Press release

nova-Institut GmbH (www.nova-institute.eu)

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Summer Special 2023 – 20 % discount on market and trend reports all around renewable carbon until 31 August 2023

After a successful Renewable Materials Conference 2023, covering all renewable carbon topics, nova-Institute is offering its 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 CO_2 to chemical recycling. They provide a comprehensive overview of bio- and CO_2-based building blocks and polymers, specific polymers as PHA, 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 recognized sources on the market.

With the allowance code "Summer2023" you get a 20 % discount on 25 market reports. All reports are available on https://renewable-carbon.eu/commercial-reports.

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

"Carbon dioxide (CO_2) as feedstock for chemicals, advanced fuels, polymers, proteins and minerals"

New report on the use of CO_2 for chemicals, advanced fuels, polymers, proteins and minerals by nova-Institute – A deep and comprehensive insight into the evolving technologies, trends and the dynamically growing market of CO_2 transformation and utilisation. Several successfully implemented technologies are now in commercial use, and many more are at the laboratory and pilot stage. A current total production capacity of novel CO_2-based products of about 1.3 Mt/a in 2022 is observed. The production capacity in 2022 is dominated by the production of CO_2-based aromatic polycarbonates, ethanol from captured CO/CO_2, aliphatic polycarbonate and methanol. By 2030, the capacity outlook for CO_2-based products is expected to exceed 6 Mt/a of CO_2-based products. High dynamic growth is observed for methanol projects, methane plants, ethanol and hydrocarbons – the latter especially for the aviation sector. The potential of CCU has been recognised by several global brands which are already expanding their feedstock portfolio. However, in Europe, investments and prospects for CO_2 utilisation are largely undermined by a lack of political support. In contrast, we see supportive policies in China as well as in the US with the Inflation Reduction Act. Such smart policies are needed to bridge the gap between now and 2050 for companies to remain competitive in the sustainable transformation.

nova-Institute's new report examines this renewable carbon source in detail: Which products can be made from CO_2, and by which processes? To which extend have the technologies already been developed and implemented in pilot, demonstration and commercial plants? Which companies are working on technologies to uses CO_2 as a feedstock? What are the trends in CO_2 utilisation in the coming years?
This report addresses the fuel, chemical and materials industries, brands, technology scouts, investors, and policy makers. The report provides 240 pages of information on CO_2 utilisation. All the 116 companies mentioned are described in detailed profiles.
https://renewable-carbon.eu/publications/product/carbon-dioxide-co2-as-feedstock-for-chemicals-advanced-fuels-polymers-proteins-and-minerals-pdf/

"Bio-based building blocks and polymers – Global capacities, production and trends 2022-2027"

Report on the global bio-based polymer market 2022 – A deep and comprehensive insight into this dynamically growing market
The year 2022 was a promising year for bio-based polymers: Bio-based epoxy resin production is on the rise, PTT regained attractiveness after several years of constant capacities and PE and PP made from bio-based naphtha are being further established with growing volumes. Increased capacities for PLA are ongoing, after being sold out in 2019. Current and future expansions for bio-based polyamides as well as PHAs are on the horizon. And also, bio-based PET is getting back in the game.
https://renewable-carbon.eu/publications/product/bio-based-building-blocks-and-polymers-global-capacities-production-and-trends-2022-2027/

"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. 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 are no longer included in this report.
https://renewable-carbon.eu/publications/product/mapping-of-advanced-recycling-providers-technologies-and-partnerships/

The old 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.
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 over 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.
The report is a must-read for all those interested in the very latest in PHAs as developers, producers or, above all, users. The information on the companies described has been checked with each of them and is state-of-the-art for February 2022.
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 and outlook, standards and 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 may be published later this year.
https://renewable-carbon.eu/publications/product/bio-based-naphtha-and-mass-balance-approach-status-outlook-standards-certification-schemes/

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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 the transition of the chemical and material industry to renewable carbon: How to substitute fossil carbon with biomass, direct CO_2 utilisation and recycling. We offer our unique understanding to support the transition of your business into a climate neutral future.

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