+357 96 030922
info@marketpublishers.com

Very Low Sulfur Fuel Oil (VLSFO) Market Forecasts to 2032 – Global Analysis By Source (Refinery and Hydrocracker), Sulfur Content (0.5% Sulfur and Other Sulfur Contents), Viscosity Grade, Compliance Strategy, Technology, Application, End User and By Geography

https://marketpublishers.com/r/VE89D4CFBB2DEN.html
Date: April 2025
Pages: 150
Price: US$ 4,150.00 (Single User License)
ID: VE89D4CFBB2DEN

Abstracts

According to Stratistics MRC, the Global Very Low Sulfur Fuel Oil (VLSFO) Market is accounted for $96.49 billion in 2025 and is expected to reach $163.78 billion by 2032 growing at a CAGR of 7.85% during the forecast period. VLSFO, or very low sulfur fuel oil, is a marine fuel that conforms to the International Maritime Organization's (IMO) rules that restrict the amount of sulfur in fuel to no more than 0.5%. In lieu of conventional high-sulfur fuel oil (HSFO), VLSFO helps reduce environmental pollution, especially sulfur oxide (SOx) emissions. It was introduced as part of the IMO 2020 mandate to reduce sulfur emissions from ships. Moreover, the viscosity and composition vary depending on the supplier because it is usually a blend of various refinery streams.

According to the International Maritime Organization (IMO), the majority of ships worldwide have transitioned from using heavy fuel oil (HFO) to very low sulfur fuel oil (VLSFO) to comply with the IMO 2020 regulation, which limits the sulfur content in marine fuels to 0.5%.

Market Dynamics:

Driver:

+357 96 030922
info@marketpublishers.com

Increase in international maritime trade

The foundation of international trade, accounting for almost 90% of global trade volumes, is international shipping. Marine traffic and the demand for marine fuels like VLSFO have increased due to the growing demand for consumer goods, energy resources, and raw materials, especially from economies like China, India, and the United States. Additionally, as e-commerce and global supply chains grow at an accelerated rate, shipping efficiency has become increasingly important, pushing operators to use economical and legally compliant fuels like VLSFO.

Restraint:

Price fluctuations and interruptions in the supply chain

The price of Very Low Sulfur Fuel Oil (VLSFO) is highly volatile due to fluctuations in crude oil prices, refining capacity, and regional demand variations. Refinery shutdowns, geopolitical conflicts, and global crises like the COVID-19 pandemic can all cause supply shortages and price spikes because VLSFO production relies on refining processes that remove sulfur from crude oil. Furthermore, a regional disparity in VLSFO availability may result in higher prices in particular markets, requiring ship operators to regularly modify their fuel procurement plans.

Opportunity:

Growing investments in low-sulfur fuel production and refinery upgrades

Refineries all over the world have been making significant investments in modernizing desulfurization units and hydro cracking procedures in order to increase the production of low-sulfur marine fuels since the implementation of IMO 2020 regulations. To accommodate the increasing demands of the maritime sector, major refining hubs like Singapore, Rotterdam, Houston, and Fujairah are increasing their VLSFO storage and distribution capacities. Moreover, private refiners and national oil companies are investigating cutting-edge refining methods to improve fuel stability and efficiency, guaranteeing a steady supply and higher quality.

Threat:

Increasing future emission limits and regulatory uncertainty

+357 96 030922
info@marketpublishers.com

The use of fossil-based marine fuels, including VLSFO, may be restricted if environmental regulations are tightened further, even though IMO 2020 regulations required a global sulfur cap of 0.5%. Potential carbon taxes on marine fuels and more stringent carbon intensity regulations are being discussed as part of new IMO policies. Alternative energy sources may become more appealing if regulatory agencies impose carbon levies or additional emission reduction targets on bunker fuels, which would raise the cost of VLSFO considerably. Additionally, Emissions Trading Systems (ETS) have already been implemented for the shipping industry in some regions, such as the European Union (EU), and other regions may follow suit.

Covid-19 Impact:

The market for Very Low Sulfur Fuel Oil (VLSFO) was significantly impacted by the COVID-19 pandemic, mostly as a result of decreased maritime activity, disruptions in international trade, and volatile crude oil prices. The demand for shipping worldwide fell precipitously as a result of the lockdowns and economic downturns, especially in industries like oil tankers, cruise lines, and container shipping. This decreased the amount of bunker fuel used overall, including VLSFO. The early 2020 crude oil price collapse led to smaller price differences between VLSFO and HSFO, which reduced the appeal of scrubber investments and momentarily stabilized the demand for VLSFO. However, regional shortages and price volatility in the VLSFO market were brought on by logistical delays, supply chain limitations, and irregular refinery operations.

The Refinery segment is expected to be the largest during the forecast period

The Refinery segment is expected to account for the largest market share during the forecast period. Refineries have adjusted their crude processing methods, improved their desulfurization facilities, and increased their investments in residue upgrading technologies in order to produce low-sulfur bunker fuels in compliance with IMO 2020 regulations. In order to meet the growing demand for VLSFO while retaining profitability, numerous sophisticated refineries possessing hydro cracking, coking, and desulfurization capabilities are at an advantage. Moreover, refineries equipped with flexible crude slates can also use hydro processing techniques or blend low-sulfur feedstocks to guarantee a consistent supply of fuels that comply with IMO regulations.

The MGO (Marine Gas Oil) segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the MGO (Marine Gas Oil) segment is predicted to witness the

+357 96 030922
info@marketpublishers.com

highest growth rate, driven by its extensive use as a substitute fuel for ships that must adhere to the IMO 2020 sulfur regulations. Compared to conventional residual fuels like IFO 180 and IFO 380, MGO is a distillate fuel with a substantially lower sulfur content, which makes it a desirable option for ship operators who want to avoid the expensive installation of exhaust gas cleaning systems. Furthermore, MGO provides operational benefits that are in line with the expanding environmental regulations in the maritime sector, such as improved combustion efficiency, lower maintenance costs, and decreased particulate emissions.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, primarily due to its high maritime trade volume, extensive refinery infrastructure, and major bunker hubs such as Singapore, China, and South Korea. With reputable refineries and blending facilities guaranteeing a consistent supply of IMO 2020-compliant fuels, Singapore, the largest bunkering port in the world, is essential to the supply of VLSFO. China has become a major player as well, increasing its domestic production of VLSFO through refinery upgrades and government incentives, which has decreased its dependency on imports. Moreover, the need for low-sulfur marine fuels is also fueled by the robust shipping and logistics sectors, which are especially prevalent in large economies like Japan and India.

Region with highest CAGR:

Over the forecast period, the Middle East & Africa region is anticipated to exhibit the highest CAGR. Saudi Arabia, the United Arab Emirates, and Kuwait, some of the biggest producers of crude oil in the region, are making significant investments in modernizing refineries to create fuels that comply with IMO 2020. Furthermore, as bunker hubs expand quickly, especially in Fujairah (UAE), Sohar (Oman), and Durban (South Africa), VLSFO availability is increasing, making the area a crucial fueling stop for international shipping routes. The M&A VLSFO market is growing rapidly due to government initiatives to modernize refining processes, increase fuel exports, and adhere to international emission standards.

Key players in the market

Some of the key players in Very Low Sulfur Fuel Oil (VLSFO) Market include Bharat Petroleum Corporation Ltd, Exxon Mobil, Hindustan Petroleum Corporation Limited (HPCL), Sinopec Inc, TotalEnergies, Valero Energy, Phillips 66, Kuwait Petroleum

+357 96 030922
info@marketpublishers.com

Corporation (KPC), Chevron, Indian Oil Corporation Ltd, Shell, Marathon Petroleum, Qatar Energy (QE), China Marine Bunker Co., Ltd. and Singapore Refining Company (SRC).

Key Developments:

In February 2025, Bharat Petroleum Corporation Limited (BPCL) signed a strategic term contract with TotalEnergies Trading Asia Pte Ltd for the supply of Middle Eastern crude oil to BPCL. The contract, which is valid for one year from April 2025 to March 2026, will ensure a 'steady and competitive' supply of crude oil to BPCL's refineries.

In December 2024, Hindustan Petroleum Corporation Limited (HPCL) has signed an agreement with NICDC Logistics Data Services Ltd. (NLDS) to integrate its APIs with Unified Logistics Interface Platform (ULIP). This partnership is a significant step towards enhancing transparency, operational efficiency, and innovation in India's logistics sector.

In September 2024, Exxon Mobil Corporation and Mitsubishi Corporation have signed a Project Framework Agreement for Mitsubishi Corporation's participation in ExxonMobil's facility in Baytown, Texas which is expected to produce virtually carbon-free hydrogen with approximately 98% of carbon dioxide (CO2) removed and low-carbon ammonia.

Sources Covered:

Refinery

Hydrocracker

Sulfur Contents Covered:

0.5% Sulfur

Other Sulfur Contents

Viscosity Grades Covered:

+357 96 030922
info@marketpublishers.com

IFO 180

IFO 380

MGO (Marine Gas Oil)

Compliance Strategies Covered:

Scrubbers

Fuel Switching

Technologies Covered:

Blending

Hydrotreating

Cracking

Applications Covered:

Main Engine

Auxiliary Engine

Boiler

End Users Covered:

Shipping/Marine

Power Generation

Industrial Boilers

+357 96 030922
info@marketpublishers.com

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

+357 96 030922
info@marketpublishers.com

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

+357 96 030922
info@marketpublishers.com

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

- Company Profiling
  - Comprehensive profiling of additional market players (up to 3)
  - SWOT Analysis of key players (up to 3)
- Regional Segmentation
  - Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)
- Competitive Benchmarking
  - Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

11 GLOBAL VERY LOW SULFUR FUEL OIL (VLSFO) MARKET, BY END USER

12 GLOBAL VERY LOW SULFUR FUEL OIL (VLSFO) MARKET, BY GEOGRAPHY

+357 96 030922
info@marketpublishers.com

13 KEY DEVELOPMENTS

14 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Very Low Sulfur Fuel Oil (VLSFO) Market Forecasts to 2032 – Global Analysis By Source (Refinery and Hydrocracker), Sulfur Content (0.5% Sulfur and Other Sulfur Contents), Viscosity Grade, Compliance Strategy, Technology, Application, End User and By Geography

Product link: https://marketpublishers.com/r/VE89D4CFBB2DEN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/VE89D4CFBB2DEN.html