

HDPE and uPVC Pipes Production.



Business Opportunities in Pipe Manufacturing Industry



Introduction

HDPE Pipe

HDPE pipe is a pipe made from high-density polyethylene. Known for its large strength to density ratio, it can carry potable water, wastewater, slurries, chemicals, hazardous wastes, and compressed gases.

HDPE ducts or HDPE pipes are specially manufactured electrical conduits made from graded raw materials like PE 63, PE 80 and PE 100.



Major Applications of HDPE Pipes are:

1. Agriculture

Flow line irrigation; lift irrigation, suction/delivery of pumps, siphons, tube-well pipes, water supplies, pesticide spraying system, and drip irrigation

Advantages - Life of pipe up to 50 years, Corrosion resistance, much lighter than metal pipes making transportation and assembling easier

2. Submarine & Underwater Pipeline

Pipeline effluent, marine outfalls, salt-water intake lines, rivers/canal crossings under water.

Advantages - Superior corrosion resistance, superior wear resistance, chemical resistance, lighter, better impact

3. Gas/Compressed Air System

Natural gas and coal gas conveyance and consumer distribution, conveyance and distribution of sewage gas, gobar gas, community biogas schemes, compressed air supply, networks at construction sites, mines and factories, air conditioning and ventilation ducts.

Advantages - Leak proof joint, better impact, Better crack propagation, insulation property

4. Hydro-Transport Systems

Iron/tin ore slurry disposal, boiler ash handling, coal, cement/clinker handling, sand slurry conveyance in mines, sand slurry disposal in dredging.

Advantages - Corrosion resistance, Abrasion resistance, Better impact

5. Chemicals & Edibles Transport

Conveyance of edible oils, fruit pulp and juices, milk and brine water, conveyance of acids, alkalies and other corrosive chemicals

Advantages - Chemical resistance, Corrosion resistance, Non toxic and food grade

6. Effluent & Waste Water Disposal Systems

Corrosive chemicals effluents, treated/untreated wastes and radioactive waste



UPVC Pipes

Unplasticized Polyvinyl Chloride or UPVC Pipes are one of the most widely used Pipes due to their flexibility and economical pricing. They exhibit excellent resistance against all types of harsh and corrosive environments. The non-metallic nature of UPVC Pipes makes them resistant to all kinds of corrosion. UPVC Pipes are majorly used in drinking water distribution systems, sewage and discharge systems. UPVC is based on polyvinyl chloride (PVC), one of the most versatile polymers found in the century. In the recent years, Un-plasticized Polyvinyl Chloride pipe or UPVC pipes have become popular and are being used widely in homes.

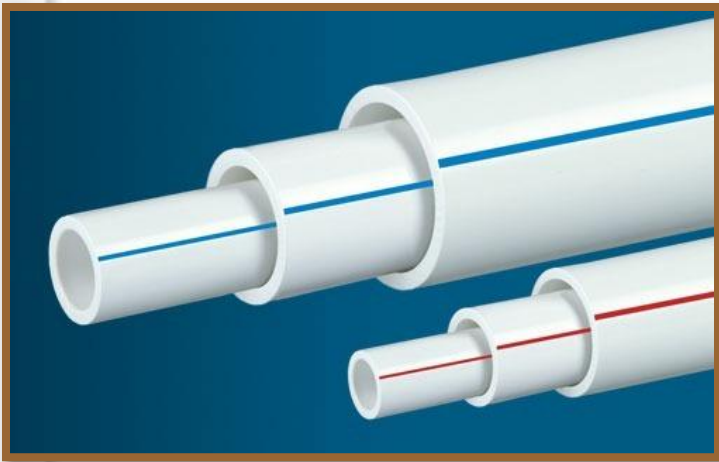


Some of the most prominent applications of a UPVC

Pipe are as follows:

- **The UPVC Pipes are used in the water supply schemes and as a casing for Tube work and also in manufacturing Raising mains for the hand pumps.**
- **The use of these pipes is also being made in the chemical industries to transport chloride and the other chemicals.**
- **They are also used as ventilation pipes for disposing the corrosive gases from the interiors of bathrooms.**
- **The use of these pipes is also being made in manufacturing sewer systems.**

- **In the electrical industry, the use of UPVC pipes is being increasingly done for electrical conduits.**
- **These pipes are also suitable for agricultural purposes as irrigation sprinkling pipe for the farm lands.**
- **Due to their anticorrosion property, they are the preferred choice for the crude oil lines.**



Market Outlook

High density polyethylene (HDPE) pipes are manufactured through the extrusion technique across the world. They are manufactured electrical tubes made from graded raw materials such as PE 63, PE 80, and PE 100. These materials are used as ideal substitutions for CI pipes and GI pipes and are one of the premier mediums of conveyance and transportation. HDPE pipes are used in several industries such as gas manufacturing, chemicals, water transportation, telecommunication, and agriculture.

HDPE pipes market is to witness substantial growth with increasing application for the HDPE pipes in various end use industries. HDPE pipes are polyethylene thermoplastic pipes used to transit gas, water for agriculture irrigation, drinking water supply, in sewage systems and others.

HDPE pipes are corrosion resistant and recyclable. Thus, seen as the replacement to various metal pipes. HDPE pipes are cost effective, light in weight and considered as a preferred choice over traditional metal pipes. The growth of global HDPE pipes market is fueled by growing demand from water irrigation systems in agriculture industry coupled with urbanization due to influx of middle class, resulting in upgrading, expansion and huge demand for infrastructural improvements and water supply across the globe.

Based on application, the High density polyethylene (HDPE) pipes market can be segmented into chemical/processing, water supply, gas distribution, telecom ducts, drainage & sewerage, and others. HDPE pipes are primarily used to supply drinking water. The non-corrosive nature of these pipes make them suitable for sewerage and sewage disposal.

The global High density polyethylene (HDPE) pipes market has been expanding due to the rise in demand for these pipes in water irrigation systems in the agriculture industry and increase in urbanization owing to the growth in demand for infrastructure improvements and water supply across the globe.

High-Density Polyethylene (HDPE) Pipe market will observe a CAGR of 4.8 % from 2018 to 2024. It is owing to its ability to witness high temperature and resistance to stiffness property and it's usage in agriculture for water supply, drainage, and irrigation which has impelled the market growth in the recent few years. The market was valued at USD 13.53 Bn in 2017 and is assured to reach USD 18.85 Bn by the end of 2024.

Rising government investment in improving sanitation coverage and growing awareness of safety and hygiene is also major factor accounting for the future growth of the market. Also, growing awareness on water conservation, irrigation, sewerage facility and water supply have been the major focus which has boosted the demand for HDPE pipes in the market. Growing population rate, rising FDI in construction and development, high investment in improving gas distribution network and increasing number of housing units are some other key factors that may have a positive impact on the market creating additional demand in the future.

The growth of global HDPE pipes market is fueled by growing demand from water irrigation systems in agriculture industry coupled with urbanization due to influx of middle class, resulting in upgrading, expansion and huge demand for infrastructural improvements and water supply across the globe. Further, HDPE pipes are widely used in sewage systems.

The market for HDPE pipe is expected to witness substantial growth due to the increase in application of HDPE pipes in various end-use industries. The rise in demand from water irrigation systems in agricultural industry drives the growth of the HDPE pipe market. Rapid urbanization leads to increase in demand for water supply, which in turn increases the requirement of HDPE pipes. This in turn contributes toward the growth of the global HDPE pipe market. Furthermore, growing sewage disposal infrastructure will increase the demand for HDPE pipes. However, fluctuating prices of raw material due to volatility in crude oil are expected to hamper the market growth. Conversely, innovation and advancement in PE pipes are the factors anticipated to provide growth opportunities to the HDPE pipes market.

uPVC Pipe

uPVC pipes are not affected by neither direct sunshine, nor wind or rain. However, to avoid surface browning due to long exposure to direct sunlight, it is recommended that the pipes are kept protected from direct sunlight. Rigid PVC is not conductive to combustion. In the event of a fire, flames are unable to travel on uPVC pipes. They therefore offer added safety when used for electrical installations, both domestic and industrial. uPVC pipes are relatively light.

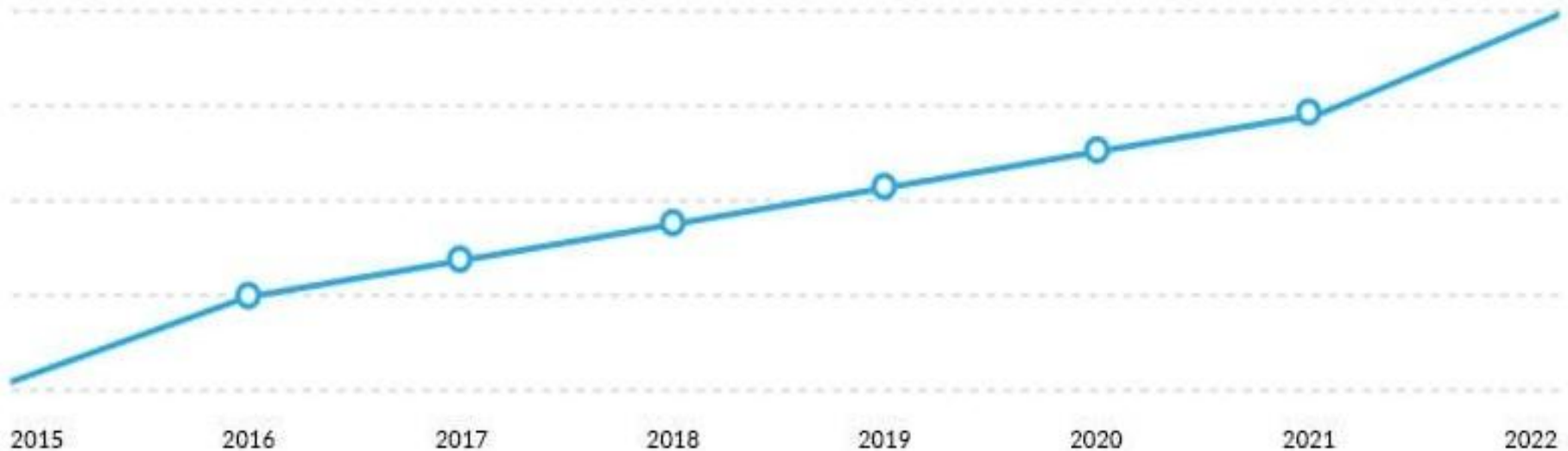
The Indian UPVC pipe market is estimated to be Rs 3,200 crore and is expected to touch Rs 8,600 crore in size by 2022, growing at a rate of 28%.



Global Pvc Pipe Market size was valued at \$54,246 million in 2015, and is anticipated to grow at a CAGR of 6.7% to reach \$85,565 million by 2022. Polyvinyl chloride (PVC) is the third largest selling plastic commodity after polyethylene & polypropylene. It is beneficial over other materials owing to its chemical resistance, durability, low cost, recyclability, and others; thus, it can replace wood, metal, concrete, and clay in different applications. Piping and piping systems are a major application of PVC resin. PVC pipes are manufactured by extrusion method in a variety of dimensions such as solid wall or cellular core construction. These are corrosion resistant, cost-effective, flame resistant, easy to install & handle, and environmentally sound, with long service life.

Global PVC Pipe Market, Opportunities and Forecast, 2014-2022

Global PVC pipe market is expected to reach \$85,565 million by 2022, growing at a CAGR of 6.7% (2016-2022)



India PVC Pipes Market Overview:

The India PVC Pipes Market size was valued at \$3,159 million in 2016 and is anticipated to expand at a CAGR of 10.2% to reach \$6,224 million by 2023. Polyvinyl chloride (PVC) is the third largest selling plastic commodity after polyethylene & polypropylene. It is beneficial over other materials, owing to its chemical resistance, durability, low cost, recyclability, and others; thus, it can replace wood, metal, concrete, and clay in different applications. PVC pipes are manufactured by extrusion method in a variety of dimensions such as solid wall or cellular core construction. They are corrosion resistant, cost-effective, flame resistant, and easy to install & handle, and environmentally sound, with long service life.

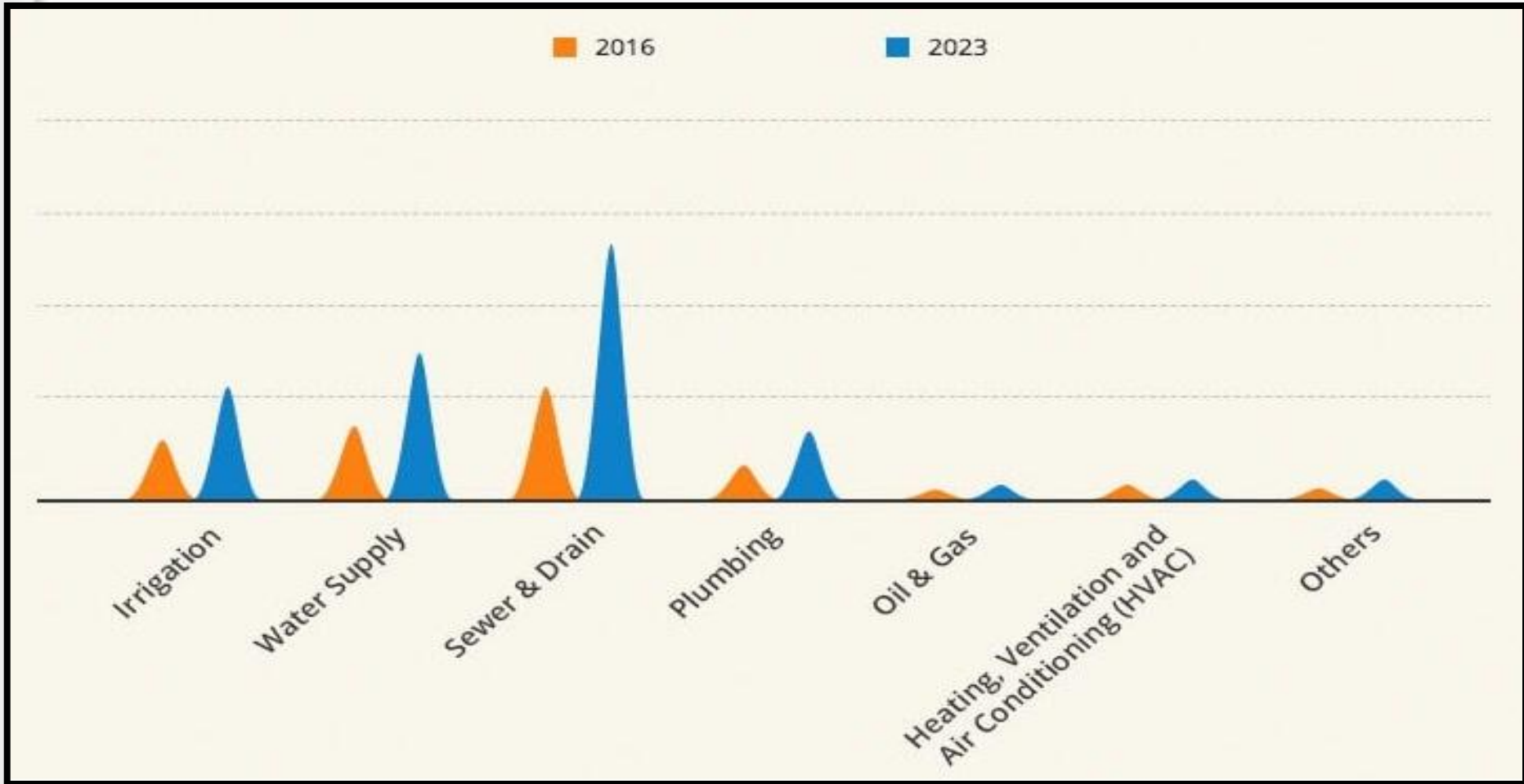
Rise in penetration of PVC pipes across various application such as irrigation, water supply, sewer & drain, plumbing, oil & gas, HVAC, and others acts as the major driving factors of India PVC pipes market. Polyvinyl chloride (PVC) pipe industry is in its mature stage. Most of the players operating in the industry focus to consolidate their position in the market through strategic expansions and product launches. Some of the major factors that drive the demand for PVC pipes include upsurge in demand from irrigation & construction industries, rise in focus on rural water management, and rapid urbanization.

The India PVC pipes market is segmented by type into chlorinated PVC pipe, unplasticized polyvinyl chloride (uPVC) pipe, and plasticized PVC pipes. Significant penetration across applications such as heavy-duty plumbing, sewer & drain, and HVAC drive the demand for uPVC pipes.

Increasing implementation and reach of government programs and marketing strategies used by players in the PVC pipes and fittings market are expected to have a positive effect on the overall revenue of the India PVC pipes and fittings market.



India PVC Pipe Market, By Application



With respect to applications, sewer & drain is the most lucrative segment, followed by water supply, irrigation, plumbing, and others. Significant demand for PVC pipes in various industries and development of infrastructure in the emerging economies are expected to drive the market growth. EPA, REACH, and other regulatory bodies have implemented guidelines for use of PVC material in various industries to control and safeguard the interest of consumers. East India is the major region to drive the demand for PVC pipe products, owing to abundant cultivation of tea.



Machinery Photographs



Extruder



Cooling Tank



Hopper Loader



Jockey Extruder

Project at a Glance

PROJECT AT A GLANCE				(` in lacs)			
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	10.00	10.00	Capital	0.00	180.06	180.06
Buildings	0.00	76.00	76.00	Share Premium	0.00	0.00	0.00
				Other Type Share			
Plant & Machineries	0.00	385.68	385.68	Capital	0.00	0.00	0.00
Motor Vehicles	0.00	8.00	8.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	108.50	108.50	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	25.00	25.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	540.18	540.18
Preliminary& Pre-operative Exp	0.00	2.00	2.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	37.50	37.50	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	67.56	67.56				
TOTAL	0.00	720.24	720.24	TOTAL	0.00	720.24	720.24

Project at a Glance

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/Book Value
	EPS	CEPS	Per Share		Per Share	Per Share				No. of Times	
	`	`	`	`	`	%	`	%	`	s	%
1-2	5.10	9.86	15.10	24.00	0.00	100.00	5.10	0.00	5.10	1.00	0.00
2-3	7.88	12.00	22.98	18.00	0.00	100.00	7.88	0.00	7.88	1.00	0.00
3-4	10.69	14.25	33.66	12.00	0.00	100.00	10.69	0.00	10.69	1.00	0.00
4-5	13.45	16.54	47.12	6.00	0.00	100.00	13.45	0.00	13.45	1.00	0.00
5-6	16.14	18.83	63.26	0.00	0.00	100.00	16.14	0.00	16.14	1.00	0.00

Project at a Glance

Year	D. S. C. R.			Debt / Equity - Deposits Debt	Equity as-Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contribution	P/V Ratio		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initial				3.00	3.00									
1-2	1.41	1.41		1.59	1.59	3.13		7.49%	3.74%	2.85%	627.23	19.47%	2.93	1.06
2-3	1.70	1.55		0.78	0.78	1.95		8.70%	5.57%	3.77%	731.57	19.46%	3.13	1.23
3-4	2.05	1.70	2.05	0.36	0.36	1.26		9.52%	6.90%	4.48%	836.07	19.46%	3.17	1.43
4-5	2.47	1.87		0.13	0.13	0.86		10.09%	7.86%	5.01%	940.58	19.46%	3.10	1.66
5-6	2.99	2.05		0.00	0.00	0.60		10.49%	8.55%	5.41%	1045.08	19.46%	2.96	2.19

Project at a Glance

BEP

BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	51.41%
Total BEP (% of Installed Capacity)	56.04%
IRR, PAYBACK and FACR	
Internal Rate of Return .. (In %age)	28.26%
Payback Period of the Project is (In Years)	2 Years 3 Months
Fixed Assets Coverage Ratio (No. of times)	16.033

Major Queries/Questions Answered in the Report?

- 1. What is HDPE and uPVC Pipes Manufacturing industry ?**
- 2. How has the HDPE and uPVC Pipes Manufacturing industry performed so far and how will it perform in the coming years ?**
- 3. What is the Project Feasibility of HDPE and uPVC Pipes Manufacturing Plant ?**
- 4. What are the requirements of Working Capital for setting up HDPE and uPVC Pipes Manufacturing plant ?**

- 5. What is the structure of the HDPE and uPVC Pipes Manufacturing Business and who are the key/major players ?**
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Reasons for Buying our Report:

- **This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product**
- **This report provides vital information on the product like it's characteristics and segmentation**
- **This report helps you market and place the product correctly by identifying the target customer group of the product**

- **This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials**
- **The report provides a glimpse of government regulations applicable on the industry**
- **The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions**

Our Approach:

- **Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.**
- **The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players**
- **We use reliable sources of information and databases. And information from such sources is processed by us and included in the report**

Scope of the Report

The report titled “Market Survey cum Detailed Techno Economic Feasibility Report on HDPE and uPVC Pipes .” provides an insight into HDPE and uPVC Pipes market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of HDPE and uPVC Pipes project. The report assesses the market sizing and growth of the Indian HDPE and uPVC Pipes Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- **Good Present/Future Demand**
- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the HDPE and uPVC Pipes sector in India along with its business prospects. Through this report we have identified HDPE and uPVC Pipes project as a lucrative investment avenue.

Tags

#How_to_Start_HDPE_Pipes_Manufacturing_Industry,
#Manufacturing_Process_for_HDPE_Pipe, #uPVC_Pipe_Production_Plant,
#HDPE_Pipe_Manufacturing, #HDPE_Pipe_Manufacturing_Process_Flow_Chart,
#HDPE_Pipe_Manufacturing_Process_PPT, #uPVC_Pipe_Manufacturing_Unit,
#Project_Report_on_HDPE_Pipes_Manufacturing,
#Unplasticized_Polyvinyl_Chloride_Pipes, #HDPE_Pipe_Plant_Cost,
#HDPE_Pipe_Project_Report_Pdf, #HDPE_Pipe_Production, HDPE Pipes
Manufacturing Industry, Production Process of HDPE Pipes, Pipe Manufacture,
High-Density Polyethylene (HDPE) or Polyethylene High-Density (PEHD) Pipe,
Production of HDPE Pipe, HDPE Pipe Plant, HDPE Pipe Making Business, HDPE
Pipe Manufacturing Process, HDPE Pipe Production and Manufacturing, HDPE
Production and Processing Plant, Un-Plasticized Polyvinyl Chloride (UPVC) Pipe
Production, UPVC Pipe Production,



uPVC Pipe Manufacturing, UPVC Pipes Factory, UPVC Pipes, PVC Pipe Manufacturing Process Flow Chart, PVC Pipe Manufacturing Process Pdf, PVC Pipe Manufacturing Process Flow Chart Pdf, uPVC Pipe Manufacturing Process PPT, PVC Pipe Manufacturing Cost, PVC Pipe Manufacturing Plant Layout, PVC Pipe Manufacturing Process, How to Start PVC Pipe Manufacturing Business, I Want to Start a Small Setup of PVC Pipe Industry, Start a PVC Pipe Manufacturing Plant, #UPVC_Pipes_Manufacturing_Project, Project Report on HDPE Pipes Manufacturing Industry, Detailed Project Report on HDPE Pipes Manufacturing, #Project_Report_on_UPVC_Pipe_Production, Pre-Investment Feasibility Study on UPVC Pipe Production, Techno-Economic feasibility study on UPVC Pipe Production, #Feasibility_report_on_HDPE_Pipe_Production, Free Project Profile on UPVC Pipe Production, Project profile on HDPE Pipe Production, Download free project profile on HDPE Pipes Manufacturing

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And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

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The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,

Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.

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Contact us

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Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Contact us

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