX	XXX.X0						
Break even Point % of Sales	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	X0.XX%	XX.0X%	XX.XX%	XX.XX%	XX.XX%
Cash Break even Point of Sales	X0.XX	X0X.X0	XXX.XX	XX0.0X	XXX.XX	XXX.XX	XXX.X0	X0X.X0	XXX.XX	XXX.0X
Cash Break even Point as a %of Sales	X0.XX%	XX.XX%	XX.XX%	X0.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%
Margin of Safety of Sales	XX0.XX	XXX.XX	XXX.XX	XXX.X0	XXX.X0	XXX.X0	XXX.XX	XXX.XX	X0X.XX	XXX.0X
Margin of Safety of % of Sales	XX.0X%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.0X%	XX.XX%	X0.XX%	XX.0X%	XX.XX%



Conclusion

The objective of the study was to prepare a project report for the proposed project for manufacture of XX micron BOPET Film from Pet Chips of M/s The Companyat.

APKA India has assessed the techno economic viability of the project based on the data provided by the firm and other market information based on primary and secondary research.

While assessing the project, D&B India considered the following major factors:

- Project specific attributes, both positive and negative.
- Appropriateness of the selected technology.
- Reasonableness of the Project Cost.
- · Economic viability of the unit.

Technical Assessment Summary

APKA India note that,

- THE COMPANY is proposing to set-up an XXXX0 MTPA, BOPET film and XX000 MTPA Pet Chip manufacturing plant at Village – XXX, Tehsil: XXX, District: XXX Dehat, Uttar Pradesh.
- The land procurement is under process and registration and CLU is yet to complete. However, the proposed total plot area of XX,000 sq. m for the project is adequate.
- The Company has already identified and paid advance for the main imported P&M viz. for XXX which
 is the leading technology provider and supplier for BOPET Lines, XXX for Chip Plant and JKampf for
 slitter.
- The technical consultant and EPC for the Company is M/s XXX. They have provided the proposed plant layout, tentative P&M list and cost and civil and building estimate. However, the plant layout is yet to be approved and it contains only estimate for main shed which is proposed to be approx. XX,X00 sq. m. and total built-up area of XX,000 sq. m. is proposed (including utility area). The total civil and building cost is estimated at INR XX.X0Cr. however, detailed civil BoQ for the same is under process.
- THE COMPANY has provided budgetary quotations for XX% by value of P&M, the balance budgetary
 quotations for mainly indigenous P&M is under negotiation.
- The Company is proposing to set up a dedicated XX KVA feeder line and substation to ensure uninterrupted power for the project as well as for future projects envisaged.
- The mandatory statutory approvals required for the project is yet to be obtained.
- The manpower, utility requirement and infrastructure for the project is adequately planned by THE COMPANY.



- The project implementation schedule is proposed staring from June X0X0 and COD is proposed to be Xst Oct X0XX for BOPET Line X and that for Chip Plant is expected by Xst July X0XX. THE COMPANY has already paid initial booking advance for the main imported P&M. As per information submitted the expected first shipment for imported machineries viz. XXX BOPET Line are estimated from Oct X0X0. The COD is achievable considering balance P&M are ordered and delivered at site as planned, meticulous monitoring of activities as per schedule and timely receipt of mandatory approvals.
- The budgeted project cost of INR XXX.00 Cr. is found to be in line with industry standards.

Based on the above observations the project is found to be technically viable.

Critical Success Factors

Availability of Raw Material

The success of the project hinges upon the availability of the principal raw material PTA and MEG. The Company already has exiting supplier base for its requirement of the raw material with dealers & suppliers, thus THE COMPANY needs to ensure long term tie-ups for uninterrupted supply of the same all the year round. Moreover, since the raw material is a petroleum product and susceptible to price fluctuation. Adequate hedging mechanism needs to be in place.

• The Company should adhere to the project implementation schedule

Considering the time required for these kinds of projects, the implementation schedule appears reasonable. Initial booking Advances for main imported machinery i.e. for XXX, Germany, XXX and JKampf has been made, however, the Company must incorporate conditions to insist timely delivery of plant and machinery at the time of placing purchase order of the machinery. The Company must meticulously monitor implementation activity to achieve planned implementation schedule.

The promoters should plan to deploy standard operating practices & good management practices

The promoters have experience in laminated packaging industry. They will have to deploy the standard operating practices for the project which are followed in the industry and ensure employment, training & retaining of qualified & experienced people to run the project.

Approvals

The Company needs to obtain all the necessary approval for smooth progress of the project. The delay will adversely affect the progress of the project timeline and cost. The Company should ensure timely approval to follow the implementation schedule.



Economic Viability

The company is setting up a BOPET film production line having installed capacity of XXXX0 MTPA for manufacturing of XX micron BOPET films along with XX000 MTPA Pet Chip plant to ensure captive raw material availability. The estimated project cost is INR XXX.00 Cr. which is proposed to be funded with bank term loan domestic of INR XX.00 Cr, and international bank term loan of INR XXX.00 Cr., promoter contribution of INR XXX.00 Cr. at Debt: Equity ratio of X.XX:X.

As per APKA India assessment, for the debt servicing of INR XXX.00 Cr. (Principal Lender - INR XXX Cr. & Domestic TL - INR XX Cr.) during FYXX to FYXX, the average DSCR is X.0X and corresponding IRR is XX.X0% which indicates that the project offers adequate safety to lenders on standalone basis.

Subject to the above assessment & Critical Success Factors, various scenarios mentioned in sensitivity analysis, SWOT analysis and Risk analysis, APKA India is of the opinion that the project is technically feasible and economically viable.





Annexure

Plant Layout

Diagram



Consolidated Financials

The consolidated financials considering existing activities of THE COMPANY, proposed execution of CPP plant along with coating section and Aluminium Foil plant as well as project under consideration of BOPET Line X & Chip Plant X project is shown hereunder.

Consolidated Profit & Loss Statement

		1			Profit &	Loss Account	(Figures in II	NR Cr.)						
Particulars	FYXX	FYX0	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX	FYXX
Farticulars	A	Prov.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Income from Operations (existing + CPP)	XXX.X X	XXX.X X	XXX.X0	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx	XXX.XX	XXX.XX	XXX.XX	xxx.xx	XXX.XX	XXX.0X
Income from Operations (Al Foil)				XXX.XX	XXX.XX	X0X.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Income from BOPET Line X				XX0.XX	XXX.XX	XXX.XX	X0X.XX	XXX.XX						
Other Income + Coating Section	X.XX	X.XX	XX.XX	XX.0X	X0.XX	XX.XX	XX.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total Revenue	XXX.X X	XXX.X X	XXX.X X	X,XXX.X X	X,XXX.X X	X,0XX.X X	X,XXX.X X	X,XXX.0 X	X,X0X.X X	X,X0X.X X	X,X0X.X X	X,X0X.X X	X,X0X.X X	X,X0X.X X
Raw Material	XXX.X0	XXX.X X	XXX.X0	XXX.XX	X,XX0.XX	X,XXX.X X	X,XXX.X X	X,XXX.0X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X0
Consumables & Packing Cost	-	-	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Manpower	X.XX	X.XX	XX.00	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0
Power & Fuel	XX.XX	XX.0X	XX.XX	XX.XX	XX0.XX	XXX.XX	XXX.0X	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Other Manufacturing Expenses	XX.XX	XX.XX	XX.0X	XX.XX	XX.0X	XX.0X	XX.XX	XX.XX	X0X.XX	X0X.X0	X0X.XX	XXX.XX	XXX.XX	XX0.XX
Total Direct Cost	XXX.X X	X0X.X X	XXX.X X	X,0X0.X X	X,XXX.X X	X,X0X.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,X0X.X X	X,X0X.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X
Opening WIP	X.XX	X.XX	X.XX	X.XX	XX.XX	XX.XX	XX.X0	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Closing WIP	X.XX	X.XX	X.XX	XX.XX	XX.XX	XX.X0	X0.XX	XX.XX						
Cost of Production	XXX.X X	X0X.X X	XXX.X X	X,0XX.X X	X,XXX.X X	X,X0X.X X	X,XXX.X 0	X,XXX.X X	X,XXX.X X	X,X0X.X X	X,X0X.X X	X,XXX.X X	X,XXX.X X	X,XXX.X 0
Opening Stock - FG	X.XX	X.XX	X.XX	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Closing Stock - FG	X.XX	X.XX	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Cost of Goods Sold	XXX.X X	X0X.X X	XXX.X 0	X,0XX.X X	X,XXX.X X	X,XXX.X X	X,XXX.0 X	X,XXX.X X	X,XXX.0 0	X,X0X.X X	X,X0X.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X
Repairs & Maintenance	0.XX	0.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.X0	X.XX	X.XX	X.XX	X0.XX	XX.0X
Insurance Cost	0.XX	X.X0	X.XX	X.X0	X.X0	X.XX	X.XX	X.0X	X.XX	X.X0	X.XX	X.XX	X.XX	X.XX



					Profit & I	Loss Account	(Figures in IN	IR Cr.)						
B 41 1	FYXX	FYX0	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX	FYXX
Particulars	A	Prov.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Selling & Distribution	-	-	0.XX	X.XX	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Admin & General	X.XX	X.XX	X.XX	X.0X	XX.XX	XX.XX	XX.XX	XX.XX	X0.XX	X0.XX	X0.XX	XX.XX	XX.XX	XX.XX
Cost of Sales	XXX.X X	XXX.X X	XXX.X X	X,0XX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.0 X	X,XXX.X	X,XXX.X X	X,XXX.X X
EBITDA	XXX.X X	XXX.X X	XXX.X X	XXX.XX	XXX.XX	XXX.XX	XXX.0X	XXX.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.0X	XX0.XX
Depreciation/Amortization	XX.XX	XX.XX	XX.XX	XX.XX	XXX.XX	XXX.XX	XX0.X0	XX.0X	X0.XX	XX.XX	X0.0X	XX.XX	XX.XX	X0.XX
EBIT	X0X.X X	XXX.X X	XXX.X X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.X0
Interest	-	^	^											
Term Loan	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.XX	X.XX	X.00	X.XX	0.XX	-
Interest on CC	X.XX	X.XX	X.XX	XX.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0
Interest on Principal Lender				X.XX	X.XX	X.XX	x.xx	X.XX	X.XX	X.XX	0.XX	0.XX	0.0X	0.00
Hedge Cost				-	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.0X	X.XX	X.XX	0.0X	-
Interest on NFB	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Total Interest	XX.X0	XX.XX	XX.XX	X0.XX	XX.XX	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
РВТ	X0.XX	XXX.X X	xx.xx	XX.X0	xx.xx	xxx.xx	xxx.xx	X0X.X0	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx
Provision for Tax	X.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.X0	XX.XX	XX.XX	XX.0X	XX.00	X0.XX	XX.XX	XX.X0	XX.XX
Provision for Deferred Taxes/Others	XX.X0	(X0.XX)	-	-	-	-	-	-	-	-	-	-	-	-
PAT	X0.XX	XXX.X X	XX.XX	XX.XX	XX.XX	X0X.XX	XXX.0X	XXX.XX	XXX.X0	XXX.XX	xxx.xx	xxx.xx	XXX.XX	XXX.XX
181														
Gross Margin	X0.XX %	X0.XX %	XX.XX %	XX.XX%	XX.XX%	XX.X0%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.0X%	XX.X0%	XX.XX%
	X0.X0	XX.XX	X0.XX	XX.0X%	XX.XX%	XX.XX%	XX.XX%	XX.0X%	XX.XX%	XX.XX%	XX.0X%	XX.X0%	XX.XX%	XX.XX%
EBITDA Margin	XX.XX	% XX.X0	% XX.X0	X.XX%										
EBIT Margin	% X0.XX	% X0.XX	% X0.XX		X.XX%	X0.X0%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%	XX.XX%
PBT Margin	% %	%	% %	X.XX%	X.XX%	X.XX%	X.XX%	X.0X%	X.XX%	X0.0X%	X0.XX%	X0.XX%	X0.XX%	X0.XX%
PAT Margin	X.XX%	XX.0X %	X.0X%	X.XX%	X.XX%	X.0X%	X.XX%	X.XX%	X.XX%	X.XX%	X.XX%	X.XX%	X.0X%	X.XX%



Consolidated Cash Flow Statement

The consolidated cash flow statement is shown below, as it can be noted that both the proposed execution of CPP plant, Al Foil project as well as the proposed BOPET Line X & CPX project can be funded by internal accrual.

			Exhibit:	Projected Ca	ash Flow Stat	ement Shee	et (Figures i	n INR Cr.)						
Particulars	FYXX	FYX0	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX	FYXX
Cash flow from operating activities														
PBT	X0.XX	XXX.XX	XX.XX	XX.X0	XX.XX	XXX.XX	XXX.XX	X0X.X0	XXX.X X	XXX.X X	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Add: Depreciation	XX.XX	XX.XX	XX.XX	XX.XX	XXX.XX	XXX.XX	XX0.X0	XX.0X	X0.XX	XX.XX	X0.0X	XX.XX	XX.XX	X0.XX
Add: Interest Paid	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.XX	X.XX	X.00	X.XX	0.XX	-
Add: (increase)/ decrease in Working Capital	(X.XX)	X0.XX	(XX.0X)	(XX.0X)	(XXX.X0)	(XX.XX)	(XX.XX)	(XX.XX)	(X0.XX)	(0.XX)	(0.X0)	(0.0X)	(0.X0)	0.00
Less: Other Income														
Less: increase/ (decrease) in CL/ ST Provisions	(XX.XX)	XX.XX	XX.XX	XX.XX	X.0X	X.00	x.xx	X.XX	X.0X	0.0X	0.XX	0.XX	0.XX	0.0X
Less: Tax Provision	(X0.XX)	(XX.XX)	(XX.XX)	(X0.XX)	(XX.XX)	(XX.X0)	(XX.XX)	(XX.XX)	(XX.0X)	(XX.00)	(X0.XX)	(XX.XX)	(XX.X0)	(XX.XX)
Net cash from operating activities	xx.xx	XXX.XX	XX.0X	X0.XX	xxx.xx	X0X.X X	XXX.X X	XX0.X X	XXX.0 X	XXX.X	XXX.X X	XXX.X0	XXX.X X	XXX.X X
Tree cash it only open acting according														
Cash flow from investing activities														
Less: (increase)/ decrease in Capital expenditure	(X.XX)	(XX.XX)	(XXX.XX)	(XXX.X0)	0.00	(X.00)	(X0.00)	(X0.00)	(X0.00)	(X0.00)	(X0.00)	(X0.00)	(X0.00)	(X0.00)
Less: (increase)/ decrease in Investments/NCA	(XX.X0)	(XX.XX)	(XX.XX)	X0.XX	XX.XX	-	-	-	-	X.X0	x.xx	-	-	-
Net cash from investing activities	(XX.XX)	(XXX.X X)	(XXX.0 X)	(XXX.X X)	xx.xx	(X.00)	(X0.00)	(X0.00)	(X0.00)	(X.X0)	(X.XX)	(X0.00)	(X0.00)	(X0.00)
Cash flow from financing activities														
Equity (Promoter Contribution/ Quasi Equity)	-	-		-	-	-	-	-	-	-	-	-	i	-
Add: increase/(decrease) in Term Loan	(XX.XX)	(X.00)	XXX.X0	XXX.XX	(X0X.XX)	(X0X.X X)	(XX.XX)	(XX.XX)	(XX.XX)	(X0.XX)	(XX.XX)	(XX.XX)	(XX.XX)	-
Add: increase/(decrease) in Other Term Liabilities	X.XX	(XX.XX)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Increase / Decrease in New WC Loan	-	-	XX.XX	XXX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.XX	0.XX	(0.0X)	(0.0X)	(0.0X)	(0.0X)
Increase / Decrease in Membership Fees														
Less: Payment of interest	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(XX.XX)	(X.XX)	(X.XX)	(X.00)	(X.XX)	(0.XX)	-



			Exhibit:	Projected Ca	ish Flow Stat	ement Shee	et (Figures i	n INR Cr.)						
Particulars	FYXX	FYX0	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX	FYXX
Add: Other Income														
Net cash from financing activities	(XX.X0	(XX.XX)	xxx.xx	xxx.xx	(X0X.X X)	(XX.X0)	(XX.XX)	(XX.XX)	(XX.X0)	(XX.0X)	(XX.XX	(XX.XX)	(XX.XX	(0.0X)
Opening cash balance	0.XX	0.XX	XX.XX	XX.X0	XX.XX	XXX.0X	XXX.XX	XXX.XX	X0X.0X	XX0.XX	xxx.xx	X,00X.X X	X,XXX.X X	X,XXX.X X
Additions	0.XX	XX.XX	XX.XX	(0.X0)	XXX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.X X	XXX.X X	xxx.xx	XX0.XX	XX0.XX	XXX.X0
Cash transferred to DSRA			XX.XX	X0.XX	XX.0X	-	-		-	-	-	-	-	-
Cumulative DSRA			XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Closing Cash Balance	0.XX	XX.XX	XX.X0	XX.XX	XXX.0X	XXX.XX	XXX.XX	X0X.0X	XX0.XX	XXX.X X	X00X.X X	XXXX.X X	XXXX.X X	XXXX.X X

The DSRA amount has been considered based on term loan term sheets and on discussion with THE COMPANY. The DSRA amount shown includes the DSRA consideration for both AI Foil project as well as for BOPET LX project.

For Al Foil project it has been assessed that INR X.XX Cr. of DSRA will be created upfront in FYXX and INR 0.XX Cr. of DSRA month on month for XX months post Xnd from COD of Al Foil project.

Similarly, for BOPET LX & CPX project upfront DSRA has been considered as INR XX.XX Cr and INR X.XX Cr. of DSRA month on month for XX months post Xnd from COD

Particulars	DSRA Assumption	Additional Condition	INR Cr.	On Sanction	On COD	Per month DSRA post COD (INR Cr.)
Al Foil Project	€X,0XX,XXX.XX (as per loan agreement)	plus X0% buffer cost	x.xx	X installment plus X month interest	Monthly for XX months post COD	0.XX
BOPET LX & CPX Project	€X,XXX,X0X.XX (estimated)	plus X0% buffer cost	xx.xx	X installment plus X month interest	Monthly for XX months post COD	x.xx



Consolidated Balance Sheet Statement

					Balance S	Sheet (Figure	s in INR Cr.)	1						
Particulars	FYXX	FYX0	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX	FYXX
Tal ticulai 3	A	Prov.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Shareholder's Funds														
Equity Share Capital	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Reserves & Surplus	X.XX	XXX.0 X	xxx.xx	XXX.XX	X0X.XX	XX0.XX	XXX.XX	XX0.XX	xxx.xx	X,0XX.X0	X,X0X.X X	X,XX0.X X	X,XXX.X X	X,XX0.X X
Others - Share premium	X0X.XX	X0X.X X	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX	X0X.XX
Total	XXX.X X	XXX.X X	XXX.X X	XXX.X X	xxx.xx	xxx.xx	xxx.xx	xxx.xx	XXX.0X	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,XXX. XX
Long Term Loans														
Term Loan from Banks	XXX.X X	XX0.X X	XX0.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	xx.xx	XX.XX	XX.X0	XX.XX	-	-	-
Term Loan from Foreign Banks		-	X00.00	XXX.0X	XXX.XX	XXX.XX	XXX.XX	XX0.XX	X0X.XX	XX.XX	XX.XX	-	-	-
Unsecured Loan	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Deferred Tax Liabilities	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Long term Provision	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX	0.XX
Total	XXX.X X	XXX.X X	XX0.XX	XXX.0X	XXX.X0	xxx.xx	xxx.xx	xxx.xx	XXX.X X	XXX.0X	xxx.xx	X0.XX	X0.XX	X0.XX
Current Liabilities														
Trade Creditors	0.XX	0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Current Portion of Exist Term Loan	XX.XX	XX.XX	XX.0X	XX.XX	XX.XX	XX.0X	XX.XX	-	X.X0	X.XX	-	-	-	-
Current Portion of Proposed Loan - CPP	-	-	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.00	-	-	-	-	-	-
Current Portion of Long Term Loan - Al Foil+LX			-	X.00	XX.XX	XX.XX	XX.X0	XX.X0	X0.XX	XX.XX	XX.XX	XX.XX	-	-
Current Maturity German Term Loan - Al Foil+LX			-	xx.xx	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	-	-
Short term Borrowings - Existing	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Short term Borrowings - Proposed CPP			XX.XX	XX.0X	XX.XX	XX.XX	XX.XX	XX.XX	XX.0X	XX.0X	XX.0X	XX.0X	XX.0X	XX.0X
Short term Borrowings - Proposed Al Foil +LX				XXX.XX	XXX.XX	XXX.XX	XXX.XX	X0X.XX	XXX.XX	xxx.xx	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Other CL	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Total	XX.X0	X0X.X X	XXX.X X	XXX.X X	xxx.xx	xxx.xx	xxx.xx	XX0.X0	XXX.0X	xxx.xx	xxx.xx	xxx.xx	xxx.xx	xxx.xx
Total Sources of Funds	X0X.X X	XXX.X X	X,X0X. XX	X,XXX. X0	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,X0X. XX	X,X0X.X X	X,XXX. XX	X,0XX.X X	X,XXX. XX	X,XXX. XX



	1	1	1	1	1	1	1	I			. (
Fixed Assets														
Fixed Assets	X0X.XX	XXX.0 X	XXX.XX	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,X0X.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X
Less: Accumulated Depreciation	X0X.XX	XXX.X X	XXX.X0	XXX.XX	XXX.XX	XXX.X0	XX0.XX	XXX.XX	XXX.XX	X,0XX.0X	X,0XX.X X	X,XXX.X X	X,XXX.X X	X,XXX.X X
Total	X0X.X 0	XXX.X 0	XXX.X X	XXX.X X	xxx.xx	xxx.xx	xxx.xx	xxx.xx	XXX.X X	xxx.xx	xxx.xx	X0X.XX	xxx.xx	XX0.XX
Intangible Assets	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X	0.0X
CWIP	-	XX.X0	XXX.XX	XXX.XX										
Total	0.0X	XX.XX	XXX.X X	XXX.X X	0.0X									
Non-Current Assets														
Fixed Deposits/ Security Deposits	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Other Long Term Advances	XX.XX	X0X.X X	XXX.XX	XX.00	-	-	-		-	-	-	-	-	-
Debts o/s for a period exceeding X months	x.xx	-	-	-	-	-) -	-	-	-	-	-	-
Total	xx.xx	XXX.X X	XXX.X X	XXX.X X	XX.XX									
Current Assets														
Inventory	XX.XX	XX.XX	XX.0X	XXX.XX	XXX.XX	XXX.XX	XXX.XX	X0X.XX	X0X.XX	X0X.XX	X0X.0X	X0X.XX	X0X.XX	X0X.XX
Receivables	XX.XX	XX.XX	X0X.XX	XXX.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Short term loan and advances	X.XX	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0	X0.X0
Others	X0.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Cash in DSRA			XX.XX											
Cash & Bank	0.XX	XX.XX	XX.X0	XX.XX	XXX.0X	XXX.XX	XXX.XX	X0X.0X	XX0.XX	XXX.XX	X,00X.XX	X,XXX.X X	X,XXX.X X	X,XXX.X X
Total	XXX.X X	XXX.X X	XXX.X X	XXX.0X	XX0.XX	XXX.XX	XXX.0X	X,0XX.X X	X,XX0. X0	X,XXX. XX	X,XXX. XX	X,X0X.X X	X,XXX.0	X,0XX.X
Total Application of Funds	X0X.X X	XXX.X X	X,X0X. XX	X,XXX. X0	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,XXX. XX	X,X0X. XX	X,X0X.X X	X,XXX. XX	X,0XX.X X	X,XXX. XX	X,XXX. XX



Consolidated Ratios

DSCR at Consolidated Level

Average DSCR Repayment Period

X.XX

DSCR	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
PAT	XX.XX	XX.XX	X0X.XX	XXX.0X	XXX.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Add: Depreciation	XX.XX	XXX.XX	XXX.XX	XX0.X0	XX.0X	X0.XX	XX.XX	X0.0X	XX.XX	XX.XX
Add: Interest on TL	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0	X.X0	0.XX
Less: Internal Accrual	(XX.00)									
Total Available (A)	XX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX	XX0.XX	XXX.XX	XXX.XX
Interest Payment TL	X0.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.X0	X.X0	0.XX
Principal Repayment - Ex TL	XX.0X	XX.XX	XX.XX	XX.0X	XX.XX	-	X.X0	X.XX	-	-
Principal Repayment - new TL - CPP	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	X.00	-	-	-	-
Principal Repayment - new TL - PX	-	XX.XX								
Principal Repayment - new TL - Al	-	XX.XX								
Total Obligation (B)	XX.XX	XXX.X0	XX0.XX	XXX.00	XXX.XX	XX.XX	XX.XX	X0.XX	XX.XX	XX.0X
DSCR (A/B)	X.XX	X.XX	X.XX	X.XX	X.XX	X.0X	X.XX	X.XX	X.X0	X.XX
Min DSCR Repayment Period	X.XX			•	•	•	•			



IRR at Consolidated Level

Particulars	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYXX	FYX0	FYXX
Cash outflow										
Capital employed										
Incremental capital employed	XX0.X0	-	X.00	X0.00	X0.00	X0.00	X0.00	X0.00	X0.00	X0.00
Total (a)	XX0.X0	-	X.00	X 0.00	X0.00	X0.00	X 0.00	X 0.00	X 0.00	X0.00
Cash Inflow										
PAT	XX.XX	XX.XX	X0X.XX	XXX.0X	XXX.XX	XXX.X0	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Finance Cost	X0.XX	XX.XX	X0.XX	XX.XX	xx.xx	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Depreciation	XX.XX	XXX.XX	XXX.XX	XX0.X0	XX.0X	X0.XX	XX.XX	X0.0X	XX.XX	XX.XX
Total (b)	XXX.0X	XXX.XX	XXX.XX	XXX.X0	XX0.XX	X0X.XX	XXX.XX	XXX.XX	XXX.XX	XXX.XX
Terminal Value										XXX.XX
Net Cash inflow	(XXX.XX)	xxx.xx	XX0.XX	X0X.X0	X00.XX	xxx.xx	xxx.xx	xxx.xx	XXX.XX	xxx.xx
IRR (after tax)	XX.XX%									



Site Visit Photos

Image
THE COMPANY Proposed Site Overview from NH X
Image
2 Another View with Boundary Marking Pillars for proposed THE COMPANY project site from Side
Village Road
Image
mage
3 Soil and Topography of Project site land
Image
4 Another View of Site Topography and Soil Type



Image	Image
5 NH X View Nr. Project Site Coming from XXX Image	6 Other side NH X View going to Delhi Image
7 Nearby River view from NHX Bridge Neat THE COMPANY Project Site	8 Milk Processing Dairy Near THE COMPANY Project site



Macroeconomic Scenario

After peaking at X.X% in X0XX, global GDP growth softened to X.X% in X0XX, on account of weak manufacturing, and rising trade and geopolitical tensions. Heightened uncertainty about the future of the global trading system, has taken a toll on business confidence, investment decisions, and global trade. Consequently, the IMF has lowered its global growth forecast for X0XX by X0 basis points, from X% in October X0XX, to X.X% in January X0X0. Similarly, growth projection for X0X0 has also been revised downwards by X0 bps, from X.X% in October X0XX, to X.X% in January X0X0. However, for X0XX, the IMF revised its estimate downwards by X0 bps from X.X% in October X0XX, to X.X% in January X0X0 citing negative surprises to economic activity in a few emerging market economies. However, an accommodative monetary policy, resilient consumer spending, along with improved business spending has brightened prospects of recovery. Overall, the outlook remains precariously balanced, with downside risks still very much prominent.

India's Key Economic Indicator

Diagram

Source: MoSPI. P.E.: Provisional Estimate. A.E.: Advance Estimate

The long-term structural reforms implemented between FY X0XX-XX, exposed the Indian economy to multiple short-term challenges such as stressed banking sector, dwindling investment growth, slowdown in consumption demand, and widening deficits. The adverse impact was seen in annual GDP growth, which decelerated, from X.X% in FY X0XX, to X.X% in FY X0XX as per the Provisional Estimates released by MoSPI. On a quarterly basis, GDP growth rebounded from X.X% in QX FY X0XX, and peaked at X.X% in QX FY X0XX; before steadily declining in the subsequent quarters to hit a low of X.X% in QX FY X0X0. Stresses within the Banking and NBFC sectors initially spread into Housing, and Automotive sectors, before trickling into other industries, thereby slowing down the entire economy. General risk aversion, trust deficit due to stressed assets, and other such systemic issues have resulted in a logiam. Consequently, economic growth is expected to remain tepid over the next two to three quarters before regaining lost pace. As per the Second Advance Estimates released by MoSPI on XXth February X0X0, India's GDP growth rate is estimated to contract to X.X%, while GVA growth rate is estimated to drop to X.X%, at constant prices, for QX FY X0X0.

Annual Sectoral Performance

According to the Second Advance Estimates released by MoSPI in February X0X0, annual GVA growth is estimated to slow down to X.X% in FY X0X0, as against X.X% in FY X0XX. Weak manufacturing and construction activity output is expected to pull down the overall GVA growth in FY X0X0, vis-a-vis the previous fiscal.

Diagram



Source: MoSPI

Growth in agriculture and allied sectors is estimated to jump to X.X% in FY X0X0, against X.X% in the previous year; primarily due to higher agricultural output, and higher MSPs.

In the industrial sector, mining activity is estimated to grow by X.X% in FY X0X0 as against a decline of X.X% in FY X0XX; but still remaining below X.X% growth achieved in FY X0XX. Growth in output from Utilities sector, too, is estimated to slow down to X.X% in FY X0X0, as compared to X.X% in FY X0XX. Manufacturing activity is expected to witness the steepest decline in growth rate in FY X0X0; with output expected to grow by a mere 0.X% in FY X0X0, as against X.X% in FY X0XX. Construction sector is expected to be the third slowest growing sector, registering an estimated X% growth in FY X0X0, as against X.X% y-o-y growth in FY X0XX. Together, these two sectors are expected to drag the over GVA growth down to X.X% in FY X0X0 from X% in FY X0XX, and X.X% in FY X0XX.

Services sector is estimated to contribute XX.X% to country's total GVA in FY X0X0 and is estimated to report X% y-o-y growth in FY X0X0; down X0 bps from X.X% in FY X0XX. Within services segment, Financial, Real Estate & Professional Services exhibited healthy growth trend, with an estimated X.X% y-o-y increase in FY X0X0, as against X.X% in FY X0XX. Trade, hotels, transport, communication and services related to broadcasting is estimated to witness slow growth rate of X.X% in FY X0X0, as against X.X% in FY X0XX. Public Administration, Defense, & Other Services is estimated to grow the fastest amongst the Service sector; by an estimated X.X% growth in FY X0X0; against X.X% in FY X0XX.

Quarterly GVA Performance

India's quarterly GVA growth rate further decelerated both annually, and sequentially, to X.X% in QX FY X0X0; as compared to X.X% y-o-y growth in QX FY X0X0, and X.X% in QX FY X0XX. Manufacturing registered slowest growth at 0.XX% in QX FY X0X0 against X.XX% in QX FY X0XX. Agriculture sector increased by X.XX%, while Services sector grew by X.XX% in QX FY X0X0, against X.XX% and X.XX% respectively in QX FY X0XX. As compared to QX FY X0X0, GVA growth rates slowed down for Manufacturing sector, while Agriculture and Services posted higher quarterly growth rates (on a y-o-y basis).

On a q-o-q basis, Financial, Real Estate & Professional Services recorded the steepest decline (-XX.X%) over QX FY X0X0, while Agriculture recorded the highest increase (XX.X%). Mining was the second highest (XX.X%), while Utilities recorded second largest decline (-X.X%). Construction (X.X%), Public Administration Defence & Other Services (X.X%), and Trade related Services (X.X%) recorded moderate growth; while Manufacturing continued to decline, falling by X% in QX FY X0XX. Overall GVA grew by X.X% in QX FY X0X0 as compared to QX FY X0X0, showing signs of revival in the economy.

Diagram

Source: MoSPI



On a yearly basis, GVA of Manufacturing sector decreased by 0.X% in QX FY X0X0, from X.X% in QX FY X0XX. GVA of Utility services declined the most, by 0.X% in QX FY X0X0, against X.X% growth in QX FY X0XX. Construction activity recorded a flat performance in terms of GVA growth, growing by 0.X% in QX FY X0X0 as against X.X% in QX FY X0XX. GVA from Public Expenditure, Defense & Other Services recorded fastest increase at X.X% in QX FYX0X0, compared to X.X% in QX FY X0XX. Similarly, GVA of Trade, Hotels, Transport, Communication & Services Related to Broadcasting sector also grew at X.X% in QX FY X0X0, as compared to X.X% growth in QX FY X0XX. Mining and Quarrying recorded a reversal in trend, growing by X.X% in QX FY X0X0, as against a decline of X.X% in QX FY X0XX. Similarly, GVA from Agricultural activities also grew by X.X% in QX FY X0X0, as compared to X% in QX FY X0XX.

Construction GVA growth decelerated from X.X% in QX FY X0XX, to X.X% in QX FY X0X0. GVA growth in Financial, Real Estate & Professional Services dipped from X% in QX FY X0XX to X.X% in QX FY X0X0. Overall, GVA growth rate slowed down from X.X% annual growth in QX FY X0XX, to X.X% in QX FY X0X0.

IIP Growth

Index of Industrial Production (IIP), a barometer for industrial activity indicated mild growth during FY X0XX by growing at X.X% against X.X% in the previous year. Sharp moderation in Manufacturing sector (which accounts for XX.XX% of the total IIP index) dragged down the overall growth rate of IIP. Marginal growth in electricity output, and a X0 bps increase in growth rate of mining sector helped neutralize the sharp decline in manufacturing in FY X0XX. Manufacturing sector index grew at subdued rate of X.X% in FY X0XX against X.X% in FY X0XX.

Diagram

Source: MoSPI

Industrial activity stalled completely by February X0XX in anticipation of General Elections. Output picked up between March-July X0XX, anticipating a consumption friendly budget from the newly elected government. However, post the Union Budget in July X0XX, IIP declined yet again for X straight months; hitting a low of -X.X% in October X0XX. After turning positive in November X0XX, **Monthly IIP Index** stalled again in December X0XX, driven by a dip in manufacturing and electricity output. In January X0X0, the overall IIP index registered a X% increase on a y-o-y basis. Mining output increased by X.X%, while Electricity output grew by X.X%, and Manufacturing output by X.X%, as compared to X.X%, X.X%, and 0.X% growth respectively in January X0XX. On m-o-m basis, Mining output increased by X.X%, while Manufacturing output increased by X.X%, and Electricity output increased by X.X% in January X0X0, as against X.X%, X.X%, and X.X% in December X0XX.

On use-based classification basis, output of Primary goods and Intermediate Goods recorded positive y-o-y growth of X.X%, and XX.X% respectively, in January X0X0. Infrastructure/Construction Goods output declined by X.X%; while output of Consumer Non-Durable goods declined by 0.X%. Consumer Durable goods output also declined by X%, while Capital Goods output decreased by X.X%. Eleven, out of the twenty-three industry groups in the manufacturing sector, showed positive growth in January X0X0.



Diagram

Source: MoSPI

Growth Trend in Investment & Consumption Demand

GDP growth is a reflection of increasing investment demand and private consumption within the economy. Investment demand decline worsened in QX FY X0X0, falling by X.X% y-o-y, as against X.X% decline in QX FY X0X0. Investment to GDP ratio - Gross Fixed Capital Formation (GFCF) expressed as a percentage of GDP - however, increased from XX.X% in QX FY X0X0, to XX.X% in QX FY X0X0. Private consumption showed signs of growth, registering a X.X% y-o-y growth rate in QX FYX0X0; against X.X% in QX FY X0X0, and X% in QX FY X0XX. Going forward, both investment as well as consumption demand, are expected to pick up as the economy comes out of cyclical slowdown.

Diagram Source: MoSPI

Price/Inflation Scenario

Wholesale Price Index (WPI) continued to rise in February X0X0, driven by rising prices of food articles. Food articles continued to grow expensive, rising at X.X% in January X0X0. Fuel & Power prices increased by X.X%, while Primary articles witnessed a growth of X.X%. Manufactured articles grew costlier by 0.X%. Consequently, the overall WPI index grew by X.X% y-o-y, in February X0X0, as compared to X.X% y-o-y growth in January X0X0.

Diagram

Source: MoSPI, Office of Economic Advisor

Retail inflation (as measured by Consumer Price Index) also accelerated further by X.X% in February X0X0, as against X.X% in February X0XX and X.X% in January X0X0. The acceleration was quicker in rural areas than urban. Food inflation continued to flare up as prices of Vegetables, Pulses, and Meat & Fish continued rising in February as well. However, given the global outbreak of novel COVIDXX, household as well as corporate spending is expected to abruptly slow-down in the short term, as countries across the world lock down in order to arrest the spread of the epidemic. Going forward, the RBI is expected to slash interest rates by X0 bps in order to contain the economic fallout of the lockdown.

External Sector

India's merchandise exports are expected to have surged to a X year high of USD XXX Bn in FY X0XX, growing by X.X% over FY X0XX. Merchandise imports grew by X%, to USD X0X.XX Bn, during FY X0XX. The increase in imports was driven by a XX.X% jump in oil imports to US\$ XX0.XX Bn. Trade deficit widened to USD XXX.XX Bn in FY X0XX, from USD XXX.0X Bn in FY X0XX. However, in INR terms, the trade deficit declined



to INR XXX Bn in March X0XX, as compared with INR XX0 Bn in March X0XX. Expectations of a stable political environment, continuity in policy as well as structural reforms, and a strong domestic consumption theme are set to drive the country's economic progress over the next XX months. Going forward, investment demand is likely to pick up pace post the government measures to boost consumption.

Economic Growth Outlook

The International Monitory Fund (IMF) estimates the Indian economy to have grown by X.X% and X.X% in X0XX, and X0XX respectively. However, compared to its forecast in October X0XX, the IMF revised its X0XX estimate of India's GDP growth, downwards, by XX0 bps from X.X% to X.X%, while keeping the estimate for X0X0 unchanged at X.X%. However, in X0XX, the IMF expects India's GDP growth to pick up, at X.X%, indicating that the long-term prospects remain intact. The estimates for X0XX, X0X0 and X0XX reflect the cyclical nature of slowdown. The circular impact of slowing investment demand and consumption demand is waning off, as indicated by rising industrial output and inflation. Government spending is also expected to kick off in a major way, over the next XX months, after the first full scale budget of the newly elected government. Consequently, while India ceded the title of world's fastest growing economy, to China, in X0XX, it is expected to regain the same in X0XX.

Stable government, strong infrastructure growth, benign inflationary pressures, and continued implementation of structural reforms is expected to fuel the country's GDP growth. With a consecutive Xnd term, the NDA government is expected to push on with its structural reforms to transform the Indian economy into a USD X trillion economy by X0XX. Slew of measures such as digitization of approval processes and records, GST implementation, the Insolvency and Bankruptcy Code, further liberalization of FDI policy and the abolition of the Foreign Investment Promotion Board (FIPB) which were initiated over the last few years have unlocked the entrepreneurial potential of India's youth, and turned India into a hotbed for startups. Cumulatively, India's Ease of Doing Business rank jumped XX places in four years (and XX positions in last five years) to position the country as XXrd easiest economy to conduct business in, as per the World Bank's latest Doing Business Report (DBR, X0X0) released on XXth October X0XX. Going forward, India targets to be in top X0 in the next year's ranking.

However, internal factors such as ongoing troubles in the BFSI sector, benign household consumption, coupled with fiscal slippages, global trade wars, and external trade linkages threaten to derail the country's march towards the USD X trillion GDP goal. External factors render the country's economy vulnerable to forces both outside and outside of the national government's policy control, while the internal factors are expected to push the government to think on its feet and implement unique yet effective policies. The most challenging task for any government will be to sufficiently insulate the domestic economy from external shocks, while simultaneously improving its position in global trade. As China shifts from an export-based growth model to a consumption based one; India seeks to position itself as a global manufacturing hub via its "Make in India" initiative. India's domestic consumption led model of economic growth lends the country a distinct advantage over its global peers.



Foreign Exchange Fluctuations

During FY X0XX, Indian rupee depreciated against the dollar by X.XX%. The depreciation in rupee value against augurs well for exporters, but is also likely to increase the country's import bill and adversely impact Balance of Payments.

Diagram

Source: Office of the Economic Adviser

Impact of Covid-XX on Indian Economy

The novel coronavirus (referred to as Covid-XX) has by now spread all over the globe with infection count breaching X million and casualty count exceeding XX0,000. The pandemic which originated in China have created havoc especially in Euro Zone and North America, with US currently the biggest victim. What makes this outbreak scariest is that, within a span of X months it has managed to reach all corners of the world. The World Health Organization (WHO) was alerted of the existence of this outbreak by China on December XX.

Since then countries and international health institutions have adopted several means to restrict the spread while doubling efforts to develop a preventive therapy. The measures to restrict the spread of infection have resulted in lockdowns across the world as countries suspended trade and imposed restrictions on travel and commerce. Across North America and Europe, a large percentage of population is under self-imposed quarantine or under Government imposed quarantine measures, as they look to tide over this pandemic.

India with its large population and high population density has all the making to be a major disaster zone for any rapidly spreading epidemic. Fortunately, proactive measures by the Government from the very early days have so far helped the country control the spread. Although the count of infections in India have crossed XXX,000 and casualties crossed X000, the spread of infection has been mild when compared to the US, Italy, Spain, UK Russia and Brazil. The slow spread could be attributed to the drastic steps that the Government initiated from early days, by means of shutting down the economy, compulsory social distancing and aggressive tracking to prevent community spread.

Impact on Indian Economy

India officially entered a nationwide lockdown on XX^{th} March X0X0, when the Union Government announced a XX day lock down period in phase X which was then extended to X phases, the X^{th} phase being getting over by X^{th} June with relaxations been made in each phase. From X^{th} June Govt. plans to re-open the economy to



bring business environment to normalcy though with restrictions. While the nationwide lockdown confined citizens to their homes and closed businesses, travel restrictions were already on place.

Indian economy was already under some strain, and the impact of Covid made it severe. The curtailing of international trade severally impacted the manufacturing industry, as there is a huge dependence on imports. China is a key supplier of raw materials as well as intermediary components to a wide range of industry, including pharmaceuticals, capital goods, textiles etc. With China imposed tough trade restrictions to prevent the spread, and India too following suit many industries are facing at a situation of raw material disruption. This intensified the situation in domestic manufacturing industry, which has already slowed down in the recent months due to demand slump. Additionally, the mandatory shutdown meant all non-essential production activities have ceased. Thus, the manufacturing sector in the country is bound to see an extended period of slowdown. With the virus infection continuing its rapid spread, the prospect of normalcy in trade as well as easing of lockdown is uncertain. Hence assigning any timeline for revival in manufacturing sector at this stage is fraught with challenges.

The impact of lockdown is particularly severe in agriculture and construction, which employs majority of people in India. March was the peak *Rabi* season in India with crops at harvestable stage as well as the time when farmers take their produce to market yards for sales. This is also the time when Government agencies start their crop procurement operations from market yards. The lockdown has impacted all these operations. There is also a severe shortage of labor as the lockdown has cut migrant laborers and farm hands from their operations. These are all pointing to a situation which would result in crop wastage, impacting the national crop production and procurement pattern. The situation is similar in construction sector too as all non-essential services was stopped till May Xrd. Additionally the lockdown has also left laborers out in a lurch.

The service sector, which has been a vital cog in India's growth story has seen widespread disruption because of lockdown. Organizations have shifted to remote working as offices has been closed. Majority of companies in India are not used to this remote working style, and hence was poorly equipped to handle this sudden transition. Although situation has improved, companies are yet to come to terms with the new working style.

The short-term impact of Covid pandemic on Indian economy is expected to be severe, as business disruptions due to lockdown would impact the productivity, and in turn the industrial output. As and when the economy opens up – expected to happen in phases post Xth June – it would take few months before the situation returns to pre-Covid levels. However, there is widespread uncertainty surrounding the pace of rebound with varying opinion about the shape of recovery (u shaped /v shaped). However, there is a consensus that economy will be stabilizing only by the end of QX and rebound will likely extend to QX or next fiscal year. Considering the continuing spread of Covid, it is still early to make future predictions.



Limiting Conditions

The revenue and cost estimates for the proposed project are given on the basis of assumptions and not on the basis of actual calculations. The revenue and costs considered are based on the findings from primary survey and secondary research, as detailed in the methodology section. There may be changes in the revenue and cost estimates depending on the market conditions. The revenue and costs are comparable to the industry benchmarks.

- The promotes of THE COMPANY is under the process of acquisition, registration and CLU of land.
 Post the same the lease agreement needs to be finalized and the same is under progress.
- THE COMPANY has finalized the main imported P&M as well as paid advance for the same however, for all other indigenous machinery vendor shortlisting is under process.
- ETP details and other utility details yet to be finalized as well as connected load break-up for power calculation is under preparation.
- The building plan is yet to be finalized and based on the same the civil BoQ estimate is under preparation.
- All mandatory approvals are pending at this stage as the land is yet to be registered and leased out to THE COMPANY.
- FYX0 audited balance sheet for existing operations are under preparation.

BASIS:

APKA-India's assumptions are based on the information obtained from owners, prevailing rules and regulations of statutory authorities, prevailing site conditions on the date of inspection.

DOCUMENTATION:

APKA-India does not normally read leases or documents of title. APKA-India assumes, unless informed to the contrary, that each Structure has good and marketable title, that all documentation are satisfactorily drawn and that there are no encumbrances, restrictions, easements or other outgoing of an onerous nature which would have a material effect on the value of interest under consideration, nor material litigation pending. Where APKA-India has been provided with documentation, APKA-India recommends that reliance should not be placed on its interpretation without verification by legal advisors.

TOWN PLANNING AND OTHER STATUTORY REGULATIONS:

APKA-India recommends that verification be obtained from legal advisors to the effect that:

i The position is correctly stated in the report.

ii The property is not adversely affected by any other decision made, or conditions prescribed by public authorities.



iii There are no outstanding statutory notices.

iv. APKA-India's reports are prepared on the basis that the Owners comply with all relevant statutory regulations, including enactment relating to fire regulations, safety and environmental considerations and stipulation of respective statutory provisions.

PHYSICAL SURVEYS:

APKA-India has not carried out Physical Survey and leveling exercise of the Structures and advice Owners to carry out actual Physical Survey of the site along with levels if desired. This report is based on documents forwarded to APKA-India by Owners, Government Records made available to APKA-India and on APKA-India's cursory inspection of site.

STRUCTURAL SURVEYS:

APKA-India has not carried out a structural survey, nor has APKA-India tested the services of the Owners and APKA-India therefore does not give any assurance that any Structure or the immoveable assets are free from defects. In APKA-India's general observations, the Structures are erected normally and appear to have been maintained properly. However, no guarantee or opinion can be inferred about the conditions of Structure and Machinery about safe working of the same.

DELETERIOUS MATERIALS:

APKA-India does not normally carry out investigations on site to ascertain whether any Structure was constructed or altered using deleterious materials or techniques (including, by way of example high alumina cement concrete, wood wool as permanent shuttering, calcium chloride or asbestos). Unless APKA-India was otherwise informed, our report is on the basis that no such materials or techniques have been used.

SITE CONDITIONS:

APKA-India has not carried out investigations on site in order to determine the suitability of ground conditions and services for the purposes for which they are, or are intended to be put, to use, nor does D&B-India undertake archaeological, ecological or environmental surveys. Unless APKA-India is otherwise informed, APKA-India's report is on the basis that these aspects are satisfactory and that, where development is contemplated, no extraordinary expenses or delays will be incurred during the construction period due to these or any other matters related to site.

ENVIRONMENTAL CONTAMINATION:

APKA-India has not carried out physical site surveys or environmental assessments, or investigated historical records, to establish whether any land or premises are, or have been, contaminated. Therefore, unless advised to the contrary, APKA-India's report is carried out on the basis that properties are not affected by environmental contamination.



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This Report has been prepared keeping in view the scope of work and the methodology as stated in this Report. Sources which form the basis of this Report could be broadly classified into two categories: (i) the facts gathered by APKA-India by way of a visit to the site of the project relating to the Transaction, or the Government offices, to the extent possible, having regard to practical constraints, and (ii) documents and information as furnished by the Customer or the Funding Entity. APKA-India has not carried out any independent verification for the accuracy or the truthfulness of such information which is believed to be accurate, updated and complete based on the information as furnished by the Customer, the Funding Entity and partly on its own information as stated hereinabove. Accordingly, the said information is not warranted by APKA-India for its accuracy, completeness, or being upto date, and is subject to further verification.

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APKA DPR (DTR+DFR+DCR)

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