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Are there GreenPremium prices for bio-based plastics?

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In the framework of the European project BIOFOREVER (www.bioforever.org) nova-Institute is conducting a number of surveys on GreenPremium prices for bio-based products and related questions on different generations of bio-based feedstock and different product segments.

In the 2014 nova paper “GreenPremium prices along the value chain of bio-based products”, the term ‘GreenPremium price’ is defined as: “The additional price a market actor is willing to pay for the additional emotional performance and/or the strategic performance of the intermediate or end product the buyer expects to get when choosing the bio-based alternative compared to the price of the conventional counterpart with the same technical performance.”

In October 2016, the first survey was conducted. It focused on bio-based plastics only to have a reference to a similar survey in 2013. It was carried out among the following LinkedIn groups related to bio-based plastics: “myBIO Community” (49,000 members), “BioBased Economy” (6,000), “Bioplastics” (4,000) and “Polymer Chemistry & Polymeric Materials” (20,000) as well as more than 100 personal contacts in the bioplastics sector.

Out of the several expert groups, 69 experts participated in the survey, mainly from companies producing and/or marketing bio-based plastics, industrial associations and consultants of this market area; all respondents are experts in the field of bio-based plastics, markets and economics. Figure 1 shows the answers to the survey which contained only a single question: “**Green Premium for bio-based plastics: Which premium extra price would you or your customers be willing to pay?**”

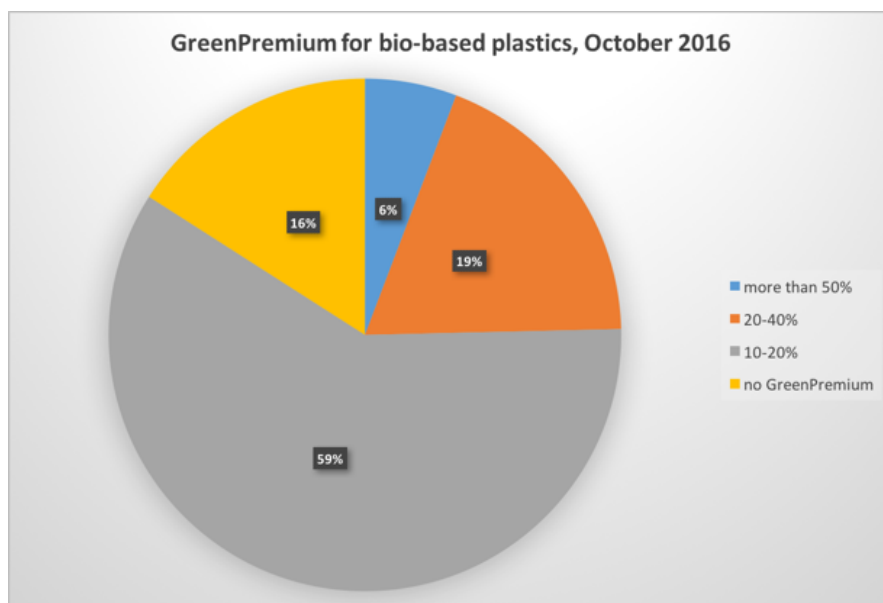


Figure 1: GreenPremium prices reported for bio-based plastics, October 2016

1 Carus, M., Eder, A., Beckmann, J. 2013: nova paper #3: “GreenPremium prices along the value chain of bio-based products“. Hürth 2013. http://bio-based.eu/publication-search/?wpv_post_search=greenpremium

Almost 85% of the experts report GreenPremium prices for bio-based plastics. Most of the participants (60%) considered the GreenPremium to range between 10-20%, almost 20% indicated a price premium of 20 up to 40%. About 6% of the respondents see a willingness to pay even more than 50% for bio-based plastics.

Exactly the same question had been put to similar LinkedIn groups in 2013. The comparison of the answers of 2013 and 2016 as depicted by figure 2 shows a very similar picture for the two years.

This thinking does not seem to be relevant for the broad audience. In the markets, bio-based polymers are still perceived positively enough to obtain a GreenPremium price. The willingness to pay GreenPremium has not reduced over the last three years. It has even grown in the medium category of “20-40%”.

Perhaps all the discussions about food security, direct and indirect land use changes and sustainability take place only in small circles in the bio-based economy. The real markets and the image of bio-based plastics seems to be less impacted by them than the political sector.

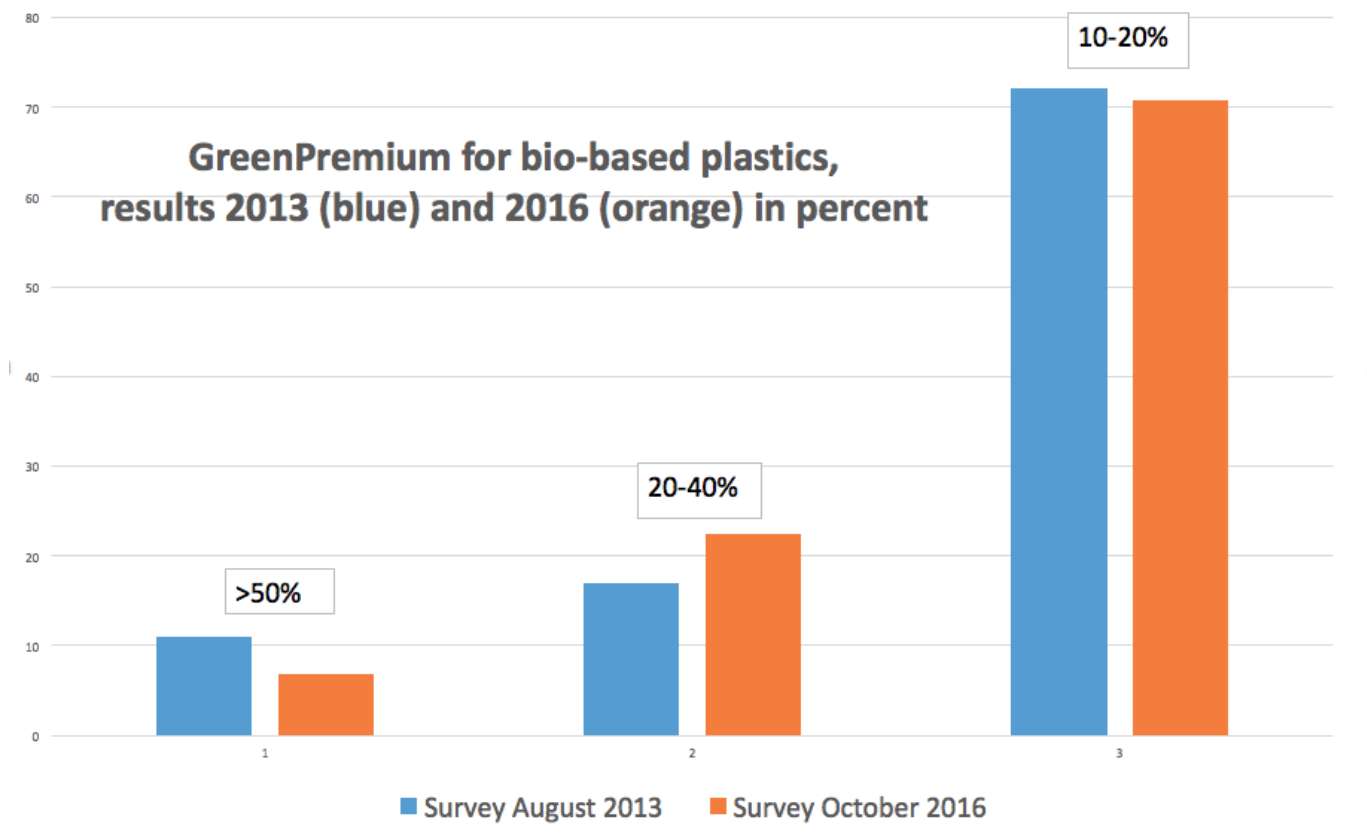


Figure 2: Comparison of reported GreenPremium prices for bio-based plastics 2013 and 2016

The survey could make out only insignificant differences between 2013 and 2016. In 2016, the group indicating „> 50% GreenPremium“ is a bit smaller than in 2013, in 2016 the group „20-40%“ is a little bit bigger than in 2013.

These results are quite unexpected. In several personal communications before the survey, a range of experts had expressed the opinion that the willingness to pay GreenPremium prices would have decreased since 2013. This was mostly due to the fact that bio-based plastics are not that new and innovative in the market place anymore and that certain concerns might have had impacts on the green image.

A more detailed survey is launched meanwhile, to understand the phenomena of GreenPremium prices in depth: What are the drivers for the willingness to pay more? Are there different levels of GreenPremium prices along the value chain? Is there a higher willingness to pay GreenPremium prices for products made from second generation feedstocks?

Please participate: <http://nova-institut.de/survey/index.php/541725>