



## Starting a Glass Fiber Reinforced Polymer (GFRP) Rebar

**Business: The Ultimate Guide** 

https://www.niir.org https://www.entrepreneurindia.co



## Product

Rebar made of Glass Fiber Reinforced Polymer (GFRP) is a brand-new, cutting-edge material that is used in building projects to boost strength, durability, and cost efficiency. Rebar made of glass fibre reinforced plastic (GFRP) offers an alternative to standard steel rebar with improved features like corrosion resistance, flexibility, lightweight, and low maintenance. Due to its many benefits, it is becoming more and more popular as a reinforcement material in construction projects.

> Visit this Page for more Information: <u>Start a</u> <u>Business in Glass Manufacturing Industry</u>



The location where GFRP rebar is produced is known as a GFRP rebar plant. A GFRP rebar plant's main elements are its structure, production method, machinery, and manpower. The construction of a GFRP rebar mill must be planned to meet the company's unique manufacturing requirements. Depending on the volume of production, the facility's size will vary, but it should be able to accommodate all required production tasks, such as mixing, forming, curing, testing, and finishing.

Related Business Plan: <u>Glass</u> <u>Fiber Reinforced Polymer</u> (GFRP) Rebar Manufacturing <u>Business</u>



www.entrepreneurindia.co





## **The Production Process**

Rebar made of glass fibre reinforced polymer (GFRP) is a more affordable and long-lasting reinforcement material for concrete constructions than typical steel rebar. You must be familiar with the production process before starting your own GFRP rebar company. This entails the choice and acquisition of raw materials, the manufacturing of GFRP rebar, and the distribution of the final good to clients.

www.entrepreneurindia.co



Choosing and buying raw materials is the initial step in the manufacturing process. This covers additives, resin, and glass fibre. Glass fibres need to be durable enough to endure the challenges of making rebar and have corrosion resistance. The glass fibres are joined together by means of resins. It is possible to utilize additives to enhance a variety of characteristics, including impact resistance, adhesion, and strength.

After choosing and purchasing the raw materials, they must be ready for use in the manufacturing process. The materials must be sorted, cut to the appropriate size, and weighed in accordance with the specifications. After that, they can be combined with resin and other additives to make GFRP rebar.

The GFRP mixture is extruded into the desired shape, wrapped around a steel rod for added support, and cured in a specific oven as part of the manufacturing process. The GFRP rebar is cut to length after curing, and any flaws or irregularities are checked for. The GFRP rebar must then be packaged for delivery and shipping.





## The Market For GFRP Rebar

Rebar made of glass fibre reinforced polymer (GFRP) is becoming a more and more common building material because it provides higher strength, corrosion resistance, and cost efficiency. The potential for a profitable Glass Fiber Reinforced Polymer (GFRP) Rebar business is growing as the demand for GFRP rebar keeps rising. The global GFRP rebar market is anticipated to grow to a value of US\$ 4.7 billion by 2024. A growing preference for the material in infrastructure projects, particularly in emerging nations, is anticipated to fuel market growth in this area. In addition, improvements in manufacturing techniques are making GFRP rebar production more accessible, which is supporting market expansion.



The structural and reinforced segments of the product market are anticipated to develop the fastest over the projected period. This can be ascribed to the rising demand for these materials due to the stronger buildings, increased safety, and lower maintenance costs they provide. Due to the demand for corrosion-resistant materials in industrial applications, the chemical and wastewater segments are also anticipated to rise. Moreover, GFRP rebar is becoming more popular among end users as a costeffective substitute for conventional steel and aluminium rebar. GFRP rebar is a very alluring solution for many industries due to its cheaper cost and higher performance. This is especially true in emerging markets, where tight budgets frequently require the employment of inexpensive solutions. These trends offer a highly favorable environment for business owners wishing to get into the GFRP rebar industry. It has never been more appealing to start a GFRP rebar business because there is a large market for it and plenty of space for expansion.

**Read Similar Articles:** <u>GLASS BASED PROJECTS</u>





## **The Business Case For GFRP Rebar**

In the building sector, glass fibre reinforced polymer (GFRP) rebar is gaining popularity as a steel rebar substitute for concrete reinforcement. GFRP rebar is more corrosion-resistant, lighter, and less expensive to install than steel rebar. This makes it a desirable option for construction companies searching for a practical approach to reinforce structures. For business owners wishing to launch their own GFRP rebar enterprise, GFRP rebar is an appealing alternative to steel rebar due to its advantages over the latter. There are numerous prospects for expansion, and the market potential is enormous.

The following are the key benefits of GFRP rebar: Europe is beginning to see the application of GFRP rebar in significant construction projects. It is currently in use in various countries.

• Resistance to corrosion - GFRP rebar is impervious to corrosion, in contrast to steel rebar, which can deteriorate quickly in some situations. This offers a longer service life and less expensive maintenance.

#### <u>www.niir.org</u>



• Lightweight - GFRP rebar is much lighter than steel rebar, which makes installation simpler and faster. This boosts productivity and lowers installation costs.

• Simple to transport GFRP rebar is much lighter than steel rebar, making it simpler and less expensive to move from one location to another.

• Economical - GFRP rebar is more reasonably priced than steel rebar, making it a more economical option for reinforcing concrete structures. For individuals wishing to enter the construction materials sector, GFRP rebar represents a fantastic business opportunity for all of the above reasons. Businesses have a great chance to profit from a market that is expanding quickly by using GFRP rebar for bridge decks and seismic retrofitting projects in countries like Italy and Spain due to its superior performance and reduced costs. Moreover, GFRP rebar is being utilized in France and Germany to construct energy infrastructure and stop coastal

#### erosion.

#### <u>www.niir.org</u>

www.entrepreneurindia.co



Asia is a second region that has begun using GFRP rebar in its projects. Japan is especially interested in this technology due to the earthquake-prone nature of its infrastructure. Thailand, China, and India are just a few of the countries employing GFRP rebar in their construction projects. In conclusion, GFRP rebar is increasingly in demand around the world.

> Read our Books Here: <u>The Complete Technology</u> <u>Book on Fibre Glass, Optical Glass and</u> <u>Reinforced Plastics</u>



## **Uses and Applications**

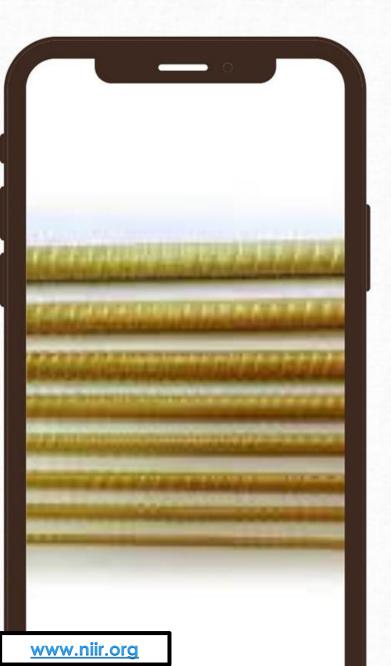
Rebar that has been reinforced with glass fibres and polymers is known as glass fibre reinforced polymer (GFRP) rebar. Contractors are using this form of rebar more frequently as a result of the benefits it provides over conventional steel rebar. GFRP Rebar can be used in a wider range of applications and has a substantially greater tensile strength and fatigue life than steel rebar. Highways, bridges, parking garages, high-rise skyscrapers, and any other structure requiring high tensile strength can all be built with GFRP Rebar. Moreover, it can be utilized to strengthen masonry and concrete structures, enhancing their corrosion resistance and durability. In addition to being considerably lighter than steel rebar, GFRP Rebar is also easily cuttable, drillable, and bendable. Also, unlike steel rebar, GFRP rebar doesn't need to be coated with epoxy and is simple to transport because it doesn't need any additional bracing or supports.



## Benefit Of Starting Glass Fiber Reinforced Polymer (GFRP) Rebar Business

Due to its strength and flexibility, glass fibre reinforced polymer (GFRP) rebar is becoming a more and more common building material. A form of fiber-reinforced composite called GFRP is utilized in concrete and other construction-related applications. It is perfect for reinforcing concrete constructions due to its low weight, strength, and resistance to corrosion. There are many advantages for business owners who start GFRP Rebar businesses.





The possibility for cost savings is one of the main advantages of beginning a Glass Fiber Reinforced Polymer (GFRP) Rebar business. Because GFRP Rebar is substantially lighter than steel, it can be moved more readily and installed with less effort. As GFRP Rebar has a great resistance to corrosion, it also needs less maintenance. This enables companies to spend less time and money on maintenance and repairs. A GFRP Rebar company also has the advantage of being very durable. Since GFRP is not magnetic, it does not rust like steel rebar does. It can tolerate extremely high and low temperatures as well as harsh climatic conditions without breaking or cracking. It also has outstanding tensile strength. Because of this, GFRP Rebar is a great option for projects requiring long-term performance.

> **Related Feasibility Study Reports:** <u>Glass Fiber Reinforced</u> <u>Polymer (gfrp) Rebar Manufacturing Business</u>

> > www.entrepreneurindia.co



Finally, GFRP Rebar is safe for the environment. Businesses using it will have less of an environmental impact than those using steel rebar since it emits fewer greenhouse gas emissions. Moreover, GFRP Rebar may be recycled, enabling repeated usage and assisting in the reduction of waste. Finally, establishing a Glass Fiber Reinforced Polymer (GFRP) Rebar business can provide companies a number of advantages. They include lower total environmental impact, increased durability, and cost savings. As a result, companies aiming to improve their sustainability and efficiency should think about investing in GFRP Rebar technology.

Watch other Informative Videos: <u>Production of Glass Fiber</u>
<u>| Investment Opportunities in Composites Industry</u>



## **KEY PLAYERS**

- Hughes Brothers Inc.
- Marshall Composites Systems
- BP Composites Ltd
- Schock international
- Pultrall Inc.
- Neuvokas Corp

- Composite Rebar Technologies (CRT)
- Technobasalt Invest LLC
- Sireg Geotech Srl
- Fibrolux GmbH
- Armastek
- Dextra Group



# PROJECT



# **GLANCE**

www.entrepreneurindia.co

<u>www.niir.org</u>

| COST OF PROJECT |
|-----------------|
|-----------------|

#### **MEANS OF FINANCE**

| Particulars                    | Existing | Proposed | Total   | Particulars                 | Existing | Proposed | Total   |
|--------------------------------|----------|----------|---------|-----------------------------|----------|----------|---------|
| Land & Site Development Exp.   | 0.00     | 620.00   | 620.00  | Capital                     | 0.00     | 1524.27  | 1524.27 |
| Buildings                      | 0.00     | 444.00   | 444.00  | Share Premium               | 0.00     | 0.00     | 0.00    |
| Plant & Machineries            | 0.00     | 588.00   | 588.00  | Other Type Share Capital    | 0.00     | 0.00     | 0.00    |
| Motor Vehicles                 | 0.00     | 15.00    | 15.00   | Reserves & Surplus          | 0.00     | 0.00     | 0.00    |
| Office Automation Equipments   | 0.00     | 46.00    | 46.00   | Cash Subsidy                | 0.00     | 0.00     | 0.00    |
| Technical Knowhow Fees & Exp.  | 0.00     | 40.00    | 40.00   | Internal Cash Accruals      | 0.00     | 0.00     | 0.00    |
| Franchise & Other Deposits     | 0.00     | 0.00     | 0.00    | Long/Medium Term Borrowings | 0.00     | 4572.80  | 4572.80 |
| Preliminary& Pre-operative Exp | 0.00     | 10.00    | 10.00   | Debentures / Bonds          | 0.00     | 0.00     | 0.00    |
| Provision for Contingencies    | 0.00     | 53.80    | 53.80   | Unsecured Loans/Deposits    | 0.00     | 0.00     | 0.00    |
| Margin Money - Working Capital | 0.00     | 4280.26  | 4280.26 |                             |          |          |         |
| TOTAL                          | 0.00     | 6097.06  | 6097.06 | TOTAL                       | 0.00     | 6097.06  | 6097.06 |

| Year | Annualised |       | Book<br>Value | Debt  | Dividend  | Retained I | Earnings | Payout | Probable<br>Market Price | P/E Ratio   | Yield Price/ Book<br>Value |
|------|------------|-------|---------------|-------|-----------|------------|----------|--------|--------------------------|-------------|----------------------------|
|      | EPS        | CEPS  | Per Share     |       | Per Share | Per Share  |          |        |                          | No.of Times |                            |
|      |            |       |               |       |           |            |          |        |                          |             |                            |
|      | `          | `     | •             | `     | `         | %          |          | %      | `                        |             | %                          |
|      |            |       |               |       |           |            |          |        |                          |             |                            |
| 1-2  | 8.99       | 9.97  | 18.99         | 24.00 | 0.00      | 100.00     | 8.99     | 0.00   | 8.99                     | 1.00        | 0.00                       |
| 2-3  | 10.81      | 11.66 | 29.80         | 18.00 | 0.00      | 100.00     | 10.81    | 0.00   | 10.81                    | 1.00        | 0.00                       |
| 3-4  | 13.10      | 13.84 | 42.90         | 12.00 | 0.00      | 100.00     | 13.10    | 0.00   | 13.10                    | 1.00        | 0.00                       |
| 4-5  | 15.40      | 16.04 | 58.29         | 6.00  | 0.00      | 100.00     | 15.40    | 0.00   | 15.40                    | 1.00        | 0.00                       |
| 5-6  | 17.67      | 18.24 | 75.97         | 0.00  | 0.00      | 100.00     | 17.67    | 0.00   | 17.67                    | 1.00        | 0.00                       |

| Year    | D. S. C. R. |            |         | Debt / -<br>Deposits<br>Debt | Equity as-<br>Equity | Total Net<br>Worth | Return on<br>Net Worth | Profitability | / Ratio        |       |                         |           | Assets<br>Turnover<br>Ratio | Current<br>Ratio |
|---------|-------------|------------|---------|------------------------------|----------------------|--------------------|------------------------|---------------|----------------|-------|-------------------------|-----------|-----------------------------|------------------|
|         | Individual  | Cumulative | Overall |                              |                      |                    |                        | GPM           | PBT            | ΡΑΤ   | Net<br>Contributi<br>on | P/V Ratio |                             |                  |
|         |             |            |         |                              | f #inc c c)          | 97                 | %                      | %             | %              | %     |                         | %         |                             |                  |
|         | (Number of  | i iimes)   |         | (Number o                    | i iimes)             | %                  | 70                     | 70            | 70             | /0    |                         | 70        |                             |                  |
| Initial |             |            |         | 3.00                         | 3.00                 |                    |                        |               |                |       |                         |           |                             |                  |
| 1-2     | 1.45        | 1.45       |         | 1.26                         | 1.26                 | 12.38              |                        | 2.16%         | 0.99%          | 0.63% | 6616.86                 | 3.06%     | 5.58                        | 1.12             |
|         |             |            |         |                              |                      |                    |                        |               |                |       |                         |           |                             |                  |
| 2-3     | 1.69        | 1.57       |         | 0.60                         | 0.60                 | 8.77               |                        | 2.19%         | 1.03%          | 0.65% | 6477.61                 | 2.57%     | 5.68                        | 1.13             |
| 3-4     | 2.03        | 1.71       | 2.05    | 0.28                         | 0.28                 | 6.77               |                        | 2.21%         | 1.09%          | 0.69% | 7373.41                 | 2.56%     | 5.67                        | 1.14             |
| 4-5     | 2.44        | 1.87       |         | 0.10                         | 0.10                 | 5.48               |                        | 2.22%         | 1.1 <b>4</b> % | 0.72% | 8269.21                 | 2.55%     | 5.63                        | 1.16             |
| 5-6     | 2.92        | 2.05       |         | 0.00                         | 0.00                 | 4.58               |                        | 2.23%         | 1.18%          | 0.75% | 9165.01                 | 2.55%     | 5.57                        | 1.19             |

| BEP   |                  |
|---|------------------|
| BEP - Maximum Utilisation Year              | 5                |
| BEF - Maximum Unisation real                | 5                |
|   |                  |
| Cash BEP (% of Installed Capacity)          | 50.34%           |
|   |                  |
| Total BEP (% of Installed Capacity)         | 51.28%           |
|   |                  |
|   |                  |
| IRR, PAYBACK and FACR                       |                  |
|   |                  |
| Internal Rate of Return ( In %age )         | 33.67%           |
|   |                  |
|   |                  |
|   |                  |
| Payback Period of the Project is (In Years) | 2 Years 3 Months |
|   |                  |
|   |                  |

Fixed Assets Coverage Ratio (No. of times)

285.464



# 



# CONTENTS

www.entrepreneurindia.co



### 1.INTRODUCTION 2.COMPOSITION OF MAIZE

1.Starch

2.Structural unit

1.Maize (Corn) Oil 2.Maize (Corn) Gluten 3.Maize (Corn) Fiber

#### **3.IMPORTANCE OF THE PROPOSED PROJECT**

**1.Basic Raw Material Required** 

**2.Other Raw Materials** 

#### **4.PRODUCT DETAILS**

#### **1.Maize Starch**

1.Uses

2. Properties & Characteristics

#### 2.Liquid Glucose

1. Structure of Glucose

2. Isomers

3. Physical and Chemical Data of Liquid Glucose (Acid Converted)

<u>www.niir.org</u>

••••4.Specification

- 5.Uses
- 6.Freezing Point Depressant

#### 3.DEXTROSE

1.Dextrose Monohydrate 2.Dextrose Anhydrous 3.Properties of Anhydrous Dextrose

#### **4.MALTODEXTRINS**

1.Properties

2.Structure

3.Uses

### **5.B.I.S. SPECIFICATIONS**

1.IS 1005: 1992 (Reaffirmed Year: 2018) Edible Maize Starch

(Corn Flour)

2.IS 16518: 2018 Maize — Specification

3.IS 2151: 1985 (Reaffirmed Year: 2019) Maize Germ Oilcake as

**Livestock Feed Ingredient** 

4.IS 2152: 2013 (Reaffirmed Year: 2018) Maize Gluten as

Livestock Feed Ingredient



### **6.MARKET SURVEY**

- **1** Maize Starch
  - 2.Liquid Glucose
  - 3.Maltodextrin
  - **4.Maltodextrin Market Segments** 
    - **1.By Source**
    - 2.By Form
    - **3.By Application**
    - 4.By Region
- 7.EXPORT & IMPORT: ALL COUNTRIES
  - **1.Export: All Countries** 
    - 1.Maize (Corn)
    - 2.Starch of Maize (Corn)
    - **3.Glucose Liquid**
    - 4.Germ of Cerls Whole Rolld Flaked or Ground
    - **5.Dextrose Other Than Solid**
    - 6.Resdus of Starch Mnufctr and Smlr Residues



#### 2.1mport: All Countries

1.Maize (Corn)

2.Starch of Maize (Corn)

3.Glucose Liquid

4.Germ of Cerls Whole Rolld Flaked or Ground

5.Dextrose Other Than Solid

6.Resdus of Starch Mnufctr and Smlr Residues

#### 8.FINANCIALS & COMPARISON OF MAJOR INDIAN PLAYERS/COMPANIES

**1.About Financial Statements of CMIE Database** 

2. Profits & Appropriations

**3.Total Liabilities** 

**4.Total Assets** 

#### **5.Net Cash Flow from Operating Activities**

6.Section – I

1.Name of Company with Contact Details
2.Name of Director(S)
3.Plant Capacity
4.Location of Plant
5. Name of Days Material(S) Consumed with O

5.Name of Raw Material(S) Consumed with Quantity & Cost







2:Section-II 1.Assets <sup>•</sup>2.Cash Flow 3.Cost as % Ge of Sales 4. Forex Transaction 5. Growth in Assets & Liabilities 6.Growth in Income & Expenditure 7.Income & Expenditure 8.Liabilities 9.Liquidity Ratios 10.Profitability Ratio **11.Profits** 12.Return Ratios 13.Structure of Assets & Liabilities (%) 14.Working Capital & Turnover Ratios 9.COMPANY PROFILE OF MAJOR PLAYERS **10.EXPORT & IMPORT STATISTICS OF INDIA 1.Export Statistics of Maize Starch** 

**2.Import Statistics of Maize Starch** 

**3.Export Statistics of Liquid Glucose** 





- **4.Import Statistics of Liquid Glucose**
- 5.Emport Statistics of Maltodextrin 6.Import Statistics of Maltodextrin 7.Export Statistics of Gluten 8.IMport Statistics of Gluten
- **11.PRESENT MANUFACTURERS**
- **12.RAW MATERIAL**
- **13.MAIZE PROCESSING PLANT** 
  - **1.Manufacturing Process of Starch**
  - **2.Process Flow Diagram of Starch**
  - 3. Manufacturing Process of Liquid Glucose, Dextrose & Maltodextrin
  - 4. Process Flow Diagram of Liquid Glucose, Dextrose & Maltodextrin
- **14.DETAIL LIST OF MACHINERY** 
  - **1.Maize Processing Plant**
  - 2.Liquid Glucose Plant
  - **3.Malto Dextrin Powder Plant & Machineries**
  - 4.Dextrose Anhydrous Plant & Machineries



••••

#### . . . .

• 5:Other Machinery Details

#### **15.EFFLUENT TREATMENT PLANT**

1.Preliminary Treatment Level 2.Secondary Treatment Level 3.Tertiary/Advanced Treatment

4.Flow Chart for ETP

#### **16.CAPTIVE POWER PLANTS**

1.Segmentation of Captive Power Plants 2.Need for Captive Power Plant in the Country 3.Plant & Machinery 17.CO-GENERATION PLANT

**1.Combined Heat and Power** 

**2.Prime Movers for Cogeneration** 



<u>www.niir.org</u>



- • •
- . . . .
- ••••

#### 18.SUPPLIERS OF PLANT & MACHINERY 19.SUPPLIERS OF RAW MATERIAL 20.PHOTOGRAPHS/IMAGES FOR REFERENCE 1.Machinery Photographs

- 2.Raw Material Photographs
- 3.Product Photographs
- **21.PLANT LAYOUT**

## 22.QUOTATION OF PLANT, MACHINERY AND EQUIPMENTS FROM SUPPLIER



## **Financial Statements of the Business**

| • | Project at a Glance                        | Annexure |
|---|--|----------|
| • | Assumptions for Profitability workings     | 1        |
| • | Plant Economics                            | 2        |
| • | Production Schedule                        |          |
| • | Land & Building<br>Factory Land & Building | 4        |
|   | Site Development Expenses                  |          |





| • | Plant & Machinery5                                 |
|---|--|
|   | Indigenous Machineries                             |
|   | Other Machineries (Miscellaneous, Laboratory etc.) |

| • | Other Fixed Assets                     |
|---|--|
|   | Furniture & Fixtures                   |
|   | Pre-operative and Preliminary Expenses |
|   | Technical Knowhow                      |
|   | Provision of Contingencies             |
| • | Working Capital Requirement Per Month7 |
|   | Raw Material                           |
|   | Packing Material                       |
|   | Lab & ETP Chemical Cost                |
|   | Consumable Store                       |







www.entrepreneurindia.co







- Annexure 1 :: Cost of Project and Means of Finance
- Annexure 2 :: Profitability and Net Cash Accruals
- Revenue/Income/Realisation
- Expenses/Cost of Products/Services/Items
- Gross Profit
- Financial Charges
- Total Cost of Sales
- Net Profit After Taxes
- Net Cash Accruals







- Annexure 3 :: Assessment of Working Capital requirements
- **Current Assets**
- **Gross Working Capital**
- **Current Liabilities**
- **Net Working Capital**
- Working Note for Calculation of Work-in-process
- Annexure 4 :: Sources and Disposition of Funds









### • Annexure 5 :: Projected Balance Sheets

- ROI (Average of Fixed Assets)
  RONW (Average of Share Capital)
  ROI (Average of Total Assets)
- Annexure 6 :: Profitability Ratios
- **D.S.C.R**
- Earnings Per Share (EPS)
  Debt Equity Ratio

www.entrepreneurindia.co







• Annexure 7 :: Break-Even Analysis

- Variable Cost & Expenses
- Semi-Variable/Semi-Fixed Expenses
- Profit Volume Ratio (PVR)
- Fixed Expenses / Cost
- **B.E.P**









• Annexure 8 to 11 :: Sensitivity Analysis-Price/Volume

- Resultant N.P.B.T
- Resultant D.S.C.R
- Resultant PV Ratio
- Resultant DER
- Resultant ROI
- Resultant BEP









- Annexure 12 :: Shareholding Pattern and Stake Status
- Equity Capital
- Preference Share Capital
- Annexure 13 :: Quantitative Details-Output/Sales/Stocks
- Determined Capacity P.A of Products/Services
- Achievable Efficiency/Yield % of Products/Services/Items
- Net Usable Load/Capacity of Products/Services/Items
- Expected Sales/ Revenue/ Income of Products/ Services/ Items









**Product wise Domestic Sales Realisation** Annexure 14 •• **Total Raw Material Cost** Annexure 15 ••• Annexure 16 **Raw Material Cost per unit** ••• **Total Lab & ETP Chemical Cost** Annexure 17 ••• **Consumables, Store etc.** Annexure 18 ••• **Packing Material Cost** Annexure 19 ••• **Packing Material Cost Per Unit** Annexure 20 •••







- Annexure 21 :: Employees Expenses
- Annexure 22 :: Fuel Expenses
- Annexure 23 :: Power/Electricity Expenses
- Annexure 24 :: Royalty & Other Charges
- Annexure 25 :: Repairs & Maintenance Expenses
- Annexure 26 :: Other Manufacturing Expenses
- Annexure 27 :: Administration Expenses
- Annexure 28 :: Selling Expenses

www.entrepreneurindia.co







- Annexure 29 :: Depreciation Charges as per Books (Total)
- Annexure 30 :: Depreciation Charges as per Books (P & M)
- Annexure 31 :: Depreciation Charges as per IT Act WDV (Total)
- Annexure 32 :: Depreciation Charges as per IT Act WDV (P & M)
- Annexure 33 :: Interest and Repayment Term Loans
- Annexure 34 :: Tax on Profits
- Annexure 35 :: Projected Pay-Back Period and IRR









**#BusinessIdeas #StartupBusinessIdea #EntrepreneurIndia #NPCSProjects #Startup #Business #BusinessConsultant #ProjectReport #BusinessPlan #BusinessIdeas** #ManufacturingBusinessIdeas #IndianLeatherIndustry #LeatherIndustryinIndia #BusinessOpportunities **#BusinessGrowth #LeatherIndustry** 









- 1. How has the Glass Fiber Reinforced Polymer (GFRP) Rebar industry performed so far and how will it perform in the coming years?
- 2. What is the Business Feasibility Study of the Glass Fiber Reinforced Polymer (GFRP) Rebar Plant?
- 3. What are the requirements of Working Capital for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?





- 4. What is the structure of the Glass Fiber Reinforced Polymer (GFRP) Rebar industry and who are the key/major players?
- 5. What is the total Startup cost for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 6. What are the operating costs for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 7. What are the machinery and equipment requirements for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?

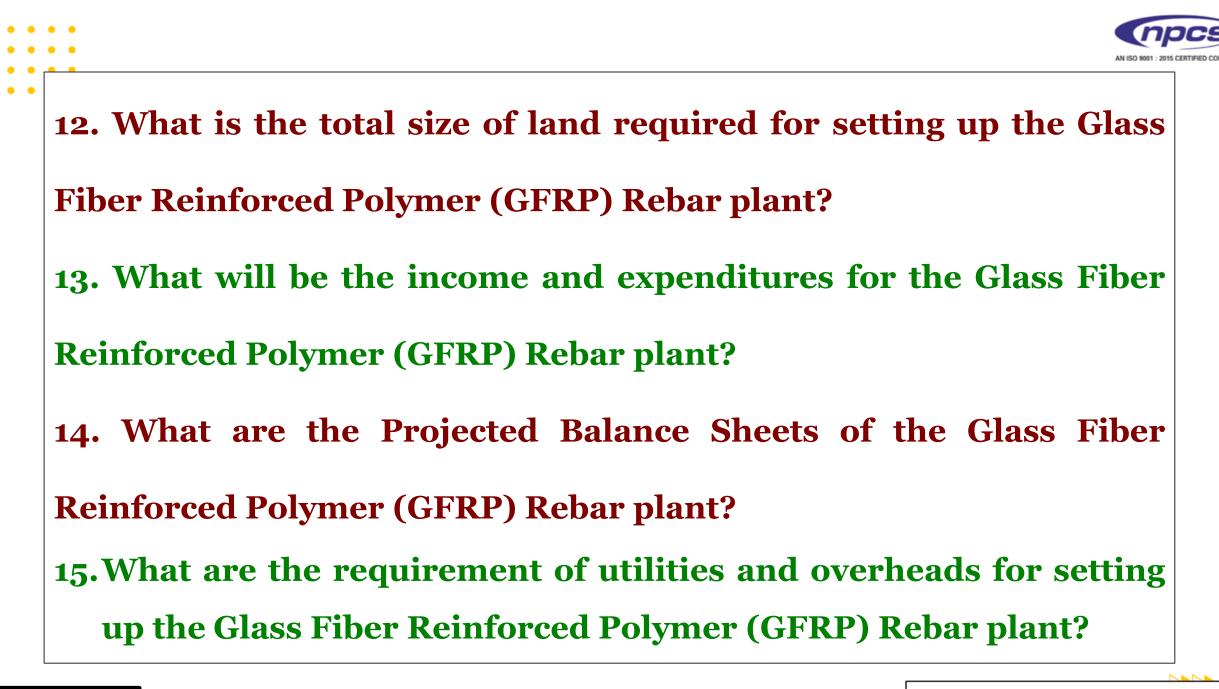


8. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?

**9.** What are the requirements of raw material for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?

10. Who are the Suppliers and Manufacturers of Raw materials for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?

11. What is the Manufacturing Process of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?





- ••••
- 16. What is the Built up Area Requirement and cost for setting up the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 17. What are the Personnel (Manpower) Requirements for setting up the
- **Glass Fiber Reinforced Polymer (GFRP) Rebar plant?**
- 18. What are Statistics of Import & Export for the Glass Fiber Reinforced
- **Polymer (GFRP) Rebar Industry?**
- 19. What is the time required to break-even?
- 20.What is the Break-Even Analysis of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?



- 21. What are the Project financials of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 22. What are the Profitability Ratios of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 23. What is the Sensitivity Analysis-Price/Volume of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
- 24. What are the Projected Pay-Back Period and IRR of the Glass
- Fiber Reinforced Polymer (GFRP) Rebar plant?
- **25.** What is the Process Flow Sheet Diagram of the Glass Fiber Reinforced Polymer (GFRP) Rebar plant?



26. What are the Market Opportunities for setting up the Glass
Fiber Reinforced Polymer (GFRP) Rebar plant?
27. What is the Market Study and Assessment for setting up the
Glass Fiber Reinforced Polymer (GFRP) Rebar plant?
28.What is the Plant Layout for setting up the Glass Fiber
Reinforced Polymer (GFRP) Rebar plant?



## For more Business Plans and further details, visit at:

## **Project Reports & Profiles**

## **BOOKS & DATABASES**

Market Research Report

www.entrepreneurindia.co

www.niir.org





Looking for a Startup Consulting Services, Click Here





Start a Business in Africa, <u>Click Here</u>



Start a Business in India, <u>Click Here</u>



Start a Business in Middle East, Click Here



Start a Business in Asia, <u>Click Here</u>



Start a Business in Potential Countries for Doing Business, <u>Click Here</u>



**Best Industry for Doing Business,** <u>Click Here</u>



Business Ideas with Low, Medium & High Investment, Click Here



Looking for Most Demandable Business Ideas for Startups, <u>Click Here</u>







www.entrepreneurindia.co

www.niir.org





- ✓ The Business Plan 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 Business Plan provides vital information on the product like it's characteristics and segmentation
- $\checkmark$  This Business Plan helps you market and place the product correctly
  - by identifying the target customer group of the product







 $\checkmark$  This Business Plan helps you understand the viability of the

project by disclosing details like machinery required, project

costs and snapshot of other project financials

- ✓ The Business Plan provides a glimpse of government regulations applicable on the industry
- $\checkmark$  The Business Plan provides forecasts of key parameters which

helps anticipate the industry performance and make sound

**business decisions** 







www.entrepreneurindia.co





- 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





### **How to Choose The Right Business For You?**

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 Businesses 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 Business Ideas on the basis of mentioned pointers and identify a suitable Business Plan matching your investment requisites......Read more





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

- Detailed Project Reports
- Visit:-<u>https://www.entrepreneurindia.co/complete-project-list</u>

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 Business Plan 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.....<u>Read more</u>







A trusted and leading name in the industry, we have been putting forth exceptionally integrated and comprehensive technical consultancy services. We believe that project consultancy serves as a critical element for the success of your projects. Moreover, we keep in mind that no client is the same and nor are the requirements. Therefore, we ensure uniqueness in every service you avail from us.



## What do we offer?



- Selection of Right Business Ideas For You (Project Identification)
- Detailed Project Reports/Pre-feasibility Reports
- Market Research Reports
- Business Plan
- Function Content of Content of
- > Industry Trend
- Databases on CD-ROM
- Laboratory Testing Services
- Turnkey Project Consultancy/Solutions
- Entrepreneur India (An Industrial Monthly Journal)





- 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



# (npcs)

### Who do we Serve?

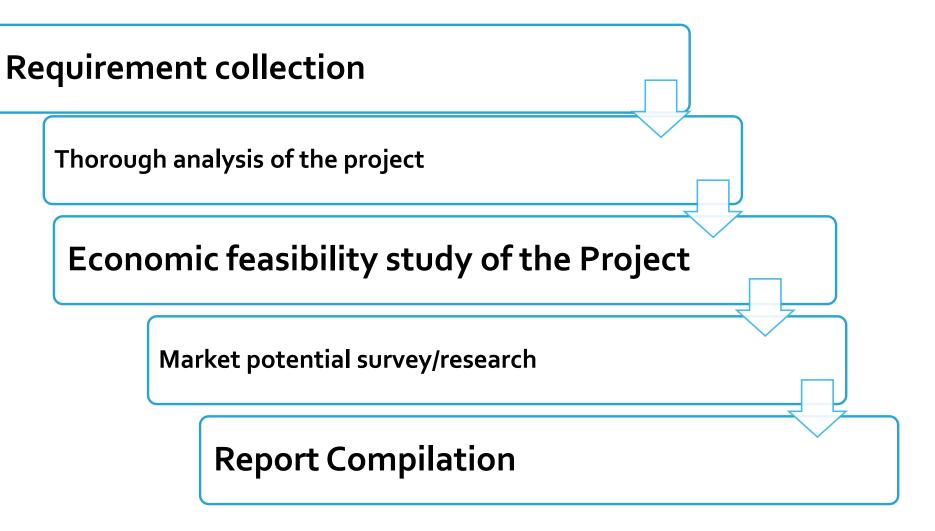
- Public-sector Companies
- Corporates
- Government Undertakings
- Individual Entrepreneurs
- o NRI's
- Foreign Investors
- Non-profit Organizations, NBFC's
- Educational Institutions
- Embassies & Consulates
- Consultancies
- Industry / trade associations



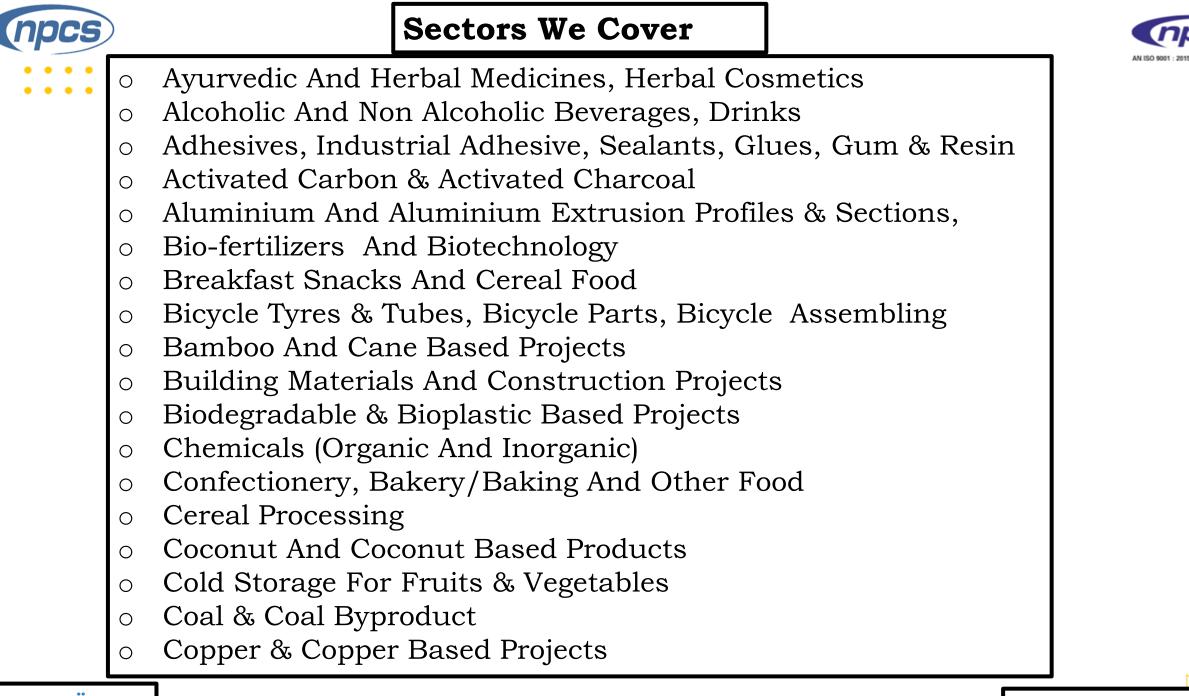












| npcs         | Sectors We Cover Cont  | (npcs)                               |
|--------------|--|--------------------------------------|
| • • • •      | <ul> <li>Dairy/Milk Processing</li> </ul>                                  | AN ISO 9001 : 2015 CERTIFIED COMPANY |
|              | o Disinfectants, Pesticides, Insecticides, Mosquito Repellents,            |                                      |
|              | <ul> <li>Electrical, Electronic And Computer based Projects</li> </ul>     |                                      |
|              | <ul> <li>Essential Oils, Oils &amp; Fats And Allied</li> </ul>             |                                      |
|              | <ul> <li>Engineering Goods</li> </ul>                                      |                                      |
|              | <ul> <li>Fibre Glass &amp; Float Glass</li> </ul>                          |                                      |
|              | <ul> <li>Fast Moving Consumer Goods</li> </ul>                             |                                      |
|              | <ul> <li>Food, Bakery, Agro Processing</li> </ul>                          |                                      |
|              | <ul> <li>Fruits &amp; Vegetables Processing</li> </ul>                     |                                      |
|              | <ul> <li>Ferro Alloys Based Projects</li> </ul>                            |                                      |
|              | <ul> <li>Fertilizers &amp; Biofertilizers</li> </ul>                       |                                      |
|              | <ul> <li>Ginger &amp; Ginger Based Projects</li> </ul>                     |                                      |
|              | <ul> <li>Herbs And Medicinal Cultivation And Jatropha (Biofuel)</li> </ul> |                                      |
|              | <ul> <li>Hotel &amp; Hospitability Projects</li> </ul>                     |                                      |
|              | <ul> <li>Hospital Based Projects</li> </ul>                                |                                      |
|              | <ul> <li>Herbal Based Projects</li> </ul>                                  |                                      |
|              | <ul> <li>Inks, Stationery And Export Industries</li> </ul>                 |                                      |
|              | <ul> <li>Infrastructure Projects</li> </ul>                                |                                      |
|              | <ul> <li>Jute &amp; Jute Based Products</li> </ul>                         |                                      |
| www.niir.org |  | www.entrepreneurindia.co             |





- o 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
  - o Organic Farming, Neem Products Etc.
  - o 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
  - o 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
- $\circ$   $\,$  Spices And Snacks Food  $\,$
- Steel & Steel Products
- o 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









- To get a detailed scenario of the industry along with its structure and classification
  - To provide a comprehensive analysis of the industry by covering aspects like:
    - Growth drivers of the industry
    - Latest market trends
    - Insights on regulatory framework
    - SWOT Analysis
    - Demand-Supply Situation
    - Foreign Trade
    - Porters 5 Forces Analysis
  - To provide forecasts of key parameters which helps to anticipate the industry performance
  - To help chart growth trajectory of a business by detailing the factors that affect the industry growth
  - To help an entrepreneur/manager in keeping abreast with the changes in the industry
- To evaluate the competitive landscape of the industry by detailing:
  - Key players with their market shares
  - Financial comparison of present players







- Venturist/Capitalists
- Entrepreneur/Companies
- Industry Researchers
- Investment Funds
- Foreign Investors, NRI's
- Project Consultants/Chartered Accountants
- Banks
- Corporates

**<u>Click here for list</u>** 

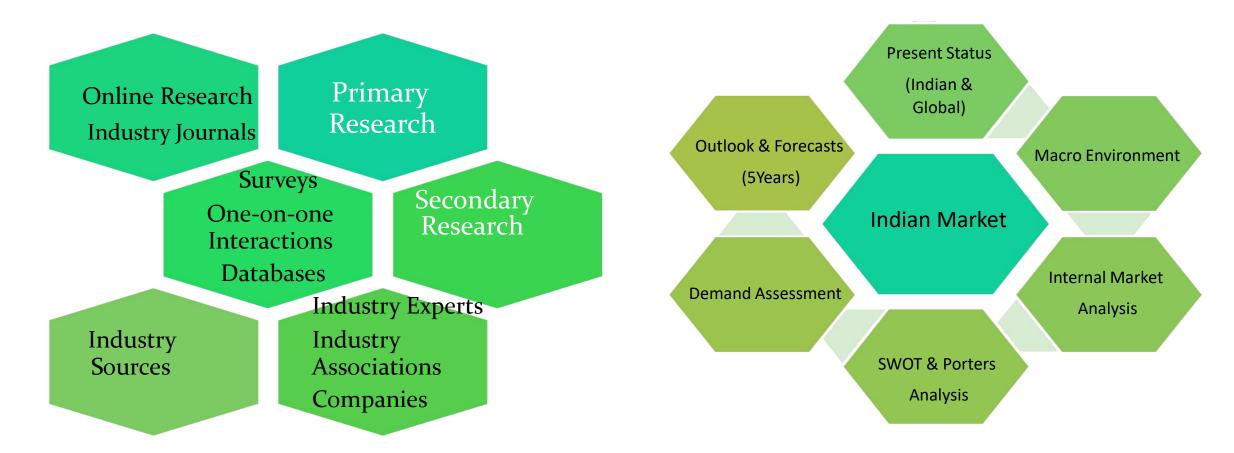














www.niir.org







∞Our research team comprises of experts from various financial fields:
∞MBA's

Industry Researchers

∞Financial Planners

 $\infty$ Research veterans with decades of experience











# www.entrepreneurindia.co











# Take a look at NIIR PROJECT CONSULTANCY SERVICES on #Street View

google-street-view

Locate us on Google Maps







www.niir.org





## **Contact US** *NIIR PROJECT CONSULTANCY SERVICES* Entrepreneur India

- 106-E, Kamla Nagar, Opp. Mall ST,
- New Delhi-110007, India.
- Email: <u>npcs.ei@gmail.com</u> , <u>info@entrepreneurindia.co</u>
- Tel: +91-11-23843955, 23845654, 23845886
- Mobile: +91-9097075054, 8800733955
- Fax: +91-11-23845886
- Website : <u>www.entrepreneurindia.co</u> , <u>www.niir.org</u>
- Take a look at NIR PROJECT CONSULTANCY SERVICES on #StreetView

google-street-view









https://www.linkedin.com/company/niir-projectconsultancy-services



https://www.facebook.com/NIIR.ORG



https://www.youtube.com/user/NIIRproject



https://twitter.com/npcs\_in



https://www.pinterest.com/npcsindia/



https://www.instagram.com/







### For more information, visit us at:

www.entrepreneurindia.co

www.niir.org