Press release

nova-Institut GmbH (www.nova-institute.eu)
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Commercialisation updates on bio-based building blocks – The exit of key players, restructuring of production capacities worldwide, a shrinking pool of new start-up companies but also burgeoning discovery and increasing production of new building blocks

UK-based chemical industry consultancy Tecnon OrbiChem and the nova-Institute release their latest "Commercialisation updates on bio-based building blocks" www.bio-based.eu/reports

Since the last report in 2017 the bio-based building block market has shown considerable changes. Ranging from the exit of key players, the restructuring of several production capacities worldwide, and a shrinking pool of new start-up companies but also, burgeoning discovery and even the increasing production of new building blocks.

35 companies have undergone restructuring in this industry since 2017. Continued low crude oil prices remain one of the biggest factors hindering further commercialisation and production expansion of several drop-in bio-based commodity chemicals, especially those targeting ethylene and propylene-based derivatives. Overpromised production timelines, and hyped projected demand and capacity goals have also hurt investor confidence in this space, while some of the attention of consumer products companies as well as packaged food and beverage companies has been diverted away from using plant-based polymers and toward recycled polymer materials.
On the other hand, the exciting trend in toward the development of various chemical recycling technologies can lead to alternative, more sustainable circular sources of virgin monomers such as aromatics, glycols, ethylene and propylene from waste petro-based plastics and is added as a new topic in the report. These chemical recycling technologies can also be used for various bio-based polymers, even polylactic acid. Additionally, the report includes the potential comeback of bio-based acrylic acid commercialisation and the introduction of renewable naphtha, also driven by the growing use of the mass balance approach. Mass balance is an important system approach which supports the use of renewable or recycled content in thermochemical crackers and major integrated chemical complexes, by enabling the virtual allocation of the attributes (bio-based or recycled) and the benefits (such as circular or climate protecting) to a specific output.

A crucial factor for the bio-based industry is the issue of climate change which continues to drive branded companies to consider using bio-based materials, which usually have lower carbon emissions in terms of feedstock use (renewable carbon vs. fossil carbon) and manufacturing compared to fossil-based materials.

In total, the outstanding report covers 20 building blocks and describes the activities of over 100 companies comprehensively. The rise and fall of the markets for several established bio-based building blocks as well as the commercialisation and development of novel monomers are discussed in depth in this report, including various technology processes, feedstock usage, supply/demand, trade history and pricing in order to give a full picture of the state of these markets and an analysis of their viability and long-term sustainability.

The market and trend report is written by Doris de Guzman from Tecnon OrbiChem, a member of the biopolymer expert group headed by nova-Institute. The report "Commercialisation updates on bio-based building blocks" is now available for 1,750 € at www.bio-based.eu/reports – in addition to further market studies on different topics of bio- and CO_2-based economics. A short version of the report is available free of charge.

If you want to meet the author and discuss the market data, then do not miss the **nova Session "Bio-based Building Blocks and Polymers – Global Capacities, Production and Trends 2019-2024" on 9 March 2020** at Cologne/Bonn airport. Register now to secure of the limited spots. www.bio-based.eu/biopolymer-session

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For more information on Tecnon OrbiChem, please see www.orbichem.com.

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nova-Institute is a private and independent research institute, founded in 1994; nova offers research and consultancy with a focus on bio-based and CO_2-based economy in the fields of food and feedstock, technology, economy, markets, sustainability, dissemination, B2B and B2C communication and policy. Every year nova organises several leading conferences on these topics. nova-Institute has 35 employees and an annual turnover of more than 3 million €.

Tecnon OrbiChem has been a leader in providing data and analysis to the petrochemical industry since 1976. Tecnon OrbiChem is one of the world's foremost marketing consultancies to the bulk chemicals, petrochemicals and plastics industries, specialising in Chemical Intermediates, Synthetic Fibres and Resins. Tecnon OrbiChem publishes a monthly Bio-

Materials & Intermediates newsletter covering up-to-date market information on various renewable carbon-based chemical building blocks, intermediates and bioplastics as well as their fossil-based counterparts. More information is available at www.orbichem.com.

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