Press release

nova-Institut GmbH (<u>www.nova-institute.eu</u>) Hürth, 25 October 2022



Winter special – 20 % discount on market and trend reports all around renewable carbon until 6th of January 2023

From advanced recycling technologies, over bio- and CO₂-based chemicals, building blocks and polymers to specific polymer insights: Get the latest nova-Institute reports around renewable carbon markets for a special price

The portfolio of nova-Institute's market reports covers all relevant topics on renewable carbon. The reports dive deep into feedstocks for the chemical industry from biomass over CO₂ to chemical recycling. They provide a comprehensive overview of bio- and CO₂-based building blocks and polymers, specific fine chemicals as cannabinoids, as well as comprehensive analyses of bio-based naphtha and the Mass Balance Approach, biodegradability, guidelines, standards and labels for bio-based products. nova-Institute also offers reports on technology, policy, key players and the latest market data available.

The market and trend reports were compiled by nova scientists together with leading international experts and are among the most reliable and recognised sources on the market.

With the allowance code **Winter22** you get a 20 % discount on 23 market reports. All reports are available at https://renewable-carbon.eu/publications.

The offer includes, but is not limited to, the following latest comprehensive overview reports.

"Mapping of advanced recycling – Providers, technologies, and partnerships"

The new report "Mapping of advanced recycling - Providers, technologies, and partnerships" is suitable for interested readers who have already dealt with the advanced recycling topic and are looking for an up-to-date overview of all identified providers and a detailed description of the technologies. In this report, the number of the formerly provided over 70 technologies and providers increased to over 100 and all technology provider profiles, old and new, are included and updated to 2022. This report no longer includes the extensive introductory part on polymer types, demand of different polymer types, waste fractions, political framework, position papers, technologies, LCAs, associations and waste management companies.

Purchase the latest version via https://renewable-carbon.eu/publications/product/mapping-of-advanced-recycling-providers-technologies-and-partnerships/.

Meanwhile, the previous report "Chemical recycling - Status, trends and challenges" is suitable for interested readers who have not yet dealt with advanced recycling and are searching for an

introduction into the topic while an up-to-date overview of all identified providers is less important. The report includes an extensive introductory part on polymer types, demand of different polymer types, waste fractions, political framework, position papers, technologies, LCAs, associations and waste management companies. Additionally, over 70 technologies and providers as well as respective profiles with updated information of 2020 are shown. Purchase the full report at https://renewable-carbon.eu/publications/product/chemical-recycling-status-trends-and-challenges-technologies-sustainability-policy-and-key-players/.

"Mimicking nature – The PHA industry landscape latest trends and 28 producer profiles"

Natural PHAs are a class of materials that exists in nature for millions of years. These materials are both bio-based and biodegradable, similar to other natural materials such as cellulose, proteins and starch. Natural PHAs are produced by an extensive variety of microorganisms through bacterial fermentation. Due to its high performance, biocompatibility, biodegradability and green credentials, the PHA family has a large design space and accommodates a wide range of market applications, as a broad variety of different polymers can be produced and blended. The potential of PHAs is enormous.

This report is a must-read for all those interested in the very latest in PHAs as developers, producers or, above all, users. All information on the companies described has been checked by each of them and represents the state-of-the-art for February 2022.

Find the full report at https://renewable-carbon.eu/publications/product/mimicking-nature-the-pha-industry-landscape-latest-trends-and-28-producer-profiles/.

"Bio-based naphtha and mass balance approach – Status & outlook, standards & certification schemes"

This report focuses on alternative, non-fossil naphtha with the first comprehensive overview of technology, producers, plants and users. The report presents 17 companies worldwide with capacities ranging from a few thousand tonnes per year to 3 million tonnes. There are currently plans for 50 new or expanded plants. Additionally, the report provides a detailed insight into the current developments in the mass balance approach. There is a big debate in the industry whether the mass balance approach can be accepted, as renewable carbon cannot be measured to the extent that is indicated (at times not at all) via the radiocarbon method. Several sound and robust certification schemes for mass balancing already exist, both for biomass and recycling. At the same time, an ISO standard for mass balances is being developed and might be published later this year.

Find the full report at https://renewable-carbon.eu/publications/product/bio-based-naphtha-and-mass-balance-approach-status-outlook-standards-certification-schemes/.

"Bio-based building blocks and polymers – Global capacities, production and trends 2020 – 2025"

This above 300-page market report provides a deep and comprehensive insight into the dynamic global bio-based building blocks and polymers market in 2020. The year 2020 was a promising year for bio-based polymers: Sold out PLA in 2019 has led to the installation of increased capacities, PE and PP made from bio-based naphtha are breaking ground, and future expansion for bio-based polyamides as well as for PBAT, PHAs and casein polymers is on the horizon. Lower production was only observed for bio-based PET.

Purchase the full report at https://renewable-carbon.eu/publications/product/bio-based-building-blocks-and-polymers-global-capacities-production-and-trends-2020-2025/.

"Carbon Dioxide (CO₂) as chemical feedstock for polymers – Technologies, polymers, developers and producers"

The completely revised and extended third version of this unique trend report addresses the polymer industry, brands, technology scouts, investors, and policymakers. The report provides 100 pages of information on CO₂ utilisation for chemical building blocks and polymers. Find the full report at https://renewable-carbon.eu/publications/product/carbon-dioxide-co2-as-chemical-feedstock-for-polymers-technologies-polymers-developers-and-producers/.

Find all nova press releases, visuals and more free-for-press purposes at www.nova-institute.eu/press

Responsible for the content under German press law (V. i. S. d. P.):

Dipl.-Phys. Michael Carus (Managing Director) nova-Institut GmbH, Chemiepark Knapsack, Industriestraße 300, DE-50354 Hürth (Germany)

Internet: <u>www.nova-institute.eu</u> – all services and studies at <u>www.renewable-carbon.eu</u>

Email: contact@nova-institut.de
Phone: +49 (0) 22 33-48 14 40

nova-Institute is a private and independent research institute, founded in 1994; nova offers research and consultancy with a focus on the transition of the chemical and material industry to renewable carbon: How to substitute fossil carbon with biomass, direct CO₂ utilisation and recycling. We offer our unique understanding to support the transition of your business into a climate neutral future. nova-Institute has more than 40 employees.

Get the latest news from nova-Institute, subscribe at www.bio-based.eu/email