

## Renewable Chemicals Accelerate Advance into Mainstream Chemical Industry

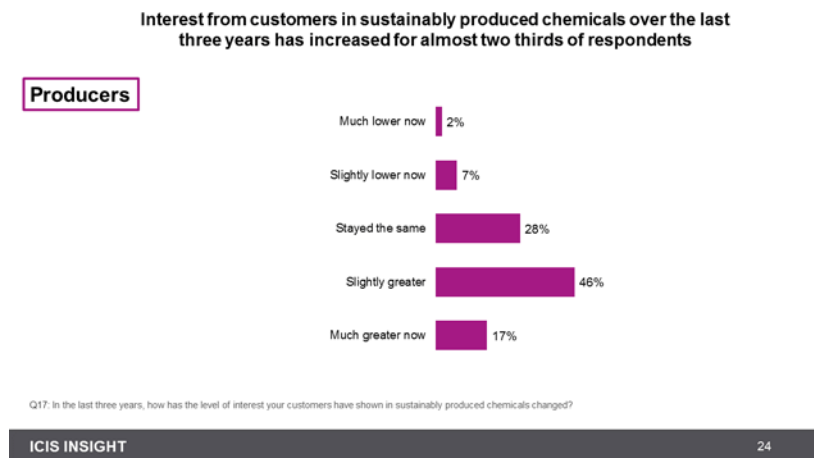
*Fourth survey reveals increased importance, action and optimism;  
Genomatica, Novozymes and BASF rated as the leaders in sustainable technology*

**San Diego, CA, November 17, 2017** – [Genomatica](#) announced today’s publication of the results of a major survey of sustainability issues in the mainstream chemical industry. The survey was conducted together with ICIS, the world’s largest petrochemical market information provider. The survey, fourth in a series they have conducted since 2009, revealed substantial advances for sustainability and renewable chemicals in general, for chemical producers, users (companies making products from basic and intermediate chemicals) and distributors. The survey covered topics including overall strategy and actions with regards to sustainable chemicals; current and planned use; commitment levels; customer interest; primary adoption factors; predictions of future adoption and use; and perceptions of industry leaders.

Complete findings and analysis are available via an [ICIS article](#); [commentary on key results](#) from Genomatica’s CEO, Christophe Schilling; a [complete set of 36 slides](#); and the [2014 survey](#) results for comparison. Readers may repost survey results with attribution to ICIS and Genomatica.

### High interest and high optimism for renewables in the chemical industry

Producers report that 65% of their customers are interested in sustainably-produced chemicals (slide 23). And 63% report a higher level of interest from their customers than three years ago; only 36% responded this way to a similar question in the 2014 survey. This near-doubling of increasing interest includes a sizable 17% showing much greater interest (see Figure 1, slide 24).



*Figure 1: Interest in sustainable chemicals has increased for almost two-thirds of customers (slide 24).*

That interest is reflected in producer and user attitudes and plans:

- 87% of producers believe it’s *important to be a leader* in sustainable chemicals, with 46% rating it very important (slide 22);

- 61% of producers and 47% of users are *highly committed to offering or using sustainable chemicals* (slide 14);
- they are *increasingly offering and planning to offer sustainable chemicals*, with almost four out of five producers expecting to offer more sustainable chemicals within the next few years (see Figure 2, slide 13);
- they are adopting a *multi-pronged strategy on renewables*, with 32% of producers and 22% of users already investing in R&D, and large numbers committed to, using or planning to use renewables (slide 12).

**Two in five producers are already offering more sustainable versions of the chemicals they produce and a third of users / distributors are already using them**

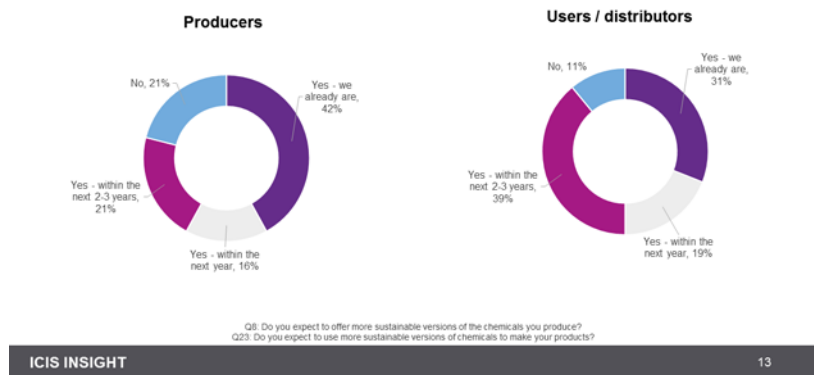


Figure 2: Chemical producers and users increasingly plan to offer or use more sustainable chemicals (slide 13).

Additionally, more than half of all producers now believe there is long-term economic advantage in switching some of their feedstocks to renewables (54% in 2017 compared to 43% in 2014, slide 20); an additional 28% aren't sure yet.

For the first time, we asked respondents their opinions about long-term adoption of renewables, as a type of "Renewables Confidence Index." A remarkable 71% of mainstream chemical industry respondents believe renewable chemicals will be in common use in five years (see Figure 3, slide 9).

**Over two thirds of respondents believe renewables-based chemicals will be in common use in five years time**

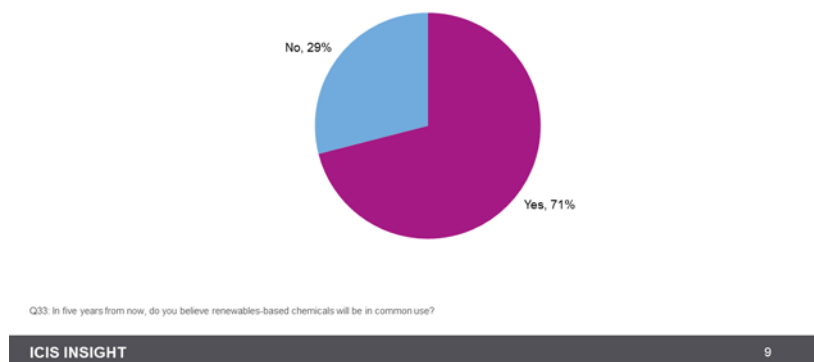


Figure 3: 71% of the industry believes renewable chemicals will be in common use in five years (slide 9).

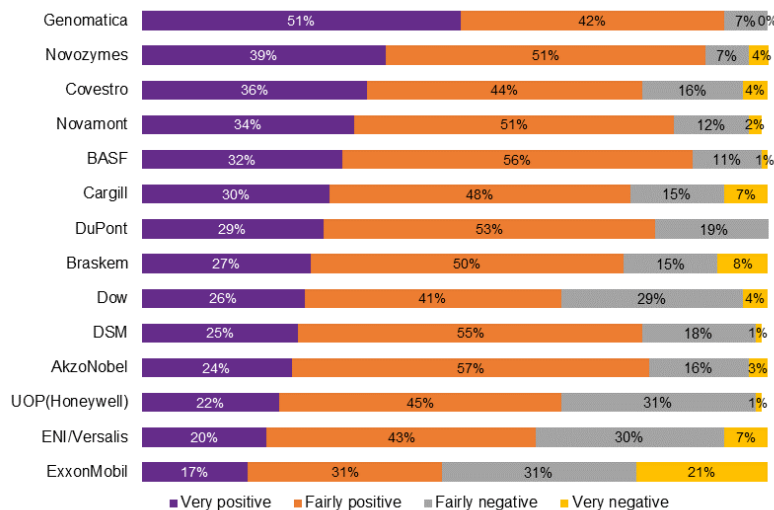
## Genomatica rated highest in industry perceptions for sustainability technology

As with previous surveys, we asked respondents to list the companies, unprompted, that they think of as technology leaders for sustainable chemicals (see slides 29 and 30) and as producers (slide 31).

We then asked them to rate several specific companies with regard to sustainability technology.

Genomatica was rated #1, with Novozymes and BASF following in total positive responses (see Figure 4, slide 32). Genomatica’s rating, up from third place in 2014, benefits from continued commercialization and innovation results, for both bio-butanediol and bio-butylene glycol, recently recognized with the ICIS Innovation Award.

### The brands with the most positive prompted brand impression for sustainability technology are Genomatica, Novozymes and BASF



Q32: What is your overall impression of the following companies with regard to sustainability technology?

Figure 4: Genomatica, Novozymes and BASF have the highest positive impression in sustainability technology (slide 32).

## Supporting quotes

“This latest survey clearly shows that the mainstream chemical industry is continuing to learn, plan and act with regards to sustainability,” said John Baker, ICIS global editor and organizer of the survey. “We saw notable indicators on numerous topics, reflecting greater understanding of biotech’s potential role.”

“This survey provides hard data to confirm the transition toward greater sustainability in the mainstream chemical industry,” said Christophe Schilling, CEO of Genomatica. “Chemical producers and downstream firms are increasingly seeing that biotech can deliver, with commercial-scale plants and solid economics. We will continue to push out innovations and deliver technologies to make this transition even more advantageous.”



## **About Genomatica**

Genomatica is a widely-recognized leader in bioengineering. It develops biobased process technologies that enable a better way to produce widely-used chemicals, from alternative feedstocks, with better economics, sustainability and performance. Genomatica has earned widespread acclaim for its technology and commercialization achievements. Awards include the [Kirkpatrick Award](#), for “the most noteworthy chemical engineering technology commercialized in the world” and the [ICIS Innovation Award](#). To learn more, see [www.genomatica.com](http://www.genomatica.com).

## **About ICIS**

ICIS, the trusted information provider for the chemical and energy industries, is a division of Reed Business Information (RBI), part of RELX Group, (UK:REL) (US:RUK) (NL:45443), the world’s leading publisher and information provider. For more information on ICIS visit [www.icis.com](http://www.icis.com). RBI publishes over 100 market leading publications, directories and online services, and organises many industry conferences and awards. For a full listing visit [www.reedbusiness.co.uk](http://www.reedbusiness.co.uk).

## **For more information**

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