

Global Advanced Carbon Materials Market – Materials and Applications

This comprehensive report analyzes and projects the global Advanced Carbon Materials Market by Material Type (Carbon Fibers, Carbon Foams, Carbon Nanotubes (CNTs), Fullerenes, Graphene), by Application Area (Aerospace & Defense, Sports & Leisure, Energy, Automotive & Transportation, Construction/Infrastructure, Electrical & Electronics, Medical and Other Applications) for the period 2021-2030 with projections from 2024-2030 in terms of value in US\$.

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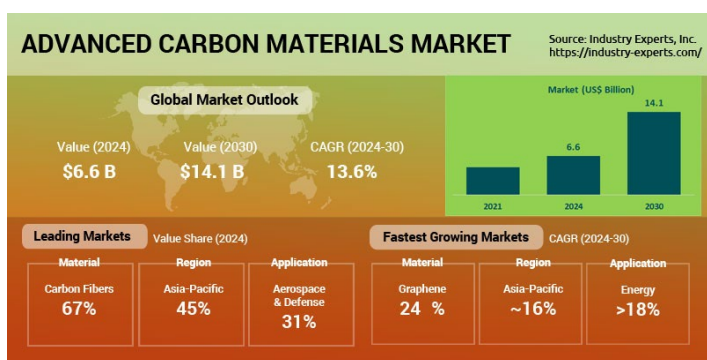
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Advanced Carbon Materials Market Trends and Outlook

Advanced Carbon Materials are a specialized class of materials utilized in engineering and scientific innovations due to their exceptional chemical, physical and electrical characteristics. Major types of the same comprise carbon fibers, carbon foams, carbon nanotubes (CNTs), fullerenes and graphene. Due to their distinctive and fundamental characteristics, Advanced Carbon Materials are regarded as the backbone of scientific revolution of the 21st century. They are widely used in various end-use applications, such as aerospace, sporting goods, medical, civil engineering, electronics, biosensors, marine, seismic retrofitting and water & waste management where low weight, high tensile strength, durability, impact absorption, resistance and stiffness are indispensable properties to have.

The global demand for Advanced Carbon Materials is estimated at US\$6.6 billion in 2024. Forecast to be US\$7.4 billion in 2025, demand for Advanced Carbon Materials globally is expected to post a robust CAGR of 13.6% between 2024 and 2030 to reach US\$14 billion by 2030.



Advanced Carbon Materials Market Report Scope

This global report on Advanced Carbon Materials analyzes the global and regional market based on material type and end-use application for the period 2021-2030 in terms of value in US\$. In addition to providing profiles of major companies operating in this space, the latest corporate and industrial developments as well as key market trends influencing the industry have been covered to offer a clear panorama of how and where the market is progressing.

Key Metrics

Historical Period:	2021-2023
Base Year:	2024
Forecast Period:	2024-2030
Units:	Value market in US\$
Companies Mentioned:	160+

Advanced Carbon Materials Market by Geographic Region

- North America (The United States and Canada)
- Europe (France, Germany, Italy, Spain, The United Kingdom and Rest of Europe)
- Asia-Pacific (China, India, Japan, South Korea, Taiwan and Rest of Asia-Pacific)
- Rest of World (Brazil, Russia, Turkiye and Other Rest of World)

Advanced Carbon Materials Market by Product Type

- Carbon Fibers
- Carbon Nanotubes
- Graphene
- Fullerenes
- Carbon Foams

Advanced Carbon Materials Market by Application Area

- Aerospace & Defense
- Sports & Leisure
- Energy
- Automotive & Transportation
- Construction/Infrastructure
- Electrical & Electronics
- Medical
- Other Applications

SAMPLE COMPANY PROFILE

VERSARIEN™ PLC (UNITED KINGDOM)

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Website: www.versarien.com

Business Overview

Versarien plc, through its subsidiaries, is a leading company engaged in the R&D, production and supply of graphene and graphene based products. Versarien holds more than 130 patents covering areas including the manufacture and use of graphene and related materials in diverse applications. The company develops and manufactures advanced graphene materials and products globally through a number of subsidiaries - 2-DTech Limited (UK), Cambridge Graphene Limited (UK), Versarian Korea Limited (Korea), Versarien Graphene Limited (UK), and Gnanomat S.L. (Spain). Versarien was the first company in the world to pass the rigorous Verified Graphene Producer® program in 2019, and has been re-certified in 2022.

Versarien plc has collaborated with Graphene Lab Co Ltd, a South Korean company specializing in CVD graphene development. Versarien has secured a significant investment from Graphene Lab and entered into agreements that grant them access to research and production facilities in South Korea, enabling them to develop graphene-based technologies for the South Korean electronics sector. This collaboration allows Versarien to leverage Graphene Lab's expertise in CVD graphene for its own growth and innovation.

Subsidiaries

Versarian Korea Limited (South Korea)

Graphene Lab Co., Ltd.

9-13, Dongtan Industrial Complex 4-gil, Hwaseong-si, Gyeonggi-do, South Korea

Tel: 031-378-2559, Fax: 031-377-2538

Overview

Based in Seoul, South Korea Versarian Korea Limited specializes in the development of CVD graphene. Versarien subsidiary Versarien Korea manufactures single-layer graphene (SLG) using a rapid thermal chemical vapor deposition (CVD) process (RT-CVD) in a clean room environment. The company's standard products include SLG on copper foil (CVD-101) up to 200 x 200 mm in size, SLG transferred on to SiO2/Si wafers (CVD-201), or SLG transferred on to PET substrates (CVD-301). Versarien also offer services to produce multiple stacked layers of graphene and transfer graphene on to other substrates of the customer's choice.

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SAMPLE TABLE/CHART

Glance at 2021, 2024 and 2030 Global Advanced Carbon Materials Market Share (%) by Material Type - Carbon Fibers, Carbon Nanotubes, Graphene, Fullerenes and Carbon Foams



Global Carbon Fibers Market Analysis (2021-2030) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in US\$ Million



KEY PLAYERS PROFILED

- 2D Carbon Graphene Material Co., Ltd
- 2D fab AB
- 2d Materials Pte. Ltd.
- 3D Strong
- Abalonyx AS
- Ad-Nano Technologies Private Limited
- Advanced Graphene Products Sp. z o.o.
- Aligned Carbon
- American Dye Source, Inc.
- American Elements Corp.
- Applied Graphene Materials plc
- Applied Nanotech, Inc.
- Arkema Group

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TABLE OF CONTENTS

PART A: GLOBAL MARKET PERSPECTIVE 1

1. INTRODUCTION 1

1.1 Product Outline 6

1.1.1 What are Advanced Carbon Materials? 6

1.1.2 Types of Advanced Carbon Materials 6

1.1.2.1 Carbon Fibers 6

1.1.2.1.1 Structure and Properties of Carbon Fibers 7

1.1.2.1.2 Classification of Carbon Fibers 9

1.1.2.1.2.1 Classification Based on Raw Materials Used 9

1.1.2.1.2.2 Classification Based on Mechanical Properties 9

1.1.2.1.2.3 Classification Based on the Final Heat Treatment Temperature 10

1.1.2.1.2.4 Classification Based on Secondary Processing 10

1.1.2.1.3 Manufacturing Process of Carbon Fibers 11

1.1.2.1.3.1 PAN-Based Carbon Fiber 11

1.1.2.1.3.2 Pitch-Based Carbon Fiber 14

1.1.2.1.4 Carbon Fibers End Use Applications 16

1.1.2.1.4.1 Aerospace and Defense 16

1.1.2.1.4.2 Sports and Leisure 16

1.1.2.1.4.3 Automotive & Transportation 17

1.1.2.1.4.4 Energy 17

1.1.2.1.4.5 Construction and Infrastructure 17

1.1.2.1.4.6 Electrical & Electronics 18

1.1.2.1.4.7 Medical & Healthcare 18

1.1.2.1.4.8 Other Applications 19

1.1.2.2 Carbon Nanotubes 19

1.1.2.2.1 Key Properties of Carbon Nanotubes 19

1.1.2.2.2 Types of Carbon Nanotubes 21

1.1.2.2.2.1 Multi-walled Carbon Nanotubes (MWCNTs) 21

1.1.2.2.2.2 Single-walled Carbon Nanotubes (SWCNTs) 23

1.1.2.2.3 Carbon Nanotubes Production Methods 25

1.1.2.2.3.1 Chemical Vapor Deposition (CVD) 26

1.1.2.2.3.2 Laser Ablation 26

1.1.2.2.3.3 Arc Discharge 27

1.1.2.2.3.4 Other Methods 27

1.1.2.2.4 Applications of Carbon Nanotubes 28

1.1.2.2.4.1 Aerospace & Defense 28

1.1.2.2.4.2 Automotive & Transportation 29

1.1.2.2.4.3 Electrical & Electronics 29

1.1.2.2.4.4 Energy 30

1.1.2.2.4.5 Medical & Biotechnology 30

1.1.2.2.4.6 Sports & Leisure 30

1.1.2.2.4.7 Construction & Infrastructure 30

1.1.2.2.4.8 Other Applications 31

1.1.2.2.4.9 Multi-Walled Carbon Nanotubes Applications 31

1.1.2.2.4.10 Single-Walled Carbon Nanotubes Applications 32

1.1.2.3 Graphene 32

1.1.2.3.1 Structure and Properties of Graphene 33

1.1.2.3.2 Types of Graphene 35

1.1.2.3.2.1 Graphene Oxide (GO) 35

1.1.2.3.2.2 Reduced Graphene Oxide (rGO) ... 35

1.1.2.3.2.3 Graphene Nanoplatelets (GNPs) ... 36

1.1.2.3.2.4 Graphene and Graphene Oxide Quantum Dots (GQDs) 36

1.1.2.3.2.5 Graphene Nanoribbons (GNRs) 37

1.1.2.3.2.6 Graphene Aerogels 37

1.1.2.3.2.7 Graphene Films 38

1.1.2.3.3 Graphene Production Processes 38

1.1.2.3.3.1 Chemical Vapor Deposition (CVD) 38

1.1.2.3.3.2 Liquid-phase (Chemical or Plasma) Exfoliation from Natural Graphite 38

1.1.2.3.3.3 Mechanical Exfoliation from Natural Graphite 39

1.1.2.3.4 Applications of Graphene 39

1.1.2.3.4.1 Aerospace & Defense 39

1.1.2.3.4.2 Automotive & Transportation 39

1.1.2.3.4.3 Construction 40

1.1.2.3.4.4 Electrical & Electronics 40

1.1.2.3.4.5 Energy 40

1.1.2.3.4.6 Medical & Healthcare 40

1.1.2.3.4.7 Sports & Leisure 41

1.1.2.3.4.8 Other Applications 41

1.1.2.4 Fullerenes 41

1.1.2.4.1 Structure and Properties of Fullerenes 41

1.1.2.4.2 Types of Fullerenes 43

1.1.2.4.2.1 Buckminsterfullerene (C60) 43

1.1.2.4.2.2 Higher Fullerenes 43

1.1.2.4.2.3 Heterofullerenes 43

1.1.2.4.2.4 Fullerenols 43

1.1.2.4.2.5 Functionalized fullerenes 43

1.1.2.4.3 Fullerenes Production Processes 44

1.1.2.4.3.1 Huffman-Krättschmer Method 44

1.1.2.4.3.2 Combustion Method 44

1.1.2.4.3.3 Microwave Method 44

1.1.2.4.3.4 Other Processes 45

1.1.2.4.4 Applications of Fullerenes 45

1.1.2.4.4.1 Medical & Cosmetics 45

1.1.2.4.4.2 Energy 45

1.1.2.4.4.3 Electronics 46

1.1.2.4.4.4 Environment 46

1.1.2.4.4.5 Other Applications 46

1.1.2.5 Carbon Foam 46

1.1.2.5.1 Properties of Carbon Foams 47

1.1.2.5.2 Carbon Foam Manufacturing Processes 47

1.1.2.5.2.1 Coal-Based 48

1.1.2.5.2.2 Intermediate Mesophase Pitch 48

1.1.2.5.2.3 Synthetic Polymers 49

1.1.2.5.2.4 Lignin and Other Biomass 49

1.1.2.5.3 Applications of Carbon Foam 49

1.1.2.5.3.1 Aerospace and Defense 49

1.1.2.5.3.2 Energy 50

1.1.2.5.3.3 Automotive 50

1.1.2.5.3.4 Construction 51

1.1.2.5.3.5 Other Applications 51

2. KEY MARKET TRENDS 52

2.1 Carbon Nanotubes and Graphene Power a New Era: Transforming the Future of Energy Storage Batteries 52

2.1.1 Revolutionizing Battery Performance with Niobium-Graphene Innovations 52

2.1.2 Smart Textiles and Energy Harvesting: The GRAPHERGIA Project 52

2.1.3 Innovative Applications: From Lead-Acid Batteries to Lithium-Sulfur Anodes 52

2.1.4 Breakthroughs in Carbon Nanomaterials Applications for Batteries 53

2.1.5 Industrial Momentum: Building Local Supply Chains 53

2.1.6 The Road Ahead: Graphene and CNTs in EVs and Beyond 53

2.2 China's Aggressive Carbon Fiber Expansion: Global Market Implications 54

2.2.1 North America: Maturing Market with Balanced Growth 55

2.2.2 Asia-Pacific: Rapid Expansion and Overcapacity Risks 55

2.2.3 Europe and Japan: Moderate Growth with Strategic Focus 55



2.2.4 Global Market Implications and Future Outlook	56	3.11 Applied Graphene Materials plc (United Kingdom)	80	3.50 GanSu HaoShi Carbon Fiber Co., Ltd. (China)	120
2.2.5 China's Carbon Fiber Ambitions: Expansion Plans May Be Challenged by Technology and Market Risks	56	3.12 Applied Nanotech, Inc. (United States)...	81	3.51 General Graphene Corporation (United States).....	121
2.2.6 Leading Players Response to China Competition	57	3.13 Arkema Group (France)	82	3.52 Global Graphene Group (United States).....	122
2.3 Burgeoning Opportunities for Carbon Fibers in High-pressure Gas Storage Vessels...	58	3.14 Arry International GmbH (Germany)	84	3.53 Goodfellow Cambridge Ltd (United Kingdom)	124
2.3.1 Advancements in Hydrogen Fuel Cell Vehicles.....	59	3.15 Asbury Carbons Inc. (United States)	85	3.54 Grafen® Nanoteknoloji (Turkey).....	125
2.3.2 Expansion in Carbon Fiber Production for Pressure Vessels	60	3.16 Avanzare Innovación Tecnológica S.L. (Spain).....	86	3.55 Grafoid Inc. (Canada).....	127
2.3.3 Rising Production of Pressure Vessels and Hydrogen Systems	60	3.17 Aztrong Corporation (Taiwan)	87	3.56 Graphene Industries Ltd. (United Kingdom)	128
2.3.4 Innovation in Type V Linerless Pressure Vessels.....	60	3.18 BeDimensional S.p.A. (Italy).....	89	3.57 Graphene Lab Co., Ltd. (South Korea) ..	128
2.3.5 Emergence of Liquid and Cryo-Compressed Hydrogen Storage	61	3.19 Bergen Carbon Solutions AS (Norway)....	90	3.58 Graphene Square Inc. (South Korea)	129
2.4 Unique Properties and Multiple Potential Applications Driving Demand for Fullerenes	61	3.20 BESTGRAPHENE Co.,Ltd. (South Korea) ..	91	3.59 Graphenea (Spain).....	130
2.5 Copper Nanowires Coated with Graphene Enhance Flexible Electronics	62	3.21 Black Swan Graphene Inc. (Canada)	92	3.60 Graphene-XT (Italy)	131
2.6 Carbon Nanotubes Revolutionizing the Medical Industry	63	3.22 Bluestar Fibres Corporation (China).....	94	3.61 Graphitene Ltd (United Kingdom)	132
2.7 Fullerenes Offer Exciting Potential in Various Medical Applications.....	63	3.23 BTCorp Generique Nano Private Ltd (India)	94	3.62 Graphjet Technology Sdn. Bhd. (Malaysia)	132
2.8 Magnetized Graphene Offers Potential to Increase Data Storage Capacity to Unimaginable Levels	64	3.24 Cabot Corporation (United States)	95	3.63 Grupo Antolin Ingenieria S.A (Spain)	133
2.9 Graphene to be Instrumental in Advancing Spintronics.....	64	3.25 Canatu Oy (Finland)	97	3.64 Grupo Graphenano (Spain).....	134
2.10 Graphene Oxide-Based Hybrid Nanopolymers Enhance Bearing Performance	65	3.26 Carbon Gates Technologies LLC (United States).....	98	3.65 Guangdong Coal-based Carbon Materials Research Co., Ltd. (China).....	137
2.11 Carbon Nanotubes Flying High in the Aerospace Industry	66	3.27 Carbon Solutions, Inc. (United States)	99	3.66 Guangdong Dowstone Technology Co., Ltd. (China)	137
3. KEY MARKET PLAYERS	68	3.28 Carbon Waters (France).....	100	3.67 Hamamatsu Carbonix Co., Ltd. (Japan). 138	
3.1 2D Carbon Graphene Material Co., Ltd (China).....	68	3.29 CealTech AS (Norway).....	100	3.68 Haydale Graphene Industries Plc (United Kingdom)	139
3.2 2D fab AB (Sweden)	69	3.30 CFOAM LLC (United States).....	101	3.69 HeiQ Materials AG (Switzerland)	140
3.3 2d Materials Pte. Ltd. (Singapore).....	69	3.31 Changsheng (Langfang) Technology Co., Ltd. (China)	102	3.70 Hexcel Corporation (United States).....	141
3.4 3D Strong (Latvia).....	70	3.32 CHASM Advanced Materials, Inc. (United States).....	102	3.71 Huntsman Corporation (United States) 144	
3.5 Abalonyx AS (Norway).....	71	3.33 Cheap Tubes Inc. (United States).....	105	3.72 HydroGraph Clean Power Inc (Canada) 145	
3.6 Ad-Nano Technologies Private Limited (India).....	72	3.34 Chengdu Zhongke Times Nano Energy Tech Co., Ltd (China).....	105	3.73 Hyosung Advanced Materials (South Korea)	146
3.7 Advanced Graphene Products Sp. z o.o. (Poland).....	73	3.35 CNT Solution Co., Ltd. (South Korea)	108	3.74 Incubation Alliance, Inc. (Japan)	147
3.8 Aligned Carbon (United States).....	75	3.36 Continental Carbon Nanotechnologies, Inc. (United States)	109	3.75 IoLiTec Ionic Liquids Technologies GmbH (Germany)	148
3.9 American Dye Source, Inc. (Canada)	76	3.37 DexMat (United States)	110	3.76 Ionic Industries Limited (Australia).....	150
3.10 American Elements Corp. (United States)	77	3.38 Deyang Encarbon Technology Co. Ltd (China)	111	3.77 JEIO Co., Ltd (South Korea)	151
		3.39 Directa Plus S.p.A. (Italy).....	111	3.78 Jiangsu Cnano Technology Co., Ltd. (China)	152
		3.40 DowAksa (Turkey).....	112	3.79 Jiangsu Hengshen Co., Ltd. (China).....	154
		3.41 Eden Innovations Ltd (Australia).....	113	3.80 Jilin Chemical Fiber Group Co., Ltd. (China)	155
		3.42 Elemental Advanced Materials (United States).....	113	3.81 Jindal Advanced Materials Private Limited (India)	156
		3.43 Enerage Inc. (China).....	114	3.82 KB-ELEMENT Co., Ltd. (South Korea)	157
		3.44 Entegris, Inc. (United States)	114	3.83 Klean Commodities (Canada)	157
		3.45 ERG Aerospace (United States).....	115	3.84 KORBON Co., Ltd. (South Korea).....	158
		3.46 Firefly International Energy Co (United States).....	116	3.85 Kumho Petrochemical Co., Ltd. (KKPC) (South Korea).....	159
		3.47 First Graphene Ltd (Australia).....	117		
		3.48 Formosa Plastics Corporation (Taiwan) 118			
		3.49 Frontier Carbon Co., Ltd. (Japan)	119		



3.86 Kureha Corporation (Japan)	160	3.123 RUSGRAPHENE (Russia)	199	3.159 Xiamen Knano Graphene Technology Co., Ltd (China)	244
3.87 Layer One – Advanced Materials (Norway)	161	3.124 SES Research Inc. (United States)	200	3.160 Xinjiang Runjust New Material Co. Ltd (China)	245
3.88 LeaderNano (China)	162	3.125 SGL Carbon SE (Germany).....	202	3.161 Zeon Corporation (Japan).....	245
3.89 Levidian Nanosystems Limited (United Kingdom).....	163	3.126 Shandong Dazhan Nano Materials Co., Ltd. (China)	206	3.162 Zhongfu Shenying Carbon Fiber Co., Ltd. (China)	246
3.90 LG Chem (South Korea).....	164	3.127 Shandong Guotai Dacheng Technology Co., Ltd. (China)	207		
3.91 Materials Technologies Research (MTR) Ltd. (United States)	165	3.128 Shandong Yongcheng New Materials Co. Ltd. (China)	208	4. KEY BUSINESS & PRODUCT TRENDS	248
3.92 Meijo Nano Carbon Co., Ltd (Japan)	166	3.129 Shandong YuHuang New Energy Technology Co., Ltd (China)	209	4.1 April 2025	248
3.93 Mersen Group (France).....	167	3.130 Shenzhen Cone Technology Co., Ltd (China)	209	4.1.1 Salgenx Introduces Hybrid Flow Energy Platform Using Graphene-Based Ultracapacitor.....	248
3.94 Mitsubishi Chemical Corporation (Japan)	168	3.131 Shenzhen Feymo Technology Co., Ltd. (China)	210	4.2 March 2025	248
3.95 Modern Synthesis Technology OOO “MCT-Нано” (Russia)	174	3.132 Shenzhen Nanotech Port Co. Ltd. (China)	211	4.2.1 Time Magazine Ranks Skeleton Technologies among World’s Top 30 GreenTech Companies	248
3.96 Molecular Rebar Design, LLC (MRD) (United States).....	175	3.133 SINOPEC Shanghai Petrochemical Company Limited (China)	213	4.2.2 Graphene Manufacturing Group Signs Pact with the Battery Innovation Center of Indiana for Graphene Aluminium-Ion Battery.....	248
3.97 Nanjing JCNANO Technology Co., LTD (China).....	177	3.134 Skeleton Technologies (Germany).....	213	4.2.3 Levidian and Graphmatech Collaborate for the Future of Clean Hydrogen.....	249
3.98 Nanjing XFNANO Materials Tech Co., Ltd (China).....	177	3.135 Standard Graphene (South Korea).....	214	4.2.4 Versarian Announces Graphinks™ Supply Agreement with Montana	249
3.99 Nano-C (United States)	178	3.136 Suzhou Graphene Nanotechnology Co, Ltd. (China)	215	4.2.5 Versarian Announces Sale of Korean Assets	249
3.100 Nanocyl SA (Belgium)	179	3.137 Syensqo SA (Belgium)	216	4.2.6 Huntsman and Advanced Material Development Team up for Carbon Nanotube Composites.....	249
3.101 nanoEMI (Poland)	181	3.138 Talga Group Ltd (Australia).....	217	4.2.7 Syensqo & Vartega Collaborate for the Recycling of Carbon Fiber Waste.....	250
3.102 Nanograf Private Limited (India)	181	3.139 TDA Research (United States).....	219	4.2.8 Hexcel and FIDAMC Partner up for the Evolution of Composite Materials	250
3.103 Nanografi Nanotechnology Inc. (Turkiye).....	182	3.140 Teijin Limited (Japan).....	219	4.2.9 Teijin Carbon Launches Tenax™ IMS65 E23 36K 1630tex.....	250
3.104 Nanointegris Inc. (Canada).....	183	3.141 The Sixth Element (Changzhou) Materials Technology Co., Ltd (China)	222	4.2.10 Teijin Carbon launches new Sustainable Carbon Fiber Brand: Tenax Next™	250
3.105 NanoLab, Inc. (United States)	184	3.142 Thomas Swan & Co. Ltd (United Kingdom)	223	4.3 February 2025	251
3.106 NanoSolution Co., Ltd. (South Korea) ..	185	3.143 Toda Kogyo Co., Ltd. (Japan).....	224	4.3.1 CNT Solution Develops Eco-Friendly Technology for Carbon Quantum Dots.....	251
3.107 Nanostructured & Amorphous Materials, Inc. (United States)	185	3.144 Tokai Carbon Co Ltd (Japan)	224	4.3.2 Mitsubishi Chemical Group receives ISCC PLUS Certification for its Prepreg Using Plant-Derived Resin	251
3.108 NanoTechLabs, Inc. (United States)	186	3.145 Toray Industries, Inc. (Japan)	225	4.3.3 Bodo Möller Chemie and DowAksa Collaborate for Sustainable Future with Resins and Fibers.....	251
3.109 NanoXplore (Canada).....	187	3.146 Tortechn Nano Fibers (Israel).....	231	4.3.4 4M Carbon Fiber and Carboscreen Partner up to Enhance Carbon Fiber Manufacturing with the Power of AI	251
3.110 NAWA Technologies (France).....	188	3.147 Toyo Tanso Co Ltd (Japan)	232	4.3.5 Paragraf and University of Cambridge Receive Grant from Innovate UK.....	252
3.111 NeoTechProduct (Russia).....	189	3.148 TPR Co., Ltd. (Japan)	233		
3.112 Newtech Group Co., Ltd. (China)	189	3.149 TrimTabs (United Kingdom)	233		
3.113 Ningbo Morsh Technology Co., Ltd. (China).....	190	3.150 Tunghsu Group Co., Ltd. (China)	234		
3.114 Nippon Graphite Fiber Corporation (Japan)	191	3.151 Ugent Tech Sdn Bhd (Malaysia)	234		
3.115 NoPo Nanotechnologies India Private Limited (India).....	192	3.152 Ultramet (United States).....	235		
3.116 Novarials Corporation (United States) 193		3.153 UMATEX, ROSATOM State Corporation (Russia)	235		
3.117 OCSiAl (Luxembourg)	194	3.154 Versarien™ plc (United Kingdom)	237		
3.118 Osaka Gas Chemicals Co Ltd. (Japan) ..	195	3.155 Vorbeck Materials Corp. (United States).....	242		
3.119 Paragraf Limited (United Kingdom).....	196	3.156 Weihai Guangwei Composites Co., Ltd. (China)	242		
3.120 Perpetuus Advanced Materials PLC (United Kingdom).....	197	3.157 William Blythe Limited (GOgraphene) (United Kingdom)	243		
3.121 Reliance Industries Ltd. (India).....	198	3.158 Wuxi Dongheng New Energy Technology Co., Ltd (China)	244		
3.122 Resonac Holdings Corp (Japan)	198				

4.3.6 Daejin Advanced Materials Planning CNT Conductive Additives Plant in North America.....	252	4.9 July 2024	257	4.13.2 NanoXplore Announces Capacity Expansion at Quebec Plant.....	262
4.4 January 2025	252	4.9.1 Black Swan Graphene Signs Commercial Deal with UK’s Broadway Colours.....	257	4.13.3 Toray Announces Launch of TORAYCA™ M46X Carbon Fiber.....	262
4.4.1 Shandong Yuhuang Group and Zhejiang Nachi New Energy Sign Strategic Cooperation Agreement	252	4.9.2 Haydale Collaborated with Carbon Capture LLC.....	257	4.14 December 2023	263
4.4.2 Perpetuus Unveils New Eco-friendly Graphene Masterbatch.....	252	4.9.3 Mersen has Announced the Acquisition of GMI group.....	258	4.14.1 Vine Ventures Backs CNT Solution with Strategic Investment	263
4.5 December 2024.....	253	4.9.4 Jindal Advanced Materials Aims to Boost FRP Rebar Capacity Five-Fold by 2026	258	4.14.2 Zeon, Nagoya University, and Friend Microbe Develop Novel Method to Degrade Carbon Nanotubes with Microorganisms.....	263
4.5.1 Gnanomat Receives Grant from Comunidad de Madrid for Speeding up GnanoCaps Developments.....	253	4.10 June 2024.....	258	4.14.3 MRD Receives SBIR EPA Phase I Grant	263
4.5.2 Versarian Signs Distribution Agreement with ABC for Graphene Biosensors.....	253	4.10.1 MEIJO NANO CARBON and SK Inc. Materials Forge a Capital and Business Alliance	258	4.14.4 Solvay Announces the Completion of Syensqo spin-off	264
4.5.3 OCSiAl and Neo Battery Materials Collaborate to develop High-Specification Silicon Anodes.....	253	4.11 May 2024	258	4.15 November 2023	264
4.6 November 2024	254	4.11.1 HydroGraph Partners with Gulf Cryo to Produce Graphene in Middle East.....	258	4.15.1 Talga Receives \$31 Million Environmental Bond Facility for its Vittangi Anode Project.....	264
4.6.1 TorTech to Develop Body Armor and Composite Protection for Vehicles	254	4.11.2 Haydale Displays New Solution Graphene ‘Hot Seat’ at Advanced Materials Show 2024	259	4.15.2 NanoXplore Announces Novel Graphene Manufacturing Process.....	264
4.6.2 Hengshen Co. receives Approval for Establishing ‘Zhenjiang Key Laboratory for High-Performance Carbon Fiber and Composites’	254	4.11.3 SiAT and CSAC Partnered on Developing Carbon Nanotube-coated Aluminum Foil for Battery Electrodes.....	259	4.15.3 Sunrise New Energy to Construct Carbon Nanotube Conductive Additive Plant in the United States.....	264
4.6.3 Saertex and Biesterfeld Enter into a Distribution Partnership.....	254	4.11.4 NoPo Nanotechnologies Secures \$3 Million Funding to Expand Production	259	4.16 October 2023.....	265
4.6.4 Harper International Commissions Two Carbon Fiber Lines in China.....	254	4.11.5 TrimTabs to Derive Carbon Nanotubes from Plastic Waste	259	4.16.1 Kumho Petrochem and POSCO Plan to launch Joint Venture	265
4.6.5 4M Carbon Fiber Launches 50-Ton Plasma Oxidation Qualification Line	255	4.12 April 2024	260	4.16.2 Skeleton Technologies Raises €108 million in Funding Round from Siemens.....	265
4.7 October 2024	255	4.12.1 SiAT and Zeon Collaborate to Launch Novel SWCNT Conductive Paste	260	4.16.3 Toray Launches New Product TORAYCA™ T1200.....	265
4.7.1 BeDimensional Inaugurates Groundbreaking 2D Crystal Plant in Genoa ..	255	4.12.2 Paragraf launches new Online Store for GFET-PV01.....	260	4.16.4 Birla Carbon Announces the Acquisition of Nanocyl SA.....	265
4.7.2 OCSiAl Commissions a New Carbon Nanotube Dispersion Plant in Serbia	255	4.12.3 March 2024.....	260	4.17 September 2023	266
4.7.3 Paragraf Receives £773,394 Grant from Innovate UK.....	255	4.12.4 HAICoPAS Milestone: Arkema and Hexcel Launch Innovative Aero Structure.....	260	4.17.1 URV tests Gnanomat Advanced Materials for NO2 Gas Sensors.....	266
4.7.4 MKE and Nanografi form a Strategic Partnership	256	4.12.5 Lyten to Supply Lithium-sulfur Batteries for Chrysler’s Halcyon Concept Car	261	4.17.2 Gnanomat Announces Development of Functional Printing Inks.....	266
4.7.5 Mersen Announces the Acquisition of Bar-Lo Carbon Products, Inc.....	256	4.12.6 CHASM Partnered with Ingevity to Scale-up and Commercialize NTeC®-E CNT Additives	261	4.17.3 SLB and TDA Research Collaborate to Scale-up TDA’s Sorbent Technologies	266
4.7.6 Haydale Partners with Stair craft to Mitigate Rising Energy Costs.....	256	4.12.7 Levidian launches Novel Graphene-Enhanced Prototype Truck Tire	261	4.17.4 Hankuk Carbon Co., Ltd. Acquires Hankuk Advanced Materials Co., Ltd.....	266
4.8 September 2024.....	256	4.12.8 Jindal Advanced Materials and MAE S.p.A. Collaborate to set up a New Carbon fiber Plant	261	4.17.5 Xinjiang Runjust New Material Co opens New Production Base.....	267
4.8.1 The Sixth Element Wins 2024 China Chemical Society Science and Technology Award.....	256	4.12.9 Hexcel has Announced the Launch of its New Product HexTow® IM9 24K Carbon Fiber.....	262	4.17.6 Brembo SGL Carbon Ceramic Brakes Expands its Production Capacity in Germany and Italy.....	267
4.8.2 Cabot Corporation Awarded Up to \$50M DOE Grant for U.S. Battery Material Facility.....	256	4.12.10 Jilin Chemical Fiber Expands Carbon Fiber Industry with 400,000-Ton Project.....	262	4.17.7 Changsheng Announces Mass Producing of T1000 grade carbon fiber.....	267
4.8.3 SPC’s Large-Tow Composite Reinforces Heavy-Duty Boom Project.....	257	4.13 January 2024.....	262	4.17.8 Hyosung Expands Facilities Owing to the Rising Demand for Carbon Fiber	268
		4.13.1 DexMat Expands Galvorn Production 20x to Meet Rising Demand	262	4.17.9 Jiangsu Dagang Co., Ltd. has Acquired Stake in Zhenjiang Xinna Environmental Protection Materials Co., Ltd. from Jiangsu Cnano Technology Co., Ltd.....	268

4.18 August 2023268

4.18.1 Cnano Unveils New Facility in Kansas City268

4.19 June 2023268

4.19.1 CNT Solution Develops High-Efficiency CNT Electrode Plate268

4.19.2 Graphite One Partners with Vorbeck Materials Corp.269

4.19.3 Zeta Energy Reveals a Process for Double-Sided CNT Coating for Lithium-Sulfur Batteries269

4.19.4 CHASM Showcases Its Breakthrough Scalable CNT Manufacturing Technology269

4.19.5 Huntsman and V-Carbon Technologies Collaborate for End-of-Life Recycling Solutions for Carbon Fiber Composites269

4.19.6 LayerOne Unveils Norway’s largest Graphene Production Unit at Herøya270

4.19.7 Solvay and Syensqo Revealed as New Entities270

4.20 May 2023270

4.20.1 CNT Solution and Chungnam TP Partner to Transform Battery Material Technology.....270

4.20.2 LG Chem Announces the Construction of its Fourth CNT Plant270

4.20.3 Versarian PLC Provides Update on Cementene™ Precast Concrete Trials.....271

4.21 April 2023271

4.21.1 Haydale and CERN Partner up for the Development of Graphene-enhanced Lubricants271

4.21.2 OCSiAl Introduces Two New High Concentrated SWCNT Dispersions for Anodes and Cathodes271

4.21.3 Jilin Chemical Fiber Launches Major Carbon Fiber Projects.....271

4.22 March 2023272

4.22.1 LayerOne Collaborated with 2D-Tech for Developing Graphene-based Innovations272

4.22.2 Toyocolor to Supply CNT Conductive Additives to CATL272

4.22.3 Nordex Group Aims to Achieve Carbon Fiber Recovery by 2032272

4.22.4 SGL Carbon Launches New Product SIGRAFIL® C T50-4.9/235 carbon fiber272

4.22.5 Hexcel Launces New Center of Research & Technology Excellence in Utah ..273

4.22.6 Haydale Supplies Graphene-enhanced Prepeg to Rega Research Ltd.....273

4.23 February 2023..... 273

4.23.1 Toyo Ink Opens its Second Lioaccum CNT Dispersions Plant in US..... 273

4.23.2 Evonik Invests €150 million in Chinese Graphene Producer SuperC..... 273

4.24 January 2023..... 273

4.24.1 Showa Denko Unveils New Identity ‘Resonac’ 273

4.24.2 Nanotech Energy to Build Graphene-based Lithium-ion Batteries Gigafactory in the UK..... 274

4.25 December 2022 274

4.25.1 Hyosung develops Ultra-High-Tensile Carbon Fiber: H3065 (T-1000 class)..... 274

4.26 November 2022 274

4.26.1 Graphene Composites and William Blythe Team up for the Supply of Graphene Oxide for GC Halo® 274

4.27 October 2022 274

4.27.1 Sinopec Launches China's First 10,000-Ton 48K Large-Tow Carbon Fiber Line 274

4.28 September 2022 275

4.28.1 BiaBrazil Uses Versarien's Graphene-Wear™ Technology for its Active Wear 275

4.29 June 2022..... 275

4.29.1 DowAksa opens new Production Plant in Yalova, Turkey..... 275

5. GLOBAL MARKET OVERVIEW276

5.1 Global Advanced Carbon Materials Market Overview by Material Type 277

5.1.1 Global Advanced Carbon Materials Type Market Overview by Geographic Region..... 279

5.1.1.1 Carbon Fibers..... 279

5.1.1.2 Carbon Nanotubes 281

5.1.1.3 Graphene 283

5.1.1.4 Fullerenes 285

5.1.1.5 Carbon Foams 287

5.2 Global Advanced Carbon Materials Market Overview by End-use Application 289

5.2.1 Global Advanced Carbon Materials Application Market Overview by Geographic Region..... 291

5.2.1.1 Aerospace & Defense 291

5.2.1.2 Sports & Leisure 293

5.2.1.3 Energy 295

5.2.1.4 Automotive & Transportation..... 297

5.2.1.5 Construction/Infrastructure..... 299

5.2.1.6 Electrical & Electronics 301

5.2.1.7 Medical & Healthcare 303

5.2.1.8 Other Applications 305

PART B: REGIONAL MARKET PERSPECTIVE..307

Global Advanced Carbon Materials Market Overview by Geographic Region 307

REGIONAL MARKET OVERVIEW309

6. NORTH AMERICA.....309

6.1 North American Advanced Carbon Materials Market Overview by Geographic Region..... 309

6.2 North American Advanced Carbon Materials Market Overview by Material Type 311

6.3 North American Advanced Carbon Materials Market Overview by End-use Application 313

6.4 Country-wise Analysis of North American Advanced Carbon Materials Market..... 315

6.4.1 The United States 315

6.4.1.1 United States Advanced Carbon Materials Market Overview by Material Type 315

6.4.1.2 United States Advanced Carbon Materials Market Overview by End-use Application 317

6.4.2 Canada..... 319

6.4.2.1 Canadian Advanced Carbon Materials Market Overview by Material Type 319

6.4.2.2 Canadian Advanced Carbon Materials Market Overview by End-use Application 321

7. EUROPE323

7.1 European Advanced Carbon Materials Market Overview by Geographic Region 323

7.2 European Advanced Carbon Materials Market Overview by Material Type 325

7.3 European Advanced Carbon Materials Market Overview by End-use Application 327

7.4 Country-wise Analysis of European Advanced Carbon Materials Market..... 329

7.4.1 France 329

7.4.1.1 French Advanced Carbon Materials Market Overview by Material Type 329

7.4.1.2 French Advanced Carbon Materials Market Overview by End-use Application 331

7.4.2 Germany 333

7.4.2.1 German Advanced Carbon Materials Market Overview by Material Type 333

7.4.2.2 German Advanced Carbon Materials Market Overview by End-use Application 335



7.4.3 Italy	337	8.4.2 Japan	363	9.3 Rest of World Advanced Carbon Materials Market Overview by End-use Application	387
7.4.3.1 Italian Advanced Carbon Materials Market Overview by Material Type	337	8.4.2.1 Japanese Advanced Carbon Materials Market Overview by Material Type	363	9.4 Country-wise Analysis of Rest of World Advanced Carbon Materials Market.....	389
7.4.3.2 Italian Advanced Carbon Materials Market Overview by End-use Application.....	339	8.4.2.2 Japanese Advanced Carbon Materials Market Overview by End-use Application.....	365	9.4.1 Brazil	389
7.4.4 Spain	341	8.4.3 India	367	9.4.1.1 Brazilian Advanced Carbon Materials Market Overview by Material Type.....	389
7.4.4.1 Spanish Advanced Carbon Materials Market Overview by Material Type	341	8.4.3.1 Indian Advanced Carbon Materials Market Overview by Material Type	367	9.4.1.2 Brazilian Advanced Carbon Materials Market Overview by End-use Application	391
7.4.4.2 Spanish Advanced Carbon Materials Market Overview by End-use Application.....	343	8.4.3.2 Indian Advanced Carbon Materials Market Overview by End-use Application	369	9.4.2 Russia.....	393
7.4.5 The United Kingdom	345	8.4.4 South Korea	371	9.4.2.1 Russian Advanced Carbon Materials Market Overview by Material Type.....	393
7.4.5.1 United Kingdom Advanced Carbon Materials Market Overview by Material Type	345	8.4.4.1 South Korean Advanced Carbon Materials Market Overview by Material Type	371	9.4.2.2 Russian Advanced Carbon Materials Market Overview by End-use Application	395
7.4.5.2 United Kingdom Advanced Carbon Materials Market Overview by End-use Application.....	347	8.4.4.2 South Korean Advanced Carbon Materials Market Overview by End-use Application.....	373	9.4.3 Turkiye	397
7.4.6 Rest of Europe.....	349	8.4.5 Taiwan	375	9.4.3.1 Turkish Advanced Carbon Materials Market Overview by Material Type.....	397
7.4.6.1 Rest of Europe Advanced Carbon Materials Market Overview by Material Type	349	8.4.5.1 Taiwanese Advanced Carbon Materials Market Overview by Material Type	375	9.4.3.2 Turkish Advanced Carbon Materials Market Overview by End-use Application	399
7.4.6.2 Rest of Europe Advanced Carbon Materials Market Overview by End-use Application.....	351	8.4.5.2 Taiwanese Advanced Carbon Materials Market Overview by End-use Application.....	377	9.4.4 Other Rest of World	401
8. ASIA-PACIFIC.....	353	8.4.6 Rest of Asia-Pacific.....	379	9.4.4.1 Other Rest of World Advanced Carbon Materials Market Overview by Material Type	401
8.1 Asia-Pacific Advanced Carbon Materials Market Overview by Geographic Region	353	8.4.6.1 Rest of Asia-Pacific Advanced Carbon Materials Market Overview by Material Type.....	379	9.4.4.2 Other Rest of World Advanced Carbon Materials Market Overview by End- use Application	403
8.2 Asia-Pacific Advanced Carbon Materials Market Overview by Material Type	355	8.4.6.2 Rest of Asia-Pacific Advanced Carbon Materials Market Overview by End- use Application	381	PART C: GUIDE TO THE INDUSTRY.....	405
8.3 Asia-Pacific Advanced Carbon Materials Market Overview by End-use Application.....	357	9. REST OF WORLD	383	1. North America	405
8.4 Country-wise Analysis of Asia-Pacific Advanced Carbon Materials Market	359	9.1 Rest of World Advanced Carbon Materials Market Overview by Geographic Region.....	383	2. Europe	408
8.4.1 China	359	9.2 Rest of World Advanced Carbon Materials Market Overview by Material Type	385	3. Asia-Pacific.....	411
8.4.1.1 Chinese Advanced Carbon Materials Market Overview by Material Type	359			4. Rest of World.....	416
8.4.1.2 Chinese Advanced Carbon Materials Market Overview by End-use Application.....	361			PART D: ANNEXURE.....	417
				1. RESEARCH METHODOLOGY	417
				2. FeedBack	419

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