

Press release

nova-Institut GmbH (www.nova-institute.eu)
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Results of seven years of market research published

Three online surveys on green premium for bio-based products and one in-depth consumer study, published now for the first time

Since 2013, nova-Institute has been investigating the pricing of bio-based products in various projects. Are there green premium prices for these products? How high are they? How long are they paid? How are they distributed along the value chain? Are there differences depending on the field of application?

Three online surveys on green premium prices for bio-based products were conducted in 2013, 2016 and 2017 respectively and an in-depth consumer study was carried out from 2018 to 2019. These methods were complementary and their results match. For the first time, all results are published in one report – and are available for free online.

The study is a result of the first-ever application of in-depth market research on bio-based products which was carried out in a collaboration by nova-Institute and september Strategie & Forschung. This collaboration combines nova's outstanding expertise in the field of bio-based products and materials as well as the knowledge and experience of september, who is one of Germany's market leaders in deep psychological market research.

Some highlights of the results

What are plastics made of? Consumers generally have no idea about mineral oil being the feedstock. It is a widespread perception that plastics are “bad” and kill animals in the sea. When it comes to plastics, the interviewees mainly thought of negative aspects, but almost nobody was aware that they are made from crude oil: “Something chemical, industrial, artificial ingredient, when it comes to ingredients ... I don't really know”. The respondents were very surprised to learn that plastics are actually made from crude oil and can be made of plants.

Easy thinking: plant features are projected onto the product – chemistry is “toxic magic”. The knowledge of chemistry is very low among consumers and the transformation from liquid mineral oil to solid plastic works like a miracle. Chemistry is “toxic magic”. In this way, the properties of the raw materials are transferred directly to the end products in consumers' minds. Aspects of the plants are also expected for the end products. Wood is hard, resistant and durable; analogously it should only be used to make hard, resistant and long-living products.

First generation feedstock for single-use applications. For soft and single-use applications, interviewees prefer first generation feedstocks: “Food crops are a high-quality feedstock, but

they are perceived less valuable than virgin lignocellulosics since food crops grow faster.” The understandable transfer of raw material properties to the product also works for these feedstocks: “This plastic product could be made of corn, because corn feels like plastic” – so it’s only logical you can make plastic out of it. Only very few respondents were aware of the discussions on food or non-food crops for industry, which seems to be mainly a discussion in the political area.

Nobody understands “bio-based” and all plant-derived products will be biodegradable. Products made from plants are biodegradable to consumers. Meaning: It will biodegrade if one throws it in the compost or in the forest. Thus: “Everything made out of plants is environment friendly”. The term “bio” is linked to “organic”, in contrast to “bio-based”, which was not or misunderstood. But consumers understand “plant-based”.

Consumers want to be educated by politics.

Consumers feel overwhelmed, not competent and not responsible for the decision which materials are good or bad. Respondents wanted a simple, official and trustworthy label to help them identify the good materials. This result calls into question the numerous consumer awareness projects currently underway. Perhaps the development of a labelling system would be more helpful.

The relevance of bio-based feedstocks in consumer products is given in products that have impact on ourselves or on the environment. Highly relevant is the replacement of „evil products“ with bad eco-image. Also, highly relevant are products that influence the body, get in touch with food as well as drinks and offer opportunity for the consumers to a great visibility and potential to show off. This has consequences for communication strategies on bio-based products, as was shown by the consumer typology developed by september institute.

“nova-Paper #13: Bio-based products: Green premium prices and consumer perception of different biomass feedstocks” can be downloaded for free at www.bio-based.eu/nova-papers

About nova-Institute

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 35 employees and an annual turnover of more than 3 million €. www.nova-institute.eu

About september

Founded in 2008, september is one of Germany's leading full-service research agencies with a team of 30 specialists, with a balanced cross-section of industries and brands in and out of Germany. september is market leader in the application of in-depth-psychology paired with advanced biometric solutions, delivering not just reports but full-scale consulting and support for strategic development. www.september-online.de

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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: www.nova-institute.eu – all services and studies at www.bio-based.eu

Email: contact@nova-institut.de

Phone: +49 (0) 22 33-48 14 40

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