

The Global Market for Carbon Nanomaterials 2024-2033

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Abstracts

Carbon possesses different allotropic forms (graphite and diamond) and has the capability to generate a range of nanostructures including graphene single sheets, single and multiwalled carbon nanotubes, carbon nanofibers, graphene quantum dots, fullerenes, and nanodiamonds. Due to their unique structural dimensions and excellent mechanical, electrical, thermal, optical and chemical properties carbon-based nanomaterials are widely utilized in many sectors.

The Global Market for Carbon Nanomaterials 2024-2033 provides a comprehensive analysis of advanced carbon nanomaterials including graphene, carbon nanotubes, carbon nanofibers, fullerenes, nanodiamonds, graphene quantum dots, and nanomaterials from carbon capture and utilization. The report examines global demand, production capacities, pricing, main producers, and applications across major end-user markets such as electronics, energy storage, membranes, coatings, polymers, biomedical devices, and sensors.

Regional demand across North America, Europe, Asia Pacific, and Rest of World is forecast from 2018 to 2034 for graphene and other key nanomaterials. The report profiles over 590 leading producers, highlighting their products, production methods, capacities, pricing, and target markets.

Multiple alternative 2D materials beyond graphene are analyzed including boron nitride, MXenes, transition metal dichalcogenides, black phosphorus, graphitic carbon nitride, germanene, graphdiyne, graphane, rhenium diselenide, silicene, stanene, antimonene and indium selenide. Latest developments in carbon capture and utilization for producing carbon nanomaterials are assessed as well as progress with graphene/nanomaterial-enhanced batteries, biosensors, electronics, catalysts, polymer

composites, and filters/membranes.

Report contents include:

Global demand forecasts for graphene, carbon nanotubes, carbon nanofibers, fullerenes, nanodiamonds to 2034

Assessment of graphene types - production capacities, pricing, producers, applications

Analysis of carbon nanotube types - capacities, pricing, producers, end markets

Review of carbon nanofiber synthesis methods and market opportunities

Fullerene product analysis, pricing, demand, producers, technology readiness

Evaluation of nanodiamond types, production methods pricing, demand, main producers

Emerging opportunities in graphene quantum dots - synthesis, pricing, applications

Role of carbon capture in producing carbon nanomaterials

Profiles of 590+ leading producers/suppliers of carbon nanomaterials. Companies profiled include BeDimensional, BestGraphene, Black Swan Graphene, DexMat, Graphenest, Graphene Leaders Canada, Graphene Manufacturing Group Limited, HydroGraph Clean Power, JEIO, Kumho Petrochemical, KB Element, LG Chem, Nano Diamond Battery, Novusterra, OCSiAl, Paragraf and Zeon Corporation.

Analysis of properties, production and applications of 2D materials beyond graphene - hexagonal boron nitride, MXenes, transition metal dichalcogenides, black phosphorus etc.

Regional demand forecasts across North America, Europe, Asia Pacific, Rest of World

Impact of graphene and nanomaterials on batteries, electronics, membranes,

coatings

Assessment of technology readiness levels for different nanomaterials by application

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