

Pyrolysis Oil Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The global pyrolysis oil market is estimated to reach over USD 350 million by the end of this year. It is projected to register a CAGR of over 4% during the forecasted period.

The COVID-19 pandemic drastically curtailed industrial activities during 2020 and 2021 due to imposed government lockdowns and restrictions, thereby limiting the growth of the pyrolysis oil market. The chemical industry and heat and power generation sector were paralyzed owing to less raw material supply, limited working hours/labor strength, and constrained financials. This halted the adoption of pyrolysis oil, a sustainable yet unconventional fuel that dwells with storage and transportation challenges in these sectors. However, the industries have been on the recovery track ever since the retraction of the pandemic in mid-2021. The recovering oil and gas, chemicals, and power sectors with increased downstream consumption due to the lifting of restrictions and the growing sustainability drive have reinstated the interests of market players in pyrolysis oil.

Key Highlights

Over the medium term, the rising demand for eco-friendly fuel and raw material alternatives and the increasing demand for pyrolysis oil application in the generation of heat and power are the major driving factors augmenting the growth of the market studied.

On the other hand, the constraints associated with the storage, transportation, and application of pyrolysis oil are anticipated to restrain the growth of the market studied over the forecast period.

Nevertheless, the emerging applications of pyrolysis oil in biorefineries are likely to create lucrative growth opportunities for the global market soon.

Europe emerged as the largest market for pyrolysis oil. However, Asia-Pacific is expected to witness the highest CAGR during the forecast period. This dominance of Europe is attributed to the bullish demand for pyrolysis oil in combustion in boilers, upgrading of transportation, and chemical production applications.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Pyrolysis Oil Market Trends

Increasing Demand for Fuel Application

Pyrolysis oil has one of its major applications as fuel in various sectors. Pyrolysis oil has a fuel value of 50-70% of that of petroleum-based fuels and can be used as boiler fuel or upgraded to renewable transportation fuels.

Pyrolysis oil is widely used as industrial fuel to substitute furnace oil. Pyrolysis oil is mainly used in heavy industries such as construction heating, steel factory, glass factory, cement factory, power factories, boiler factories, and hotel heating.

Pyrolysis oil can be potentially used to heat boilers (as a combustion fuel), which can be used to produce electricity in the future. Further, refined or upgraded pyrolysis oil-based products can also be used in gas turbine generators and diesel generators. Currently, various nations are considering using gas turbine generators in place of coal-fired plants to produce electricity with fewer carbon emissions. Moreover, pyrolysis oil can be used as combustion fuel in various industries such as cement, steel, glass, brick plants, and others.

In addition to direct combustion, pyrolysis oil can be used as a feedstock for refining diesel fuel. It can be refined into diesel by a distillation machine. Once the pyrolysis oil is refined into diesel by a pyrolysis oil distillation machine, the obtained diesel can be used in some machinery, such as trucks, tractors, ships, and diesel generators.

Owing to the large volume consumption of fuel from various industrial applications such as power, industrial boilers, diesel engines, and power generators like gas turbines, the potential demand for pyrolysis oil-based fuels is likely to increase in the forecast period.

Europe to Dominate the Market

Europe dominated the worldwide market with a significant market share and is projected to maintain its dominance during the forecast period. In Europe, pyrolysis oil is majorly used for applications such as combustion in boilers, fueling in engines and turbines, upgrading to transportation fuels, and as a renewable feedstock for chemicals and materials. The major industries in the region that leverage pyrolysis oil applications are the steel industry, the cement industry, and transportation.

France is the third largest crude steel producer among the European Union countries. It produced about 13.9 million tons of crude steel in the year 2021, around 20% more than in the year 2020.

The German government is putting together various new incentives and regulations to cut carbon emissions quickly. Moreover, Germany is increasingly dependent on imports to meet its demand for oil and gas. The country's import rate was 63.7% in 2021. Similarly, the country is one of the largest importers of natural gas. Imports meet 95% of their gas requirements. In order to reduce the imports in the country, the German government is offering incentives and other benefits to biofuel production in the country.

In the United Kingdom, the government has begun guidance for Biofuels and other fuel substitutes (i.e., Excise Notice 179e) from 1 April 2022, as part of which the government is promoting the usage of various biofuels, which is likely to create demand for pyrolysis oil in the country.

The potential of pyrolysis oil production in reducing plastic waste management issues as well as in fulfilling the demand for energy used for heating applications is likely to offer a huge opportunity for the market in the country. For instance, in August 2022, Italian Company Maire Tecnimont SpA announced that its subsidiary NextChem had been awarded a Front-End Engineering Design (FEED) contract for an advanced mechanical recycling plant of municipal plastic waste in Europe to establish a recycling plant for polyolefins by the pyrolysis process, with a waste processing capacity of 75,000 tons per year.

All aforementioned factors are likely to fuel the growth of the pyrolysis oil market in Europe over the forecast period.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Pyrolysis Oil Market Competitor Analysis

The global pyrolysis oil market is fragmented, with top players holding insignificant shares to affect market demand individually. Some of the major players in the market (in no particular order) include Twence, Green Fuel Nordic Oy, Bioenergy AE Cote-Nord, New Hope Energy, and Pyrocell.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Drivers

4.1.1 Rising Demand For Environment-friendly Fuel and Raw Material Alternatives

4.1.2 Increasing Demand From Heat and Power Generation Sectors

4.2 Restraints

4.2.1 Problems Associated With Storage, Transportation, and Application of Pyrolysis Oil

4.3 Industry Value-Chain Analysis

4.4 Porter's Five Forces Analysis

4.4.1 Bargaining Power of Suppliers

4.4.2 Bargaining Power of Buyers

4.4.3 Threat of New Entrants

4.4.4 Threat of Substitute Products and Services

4.4.5 Degree of Competition

5 MARKET SEGMENTATION (Market Size in Value)

5.1 By Raw Material

5.1.1 Waste Plastic

5.1.2 Waste Rubber

5.1.3 Wood

5.1.4 Oil Sludge

5.1.5 Other Raw Materials

5.2 By Application

5.2.1 Fuels

5.2.2 Chemicals

5.3 By Geography

5.3.1 Asia-Pacific

5.3.1.1 China

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.3.1.2 India
- 5.3.1.3 Japan
- 5.3.1.4 South Korea
- 5.3.1.5 Rest of Asia-Pacific
- 5.3.2 North America
 - 5.3.2.1 United States
 - 5.3.2.2 Canada
 - 5.3.2.3 Mexico
- 5.3.3 Europe
 - 5.3.3.1 Germany
 - 5.3.3.2 France
 - 5.3.3.3 United Kingdom
 - 5.3.3.4 Italy
 - 5.3.3.5 Rest of Europe
- 5.3.4 South America
 - 5.3.4.1 Brazil
 - 5.3.4.2 Argentina
 - 5.3.4.3 Rest of South America
- 5.3.5 Middle East
 - 5.3.5.1 Saudi Arabia
 - 5.3.5.2 South Africa
 - 5.3.5.3 Morocco
 - 5.3.5.4 Rest of Middle East

6 COMPETITIVE LANDSCAPE

- 6.1 Mergers and Acquisitions, Joint Ventures, Collaborations, and Agreements
- 6.2 Market Ranking Analysis
- 6.3 Strategies Adopted by Leading Players
- 6.4 Company Profiles
 - 6.4.1 Alterra Energy
 - 6.4.2 Bioenergy Ae Cote-Nord
 - 6.4.3 Ensyn
 - 6.4.4 Green Fuel Nordic Oy
 - 6.4.5 Mk Aromatics Limited
 - 6.4.6 New Energy Kft.
 - 6.4.7 New Hope Energy
 - 6.4.8 Nexus Circular
 - 6.4.9 Plastic Advanced Recycling Corp.
 - 6.4.10 Plastic Energy
 - 6.4.11 Pyrocell (setra)
 - 6.4.12 Quantafuel ASA
 - 6.4.13 Trident Fuels Pty Ltd
 - 6.4.14 Twence

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

- 7.1 Emerging Applications in Biorefineries

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Pyrolysis Oil Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-28"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

