

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

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Report description:

The nanocellulose market is estimated to be valued at USD 756.80 million by the end of this year and is expected to register a CAGR of over 21% during the forecast period.

The market was negatively affected due to COVID-19. Manufacturing activities were halted due to supply chain disruptions and labor shortages. However, with the increasing demand observed in oil and gas, the textile segment owing to the growing utilization of various products has increased the demand from various application segments.

Key Highlights

Over the short term, the increasing adoption of flexible packaging aids is a major factor driving the growth of the market studied. On the flip side, a dearth of consumer awareness and economic barriers are expected to hinder the market's growth. Increasing innovation activities and R and D investments, and capacity expansion by manufacturers to capitalize on the wide applicability are expected to unveil new opportunities for the market studied. North America dominated the market across the world with the most substantial consumption.

Nanocellulose Market Trends

Composites Segment to Dominate the Market

The composites segment accounted for the largest application of nanocellulose in 2021. This is owing to the increased demand for

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packaging materials and biodegradable plastics, which has resulted in increased government support and investment in the development of such materials.

Nanocellulose composites have heavily replaced plastics due to their bio-degradable and non-toxic nature. Due to the reduced size of the dispersed phase and its good dispersion in the polymer matrix, these materials exhibit markedly improved properties when compared to pure polymers or their traditional composites.

Furthermore, the development of electric vehicles is expected to continue to gain momentum in the future, especially in North America, Europe, and Asia, owing to government programs promoting the move away from fossil fuels.

According to EV Volumes, global EV sales of a total of 4.3 million new BEVs and PHEVs were delivered during the first half of 2022, an increase of 62 % compared to 2021 H1. Of the 6.75 million EVs sold in 2021, 3.4 million EVs were sold in 2021 in mainland China, 2.3 million EVs were sold in Europe, and 0.7 million were in the United States.

With the increasing demand for polymers worldwide, and majorly developing economies, such as India, Japan, and Vietnam, among others, the demand for nanocellulose is expected to witness a massive increase in the coming years from composite applications.

In India, more than 30 hospital projects are under the planning or construction phase which includes both expansions as well as new construction projects. For instance, the Health City hospital project worth USD 1.4 million is under construction, which is being built by Care Hospitals in the Visakhapatnam district of Andhra Pradesh.

Therefore, considering the aforementioned factors, the demand for nanocellulose in the segment studied is expected to grow substantially during the forecast period.

North America to Dominate the Market

North America dominated the nanocellulose market and it is expected to continue its dominance during the forecast period. Increased infrastructure projects, as well as the renovation of commercial buildings in North America, will drive regional nanocellulose market growth for composite applications. This is mainly owing to huge government spending on public infrastructure upgrades.

Growing industries like food & beverage, oil & gas, paints & coatings, construction, and other industries, in the region, will further complement nano cellulose business growth by 2027.

The number of operational United States oil and gas rigs totaled 610 in the last week of January 2022, according to Baker Hughes. Additionally, the United States crude oil production fell below 11.6 million b/d in December 2021, a decline of 0.2 million b/d from November 2021, EIA further forecasted that production would rise to an average of 12.0 million b/d in 2022 and then to recording production on an annual-average basis of 13.0 million b/d in 2023.

As per the reports by the US Census Bureau, the value of construction in 2021 was USD 1,589.0 billion, 8.2% (70.8%) above the USD 1,469.2 billion spent in 2020. The residential construction value stood at USD 819.13 billion in December 2021 whereas the value for the non-residential segment was USD 820 billion in the same period.

According to the reports by the Business Development Bank of Canada (BDC), USD 119 billion worth of the food & beverage industry recovered in 2021 after a downfall of 5.2% in 2020. Moreover, the report also estimated the growth of the food & beverage sectors for more than 15.6% in the next five years.

Mexico is one of the world's largest oil producers. However, Mexico's oil production, meanwhile, was flat at 1.66 million b/d in 2021, as Pemex output dipped to 1.6 million b/d from 1.61 million b/d a year earlier. Private sector oil production rose to 64,191 b/d from 53,919 b/d. Mexico has become increasingly dependent on U.S. natural gas imports as domestic production has stagnated. Imports account for 90% of gas consumed in Mexico when excluding gas consumed by Pemex as of October 2021, according to CNH.

With such growth from various end-user industries, the North American nanocellulose market is expected to grow rapidly during the forecast period, majorly spurred by the United States.

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Nanocellulose Market Competitor Analysis

The nanocellulose market is consolidated in nature. The major players include CelluForce, GranBio, Melodea Ltd, CelluComp Ltd, and Borregaard, among others.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

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