

Industrial Production of 1-Butene

Butene-1 Market in Asia Pacific to reach US\$787.8 $\overset{3}{\text{CH}_2}$ $\overset{4}{\text{CH}_3}$ million by 2026

$$\begin{array}{ccc}
H & CH \\
C = C \\
H & H
\end{array}$$



Introduction

Butene-1 is a colourless flammable gas. Butene-1 is used as co monomer in the production of high density polyethylene (HDPE) and linear low density polyethylene (LLDPE).

1-Butene, an organic chemical belonging to the family of alpha olefins, is a colourless combustible gas. There are various methods of production of 1-Butene, such as from refinery crude stream of C4 hydrocarbons and natural gas, dehydrogenation of butane and dimerization of ethylene, which is stored and transported as compressed liquefied gas.

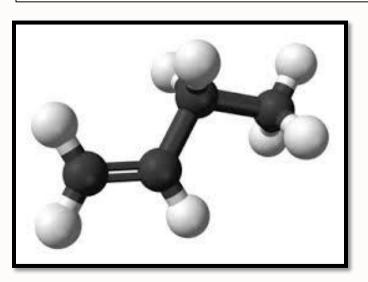
$$H = CH_{2} - CH_{3}$$



It finds major applications as co-monomer in manufacture of high density poly-ethylene (HDPE), linear low density poly-ethylene (LLDPE), which are used for food and non-food packaging such as bags and stretch wraps, toys, containers, pipes, etc., in production of polyethylene/ polypropylene resins having properties such as flexibility as well as high tear strength. 1-Butene is also used to produce valeraldehyde, polybutene, butadiene, butylene oxide, maleic anhydride, Secondary Butyl Alcohol (SBA) and Methyl Ethyl Ketone (MEK). In addition to this, 1-Butene finds application as an intermediate for manufacturing of plasticizers, antioxidants, corrosion inhibitors, herbicides and as additives used in hydraulic and lubricating oils.



1-Butene is predominantly used in the production of polyethylene. It is used as a comonomer in a range of polyethylene applications such as flexible and rigid packaging. It is also used in oilfield drilling applications, as it has low volatility, low odor, and aids in anaerobic biodegradation in marine environment.





Market Outlook

The global 1-Butene market is projected to reach USD 4.21 billion by 2021, at a CAGR of 7.1% from 2016 to 2021. The linear low-density polyethylene (LLDPE) segment led the 1-Butene market, due to increasing demand of LLDPE across industries such as packaging, food & beverages, and construction. The global supply-demand scenario, regional trade flow analysis, price analysis of 1-Butene and plant capacity of the leading players are covered in the report. The 1-Butene market has been segmented on the basis of application (LLDPE, HDPE, Valeraldehyde, and others), and by region (North America, Europe, Asia-Pacific, and Rest of the World).

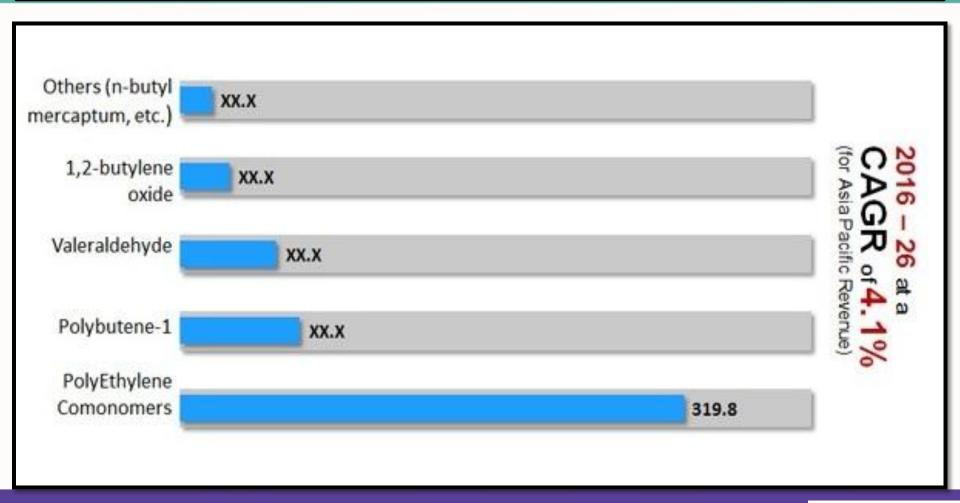


Strong demand for polyethylene, the largest market sector at 65%, will keep butene-1 in demand despite competition from other co-monomers hexane-1 and octane-1. Linear low-density polyethylene (LLDPE) and high-density polyethylene (HDPE) resins are growing at respective rates of 1.5% and 3% annually. Because of the co-monomer displacement by other alkenes in the fastest growing segments of the polyethylenes, butane-1 will experience growth of somewhat less than half the thermoplastics' growth rates.

Butene-1 is less expensive than the alternative co-monomers, so the loss in market share is somewhat mitigated by the more favorable economics of production.



Asia Pacific (China, India, ASEAN), Butene-1 Market, By Application, 2015 (US\$ Mn)





The Asia Pacific market for butene-1 is highly consolidated in terms of geography and is dominated by China. While India and ASEAN countries are key contributors to the market's revenues, they have a scarcity of suppliers as well as large-scale manufacturers of butene-1, and the markets are thus undersupplied. The market in China, on the other hand, is oversupplied and helps satisfy the demand for butene-1 in the rest of the Asia Pacific.

Of the key applications of butene-1, the segment of polyethylene comonomers account for over 65% of the overall market.



In terms of geography, China held a nearly 64% share in the market and is expected to continue dominance over the forecast period as well. Presence of a large supplier base and vast production facilities have made the China butene-1 market oversupplied.

The demand for alpha olefins is also likely to increase in the Middle East owing to large-scale oilfield drilling activities in the region. In addition, 1-Butene is used as a copolymer in the production of gasoline, butadiene, and other products, which increases its scope of applications in the developing countries.



In addition to these factors, the Asia Pacific market for butene-1 is also driven by the expansion of the packaging industry in the region in the past few years. Plastic packaging materials form one of the core segments of the packaging industry. As a large number of plastic packaging materials are prepared from polybutylene-1, the flourishing packaging market is also expected to have a significant positive impact on the overall development of the Asia Pacific butene-1 market.



The main reason for the high demand for 1-Butene can be attributed to the increasing consumption of plastics and automobiles, which are its largest end-use industries. The growing plastics industry worldwide drives the market for 1-Butene, and demand is expected to be higher in emerging countries. The rising demand for plastic packaging in food, pharmaceutical, and other industries is boosting the plastics market, which in turn is expected to drive the alpha olefins market. 1-Butene is used as a copolymer in the production of gasoline, butadiene, and other products, which increases its scope of applications.



Major Queries/Questions Answered in the Report?

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



- 5. What is the structure of the Butene-1 Manufacturing Business and who are the key/major players?
- 6. What is the total project cost for setting up Butene-1 Manufacturing Business?
- 7. What are the operating costs for setting up Butene-1 Manufacturing plant?
- 8. What are the machinery and equipment requirements for setting up Butene-1 Manufacturing plant?



- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Butene-1 Manufacturing plant?
- 10. What are the requirements of raw material for setting up Butene-1 Manufacturing plant?
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up Butene-1 Manufacturing Business?
- 12. What is the Manufacturing Process of Butene-1?



- 13. What is the total size of land required for setting up Butene-1 Manufacturing plant?
- 14. What will be the income and expenditures for Butene-1 Manufacturing Business?
- 15. What are the Projected Balance Sheets of Butene-1 Manufacturing plant?
- 16. What are the requirement of utilities and overheads for setting up Butene-1 Manufacturing plant?
- 17. What is the Built up Area Requirement and cost for setting up Butene-1 Manufacturing Business?



- 18. What are the Personnel (Manpower)
 Requirements for setting up Butene-1
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- 19. What are Statistics of Import & Export for Butene-1?
- 20. What is the time required to break-even of Butene-1 Manufacturing Business?
- 21. What is the Break-Even Analysis of Butene-1 Manufacturing plant?
- 22. What are the Project financials of Butene-1 Manufacturing Business?



- 23. What are the Profitability Ratios of Butene-1 Manufacturing Project?
- 24. What is the Sensitivity Analysis-Price/Volume of Butene-1 Manufacturing plant?
- 25. What are the Projected Pay-Back Period and IRR of Butene-1 Manufacturing plant?
- 26. What is the Process Flow Sheet Diagram of Butene-1 Manufacturing project?



27. What are the Market Opportunities for setting up Butene-1 Manufacturing plant?

- 28. What is the Market Study and Assessment for setting up Butene-1 Manufacturing Business?
- 29. What is the Plant Layout for setting up Butene-1 Manufacturing Business?



Table of Contents of the Project Report



Our Detailed Project Report contains

- Introduction
- Properties
- Uses & Applications
- List of Plant & Machineries
- Miscellaneous Items and Accessories
- Instruments, Laboratory Equipments and Accessories
- Electrification, Electric Load and Water
- Maintenance, Suppliers/Manufacturers of Plant and Machineries
- Process of Manufacture
- Flow Sheet Diagram
- List of Raw Materials
- Availability of Raw Materials
- Requirement of Staff & Labour



- Skilled & Unskilled Labour
- Requirement of Land Area
- Built up Area
- Plant Layout.

Along with financial details as under:

- Assumptions for Profitability workings
- Plant Economics
- Production Schedule
- Land & Building
- Factory Land & Building
- Site Development Expenses
- Plant & Machinery
- Indigenous Machineries



- Other Fixed Assets
- Furniture & Fixtures
- Pre-operative and Preliminary Expenses
- Technical Knowhow
- Provision of Contingencies
- Working Capital Requirement Per Month
- Raw Material
- Packing Material
- Lab & ETP Chemical Cost
- Consumable Store
- Overheads Required Per Month And Per Annum
- Utilities & Overheads (Power, Water and Fuel Expenses etc.)



- Royalty and Other Charges
- Selling and Distribution Expenses
- Salary and Wages
- Turnover Per Annum
- Share Capital
- Equity Capital
- Preference Share Capital



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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 Butene-1." provides an insight into Butenemarket in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Butene-1 project. The report assesses the market sizing and growth of the Indian Butene-1 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 Butene-1 sector in India along with its business prospects. Through this report we have identified Butene-1 project as a lucrative investment avenue.



Tags

Production_of_Butene-1, 1-Butene, Commercial_Production_of_1-Butene, Butene-1, Butene_1_Production_Process, Application_of_Butane-1, Colourless Flammable Gas, Alpha Olefins, 1-Butene_Industry, Chemical Manufacturing, Chemical Industry, 1-Butene Compound, Project Report on 1-Butene manufacturing Industry, Detailed_Project_Report_on_Butene_1_Production, Project_Report_on_Butene-1_Production, Pre-Investment Feasibility Study on Butene-1 Production, Techno-Economic feasibility study on Butene-1 Production, Feasibility_report_on_Butene-1_Production, Free Project Profile Butene-1 Production, Project_profile_on_1-Butene_manufacturing, on Download free project profile on Butene 1 Production, Butene 1 Manufacture, Industrial Production of Butene-1



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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.



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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.

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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- 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



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