

List of Profitable Glass (Flat, Art, Hollow, Automotive, Optical Glass, Glass Processing Line, Glassware Industry) and Ceramic Based Projects Manufacturing Business Ideas



# Introduction

Glass is a combination of sand and other minerals that are melted together at very high temperatures to form a material that is ideal for a wide range of uses from packaging and construction to fibre optics. A form of glass occurs naturally within the mouth of a volcano when the intense heat of an eruption melts sand to form Obsidian, a hard black glassy type of stone. Glass, chemically, is actually more like a liquid, but at room temperature it is so viscous or sticky it looks and feels like a solid. At higher temperatures glass gradually becomes softer and more like a liquid. It is this latter property, which allows glass to be poured, blown, pressed and moulded into such a variety of shapes.



# **Market Outlook**

Glass is the dominating material in modern day architecture. It can be designed to incorporate many desirable properties by modifying its composition and processing. Today, the glass industry offers glazing with technical features that can be used for heat, solar, or sound protection, as design components, safety glass, or as a part of solar systems. As product versatility increases, so does the need for architects, planners, and building owners to consult with the glass processor.

Indian glass market is estimated to increase at a compound annual growth rate (CAGR) of 15 per cent over the next three years.



The glass consumption growth is expected in construction (10-12 per cent), automotive (20), consumer goods (15-20) and pharmaceuticals (15-18) sectors. The highest share in the number of factories of the glass industry is Uttar Pradesh with a share of 36.9 per cent, followed by Gujarat at 15 per cent, Andhra Pradesh and Tamil Nadu at 5.6 per cent and Karnataka with 4 per cent.

The growth in the Indian glass industry is dominated by container glass segment, which accounts for majority of the sales in terms of volume, The growth in the glass industry is characterized by the increase use of processed & reflective glass as the Indian customer has become more aware about the importance of glass in effectively addressing the concerns of safety and energy efficiency.



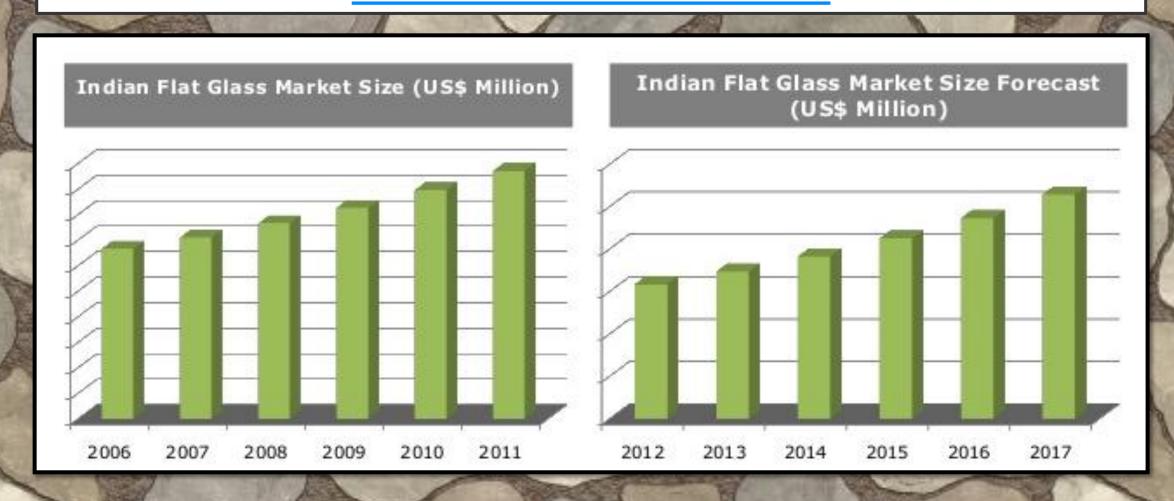
## FLAT GLASS INDUSTRY IN INDIA

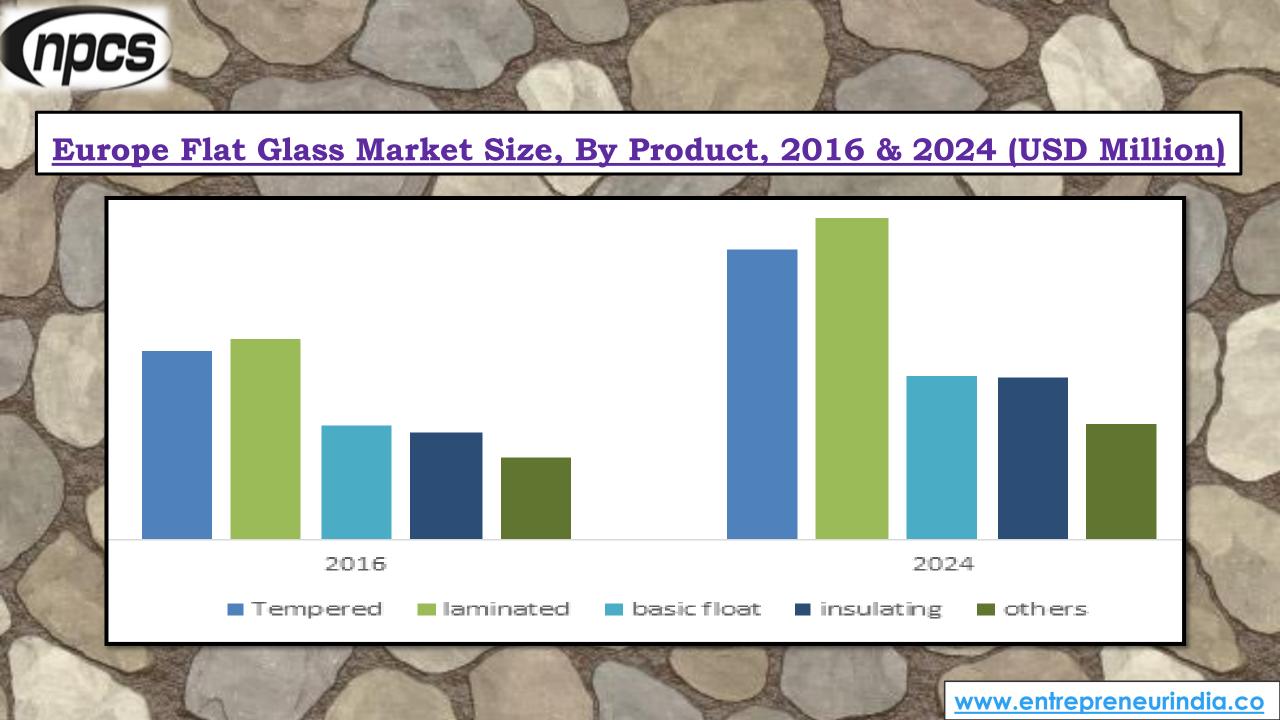
- The current flat glass market stands at @ 5473 TPD
- Construction industry contributes to 80% of Flat glass demand
- This segment is expected to grow at a CAGR of 14%.





## **Indian Flat Glass Market**







Rapid industrialization & urbanization in India, China, Malaysia and Thailand coupled with adoption of smart & energy efficient technology as advanced construction practice should have positive influence on flat glass demand. Significant investments are being made for modernizing existing airports & terminals in Asia Pacific, with India alone planning to spend over USD 15 billion in 2017. It is increasingly used for interior designing, replacing traditional materials like stone and wood for constructing floors, stairs, bathroom & walkways. Flat tempered glass market size should surpass USD 40 billion by 2024 owing to strong application scope in residential & commercial construction projects. Its exceptional hardness and ability to break into small harmless pieces upon impact reduces risk of injury and should boost global product demand.



Global flat glass market size from automotive applications should grow at a rate of over 7% during projected period. Strong application outlook in manufacturing windows, windshields & backlight should promote product demand. Rising demand for luxury cars owing to increased disposable income, emphasize on using laminated products for sun roofing and smart technology driving flat glass market size.







# Here are few Projects for Startups:

#### > GLASS MANUFACTURING

The Indian glass industry has come a long way since its inception in the early 19th century. This well-developed industry is large enough to cover virtually all the major facet of glass making. The glass industry in our country has accumulated capacity for in excess of domestic needs......Read more





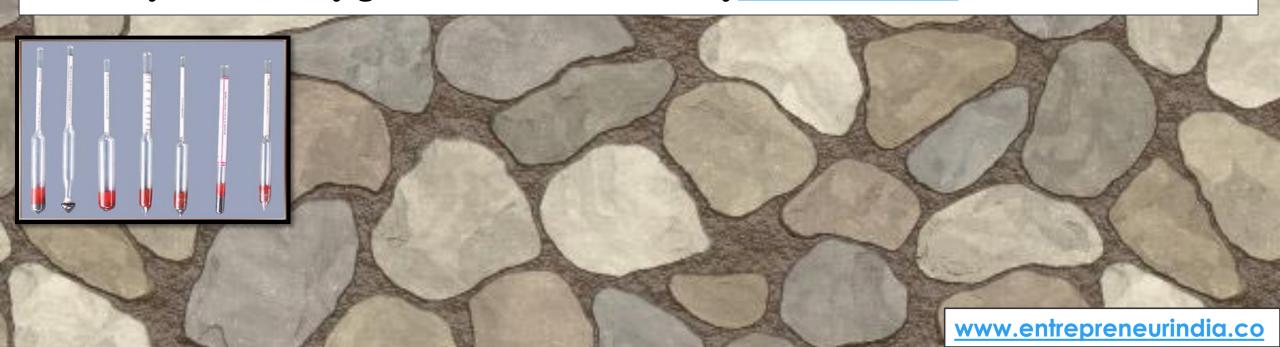
## **HOT AND COLD FUSION OF GLASS**





#### > GLASS DENSITY HYDROMETER

Glass is a brittle solid material at room temperature. It is believed that even its apparent solid state, it is actually a liquid. On heating, it first softness and then melts. Glass is manufactured at high temperatures i.e. 6000C-13000C. Density of glass is indirectly measured by gamma radiation indirectly......Read more





## > GLASS SHEET, FLAT GLASS, FLOAT GLASS





#### FLOAT GLASS

Glass is one of man's most valuable and versatile materials. About 700 different compositions are in thousands use. These are fabricated into tens of thousands of different articles that have combinations of properties for about a thousand essentially different uses. Glass is formed from those elements such as silicon, boron, phosphorous and arsenic that can be converted into glass when combined with oxygen, sulphur, tellurium or selenium.......Read more





#### > TOUGHENED GLASS





#### > GLASS BEADS MANUFACTURING

A unified system of classifying glasses used in the production of imitation jewellery has been produced. Glass bead is a handicraft item produced by skilled artisans out of block glass or clourful glass tubes rods. The glass beads made with sample machines and tools are used to make artificial jewellery and is used to decorate garments also......Read more





#### > OPTICAL LENSES

Eyeglass lenses are glass or plastic optical items that fit inside eyewear frames to enhance and/or correct the wearer's vision. Due to the increasing demand for eyewear, quartz and beryl lenses were virtually replaced by glass lenses. The convex lens was the first optical lens used in glasses to aid the correction of farsightedness, but other corrective lenses followed, including the concave lens for the correction of near-sightedness, and more complex lenses for the correction of astigmatism......Read more





## > GLASS BOTTLES FOR WINE





#### > GLASS BOTTLES FOR COSMETICS

Glass is so much a part of our daily life that we cannot imagine living without it. Glassware is used both by the consumer as well as by the Government and industry. The primary aim of packaging is to protect the product from air, light, heat, cold, moisture dust, dirt etc. There are three raw materials for glass making, viz. Silica Sand, Soda Ash and Lime......Read more





#### > HOLLOW GLASSWARE

Glass is an amorphous (non-crystalline) solid material which is often transparent and has widespread practical, technological, and decorative usage in things like window panes, tableware, and optoelectronics. The most familiar, and historically the oldest, types of glass are based on the chemical compound silica (silicon dioxide), the primary constituent of sand........Read more





#### > GLASS REINFORCED CONCRETE

Glass Reinforced Concrete is a composite consisting of a mortar of hydraulic cement & fine aggregate reinforced with alkali resistant glass fibres. GRC is a family of composite materials that combine the high compressive strength properties of cement mortars with significantly increased impact, hexural and tensile strengths imparted by the fibre reinforcement......Read more





#### > TEMPERING & TOUGHENING OF FLAT GLASS





### > GLASS SHEET (AUTOMATIC PLANT)

Glass is one of the man's most valuable and versatile materials. About 700 different compositions are in thousands use. Glass is formed from those elements such as silicon, boron, phosphorous and arsenic that can be converted into glass when combined with oxygen, sulphur, tellurium or selenium. Common glasses contains about 70% SiO2......Read more





> CONVERSION OF INDUSTRIAL VITRIFIED TILES INTO COMMERCIAL VITRIFIED TILES

Industrial vitrified tiles are largely used in the industrial floor or wall construction. In the industrial verification process tiles are not completely vitrified or properly heat soaked in the oven or in the kiln. Industrial vitrified tiles can be further used for good finishing and glassiness with colouring by using special oven treatment......Read more





#### > ARTIFICIAL MARBLE TILES

With the vast potential of plastics, artificial synthetic marble is virtually replacing the use of natural marble. The qualities of artificial synthetic marble are very much the same as those of natural marble. Synthetic marble is produced out of fillers and synthetic resin is used as binder.......Read more





#### > INSULATOR

Electricity play a vital role in the development and growth of Agriculture and Industry, As such, it is a high priority item for all the developing or developed nations. For the generation and distribution of Electricity, High Tension Insulators are an important adjusts. The substances, which strongly oppose flow of electrons through them, are termed as insulators......Read more





Glass Production, Glass Manufacturing Process, Glass Making Industry, Manufacture of Glass, Production of Glass, How Glass is Made?, Glass Manufacture, Composition and Production of Glass, Production Process of Glass, Glass Production & Processing, Glass Manufacturing Business, How to Start Glass Manufacturing Business, Toughened Glass Manufacturing Plant, Glass Manufacturing Plant Cost, Glass Factory Cost, Small Scale Glass Manufacturing Plant, Glass Factory Investment, Glass Industry, Glass Manufacturing Company in India, Glass Manufacturing Industry, Flat Glass Manufacturing Plant, Flat Glass Manufacturing Plant, Project Report on Toughened Glass Production, Flat Glass Manufacturing Project, Flat Glass Manufacturing Opportunity in India, Glass Manufacturing Business In India, Float Glass Production Line, Tempered Glass Production, Tempered Glass Making Business, Tempered Glass Manufacturing Business, Tempered Glass Production Plant, Manufacturing of Optical Glass, How to Manufacture Optical Glass, Production of Optical Glass, Optical Glass Manufacturing Process, Optical Glass Factory, Glass Sheet (Automatic Plant) Production Plant, Tempering & Toughening of Flat Glass, Glass Reinforced Concrete, Production of Hollow Glassware, Production of Glass Bottles For Cosmetics, Production of Glass Bottles for Wine,



How to Start Optical Lenses Manufacturing Business, Glass Beads Manufacturing Unit, Toughened Glass Production Business, Float Glass Production Plant, Glass Sheet, Flat Glass, Float Glass Manufacturing Business, Glass Density Hydrometer, Hot and Cold Fusion of Glass, Hollow Glass Manufacturing, Hollow Glassware Production, Glass Bead Making, Glass Bead Production, Glass Beads Manufacture, Lens Manufacturing Industry, Making of Optical Lenses, Optics Manufacturing Process, Glass Bottle Manufacturing Process, Glass Bottle Production, Glass Beads Manufacturing ideas, Projects on Small Scale Industries, Small scale industries projects ideas, Float Glass Production Based Small Scale Industries Projects, Project profile on small scale industries, How to Start Float Glass Production Industry in India, Glass production Projects, New project profile on Hollow Glassware production industries, Project Report on Hollow Glassware production Industry, Detailed Project Report on Glass production, Project Report on Float Glass Production, Pre-Investment Feasibility Study on Flat Glass Manufacturing, Techno-Economic feasibility study on Glass production, Feasibility report on Glass Beads Manufacturing, Free Project Profile on Float Glass Production, Project profile on Flat Glass Manufacturing, Download free project profile on Glass production





# 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



# Free Instant Online Project Identification and Selection Service

Our Team has simplified the process for you by providing a "Free Instant Online Project Identification & Selection" search facility to identify projects based on multiple search parameters related to project costs namely: Plant & Machinery Cost, Total Capital Investment, Cost of the project, Rate of Return% (ROR) and Break Even Point % (BEP). You can sort the projects on the basis of mentioned pointers and identify a suitable project matching your investment requisites.....Read more



#### **Download Complete List of Project Reports:**

#### Detailed Project Reports

NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our Market Survey cum Detailed Techno Economic Feasibility Report provides an insight of market in India. The report assesses the market sizing and growth of the 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

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,

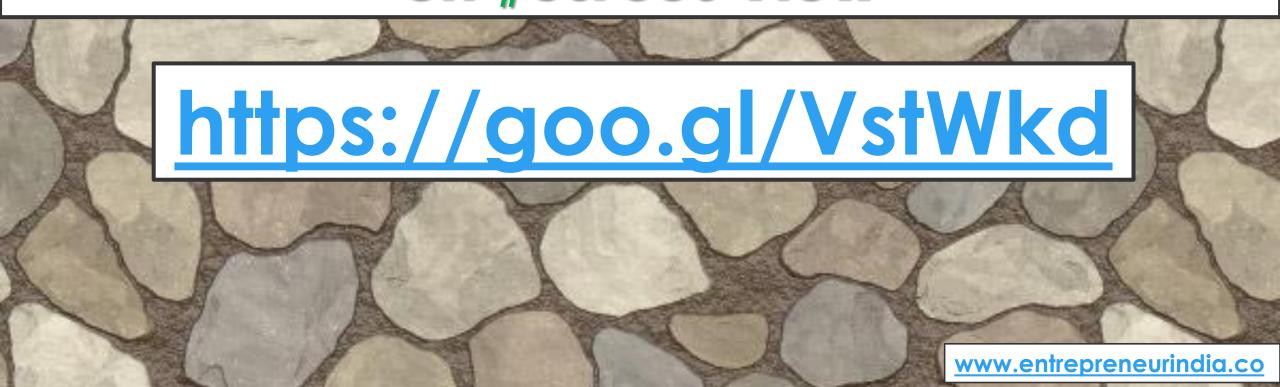


Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market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

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 India along with its business prospects......Read more











# Contact us

#### NIIR PROJECT CONSULTANCY SERVICES

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

Email: <u>npcs.ei@gmail.com</u>, <u>info@entrepreneurindia.co</u>

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

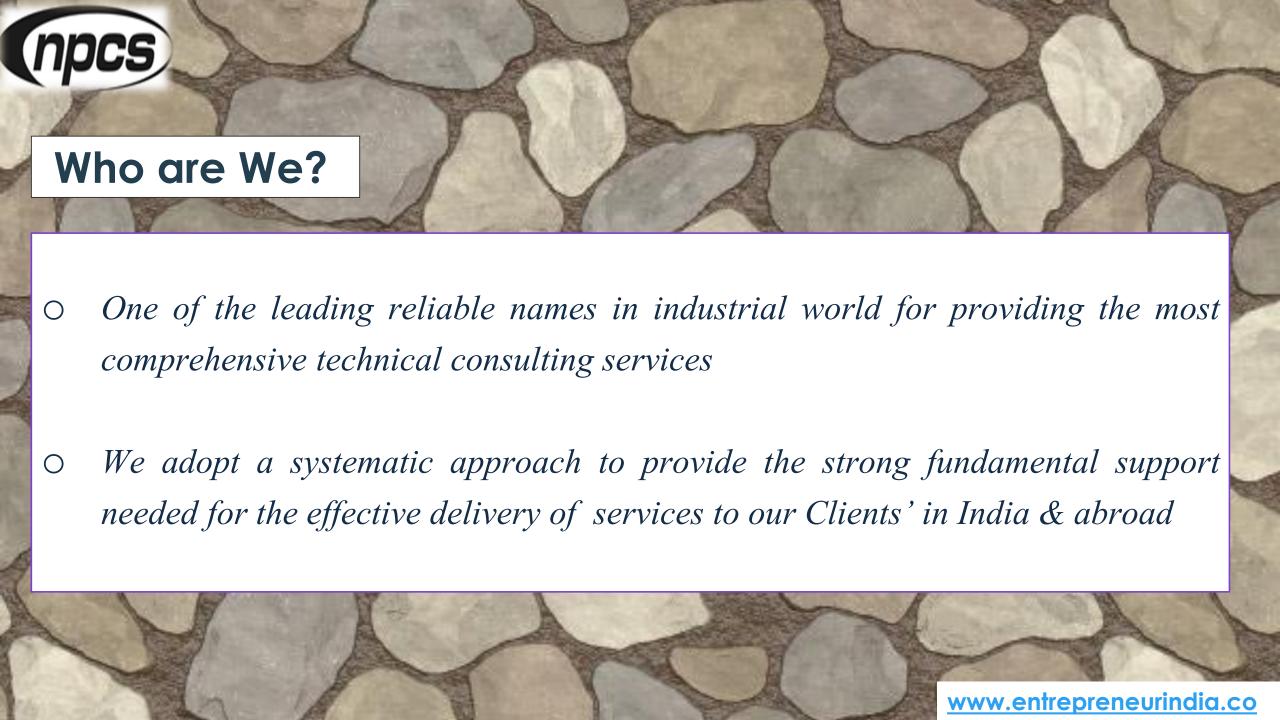
Mobile: +91-9811043595Fax: +91-11-23841561

Website: <u>www.entrepreneurindia.co</u>, <u>www.niir.org</u>

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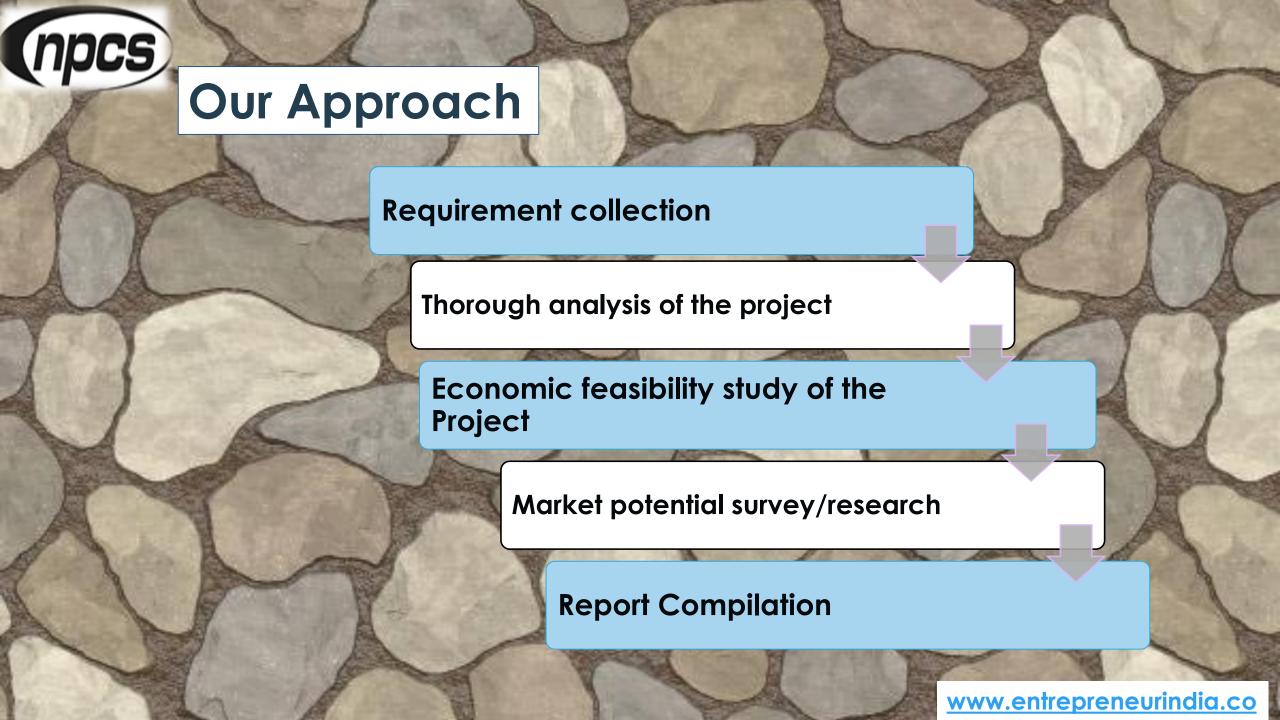
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- Laboratory Testing Services
- Turnkey Project Consultancy/Solutions
- Entrepreneur India (An Industrial Monthly Journal)



#### **How are We Different?**

- We have two decades long experience in project consultancy and market research field
- O 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





# Contact us

#### NIIR PROJECT CONSULTANCY SERVICES

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

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

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

Mobile: +91-9811043595

Website: www.entrepreneurindia.co, www.niir.org

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