

# Global Nitrogen Market Outlook to 2027

<https://marketpublishers.com/r/G503DF2E5F7FEN.html>

Date: January 2022

Pages: 191

Price: US\$ 4,490.00 (Single User License)

ID: G503DF2E5F7FEN

## Abstracts

Nitrogen is a non-metallic chemical that is colorless, odorless, and inert gas used in various applications, including fertilizers, industrial, and feed, among others. Nitrogen is one of the primary applications in the production of ammonia which is further used to produce fertilizers. According to BlueQuark Research & Consulting, the global Nitrogen market is expected to have a moderate growth rate during the forecast period. Due to the growing population and environmental degradation, there is a continuous decrease in arable land per person, which has significantly increased the consumption of fertilizers and hence increasing nitrogen usage. High demand for nitrogen for food & beverage packaging is another major growth factor of the market as nitrogen packaging delays aerobic spoilage & oxidative deterioration and extends the shelf-life of food products. However, the lack of safety measures used during handling nitrogen in industries such as steel manufacturing, aerospace industry limits the growth of the nitrogen market globally. Moreover, the growing use of nitrogen as a shielding gas in the packaging of medicines and as a fire suppressant in mining and oil & gas industries are further boosting the market growth.

Nitrogen has several uses in the food & beverage industry, including food processing, food packaging, and flushing, among others. One of the common uses of nitrogen gas in the food & beverage industry is for food aeration. In terms of packaging, nitrogen packaging is extremely popular among other gases. Nitrogen is often used for Modified Atmosphere Packaging (MAP). MAP is used to increase the shelf life of the packaged food. Using nitrogen, oxygen is pushed out of the packaging. Food & beverage companies that use nitrogen for packaging can increase their exports to foreign countries without the risk of food getting spoiled. Nitrogen packaging is also capable of preserving food's nutritional value, flavor, texture, taste, and aroma. Nitrogen is also used in the winemaking process to remove and prevent oxygen from coming into contact with the wine. In 2018, the global retail value of food & beverage sales stood at USD 2.43 trillion, an increase from USD 2.27 trillion in 2013. The value is expected to

reach USD 2.73 trillion in 2023, witnessing a CAGR of 2.1%.

Within the global beverage industry, beer is expected to remain the largest segment by value. Acceptance of alcohol consumption by consumers, population base of the young generation, and increasing per capita income are the major driving forces that spur growth for this segment over the forecast period. APAC is expected to remain the largest region and to witness the highest growth rate during the forecast period due to its huge population base. The market growth for the food & beverage industry is expected to be slow in North American and European regions. In contrast to this, Asia-Pacific and the Middle-East and African regions are expected to witness significant growth in the coming years. The consumption of nitrogen is expected to be driven by the growth in the global food & beverage industry during the forecast period.

On 10th August 2020, Corteva launched instinct NXTGEN Nitrogen Stabilizer, a new formulation that adds Optinyte technology to offer up to eight weeks of protection of urea, UAN, and liquid manure during fall. Ammonia is being investigated as a potential fuel as an alternative to hydrogen. However, it seems contradictory that its process of production has pumped carbon dioxide (CO<sub>2</sub>) emissions into the atmosphere. Ammonia-producing plants contribute to 1.8% of global CO<sub>2</sub> emissions, equating to half a billion tonnes released into the atmosphere per year.

The global Nitrogen market is segmented on the basis of Phase, Production Method, Application, and End-use. The end user industry segment is further segmented as Fertilizer, Oil & Gas, Electronics, Food & Beverage, Healthcare, and Others.

Fertilizers are critical for agricultural productivity. According to the International Fertilizer Association (IFA), around 85% of the soils globally are deficient in nitrogen. Nitrogen is considered to be the most important nutrient, and plants absorb more nitrogen than any other element. Nitrogen is essential in the formation of protein, which makes up the majority of the tissues of most living things. Mineral fertilizers are required to meet the increasing food requirements of a growing world population. According to the United Nations, the global population is estimated to reach 9.8 billion by 2050, and to be able to produce enough food for everyone, an increase in crop yields is essential.

Global fertilizer demand is expected to be growing on an average of 1.5% per annum by the year 2021. The fertilizer industry is expected to attract investment close to USD 110 billion in more than 65 new production units, increasing global capacity by 90 million tonnes. The fertilizer sector has been largely affected by the ongoing COVID-19 pandemic since its outset. China being the biggest and most significant producer of

fertilizers, has been hit by the low operational rates of production facilities and is observing a downward trend in the market. The Asia Pacific accounts for 60% of the fertilizers market. Every year more than 100 million tonnes of nitrogen is applied to crops in the form of fertilizers, helping them grow stronger and better.

Based on geography, the global Nitrogen Market is segmented into Asia Pacific, North America, South America, Europe, and Middle East & Africa. Asia-Pacific was found to be the major region for the market. China is the largest consumer of nitrogen in the region. The major companies in the market own manufacturing facilities as well as major supply contracts with certain region emerging economies such as China, thereby gaining flexibility and logistics strength for the imports.

The United States is one of the world's largest economies. The GDP of the country has decreased at a rate of 5% in the first quarter and 9.5% in the second quarter of 2020 due to the ongoing coronavirus pandemic. According to the World Bank, the total cultivable land in the country is approximately 40%. The use of fertilizers and pesticides is extensive in the country's agriculture and crop production and has been extensively aided by these inputs for some time. As demand for crops like corn and soybeans grew in the country, so did the land area dedicated for their production, along with the increased use of fertilizers. In 2018, the fertilizer consumption in the United States was more than 150 kilograms per hectare.

Natural gas is a primary component in the production of nitrogen-based fertilizers. Despite an oversupply in the current market, the recent shale gas glut in the region has nitrogen fertilizer producers looking to take advantage of the resulting reduced production costs. The nitrogen demand in the country is led by the increase in corn acres that are expected to increase in the forecasted years. 58% of the nitrogen consumption in the country is used in corn production. In 2019 nitrogen fertilizer consumption was around 11.9 million metric tons in the country. Nitrogen has no detrimental effect on food or beverages when it is brought into contact. In fact, it is extremely beneficial in the food and beverage industry as it can be used to displace oxygen and therefore prevent oxidation, which causes food and beverage spoilage. In the United States, people consume 31% more packaged food than fresh food, which is one of the highest in the world.

Some of the major market players in the global market include Air Liquide S.A., Air Products and Chemical, The Linde Group, and Messer Group, among others.

In Jul 2020, Air Liquide and NLMK, a leading steel producer in Russia, have entered

into a new long-term partnership. Under the agreement, Air Liquide will invest around 100 million euros in the flagship site of NLMK in Lipetsk.

In Jul 2020, Air Liquide has signed a long-term agreement with Steel Dynamics, Inc., to supply gaseous oxygen, nitrogen, and argon to the company's new Electric Arc Furnace (EAF) steel mill in Sinton, Texas.

In Jul 2020, Air Liquide and the Port of Rotterdam Authority launched a jointly created initiative, which aims at enabling 1,000 hydrogen-powered zero-emission trucks on the roads connecting the Netherlands, Belgium, and western Germany by 2025.

In Apr 2020, Air Liquide will invest close to 200 million euros to build production capacities in the Science Parks of Tainan and Hsinchu, respectively, located in the South and the North of Taiwan.

Our Global Nitrogen market report provides deep insight into the current and future state of the Nitrogen market across various regions. Also, the study comprehensively analyzes the Nitrogen market by segments based on phase (Gas and Liquid), by production method (Fractional Distillation, Pressure Swing Adsorption, and Membrane Separation), by application (Semiconductors, Packaging, Ammonia, Fire Prevention, Pharmaceuticals, and Others (Molding, Stainless Steel, etc.)) and, by end-user industry (Fertilizer, Oil & Gas, Electronics, Food & Beverage, Healthcare, and Others (Glass, Metal, etc.)), and by Geography (Asia Pacific, North America, Europe, South America, and Middle-East and Africa). The report examines the market drivers and restraints, along with the impact of Covid-19 are influencing the market growth in detail. The study covers & includes emerging market trends, market developments, market opportunities, market size, market analysis, market dynamics, and challenges in the industry. This report also covers extensively researched competitive landscape sections with profiles of major companies, including their market share and projects.

## Contents

### 1. Executive Summary

### 2. Research Scope and Methodology

- 2.1 Aim & Objective of the study
- 2.2 Market Definition
- 2.3 Study Information
- 2.4 General Study Assumptions
- 2.5 Research Phases

### 3. Market Analysis

- 3.1 Introduction
- 3.2 Market Dynamics
  - 3.2.1 Drivers
  - 3.2.2 Restraints
- 3.3 Market Trends & Developments
- 3.4 Market Opportunities
- 3.5 Feedstock Analysis
- 3.6 Regulatory Policies
- 3.7 Trade Scenario
- 3.8 Price Trend Analysis
- 3.9 Analysis of Covid-19 Impact

### 4. Industry Analysis

- 4.1 Supply Chain Analysis
- 4.2 Porter's Five Forces Analysis
  - 4.2.1 Competition in the Industry
  - 4.2.2 Potential of New Entrants into the Industry
  - 4.2.3 Bargaining Power of Suppliers
  - 4.2.4 Bargaining Power of Consumers
  - 4.2.5 Threat of substitute products

### 5. Market Segmentation & Forecast

- 5.1 By Phase
  - 5.1.1 Gas
  - 5.1.2 Liquid
- 5.2 By Production Method

- 5.2.1 Fractional Distillation
- 5.2.2 Pressure Swing Adsorption
- 5.2.3 Membrane Separation
- 5.3 By Application
  - 5.3.1 Semiconductors
  - 5.3.2 Packaging
  - 5.3.3 Ammonia
  - 5.3.4 Fire Prevention
  - 5.3.5 Pharmaceuticals
  - 5.3.6 Other
- 5.4 By End-User Industry
  - 5.4.1 Fertilizer
  - 5.4.2 Oil & Gas
  - 5.4.3 Electronics
  - 5.4.4 Food & Beverage
  - 5.4.5 Healthcare
  - 5.4.6 Others

## **Regional Market Analysis**

- 6.1 North America
  - 6.1.1 United States
  - 6.1.2 Canada
  - 6.1.3 Mexico
- 6.2 Europe
  - 6.2.1 United Kingdom
  - 6.2.2 Germany
  - 6.2.3 Italy
  - 6.2.4 France
  - 6.2.5 Russia
  - 6.2.6 Nordic Countries
  - 6.2.7 Rest of Europe
- 6.3 Asia-Pacific
  - 6.3.1 China
  - 6.3.2 India
  - 6.3.3 Japan
  - 6.3.4 South Korea
  - 6.3.5 ASEAN Countries
  - 6.3.6 Rest of Asia-Pacific
- 6.4 South America

- 6.4.1 Brazil
- 6.4.2 Argentina
- 6.4.3 Rest of South America
- 6.5 Middle East & Africa
  - 6.5.1 South Africa
  - 6.5.2 Saudi Arabia
  - 6.5.3 Rest of Middle East & Africa

## Company Profiles

oup

.A.

and Chemicals

Group GmbH

o

anso Corporation

ec

Air

Industrial Gases, Inc.

gde

roup Company

pen

Industrial Gases Ltd.

Gases Limited

Liquid Air Company Ltd.

*es are not exhaustive*

## **Competitive Landscape**

of Notable Players in the Market

A, JV, and Agreements

Market Share Analysis

Strategies of Key Players

## **Conclusions and Recommendations**



## List Of Tables

### LIST OF TABLES

Global Nitrogen Market, in kilotons, 2016-2026

Gas - Global Nitrogen Market, in kilotons, 2016-2026

Liquid - Global Nitrogen Market, in kilotons, 2016-2026

Global Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

North America Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

United States Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Canada Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Mexico Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Europe Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Other Supporting Charts

United Kingdom Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Germany Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Italy Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

France Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Russia Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Nordic Countries Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Rest of Europe Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

South America Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Brazil Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Argentina Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

million), 2016-2026

Rest of South America Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Asia-Pacific Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

China Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

India Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Japan Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

South Korea Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

ASEAN Countries Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Rest of Asia-Pacific Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Midde East & Africa Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Saudi Arabia Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

South Africa Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Rest of Middle-East & Africa Nitrogen Market Size, Market Growth & Market Forecast Revenue(in USD million), 2016-2026

Nitrogen - Market Share of Key Companies in 2020

Total Electronics Sales Statistics

Packed Food & Beverage Consumption Statistics

## I would like to order

Product name: Global Nitrogen Market Outlook to 2027

Product link: <https://marketpublishers.com/r/G503DF2E5F7FEN.html>

Price: US\$ 4,490.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G503DF2E5F7FEN.html>

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**

Customer signature \_\_\_\_\_

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

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