

The Global Market for Alternative Naphtha

<https://marketpublishers.com/r/GA9C34E6AD64EN.html>

Date: November 2024

Pages: 175

Price: US\$ 1,300.00 (Single User License)

ID: GA9C34E6AD64EN

Abstracts

The market for alternative naphtha is driven by multiple factors including sustainability goals, regulatory pressure, and corporate commitments to reduce fossil fuel dependence. The global push towards circular economy and reduced carbon emissions has positioned alternative naphtha as a crucial component in the chemical industry's transition to renewable feedstocks. Major chemical companies are increasingly incorporating alternative naphtha into their feedstock mix through direct investment in production facilities or strategic partnerships, with the market comprising several key segments including bio-based naphtha from HVO/HEFA processes, pyrolysis-based naphtha from plastic waste, CCU-derived naphtha, and biomass-derived alternatives. The market's growth trajectory is supported by increasing scale of production facilities, improving cost competitiveness, expanding end-user acceptance, strengthening policy support, and growing investment in technology development, though challenges remain including feedstock availability and cost, technology scalability, infrastructure adaptation requirements, and market price competition with conventional naphtha.

This comprehensive market report provides detailed insights into the rapidly evolving global alternative naphtha market, analyzing key trends, technologies, and market dynamics shaping the transition from fossil-based to renewable and circular feedstocks in the petrochemical industry. The report provides in-depth analysis of both demand-side and supply-side factors influencing market growth, including detailed capacity analyses across different production routes and regions.

Report contents include:

Production Routes Covered including:

Bio-based naphtha from HVO/HEFA processes

Pyrolysis-based naphtha from plastic and tire waste

Biomass-derived alternatives

CCU (Carbon Capture and Utilization) derived naphtha

'Alcohol-to-Jet' conversion routes

Production technologies including:

Detailed analysis of HVO/HEFA processes and co-processing capabilities

Thermal and catalytic pyrolysis technologies for waste plastics and tires

Biomass gasification processes

Carbon capture and conversion technologies

Fischer-Tropsch synthesis applications

Novel alcohol conversion processes

Feedstock options including:

Renewable sources (vegetable oils, animal fats, used cooking oils)

Waste materials (plastic waste, tire waste)

Novel feedstocks (CO₂, biomass)

Feedstock availability and pricing trends

Quality requirements and specifications

Market Capacity and Production including:

Current and planned production capacity (2022-2026)

Regional distribution of production facilities

Major producer profiles and market shares

Capacity utilization rates

Future capacity additions and expansions

Technology Integration and Infrastructure :

Integration with existing refinery infrastructure

Steam cracker feed requirements

Process optimization strategies

Equipment configuration needs

Operating parameters and performance metrics

Detailed profiles of 39 key companies including:

Major oil and chemical companies

Technology providers

Specialized alternative naphtha producers

Start-ups and innovators. Companies profiled include Borealis, CJ CheilJedang, Diamond Green Diesel, Eni, HD Hyundai Chemical, Idemitsu, Infinium, Neste, S-Oil, SK Geocentric, PT Kilang Pertamina Internasional, UPM Biofuels and more....

Sustainability and Environmental Impact including:

Carbon footprint comparisons across production routes

Sustainability metrics and certification schemes

Circular economy integration

Environmental regulations and compliance requirements

Future market projections including:

Five-year capacity forecasts

Technology development trajectories

Investment trends and opportunities

Market growth drivers and constraints

Value Chain Analysis:

Feedstock supply chains

Production processes

Distribution networks

End-user applications

Value chain integration strategies

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