

Global Biolubricants Market: Analysis By Base Oil (Vegetable Oil, Animal Fats and Others), By Application (Hydraulic Oil, Metalworking Fluids, Greases, Gear Oil and Others), By End Use (Automotive, Industrial, Marine and Others), By Region Size and Trends with Impact of COVID-19 and Forecast up to 2028

https://marketpublishers.com/r/G46A24AEBC3AEN.html

Date: November 2023 Pages: 142 Price: US\$ 2,250.00 (Single User License) ID: G46A24AEBC3AEN

# **Abstracts**

Biolubricants, also known as bio-based lubricants, are environmentally friendly lubricants derived from renewable sources such as vegetable oils, animal fats, and synthetic esters. These lubricants offer eco-friendly alternatives to conventional petroleum-based lubricants, as they possess biodegradable properties, lower toxicity levels, and reduce environmental impact. Biolubricants are utilized in various industries, including automotive, manufacturing, and construction, due to their capacity to minimize environmental harm while providing adequate lubrication for machinery and equipment, contributing to sustainable and eco-conscious practices in industrial operations. The global biolubricants market was valued at US\$2.21 billion in 2022. The market value is expected to reach US\$2.97 billion by 2028.

The global biolubricants market has significantly expanded, propelled mainly by the burgeoning automobile sector. Concerns over emissions, particularly associated with traditional petroleum-based lubricants, have spurred the demand for biolubricants. The expanding machine tools sector, crucial in precision-driven industries like manufacturing and automotive, drives the uptake of biolubricants due to their eco-friendly nature and operational advantages. The shift from crude oil reliance towards renewable-sourced biolubricants aligns with stringent global regulations, addressing sustainability and environmental worries. Industries prefer these alternatives for their eco-friendly traits,



including biodegradability. In construction, biolubricants meet environmental regulations and improve heavy machinery performance, establishing them as dependable solutions for challenging conditions. These elements collectively shape the burgeoning landscape of the biolubricants market. The biolubricants market is projected to grow at a CAGR of 5.25% over the years 2023-2028.

Market Segmentation Analysis:

By Base Oil: The report identifies three segments on the basis of base oil: Vegetable Oil, Animal Oil and Others. In 2022, vegetable oil-based biolubricants dominated the market and would grow at the highest CAGR during the forecast period due to their innate biodegradability, renewability, and minimal environmental footprint. As environmental awareness and regulatory mandates heighten, the demand for eco-conscious lubricants, particularly those derived from vegetable oils, intensifies. This surge underscores the market's response to environmental needs, stressing the necessity for sustainable lubricants.

By Application: On the basis of application, the global biolubricants market can be divided into five segments namely, Hydraulic Oil, Metalworking Fluids, Greases, Gear Oil and Others. In 2022, the market was led by hydraulic oil biolubricants, derived from biodegradable base stocks and additives, specifically designed for eco-friendly hydraulic systems. They are designed to reduce environmental impact and are used in hydraulic systems. As industries and environmental regulations prioritize sustainability, the demand for biolubricants, including Hydraulic Oil Biolubricants, has risen. Aligned with eco-conscious trends, these products minimize environmental harm, fostering market expansion as businesses and consumers opt increasingly for eco-friendly alternatives over traditional lubricants.

By End Use: On the basis of end use, the global biolubricants market can be divided into into four segments namely, Automotive, Industrial, Marine and Others. The Automotive segment dominated the market in 2022 and is projected to be the fastestgrowing sector in the forecasted period. Biolubricants find extensive applications in automotive operations, including engine oils, transmission fluids, and greases, offering efficient lubrication while minimizing environmental impact. The escalating adoption of eco-friendly lubricants in the automotive field propels the overall demand for biolubricants. As the automotive industry gravitates towards more sustainable solutions, the surge in demand for biolubricants remains pivotal, driving the continual expansion of the biolubricants market.



By Region: In the report, the global biolubricants market is divided into five regions: North America, Europe, Asia Pacific, Latin America, and Middle East & Africa. North America dominated the market in 2022. Biolubricants, prized for their eco-friendly attributes like biodegradability, gain momentum, outpacing traditional petroleum-based counterparts. The US enforces stringent regulations, propelling biolubricant use, notably in auto sectors aiming for emissions reduction. Ongoing R&D enhances their efficiency, expanding their applicability across industries. In Canada, the environmental drive steers the quest for sustainable lubricants. This collective impetus across the US, Canada, and emerging markets like Mexico foresees continued growth for North American biolubricants, fueled by industrial expansion and governmental support.

Over the last decade, the Asia Pacific region has seen a notable transformation in the biolubricants sector. Specifically, China, Japan, India, and South Korea are key influencers shaping this market's course. China's growth is fueled by rapid economic and industrial expansion, while India thrives on its booming automotive and industrial sectors. India's pursuit of eco-friendly vehicles makes biolubricants vital in curbing emissions and improving fuel efficiency, underscoring their significance in India's sustainability drive.

#### Market Dynamics:

Growth Drivers: The global biolubricants market has witnessed sustained growth due to several driving forces. The expanding automotive sector propels biolubricant demand due to their eco-friendly advantages. Biolubricants, being biodegradable, less toxic, and having a smaller carbon footprint than traditional lubricants, meet environmental concerns in the industry. With mounting pressure to cut emissions, biolubricants offer a sustainable solution, aligning with these objectives amid increasing consumer and manufacturer awareness. Other factors such as growing concerns over rising emissions, increasing use in machine tools sector, crude oil alternative, environmental regulation, adoption in construction industry are significantly influencing the biolubricants market.

Challenges: Despite the biolubricants market experiencing strong growth, it faces notable challenges such as the considerable initial expense and performance uncertainties. The substantial upfront cost stands as a significant barrier to the expansion of the biolubricants industry. While biolubricants offer various environmental advantages as they are derived from renewable sources, their comparatively higher price remains a considerable obstacle to widespread adoption. Additionally, concerns about performance represent a significant impediment to the industry's growth.



Trends: The market is projected to grow at a fast pace during the forecast period, due to various latest trends such as propelling demand in marine industry, rising research & development, growing adoption in emerging economies, rising demand for low viscosity fluids, rising focus on wind energy to benefit biolubricants. The increasing focus on wind energy positively impacts biolubricant demand, driving the market. Wind power relies on intricate mechanical parts requiring efficient lubrication for durability. Biolubricants, with superior lubricating abilities and eco-friendliness, suit these needs. As the global wind sector expands, the need for reliable, environmentally conscious lubricants like biolubricants rises. Wind energy's sustainable nature fuels the demand for lubricants aligned with eco-goals, making biolubricants a natural fit. This trend accelerates biolubricant adoption, especially in wind turbines, aligning with sustainable energy and boosting market demand.

Impact Analysis of COVID-19 and Way Forward:

The COVID-19 pandemic significantly affected the biolubricants market, causing both challenges and opportunities. The initial disruption in supply chains, manufacturing activities, and reduced industrial operations due to lockdowns impacted the market negatively, leading to a temporary slowdown in demand.

However, the pandemic also underscored the importance of sustainability and environmental concerns, fostering increased interest in eco-friendly products like biolubricants. As industries gradually recovered, there was a growing emphasis on sustainability and reducing environmental footprints, driving the adoption of biolubricants. This shift in consumer behavior and industry focus towards environmentally conscious solutions contributed to a resurgence in demand for biolubricants, creating new opportunities for growth despite the initial setbacks caused by the pandemic.

#### Competitive Landscape:

The global biolubricants market is fragmented. However, the market share of organized players has increased significantly over the last few years and is expected to continue given the wide product offerings, better service, and higher brand visibility.

The key players in the global biolubricants market are:

#### TotalEnergies

Global Biolubricants Market: Analysis By Base Oil (Vegetable Oil, Animal Fats and Others), By Application (Hyd...



Fuchs Petrolub SE Shell plc. ExxonMobil Corporation BP p.l.c. Quaker Houghton Emery Oleochemicals Group Renewable Lubricants, Inc. BioBlend Renewable Resources, LLC.

Some of the strategies among key players in the market are new launch, mergers, acquisitions, and collaborations. For instance, In September 2023, FUCHS announced a significant increase in their presence in South America by acquiring full ownership of FUCHS LUBRICANTS SpA in Chile.



# **Contents**

## **1. EXECUTIVE SUMMARY**

## 2. INTRODUCTION

- 2.1 Biolubricants: An Overview
- 2.1.1 Introduction to Biolubricants
- 2.1.2 Benefits of Biolubricants
- 2.2 Biolubricants Segmentation: An Overview
- 2.2.1 Biolubricants Segmentation

# 3. GLOBAL MARKET ANALYSIS

- 3.1 Global Biolubricants Market: An Analysis
  - 3.1.1 Global Biolubricants Market: An Overview
  - 3.1.2 Global Biolubricants Market by Value
  - 3.1.3 Global Biolubricants Market by Base Oil (vegetable oil, animal fats and others)

3.1.4 Global Biolubricants Market by Application (hydraulic oil, metalworking fluids, greases, gear oil and others)

3.1.5 Global Biolubricants Market by End Use (automotive, industrial, marine and others)

3.1.6 Global Biolubricants Market by Region (North America, Europe, Asia Pacific, Latin America and Middle East and Africa)

3.2 Global Biolubricants Market: Base Oil Analysis

- 3.2.1 Global Biolubricants Market by Base Oil: An Overview
- 3.2.2 Global Vegetable Oil Biolubricants Market by Value
- 3.2.3 Global Animal Oil Biolubricants Market by Value
- 3.2.4 Global Others Biolubricants Market by Value

3.3 Global Biolubricants Market: Application Analysis

3.3.1 Global Biolubricants Market by Application: An Overview

- 3.3.2 Global Hydraulic Oil Biolubricants Market by Value
- 3.3.3 Global Metalworking Fluids Biolubricants Market by Value
- 3.3.4 Global Greases Biolubricants Market by Value
- 3.3.5 Global Gear Oil Biolubricants Market by Value
- 3.3.6 Global Others Biolubricants Market by Value
- 3.4 Global Biolubricants Market: End Use Analysis
- 3.4.1 Global Biolubricants Market by End Use: An Overview



- 3.4.2 Global Automotive Biolubricants Market by Value
- 3.4.3 Global Industrial Biolubricants Market by Value
- 3.4.4 Global Marine Biolubricants Market by Value
- 3.4.5 Global Others Biolubricants Market by Value

#### 4. REGIONAL MARKET ANALYSIS

- 4.1 North America Biolubricants Market: An Analysis
- 4.1.1 North America Biolubricants Market: An Overview
- 4.1.2 North America Biolubricants Market by Value
- 4.1.3 North America Biolubricants Market by Region (the US, Canada, and Mexico)
- 4.1.4 The US Biolubricants Market by Value
- 4.1.5 Canada Biolubricants Market by Value
- 4.1.6 Mexico Biolubricants Market by Value
- 4.2 Europe Biolubricants Market: An Analysis
- 4.2.1 Europe Biolubricants Market: An Overview
- 4.2.2 Europe Biolubricants Market by Value
- 4.2.3 Europe Biolubricants Market by Region (Germany, UK, France, Italy, and Rest of the Europe)
  - 4.2.4 Germany Biolubricants Market by Value
  - 4.2.5 The UK Biolubricants Market by Value
  - 4.2.6 France Biolubricants Market by Value
  - 4.2.7 Italy Biolubricants Market by Value
- 4.2.8 Rest of Europe Biolubricants Market by Value
- 4.3 Asia Pacific Biolubricants Market: An Analysis
- 4.3.1 Asia Pacific Biolubricants Market: An Overview
- 4.3.2 Asia Pacific Biolubricants Market by Value

4.3.3 Asia Pacific Biolubricants Market by Region (China, Japan, India, South Korea and Rest of the Asia Pacific)

- 4.3.4 China Biolubricants Market by Value
- 4.3.5 Japan Biolubricants Market by Value
- 4.3.6 India Biolubricants Market by Value
- 4.3.7 South Korea Biolubricants Market by Value
- 4.3.8 Rest of Asia Pacific Biolubricants Market by Value
- 4.4 Latin America Biolubricants Market: An Analysis
- 4.4.1 Latin America Biolubricants Market: An Overview
- 4.4.2 Latin America Biolubricants Market by Value
- 4.5 Middle East and Africa Biolubricants Market: An Analysis
- 4.5.1 Middle East and Africa Biolubricants Market: An Overview



4.5.2 Middle East and Africa Biolubricants Market by Value

#### 5. IMPACT OF COVID-19

5.1 Impact of COVID-19 on Global Biolubricants Market

5.2 Post COVID-19 Impact on Global Biolubricants Market

### 6. MARKET DYNAMICS

- 6.1 Growth Drivers
- 6.1.1 Growing Automobile Sector
- 6.1.2 Growing Concerns Over Rising Emissions
- 6.1.3 Increasing Use in Machine Tools Sector
- 6.1.4 Crude Oil Alternative
- 6.1.5 Environmental Regulation
- 6.1.6 Adoption in Construction Industry
- 6.2 Challenges
  - 6.2.1 Higher Upfront Cost
  - 6.2.2 Performance Concerns
- 6.3 Market Trends
  - 6.3.1 Propelling Demand in Marine Industry
  - 6.3.2 Rising Research & Development
  - 6.3.3 Growing Adoption in Emerging Economies
  - 6.3.4 Rising Demand For Low Viscosity Fluids
  - 6.3.5 Rising Focus on Wind Energy to Benefit Biolubricants

# 7. COMPETITIVE LANDSCAPE

7.1 Global Biolubricants Market Players by Products Comparison

# 8. COMPANY PROFILES

- 8.1 TotalEnergies
  - 8.1.1 Business Overview
  - 8.1.2 Operating Segments
  - 8.1.3 Business Strategy
- 8.2 Fuchs Petrolub SE
  - 8.2.1 Business Overview
  - 8.2.2 Operating Segments



8.2.3 Business Strategy

8.3 Shell plc.

- 8.3.1 Business Overview
- 8.3.2 Operating Segments
- 8.3.3 Business Strategy
- 8.4 ExxonMobil Corporation
  - 8.4.1 Business Overview
  - 8.4.2 Operating Segments
- 8.4.3 Business Strategy
- 8.5 BP p.l.c.
  - 8.5.1 Business Overview
  - 8.5.2 Operating Segments
  - 8.5.3 Business Strategy
- 8.6 Quaker Houghton
  - 8.6.1 Business Overview
  - 8.6.2 Operating Segments
- 8.6.3 Business Strategy
- 8.7 Emery Oleochemicals Group
  - 8.7.1 Business Overview
- 8.7.2 Business Strategy
- 8.8 Renewable Lubricants, Inc.
  - 8.8.1 Business Overview
  - 8.8.2 Business Strategy
- 8.9 BioBlend Renewable Resources, LLC.
  - 8.9.1 Business Overview
  - 8.9.2 Business Strategy



# **List Of Figures**

#### LIST OF FIGURES

Figure 1:Benefits of Biolubricants Figure 2: Biolubricants Segmentation Figure 3: Global Biolubricants Market by Value; 2018-2022 (US\$ Billion) Figure 4: Global Biolubricants Market by Value; 2023-2028 (US\$ Billion) Figure 5: Global Biolubricants Market by Base Oil; 2022 (Percentage, %) Figure 6: Global Biolubricants Market by Application; 2022 (Percentage, %) Figure 7: Global Biolubricants Market by End Use; 2022 (Percentage, %) Figure 8: Global Biolubricants Market by Region; 2022 (Percentage, %) Figure 9: Global Vegetable Oil Biolubricants Market by Value; 2018-2022 (US\$ Billion) Figure 10: Global Vegetable Oil Biolubricants Market by Value; 2023-2028 (US\$ Billion) Figure 11: Global Animal Oil Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 12: Global Animal Oil Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 13: Global Others Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 14: Global Others Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 15 : Global Hydraulic Oil Biolubricants Market by Value; 2018-2022 (US\$ Billion) Figure 16: Global Hydraulic Oil Biolubricants Market by Value; 2023-2028 (US\$ Billion) Figure 17: Global Metalworking Fluids Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 18: Global Metalworking Fluids Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 19: Global Greases Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 20: Global Greases Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 21: Global Gear Oil Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 22: Global Gear Oil Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 23: Global Others Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 24: Global Others Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 25: Global Automotive Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 26: Global Automotive Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 27: Global Industrial Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 28: Global Industrial Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 29: Global Marine Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 30: Global Marine Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 31: Global Others Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 32: Global Others Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 33: North America Biolubricants Market by Value; 2018-2022 (US\$ Million)



Figure 34: North America Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 35: North America Biolubricants Market by Region; 2022 (Percentage, %) Figure 36: The US Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 37: The US Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 38: Canada Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 39: Canada Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 40: Mexico Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 41: Mexico Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 42: Europe Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 43: Europe Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 44: Europe Biolubricants Market by Region; 2022 (Percentage, %) Figure 45: Germany Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 46: Germany Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 47: The UK Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 48: The UK Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 49: France Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 50: France Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 51: Italy Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 52: Italy Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 53: Rest of Europe Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 54: Rest of Europe Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 55: Asia Pacific Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 56: Asia Pacific Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 57: Asia Pacific Biolubricants Market by Region; 2022 (Percentage, %) Figure 58: China Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 59: China Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 60: Japan Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 61: Japan Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 62: India Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 63: India Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 64: South Korea Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 65: South Korea Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 66: Rest of Asia Pacific Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 67: Rest of Asia Pacific Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 68: Latin America Biolubricants Market by Value; 2018-2022 (US\$ Million) Figure 69: Latin America Biolubricants Market by Value; 2023-2028 (US\$ Million) Figure 70: Middle East and Africa Biolubricants Market by Value; 2018-2022 (US\$ Million)

Figure 71: Middle East and Africa Biolubricants Market by Value; 2023-2028 (US\$



Million)

Figure 72: Country-wise Motor Vehicle Production; 2021-2022 (Thousand)

Figure 73: Global Energy Related Greenhouse Gas Emissions; 2018-2022 (GtCO2 eq)

Figure 74: Global Biolubricants Market Players by Products Comparison

Figure 75: TotalEnergies Revenues From Sales by Segments; 2022 (Percentage, %)

Figure 76: Fuchs Petrolub SE Sales Revenue by Segments; 2022 (Percentage, %)

Figure 77: Shell plc. Revenue by Segments; 2022 (Percentage, %)

Figure 78: ExxonMobil Corporation Sales and Other Reporting Revenue by Segments; 2022 (Percentage,%)

Figure 79: BP p.l.c. Sales and Other Operating Revenues by Segment; 2022 (Percentage, %)

Figure 80: Quaker Houghton Net Sales by Segment; 2022 (Percentage, %)



#### I would like to order

Product name: Global Biolubricants Market: Analysis By Base Oil (Vegetable Oil, Animal Fats and Others), By Application (Hydraulic Oil, Metalworking Fluids, Greases, Gear Oil and Others), By End Use (Automotive, Industrial, Marine and Others), By Region Size and Trends with Impact of COVID-19 and Forecast up to 2028

Product link: https://marketpublishers.com/r/G46A24AEBC3AEN.html

Price: US\$ 2,250.00 (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 <u>https://marketpublishers.com/r/G46A24AEBC3AEN.html</u>

# To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

Global Biolubricants Market: Analysis By Base Oil (Vegetable Oil, Animal Fats and Others), By Application (Hyd...



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970