

Carbon Dioxide Market By Form (Solid, Liquid, Gas), By Application (Food and Beverages, Medical, Fire Fighting, Agriculture, Metal Fabrication, Others): Global Opportunity Analysis and Industry Forecast, 2024-2033

Market Report | 2025-01-01 | 389 pages | Allied Market Research

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Report description:

Carbon Dioxide Market??

The carbon dioxide market was valued at \$69,173.10 million in 2023 and is estimated to reach \$217,838.40 million by 2033, exhibiting a CAGR of 12.3% from 2024 to 2033.?

Carbon dioxide is a colorless naturally occurring gas with a sour taste and faint sharp odor. The gas is generated via several processes, including combustion of carbon-containing materials, respiration, and fermentation. Moreover, it is utilized by plants to perform photosynthesis. Carbon dioxide is present in considerably less quantity on the earth as compared to oxygen & nitrogen; however, it is a major component of the planet's air and is a critical greenhouse gas. The major properties of carbon dioxide include its anti-inflammatory & acidic nature, high density as compared to air, and water solubility.?

Industries such as food & beverage and pharmaceuticals are the key drivers of the carbon dioxide market. The food & beverage industry utilizes the gas in carbonated drinks and food packaging, whereas the pharmaceuticals industry requires carbon dioxide as a raw material for drug synthesis and in respiratory therapies. In addition, upsurge in the use of carbon dioxide in oil extraction techniques propels the growth of the market as injection of the gas enhances the efficiency of oil production. Furthermore, increase in water treatment plants using carbon dioxide to balance the pH levels of water augments the market development. A current trend dominating the market is the conversion of carbon dioxide into useful products and reducing its environmental impact. Materials such as biofuels, concrete building materials, and nanoparticles are considerably being developed using carbon dioxide, paving the way for a sustainable future.??

However, high concentrations of carbon dioxide pose health hazards for humans. Therefore, the usage and handling of carbon dioxide are subject to stringent regulations that notably hamper the development of the market. Moreover, a large quantity of carbon dioxide is obtained as a byproduct from different industries and in case of fluctuations in availability, the market growth is restrained. On the contrary, rise in the popularity of carbon capture and offsetting technologies is presenting lucrative

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opportunities for the market. According to McKinsey, the capacity of carbon capture, utilization, and storage facilities under development crossed the mark of 420 million tons of carbon dioxide per annum in 2023, exhibiting more than a 40% increase since 2022. This upsurge in carbon capture is poised to fuel the availability of carbon dioxide and present novel avenues for the market.?

Segment Review?

The carbon dioxide market is segmented into form, application, and region. On the basis of form, the market is divided into solid, liquid, and gas. Depending on application, it is classified into food & beverages, medical, firefighting, agriculture, metal fabrication, and others. Region wise, it is analyzed across North America, Europe, Asia-Pacific, Middle East & Africa, and Latin America.?

Key Findings?

On the basis of form, the gas segment dominated the market in 2023.?

Depending on application, the agriculture segment held a high share of the market in 2023.?

Region wise, Asia-Pacific was the highest revenue generator in 2023.?

Competition Analysis?

The leading players operating in the carbon dioxide market are India Glycols Limited, Ellenbarrie industrial Gases, Gulfcryo, Dubai Industrial Gas, Buzwair Industrial Gases Factories, ACAIL GAS, Linde PLC, Messer Group, SOL SpA, and TAIYO NIPPON SANCO CORPORATION. These major players have adopted various key development strategies such as acquisition, agreement, joint venture, collaboration, product launch, and partnership to strengthen their foothold in the competitive market.?

Key Benefits for Stakeholders

This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the carbon dioxide market analysis from 2023 to 2033 to identify the prevailing carbon dioxide market opportunities.

The market research is offered along with information related to key drivers, restraints, and opportunities.

Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

In-depth analysis of the carbon dioxide market segmentation assists to determine the prevailing market opportunities.

Major countries in each region are mapped according to their revenue contribution to the global market.

Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

The report includes the analysis of the regional as well as global carbon dioxide market trends, key players, market segments, application areas, and market growth strategies.

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- Technology Trend Analysis
- Regulatory Guidelines
- Strategic Recommedations
- Additional company profiles with specific to client's interest
- Additional country or region analysis- market size and forecast
- Average Selling Price Analysis / Price Point Analysis
- Criss-cross segment analysis- market size and forecast
- Expanded list for Company Profiles
- Historic market data
- Import Export Analysis/Data
- Key player details (including location, contact details, supplier/vendor network etc. in excel format)
- List of customers/consumers/raw material suppliers- value chain analysis
- Market share analysis of players at global/region/country level
- SWOT Analysis
- Volume Market Size and Forecast

Key Market Segments

By Form

- Solid
- Liquid
- Gas

By Application

- Metal Fabrication
- Others
- Food and Beverages
- Type
- Beer
- Carbonated Drinks
- Others
- Medical
- Fire Fighting
- Agriculture

By Region

- North America
- U.S.
- Canada
- Mexico
- Europe
- Germany
- France
- UK

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- Spain
- Italy
- Rest of Europe
- Asia-Pacific
- China
- India
- Japan
- South Korea
- Australia
- Rest of Asia-Pacific
- LAMEA
- Brazil
- South Africa
- Saudi Arabia
- Rest of LAMEA
- Key Market Players
- ACAIL GAS
- SOL SpA
- Ellenbarrie industrial Gases
- India Glycols Limited
- Buzwair Industrial Gases Factories
- Linde PLC
- Gulfcryo
- Dubai Industrial Gas
- Messer Group
- TAIYO NIPPON SANZO CORPORATION

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