

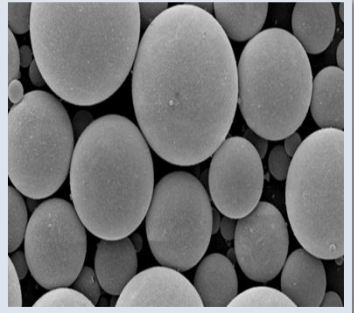


Flyash based Value Added Products,

Coal Ash utilization,

Fly Ash as Raw Material,

Products from Waste





Introduction

Fly ash is a fine powder substance which is a by-product of electric generation power plants produced by burning of pulverized coal. Fly ash contains aluminous and siliceous material that forms cement in the presence of water. Fly ash when mixed with lime and water forms a compound similar to Portland cement. Coal fired power plant produces fly ash which provides an excellent prime material used in embedded cement, mosaic tiles and hollow blocks.

Fly ash is used in concrete and had a successful track record as it provides mechanical and durable properties to concrete.



Fly ash can be a cost-effective substitute for Portland cement in many markets. Fly ash is also recognized as an environmentally friendly material because it is a byproduct and has low embodied energy, the measure of how much energy is consumed in producing and shipping a building material. By contrast, Portland cement has a very high embodied energy because its production requires a great deal of heat. Fly ash requires less water than Portland cement and is easier to use in cold weather. Other benefits include:

- **Produces various set times**
- **Cold weather resistance**
- **High strength gains, depending on use**
- **Can be used as an admixture**



- **Considered a non-shrink material**
- **Produces dense concrete with a smooth surface and sharp detail**
- **Great workability**
- **Reduces crack problems, permeability, and bleeding**
- **Reduces heat of hydration**
- **Allows for a lower water-cement ratio for similar slumps when compared to no-fly-ash mixes**
- **Reduces CO2 emissions**

In a number of emerging economies, and particularly in BRICS nations, the building and constructing industry is prospering on the back of rapid urbanization. For the construction industry, cement is of optimum importance, and the vendors are constantly looking for improved versions of it in order to build robust skyscrapers and other concrete structures.

Fly ash, which is a byproduct of coal-fired electric power plants, has emerged as a premium substitute for Portland cement for the building and construction industry. When employed in concrete, fly ash improves the strength, ease of pumping concrete, and segregation. The demand in the global fly ash market will multiply at a notable CAGR of 7.1% during the forecast period of 2017 to 2025. Revenue-wise, the analysts of the report have evaluated that the global fly ash market was worth US\$5,237.1 mn in 2017. And if their estimations are to be believed, the opportunities in this market will swell up to US\$9,080.9 mn by the end of 2025.

The rapid development in the construction industry has led to the upsurge in the sale of fly ash and its products across the world. This rapid development is due to the increasing construction speed in the construction industry across the globe. The most important factor that is contributing to the growth and development of the market is the increased capital expenditure and investments in the construction industry across the globe.

Over the years, there has been a significant improvement in the construction speed because of the one-time allocation of budget for infrastructure and industrial projects. The ongoing construction of smart cities coupled with rapid industrialization is fueling the growth of the market.

This increasing demand is rather because of the changing lifestyle of the people across the globe. Moreover, the demand for fly ash market is growing in emerging economies that have increased their focus on infrastructure and roads. Advanced material properties, high durability, cost-effective, and environment-friendly are some of the factors responsible for the rising popularity of fly ash in the construction industry and its applications. Such factors are expected to drive the fly ash market growth over the forecast period.



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

Flyash based Value Added Products,

Coal Ash utilization,

Fly Ash as Raw Material,

Products from Waste

List of Few Fly Ash based Business Ideas That'll Make Money:

➤ Lime Bonded Fly Ash Brick

Lime bonded fly ash bricks are the product of thermal power waste base products. There is no sophisticated machinery used in this production. There is good demand of this product. As a whole the project is cost effective tiny and small scale industry with supporting of government fund. Few entrepreneur may enter into this field. [Read more](#)



➤ AAC Blocks (autoclaved Aerated Concrete Blocks) Fly Ash Based

Autoclaved Aerated Concrete (AAC) is a non-combustible, lime-based cementitious building material that is expanding into new worldwide markets. As a single component building material AAC has achieved acceptance in new markets throughout the world. The AAC has the features of light bulk density good thermal insulation properties and sound absorption, certain strength and process ability, [Read more](#)



➤ Bricks from Fly Ash

Bricks may be made from a no. of different kinds of materials but they must usually possess a certain amount of plasticity. Fly ash is one of them. Fly ash is an industrial waste of thermal power station using pulverized coal. Fly ash generally contains about 5% to 6% unburnt carbon. Its addition in clay, therefore result in better burnt bricks together with economy in coal consumption during firing. [Read more](#)



➤ **Cenosphere Processing**

The word Cenosphere is derived from two Greek words Kens (hollow) and Sphaira (sphere). Cenospheres are light weight, inert hollow sphere comprising largely of silica & alumina and filled with air or inert gas. Cenospheres are a naturally occurring by product of the burning process of pulverized coal fired boilers. They are formed during the molten state of ash and attain spherical shape to have minimum surface tension. [Read more](#)



➤ Fly Ash Bricks from Limestone

Fly Ash bricks are alternative to burnt clay bricks in the construction sector in India. Fly ash bricks are an environment friendly cost saving building product. These fly ash bricks are three times stronger than conventional bricks with consistent strength. This is proving to be a revolutionary invention that produces bricks without the sintering process and consequently no greenhouse gases are emitted. [Read more](#)



➤ Fly Ash Bricks by Triboelectric Beneficiation Process

Fly Ash required for the production of Fly Ash Bricks, the raw Fly Ash is subjected to Triboelectrostatic Beneficiation process making use of separation technologies. Separation technologies, LLC (ST) continues install fly ash beneficiation systems to supply high quality fly ash for the desired purpose. Fly Ash is a useful by-product from thermal power stations using pulverized coal as a fuel and has considerable pozzolanic activity. [Read more](#)



Flyash Based Value Added Products, Coal Ash Utilization, Fly Ash as Raw Material, Products from Waste, Flyash - High Value Added Products and Application, Fly Ash for High Value Added Applications, Valuable Products from Fly Ash, Fly Ash as a Value Added Product, Utilization of Value-Added Products from Combustion Fly Ash, Value-Added Products from Fly Ash, Products made from Fly Ash, Fly Ash Products India, Fly Ash Uses, Fly Ash Bricks, Conversion Of Wastes into Value-Added Products, Value-Added Materials from Coal Combustion Products, Fly Ash Based Products, Fly Ash Products List, Fly Ash Uses, Coal Combustion Products, Project Report on Fly Ash Brick Manufacturing Industry, Detailed Project Report on Cenosphere Processing, Project Report on Ash Bricks Composition, Pre-Investment Feasibility Study on Ash Bricks Composition, Techno-Economic feasibility study on Fly Ash Beneficiation, Feasibility report on Cenosphere Processing, Free Project Profile on Production of Fly Ash Bricks from Limestone, Project profile on Fly Ash Beneficiation, Download free project profile on Fly Ash Brick Manufacturing, Waste Management, Project Profile on Fly Ash Bricks, Lime Bonded Fly Ash Brick Manufacturing Plant, Production of Fly Ash Bricks, Fly Ash Bricks Manufacturing Process, Fly Ash Brick Plant, Fly Ash Based Lime Bricks, Fly Ash Brick Manufacture, Fly Ash Bricks Composition, Fly Ash Bricks Manufacturing, Manufacturing of Fly Ash Bricks, Fly Ash Bricks Manufacturing Unit, Fly Ash Bricks by Triboelectric Beneficiation Process, AAC Blocks (Autoclaved Aerated Concrete Blocks) Fly Ash Based, Fly Ash AAC Block, Autoclave Aerated Concrete Block, AAC Block Making Business Ideas, Cenosphere Processing, Cenosphere Processing Plant, Cenosphere Manufacturing Process, Fly Ash Bricks from Limestone, Production of Fly Ash Bricks from Limestone



**For more Projects and further details,
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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](#)



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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*



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- *Market Research Reports*
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- *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



Contact us

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