

The Global Market for Bio-based Chemicals, Polymers and Materials

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Abstracts

Building new value chains through the utilisation of biobased and biomass components for the development of innovative products will accelerate the transition from traditional production technologies to the concept of biorefineries. Developing bio-based chemicals, polymers and products in a sustainable manner allows for substantial new business opportunities. Bio-based chemicals are obtained through biological, chemical or physical transformation of plant or animal based feedstocks, which include sugar, starch, oils and fats, and lignocellulose from forestry, agricultural crops and organic waste.

The global opportunities offered by the transition to a more sustainable, low waste economy are vast, and the last decade has seen a substantial increase in interest in bio-based chemicals with many drop-in or novel bio-based chemicals being developed and introduced to the market.

New technologies and traditional methods coupled with biotechnologies applied to biomass feedstocks and waste streams from various sources, such as urban waste or agricultural residues or wastes from food and feed streams, will convert renewable resources into high added-value sustainable bioproducts.

Report contents include:

In depth market analysis of bio-based chemical feedstocks, biopolymers, bioplastics, natural fibers and lignin.

Global production capacities, market demand and trends 2019-2025

Analysis of biobased chemical including 11-Aminoundecanoic acid (11-AA), 1,4-Butanediol (1,4-BDO), Dodecanedioic acid (DDDA), Epichlorohydrin (ECH), Ethylene, Furan derivatives, 5-Chloromethylfurfural (5-CMF), 2,5-Furandicarboxylic acid (2,5-FDCA), Furandicarboxylic methyl ester (FDME), Isosorbide, Itaconic acid, 5 Hydroxymethyl furfural (HMF), Lactic acid (D-LA), Lactic acid – L-lactic acid (L-LA), Lactide, Levoglucosenone, Levulinic acid, Monoethylene glycol (MEG), Monopropylene glycol (MPG), Muconic acid, Naphtha, 1,5-Pentametylenediamine (DN5), 1,3-Propanediol (1,3-PDO) , Sebacic acid and Succinic acid.

Analysis of synthetic biopolymers market including Polylactic acid (Bio-PLA), Polyethylene terephthalate (Bio-PET), Polytrimethylene terephthalate (Bio-PTT), Polyethylene furanoate (Bio-PEF), Polyamides (Bio-PA), Poly(butylene adipate-co-terephthalate) (Bio-PBAT), Polybutylene succinate (PBS) and copolymers, Polyethylene (Bio-PE), Polypropylene (Bio-PP)

Analysis of naturally produced bio-based polymers including Polyhydroxyalkanoates (PHA), Polysaccharides, Microfibrillated cellulose (MFC), Cellulose nanocrystals, Cellulose nanofibers, Protein-based bioplastics, Algal and fungal.

Market segmentation analysis.

Analysis of types of natural fibers including plant fibers, animal fibers including alternative leather, wool, silk fiber and down and polysaccharides.

Markets for natural fibers, including composites, aerospace, automotive, construction & building, sports & leisure, textiles, consumer products and packaging.

Production capacities of lignin producers.

In depth analysis of biorefinery lignin production.

Profiles of over 500 companies. Companies profiled include NatureWorks, Total Corbion, Danimer Scientific, Novamont, Mitsubishi Chemicals, Indorama, Braskem, Avantium, Borealis, Cathay, Dupont, BASF, Arkema, DuPont, BASF , AMSilk GmbH, Notpla, Loliware, Bolt Threads, Ecovative, Kraig Biocraft Laboratories, Spiber, Bast Fiber Technologies Inc., Kelheim Fibres GmbH,

BComp, Circular Systems, Evrnu, Natural Fiber Welding, Icytos, Versalis SpA, Clariant, MetGen Oy, Praj Industries Ltd., Bloom Biorenewables SA, FP Innovations, UPM, Klabin SA, RenCom AB and many more.

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