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Global and China Graphene Industry Report, 2020-2026

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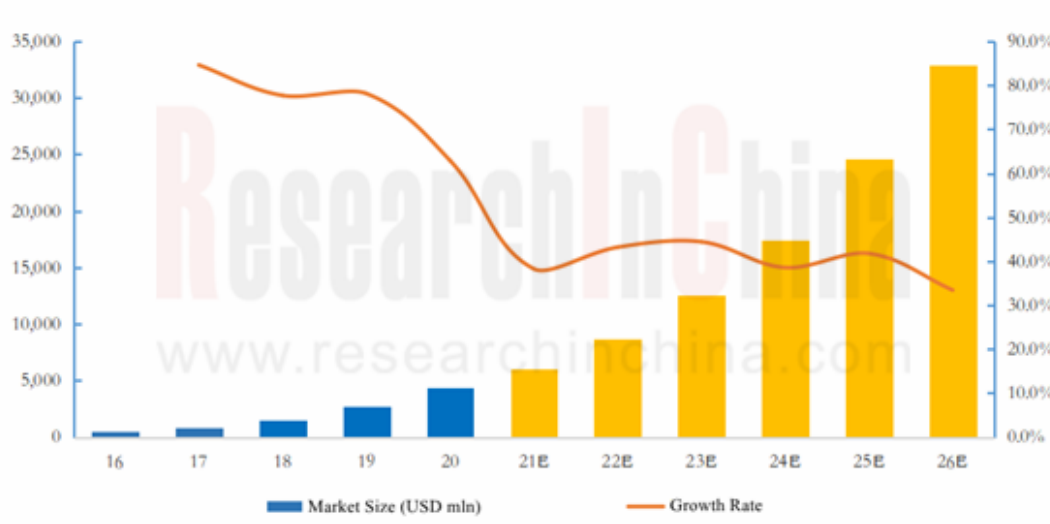
Abstract

Graphene, a kind of 2D carbon nanomaterial, features excellent properties such as mechanical property and super electrical conductivity and thermal conductivity. Its downstream application ranges from basic sciences and new energy battery to flexible display, sensor and composites. Wide adoption gives a big boost to the graphene market. In 2020, the global graphene market was worth USD4,386 million, of which the growing Chinese market was valued at RMB10.1 billion, or 33.4% of the global.

Graphene finds wide commercial application in the form of powder and film. Graphene powder is largely used in new energy and anticorrosive paint; graphene film gets utilized for flexible displays and sensors, with the new energy field demanding over 70%.

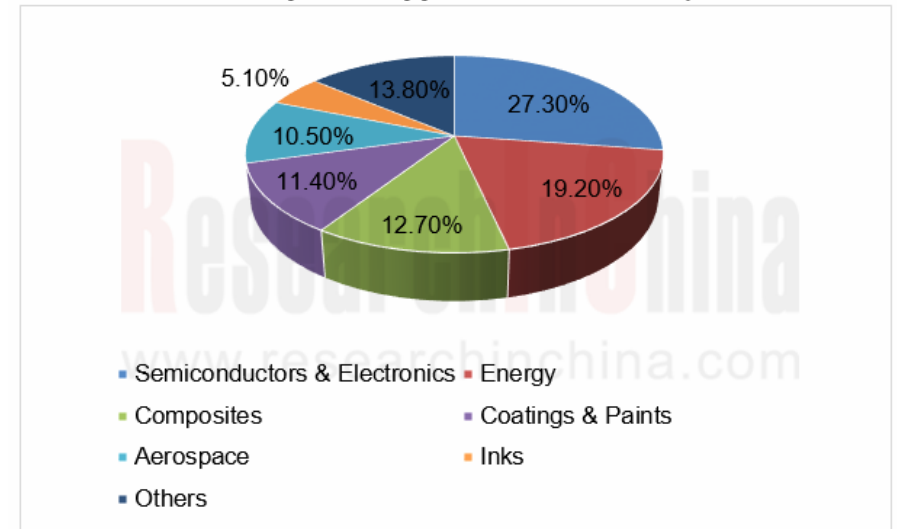
For downstream application, graphene is most often seen in new energy-related fields such as lithium battery conductive agent and new energy supercapacitor. The increasingly high penetration of new energy vehicles will fuel the boom of graphene industry. In 2020, the global graphene conductive agent market was valued at RMB6.7 billion; in 2030, the global graphene supercapacitor market is expected to be worth USD609 million, sustaining CAGR of over 20%. In 2019, China's production of anticorrosive paint jumped by 18% thanks to good performance of graphene anticorrosive materials in thermal stability and antiseptis. Graphene flexible displays are often demanded by wearable devices. For strong chemosensitivity, graphene-based sensors have a promising future in medicine.

Global Graphene Market Size and Growth Rate, 2016-2026E



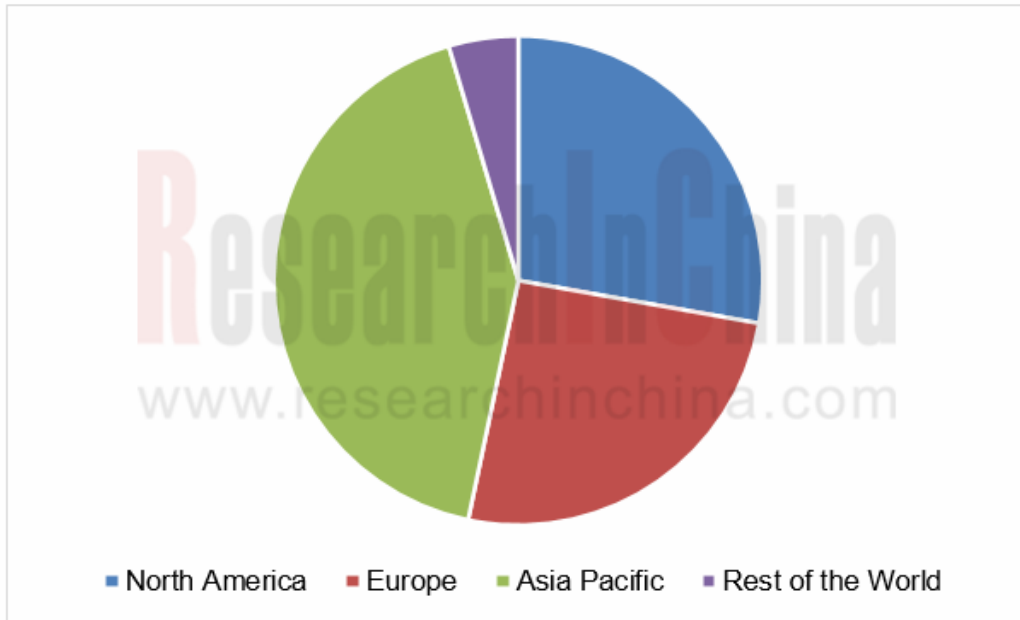
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Global Graphene Application Structure, 2020



By region, Asia-Pacific region, especially China where advanced manufacturing is rising, demands ever more graphene, leading to a surging graphene market there. In 2020, the region commanded 42.1% of the global graphene market, outstripping the rest of the world in sales. Moreover, considering large numbers of producers with strong competence in research and development, it is predicted that the region's demand for graphene will soar in the years to come.

Global Graphene Market Structure by Region, 2020



Through the lens of competitive pattern, European and American companies stay ahead in graphene preparation technology and applied products like composites and core electronic components, while the Asian graphene application market has a rosy prospect. In China, over 10 listed companies work on research and production of graphene-based products, typically graphene conductive agent, flexible display and heat conductive materials, with the initial capability of mass-producing graphene films and powder. Among them, The Sixth Element (Changzhou) Materials Technology Co., Ltd. as the first one boasting graphene powder and film mass production lines focuses on studying graphene application in sensor and heating film; 2D Carbon (Changzhou) Tech Inc., Ltd. has developed graphene film production lines for application in heating film and flexible display.

Global and China Graphene Industry Report, 2016-2026 highlights the following:

- Graphene (classification, technology, development course, industry chain, etc.);
- Global graphene industry (status quo, market size, prices, patents, industrialization, development trends, etc.);
- China's graphene industry (status quo, market size, competitive pattern, industrialization, development trends, etc.);
- Graphene upstream sectors (market size, etc.)
- Graphene downstream sectors (market size, main companies, segments, application, etc.);
- 20 foreign and 17 Chinese producers of graphene and applied products (operation, graphene business, production layout, R&D, etc.).

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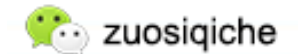
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