

# **The Global Market for Nanocellulose 2023-2033 (Cellulose Nanofibers, Cellulose Nanocrystals and Bacterial Nanocellulose)**

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## **Abstracts**

The global nanocellulose (NC) market has accelerated over the last few years as producers in Japan and to a lesser extent North America and Europe bring products to market. The development of these remarkable materials has compelled major paper and pulp producers to gravitate their traditional business towards advanced biorefineries, which have met with initial success and resulted in production capacity increases.

Three types of NC are commercially available: cellulose nanocrystals (CNC), cellulose nanofibers (CNF), and bacterial nanocellulose (BNC). In addition to being produced in different ways, these three types also vary in their physico-chemical properties, from size to crystallinity. Most commercially produced NC is CNF, which is produced on a large scale in Japan.

NC materials are abundant, renewable and inexpensive but are extremely strong, durable, and lightweight, non-toxic and are lower cost than other advanced materials and nanomaterials. Used as a materials additive and in composites, nanocellulose will help to drive the global move away from oil-based plastics and products to sustainable, bio-based alternatives.

Nanocellulose (NC) can be derived from a multitude of abundant cellulosic biomass sources such as wood pulp, agricultural crops, organic waste, as well as from bacteria. Properties including high tensile strength, biocompatibility, and high aspect ratio make it attractive to a wide range of markets, from medical to construction to aerospace. As nanocellulose originates from renewable matter, its potential to replace petroleum-derived materials in films, coatings, composites, and packaging are particularly

interesting in the wake of current political and societal movements towards reduction of plastic consumption. Most of the NC being developed for commercial purposes is in the form of CNF. Currently, many NC-based applications are at an early stages, with some applications already commercially available, mainly in Japan.

The Global Market for Nanocellulose to 2033 is the most comprehensive and up-to date report on nanocellulose currently available. Profiling over 160 companies, the report provides key information for investors and executives to enable them to understand and take advantage of the opportunities provided by nanocellulose. A must-have for anyone interested in the business and investment opportunities in nanocellulose, The Global Market for Nanocellulose to 2033 contains:

Tabular data on current nanocellulose products.

Market assessment by nanocellulose type: cellulose nanocrystals (CNC), cellulose nanofibers (CNF), and bacterial nanocellulose (BNC).

Assessment of nanocellulose by market including applications, key benefits, market megatrends, market drivers for use of nanocellulose, technology drawbacks, competing materials, estimated consumption of nanocellulose to 2033 and main OEMs in each market with potential interest in nanocellulose for product integration.

Graphical depictions of nanocellulose applications by market.

In depth-assessment of nanocellulose producer and distributor pricing in 2023.

Global market for nanocellulose in tons, by sector, historical and forecast to 2033.

In-depth profiles of nanocellulose producers including products, production capacities, manufacturing methods, collaborations, licensing, customers and target markets. Companies profiled include Granbio, Asahi Kasei, Cellucomp, Chuetsu Pulp & Paper, Daio Paper, DKS, Fiberlean, Fuji Pigment Co., Ltd. Innventia AB, KRI, Inc., Melodea, Nippon Paper, Oji and many more.

112 cellulose nanofiber company profiles

21 cellulose nanocrystal company profiles

20 bacterial nanocellulose company profiles

Detailed forecasts for key growth areas, opportunities and demand.

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