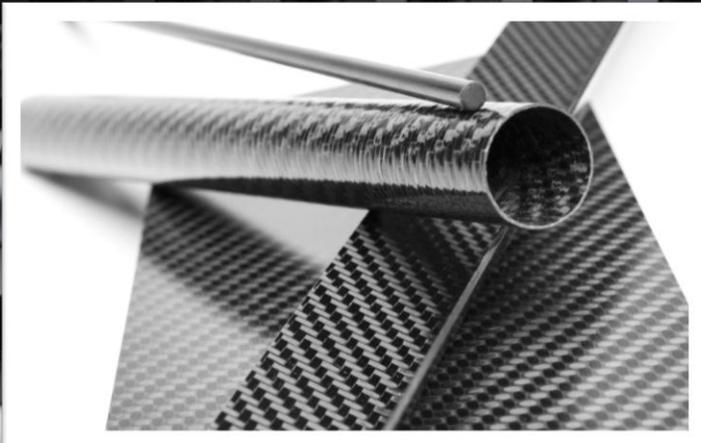


# Projects on Carbon Fiber, Carbon Fiber Composites, Graphite Fibre and Carbon Fiber Reinforced Polymer

**- An Investment Opportunities**



# Introduction

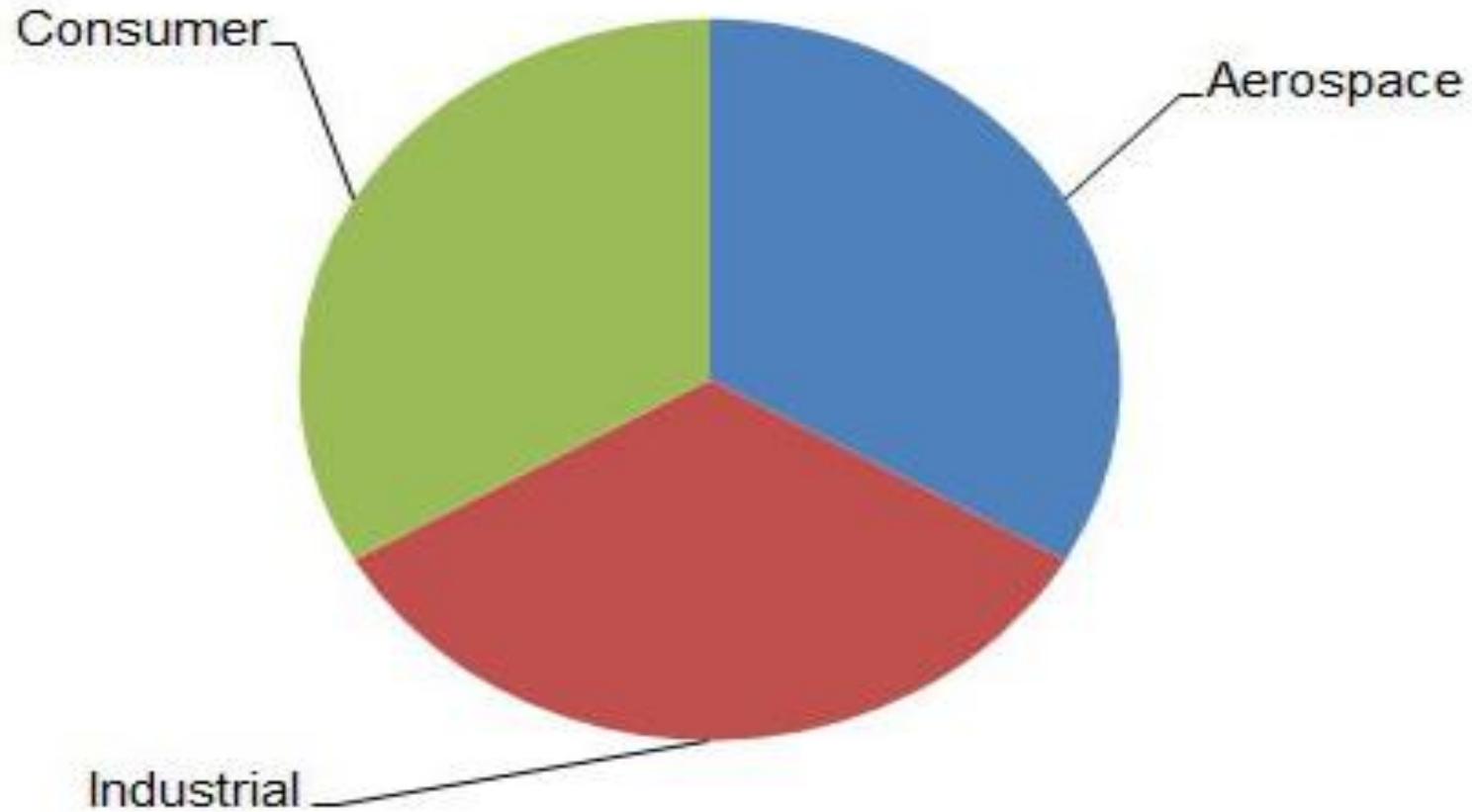
**Carbon fiber is composed of carbon atoms bonded together to form a long chain. The fibers are extremely stiff, strong, and light, and are used in many processes to create excellent building materials. Carbon fiber material comes in a variety of "raw" building-blocks, including yarns, uni-directional, weaves, braids, and several others, which are in turn used to create composite parts.**

**Carbon fiber is extremely strong. It is typical in engineering to measure the benefit of a material in terms of strength to weight ratio and stiffness to weight ratio, particularly in structural design, where added weight may translate into increased lifecycle costs or unsatisfactory performance. The stiffness of a material is measured by its modulus of elasticity. The modulus of carbon fiber is typically 33 msi (228 GPa) and its ultimate tensile strength is typically 500 ksi (3.5 Gpa). High stiffness and strength carbon fiber materials are also available through specialized heat treatment processes with much higher values.**

# **Market Outlook**

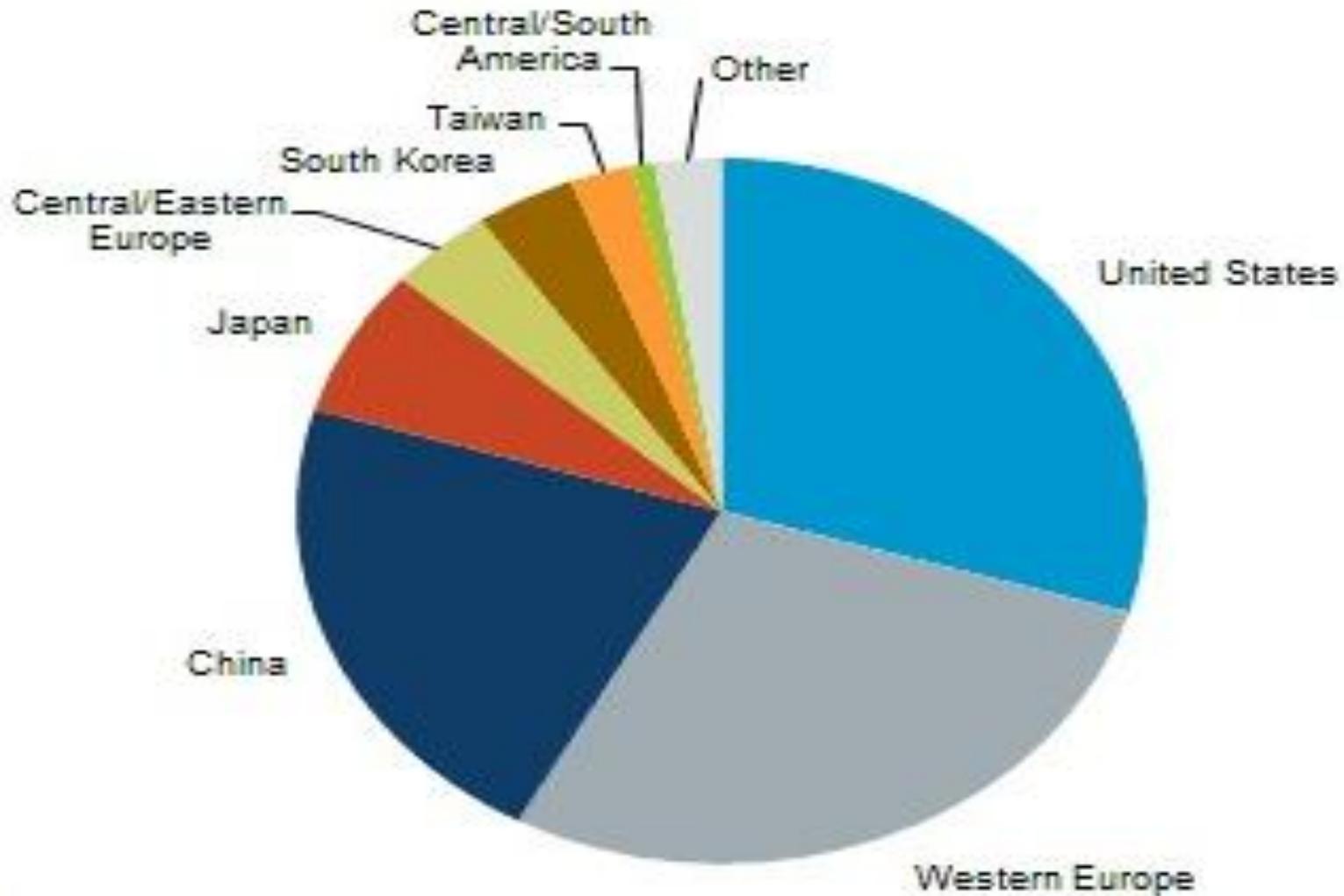
**Indian carbon fiber composites market is poised for dramatic growth rate of 22% and expects to reach over US\$ 50 mln in the next 5 years, driven by various industrial applications, as per Composite Insights.**

# Indian Carbon Fiber Composites Market



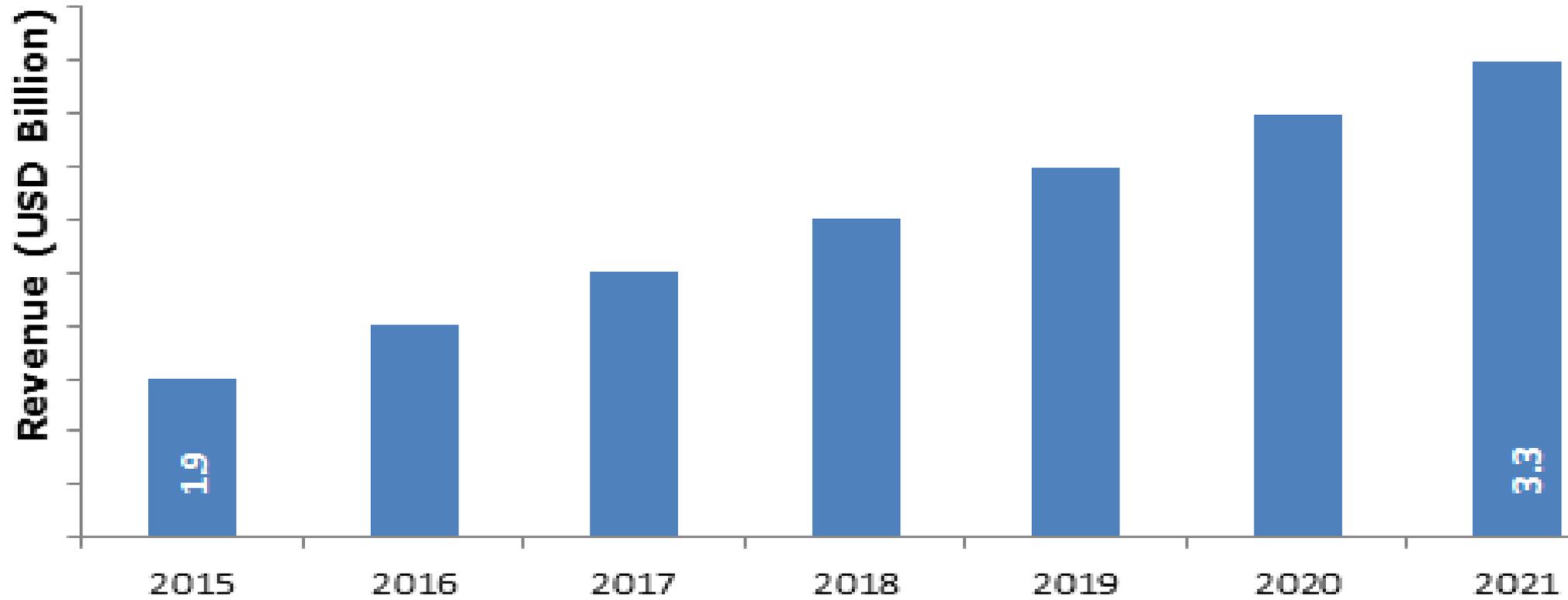
**Global carbon fiber market volume accounted for around 35-kilo tons while market revenue accounted for approximately USD 1.9 Billion in 2015 and is expected to reach approximately USD 3.3 Billion by 2021, growing at a CAGR of around 9.8% between 2016 and 2021.**

## Global Consumption of Carbon Fiber



# Global Carbon Fiber Market

## Revenue



**Global Carbon Fiber Reinforced Polymer is growing rapidly post 2016 as the market is boosted due various industries such as Construction, Electrical Isolation, Industrial, Marine and Others. Global carbon fiber reinforced polymer which is growing rapidly and expected to continue its growth by the end of 2022.**

**The global carbon fibre reinforced plastic (CFRP) market is expected to reach \$ 27.98 billion by 2024 from \$ 11.6 billion in 2015.**

Niir Project Consultancy Services (NPCS) can provide Detailed Project Report on

Carbon Fiber, Carbon Fiber Composites, Graphite Fibre and Carbon Fiber Reinforced Polymer

## ➤ **Carbon Composite Fiber**

**Carbon Composite fibre is produced from the raw material used PAN, pitch etc. Quality of composite carbon fibre produced from PAN is much better than the product produced from the pitch. It is one of high technology base product with fair market demands in India. Carbon fibers are black fibers used as yarns felt or powder like short mono filaments with diameters smaller than 10 mm.....[Read more](#)**

## ➤ **Carbon Fiber**

**Carbon fibers have been under continuous development for the last 50 years. The properties of carbon fibers, such as high stiffness, high tensile strength, low weight, high chemical resistance, high temperature tolerance and low thermal expansion, make them very popular in aerospace, civil engineering, military, and motorsports, along with other competition sports....[Read more](#)**

**For more details visit at:**

[Carbon Fiber, Carbon Fiber Composites,  
Graphite Fibre and Carbon Fiber Reinforced  
Polymer](#)

# Major Queries/Questions Answered in our Report?

- 1. How has the industry performed so far and how will it perform in the coming years?**
- 2. What is the Project Feasibility of the Plant?**
- 3. What are the requirements of Working Capital for setting up the plant?**
- 4. What is the structure of the industry and who are the key/major players?**

- 5. What is the total project cost for setting up the plant?**
- 6. What are the operating costs for setting up the plant?**
- 7. What are the machinery and equipment requirements for setting up the plant?**
- 8. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up the plant?**
- 9. What are the requirements of raw material for setting up the plant?**

10. Who are the Suppliers and Manufacturers of Raw materials for setting up the plant?
11. What is the Manufacturing Process of the plant?
12. What is the total size of land required for setting up the plant?
13. What will be the income and expenditures for the plant?
14. What are the Projected Balance Sheets of the plant?

- 15. What are the requirement of utilities and overheads for setting up the plant?**
- 16. What is the Built up Area Requirement and cost for setting up the plant?**
- 17. What are the Personnel (Manpower) Requirements for setting up the plant?**
- 18. What are Statistics of Import & Export for the Industry?**
- 19. What is the time required to break-even?**

- 20. What is the Break-Even Analysis of the plant?**
- 21. What are the Project financials of the plant?**
- 22. What are the Profitability Ratios of the plant?**
- 23. What is the Sensitivity Analysis-Price/Volume of the plant?**
- 24. What are the Projected Pay-Back Period and IRR of the plant?**
- 25. What is the Process Flow Sheet Diagram of the plant?**
- 26. What are the Market Opportunities for setting up the plant?**
- 27. What is the Market Study and Assessment for setting up the plant?**
- 28. What is the Plant Layout for setting up the plant?**

# Reasons for buying our report:

- **The 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**
- **The report provides vital information on the product like it's characteristics and segmentation**
- **The report helps you market and place the product correctly by identifying the target customer group of the product**

- **The 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**

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# Contact us

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# **NIIR PROJECT CONSULTANCY SERVICES**

**An ISO 9001:2015 Company**

# Who are we?

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

## What do we offer?

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

## How are we different ?

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

# Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

# Who do we serve?

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

# Sectors We Cover

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

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

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

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

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

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

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

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

# Contact us

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