
Description:
Bio-butanol is expected to fulfill about 20% of the global domestic gas and diesel requirement. Butanol is being considered as a suitable and safe biofuel alternative to ethanol. Bio-butanol is mixed in various proportions with gasoline to be used as Bio-Fuels, as a gasoline, diesel and jet fuel replacement. It is used in adhesives, paints, personal care products, cleaners and other high end applications – jet fuel, bio based plastics and synthetic rubber, fibres etc.

Big players like Exxonmobil, DuPont and BP are investing in a range of biofuel technologies, with BP making investments in bio-butanol production. Moreover, there are a large number of biofuel ventures banking on biobutanol as an attractive ethanol alternative.

Butanol is seen as a potential alternative to ethanol as it has 30 percent more energy per gallon than ethanol. The current global demand for butanol is exceeding 1.2 billion gallons per year and it has been valued over $6 billion annually. This high-value market will expand significantly as bio-butanol will make pathways to other chemical derivatives. In other industrial chemical markets it has a global presence of over $5 billion.

North America and Europe are the two major markets for biofuels. Brazil has the largest production of bio-butanol because of the enormous amount of raw material - bagasse. India, China, Brazil, Japan have great potential in adopting this alternative.

Some of the key players in this market are Butamax- an initiative of Dupont and BP, Gevo, Cobalt Technologies, Cathay Industrial Biotech, Green Biologics, Butyl Fuel LLC., W2 Energy, ZeaChem, Energy Quest, ButalcoGmbH, METabolic Explorer, TetraVitae Biosciences, Dow, Celanese, Eastman etc.

Drivers:
Reduction of carbon emission to a great extent. The increasing population and carbon emissions emphasis the need for cleaner alternatives. Another excellent reason is no vehicular modification required after the switch over to bio- butanol. The Life-cycle assessment of bio-butanol is advantageous compared to bio-ethanol.

Challenges:
Uncertainty in regulations makes it difficult to have a robust business plan. The debate over food versus fuel. Higher production costs of butanol is one of the major challenges that this industry is facing.

Opportunities:
Biobutanol is being seen as a potential alternative to ethanol. Growing awareness and demand for usage for renewable energy sources and alternative energy sources for petroleum products is seen as a major opportunity for this market.

This report profiles the market segments, forecasts and trends. The regions included in the study are:
Asia-Pacific, North America, Europe, South America, MEA.

The report also gives a comprehensive analysis of the market trends- drivers, challenges and opportunities. Competitive landscape – Mergers and acquisitions landscape, joint ventures and collaborations, strategies adopted by leading players and start up analysis, technological developments, investment opportunities and the future of bio-butanol market.

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