

Global Green Chemicals Market Assessment, By Product [Bio-alcohols, Biopolymers, Bio-solvents, Organic Acids and Others], By Application [Food and Beverage, Building and Construction, Personal Care, Packaging, Automotive and Others], By Region, Opportunities, and Forecast, 2018-2032F

<https://marketpublishers.com/r/G5BC1EE7E20CEN.html>

Date: February 2025

Pages: 244

Price: US\$ 4,500.00 (Single User License)

ID: G5BC1EE7E20CEN

Abstracts

Global Green Chemicals Market size was valued at USD 129.58 billion in 2024 which is expected to reach USD 302.09 billion in 2032 with a CAGR of 11.16% between 2025 and 2032. Green chemicals are essential to economies if any country what to survive the exaggerating pollution levels and worsening livelihood of common populace. Air, water and food are essential commodities and even the rich (HNI) are finding it difficult to breathe in poor quality air, drink dirty water and eat polluted or GMO food.

No matter how much money is invested, all 3 can never be cleaned to a level of pre-industrial era where everything was naturally pure. Everyone started understanding problems associated with oil and chemicals and forcing governments to push through green alternatives demanding green chemicals which have the capability to change all that.

Crude oil depletion is another major factor owing to which the world is shifting towards green chemicals. As per IEA, oil demand is increasing rapidly and only in 2023, it is expected to increase by 1.9 million barrels per day (mb/d) reaching 101.7 mb/d, however supply is set to slow to 1 mb/d resulting in usage of more inventories and further increase in oil prices this year.

Rise in Consumer Demand for Sustainable Products Driving Global Green Chemicals

Market

The increasing consumer demand for sustainable products is pivotal in driving the global green chemicals market. Today's consumers are more eco-conscious, preferring products that are environmentally friendly and non-toxic. This trend spans various sectors, from food and beverages to personal care. Companies respond by adopting green chemicals in their production processes to meet these demands. As a result, the market experiences robust growth, supported by consumers willing to pay a premium for sustainability. This shift in consumer preferences is not just a passing trend but a powerful force shaping the future of the chemicals industry.

For instance, in May 2024, according to PwC's 2024 voice of the consumer survey consumers are willing to pay 9.7% more for sustainably produced goods, despite inflation and cost-of-living concerns. This demonstrates a strong preference for eco-friendly products, driven by almost nine-in-ten experiencing the disruptive effects of climate change. As consumers prioritize sustainability, companies must balance affordability with environmental impact to meet this demand. This shift underscores the significant role of consumer demand in driving the global green chemicals market, encouraging industries to adopt and innovate green chemistry solutions.

Increased investment paving the way for a biofuel economy in Europe

Europe is a technologically advanced region and is heavily investing in the research and development of green chemicals. By the end of 2021, there have been 88 green chemistry projects operating in Europe, including 12 expansion projects and 73 new construction projects. The companies with the most involvement in these initiatives is BASF SE, INEOS, Northvolt AB, and Air Liquide SA. Germany, France, Spain, United Kingdom and Belgium are some of the top countries in the EU in which majority of these developments have taken place.

The use of biofuels for transportation in the European Union (EU) countries has increased over time, amounting to 1.6 million metric tons between 2015 and 2020. In Europe, Biodiesel was the most used biofuel in 2020 with a total consumption of 15.8 million metric tons, or approximately 13 million metric tonnes of oil equivalent. In 2020, the Covid-19 pandemic is closely linked to the decline in biofuels in addition to the United Kingdom's exclusion from the EU.

Declining Crude Oil and Gas Reserves

One of the major factors that is also going to act as a prominent driver is the decreasing dependence on fossil fuels and increasing demand for a bio backed economy and renewable sources of energy since green chemicals involve utilizing renewable resources to create materials and energy includes using crops, woods and microorganisms. As per World Bank report on Congo economic prosperity in 2023, Congo's 40% of GDP is dependent on crude oil business and depleting reserves can wipe out most of its supply by 2040, leaving limited room for further extraction since after a significant extraction, crude starts becoming heavy.

Bio-based products include bioplastics, fertilisers and chemicals. We can better safeguard our environment and biodiversity if we reduce our reliance on fossil fuels. Green chemicals offer several advantages over what we know as the conventional chemicals as they are more functional, efficient and most importantly are more environmentally friendly not only at their application but throughout their life cycle that is their synthesis, production, dispatchment as well as degradation is of no harm to the environment.

Biodiesel and Bioethanol are the Future of Mobility

Travel is a common substituent in the life of a working professional and makes up a significant time of the day for a working individual. The fuel consumption globally has increased tremendously in past few decades as there have been newer developments in the amounts of vehicles being produced. Conventional fuels cause damage to the environment and emit pollutants including CO, SO₂, NO₂ and even CFC in some cases which is majorly responsible for the ozone layer depletion. Crude Oil resources are also limited and their consumption has been exponentially rising. Therefore, it have made the world realize the use of green chemicals as biofuels and with a heavy investment, supply and demand are generated from the biofuel segment.

Several countries have policies and government regulations, which promotes usage of biofuels such as the National Policy on Biofuels in India. Biofuels contributes to 3.6% of the global transportation energy consumption in 2021, primarily for road transportation. Compared to 2021, the market for biofuels increased by 6% or 9,100 Million Litres Per Year, in 2022. Due to favourable policies in the United States and Europe, bio diesel is the fastest growing transportation fuel based on year-over-year growth. Brazil and India's demand scenario are supported by blending mandates and financial incentives, and Indonesia's 30% biodiesel blending mandate encourages the use of the fuel in the country.

In 2022, conventional ethanol is the most produced and consumed biofuel followed by conventional biodiesel, both contributing to over 96% share in global biofuel market. Advanced biodiesel and bio jet kerosene are still a developing category, whereas advanced ethanol is generating strong investments and started showcasing its potential.

Impact of COVID-19

The COVID-19 outbreak caused supply chain disruptions, production halts and manufacturing activity interruptions, all of which had a detrimental effect on the green chemicals market in 2020. In addition, automotive were not moving during lockdown and hence demand for fuel including biofuels tanked. Several automotive manufacturers halted their operations and some limited their productions due to negligible demand for months, which decreased the need for green chemicals especially biofuels. Several on-going green chemicals plants construction also halted due to financial and labour shortage along with limited movement of labours.

Impact of Russia-Ukraine War

The Russia-Ukraine war led to a high volatility in the price of crude oil leading arising the need and making it clear that the world needs to be shifting to greener alternatives of energy and therefore this promoted the use of green chemicals. Russia's war on Ukraine has severely disrupted international markets, exposing weaknesses in the security of the raw material supply that is essential for industrial production. Export limitations, a lack of transparency and ongoing market asymmetries, particularly the concentration of production in a small number of countries and bilateral dependencies are the key factors impacting supply chain susceptibilities.

Key Players Landscape and Outlook

In order to stay ahead of the competition, key players are making significant investments in construction of new plants to increase capacities. Expansion through geographies including establishment of new plants in existing country or a new country is the key development for most companies globally in green chemicals ecosphere.

Solugen, a United States based green chemical manufacturer raised over USD 200 million in Series D funding which will be used in their expansion plans to set up 3 new manufacturing facilities in United States and internationally. The company had raised over USD 642 million till date which helped company to expand its manufacturing capacity in United States.

Contents

1. RESEARCH METHODOLOGY

2. PROJECT SCOPE & DEFINITIONS

3. EXECUTIVE SUMMARY

4. VOICE OF CUSTOMER

4.1. Market Awareness and Product Information

4.2. Brand Awareness and Loyalty

4.3. Factors Considered in Purchase Decision

4.3.1. Brand Name

4.3.2. Quality

4.3.3. Quantity

4.3.4. Price

4.3.5. Product Specification

4.3.6. Ease of Use

4.3.7. Image Quality

4.3.8. Technical Support

4.4. Frequency of Purchase

4.5. Medium of Purchase

5. GLOBAL GREEN CHEMICALS MARKET OUTLOOK, 2018-2032F

5.1. Market Size & Forecast

5.1.1. By Value

5.1.2. By Volume

5.2. By Product

5.2.1. Bio-alcohols

5.2.2. Biopolymers

5.2.3. Bio-solvents

5.2.4. Organic Acids

5.2.5. Others

5.3. By Application

5.3.1. Food and Beverage

5.3.2. Building and Construction

5.3.3. Personal Care

- 5.3.4. Packaging
- 5.3.5. Automotive
- 5.3.6. Others
- 5.4. By Region
 - 5.4.1. North America
 - 5.4.2. Europe
 - 5.4.3. South America
 - 5.4.4. Asia-Pacific
 - 5.4.5. Middle East and Africa
- 5.5. By Company Market Share (%), 2022

6. GLOBAL GREEN CHEMICALS MARKET OUTLOOK, BY REGION, 2018-2032F

- 6.1. North America*
 - 6.1.1. By Product
 - 6.1.1.1. Bio-alcohols
 - 6.1.1.2. Biopolymers
 - 6.1.1.3. Bio-solvents
 - 6.1.1.4. Organic Acids
 - 6.1.1.5. Others
 - 6.1.2. By Application
 - 6.1.2.1. Food and Beverage
 - 6.1.2.2. Building and Construction
 - 6.1.2.3. Personal Care
 - 6.1.2.4. Packaging
 - 6.1.2.5. Automotive
 - 6.1.2.6. Others
 - 6.1.3. United State*
 - 6.1.3.1. By Product
 - 6.1.3.1.1. Bio-alcohols
 - 6.1.3.1.2. Biopolymers
 - 6.1.3.1.3. Bio-solvents
 - 6.1.3.1.4. Organic Acids
 - 6.1.3.1.5. Others
 - 6.1.3.2. By Application
 - 6.1.3.2.1. Food and Beverage
 - 6.1.3.2.2. Building and Construction
 - 6.1.3.2.3. Personal Care
 - 6.1.3.2.4. Packaging

6.1.3.2.5. Automotive

6.1.3.2.6. Others

6.1.4. Canada

6.1.5. Mexico

*All segments will be provided for all regions and countries covered

6.2. Europe

6.2.1. Germany

6.2.2. France

6.2.3. Italy

6.2.4. United Kingdom

6.2.5. Russia

6.2.6. Netherlands

6.2.7. Spain

6.2.8. Turkey

6.2.9. Poland

6.3. South America

6.3.1. Brazil

6.3.2. Argentina

6.4. Asia Pacific

6.4.1. India

6.4.2. China

6.4.3. Japan

6.4.4. Australia

6.4.5. Vietnam

6.4.6. South Korea

6.4.7. Indonesia

6.4.8. Philippines

6.5. Middle East & Africa

6.5.1. Saudi Arabia

6.5.2. UAE

6.5.3. South Africa

7. MARKET MAPPING, 2024

7.1. By Product

7.2. By Application

7.3. By Region

8. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 8.1. Supply Demand Analysis
- 8.2. Import Export Analysis
- 8.3. Value Chain Analysis
- 8.4. PESTEL Analysis
 - 8.4.1. Political Factors
 - 8.4.2. Economic System
 - 8.4.3. Social Implications
 - 8.4.4. Technological Advancements
 - 8.4.5. Environmental Impacts
 - 8.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
- 8.5. Porter's Five Forces Analysis
 - 8.5.1. Supplier Power
 - 8.5.2. Buyer Power
 - 8.5.3. Substitution Threat
 - 8.5.4. Threat from New Entrant
 - 8.5.5. Competitive Rivalry

9. MARKET DYNAMICS

- 9.1. Growth Drivers
- 9.2. Growth Inhibitors (Challenges, Restraints)

10. KEY PLAYERS LANDSCAPE

- 10.1. Competition Matrix of Top Five Market Leaders
- 10.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2024)
- 10.3. Mergers and Acquisitions/Joint Ventures (If Applicable)
- 10.4. SWOT Analysis (For Five Market Players)
- 10.5. Patent Analysis (If Applicable)

11. PRICING ANALYSIS

12. CASE STUDIES

13. KEY PLAYERS OUTLOOK

- 13.1. Cargill, Incorporated
 - 13.1.1. Company Details

- 13.1.2. Key Management Personnel
- 13.1.3. Products & Services
- 13.1.4. Financials (As reported)
- 13.1.5. Key Market Focus & Geographical Presence
- 13.1.6. Recent Developments
- 13.2. BASF SE
- 13.3. LG Chem
- 13.4. Balfour Beatty
- 13.5. Covation Biomaterials
- 13.6. 3M
- 13.7. ADM
- 13.8. Dow
- 13.9. Emery Oleochemicals
- 13.10. Plycem USA Inc.
- 13.11. TotalEnergies
- 13.12. INEOS
- 13.13. Air Liquide SA
- 13.14. Northvolt AB
- 13.15. Borealis AG

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work

14. STRATEGIC RECOMMENDATIONS

15. ABOUT US & DISCLAIMERS

I would like to order

Product name: Global Green Chemicals Market Assessment, By Product [Bio-alcohols, Biopolymers, Bio-solvents, Organic Acids and Others], By Application [Food and Beverage, Building and Construction, Personal Care, Packaging, Automotive and Others], By Region, Opportunities, and Forecast, 2018-2032F

Product link: <https://marketpublishers.com/r/G5BC1EE7E20CEN.html>

Price: US\$ 4,500.00 (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/G5BC1EE7E20CEN.html>