



# Sustainability Research November 2017



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# Sustainability Research November 2017



## **AGENDA**

Methodology  
Respondent Profile  
Main Findings  
Summary

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Reed Business Information  
November 2017

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**SUSTAINABILITY RESEARCH NOVEMBER 2017**

**METHODOLOGY & RESPONDENT PROFILE**



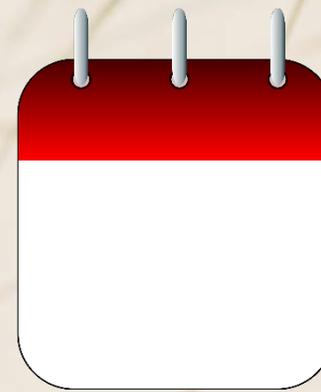
## Method

- Online questionnaire including version for mobile devices



## Audience

- Targeted ICIS branded email
- Respondents completing questionnaire entered into a prize draw to win an iPad mini
- Also promoted via social media & in newsletters



## Timings

- Fieldwork, data processing and analysis took place in October & November 2017.



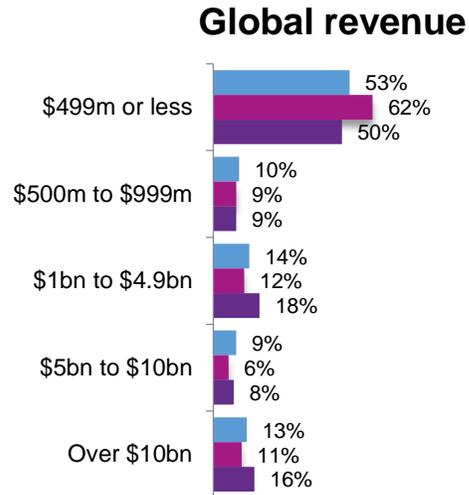
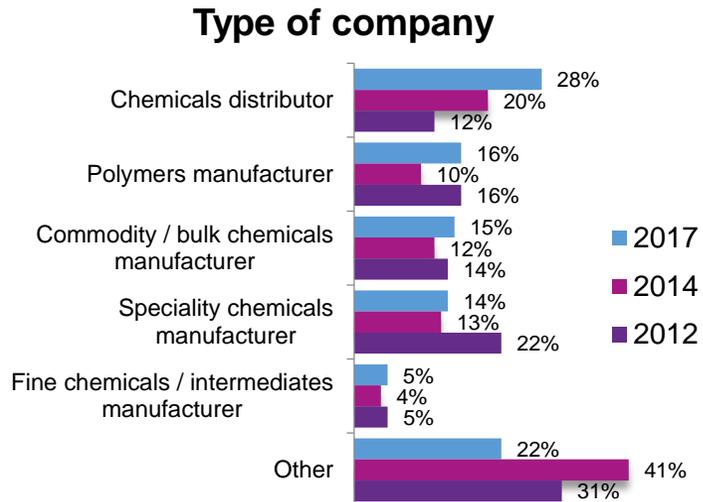
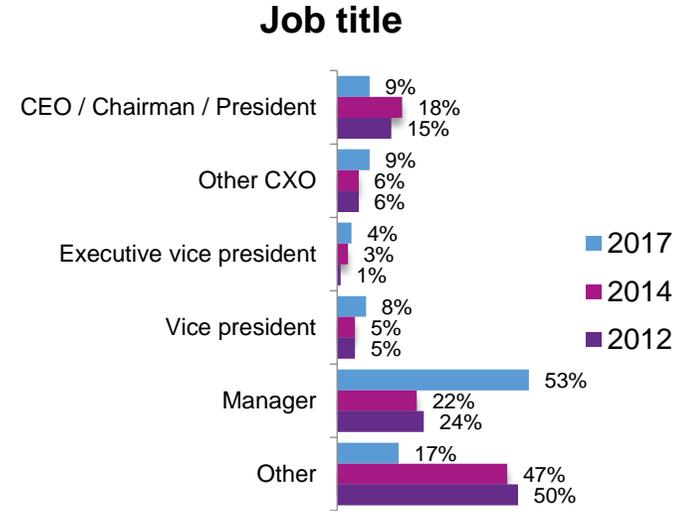
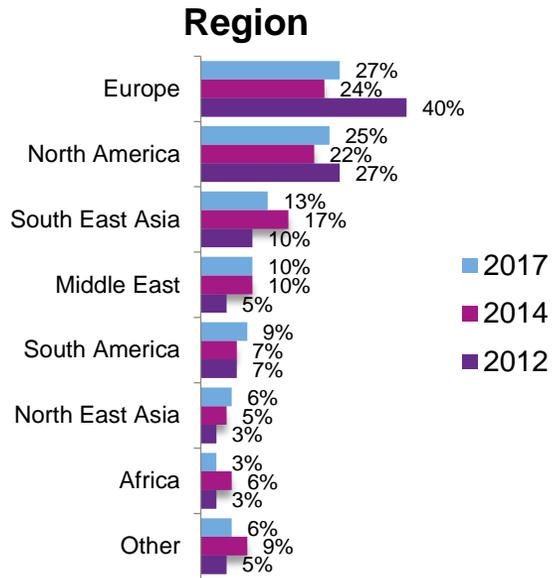
## Results

- Results are shown on those answering each question

**SUSTAINABILITY RESEARCH NOVEMBER 2017**

**RESPONDENT PROFILE**

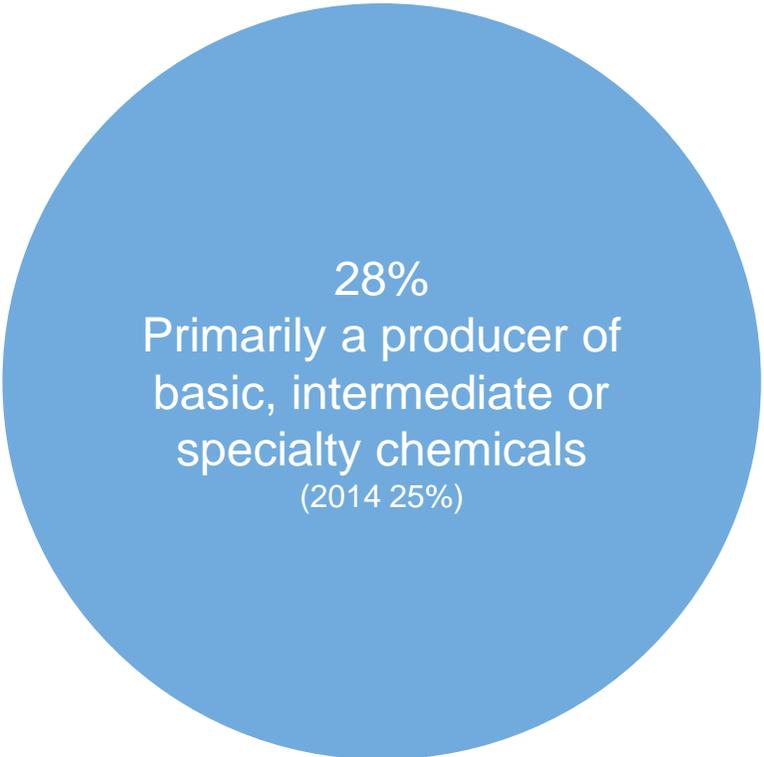
# Demographics



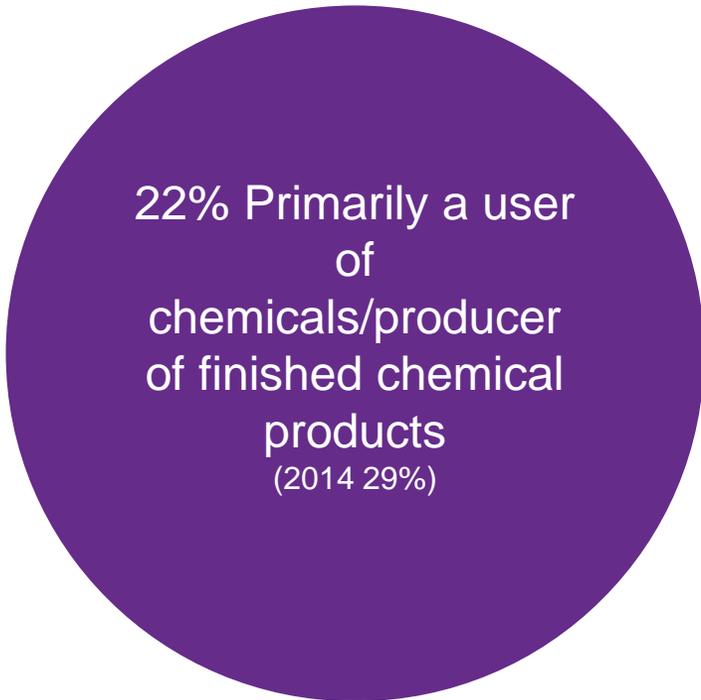
Average:

2017 \$2.9bn  
 2014 \$1.2bn  
 2012 \$3.3bn

## The sample has a mix of producers, users & distributors



28%  
Primarily a producer of  
basic, intermediate or  
specialty chemicals  
(2014 25%)



22% Primarily a user  
of  
chemicals/producer  
of finished chemical  
products  
(2014 29%)



15% A chemical  
distributor  
(2014 20%)

('Other' 35% 2014 26%)

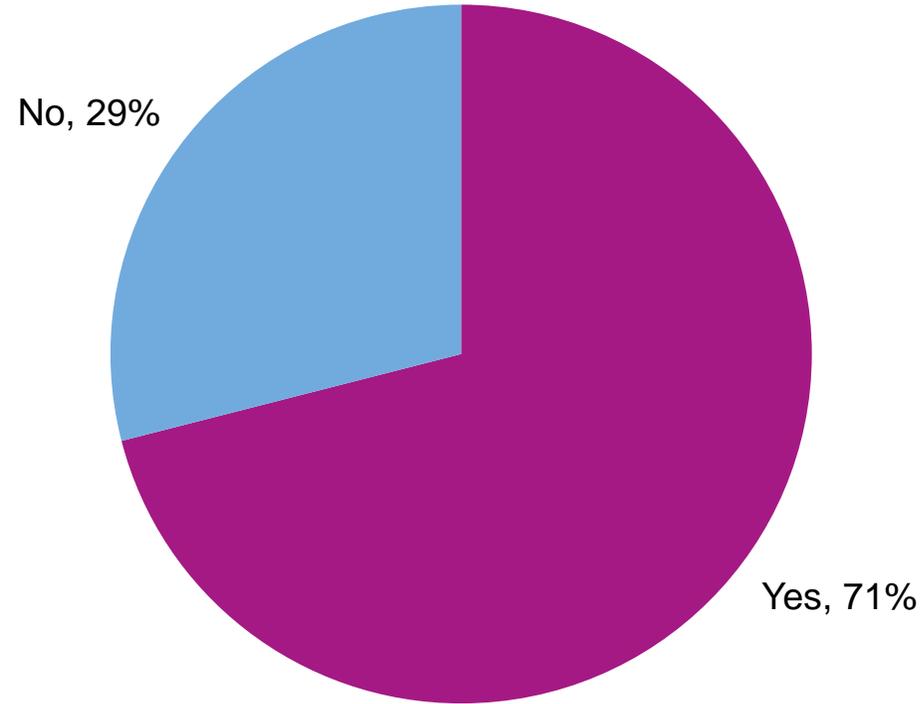
Q5: Is your company...?



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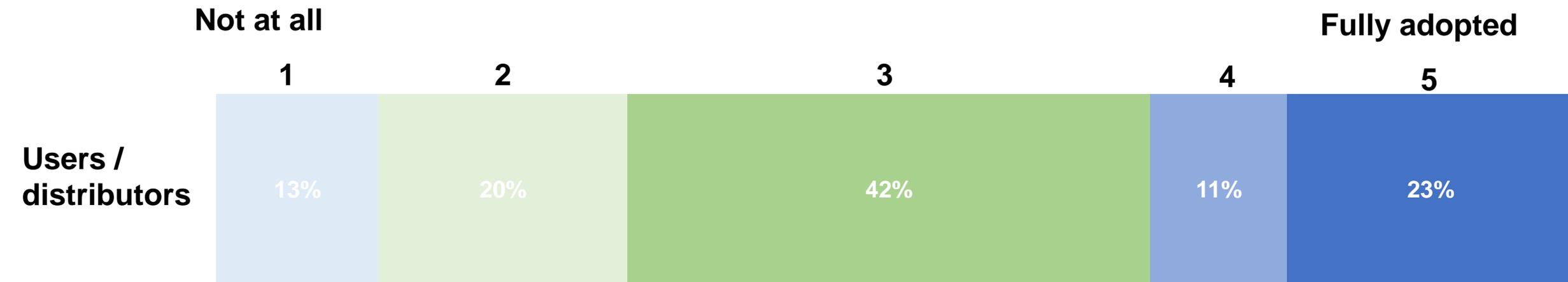
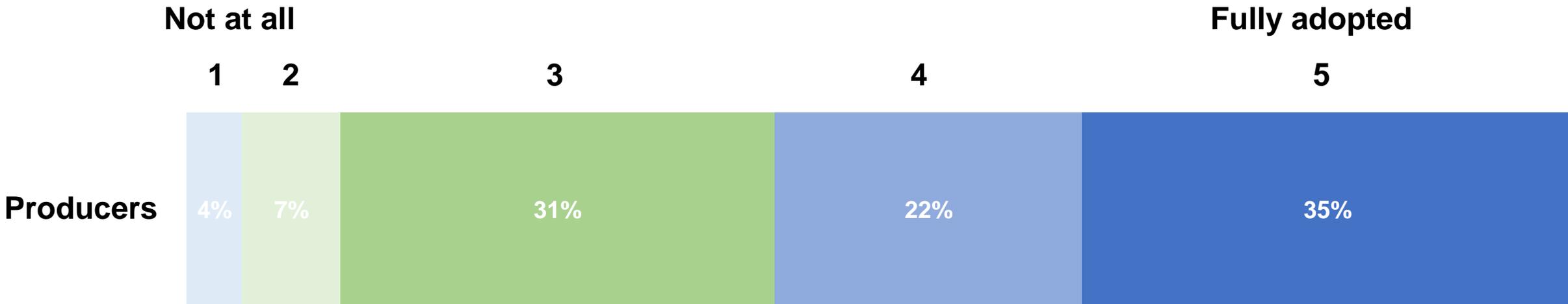
**MAIN FINDINGS – CONTENT LED  
QUESTIONS**

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



Q33: In five years from now, do you believe renewables-based chemicals will be in common use?

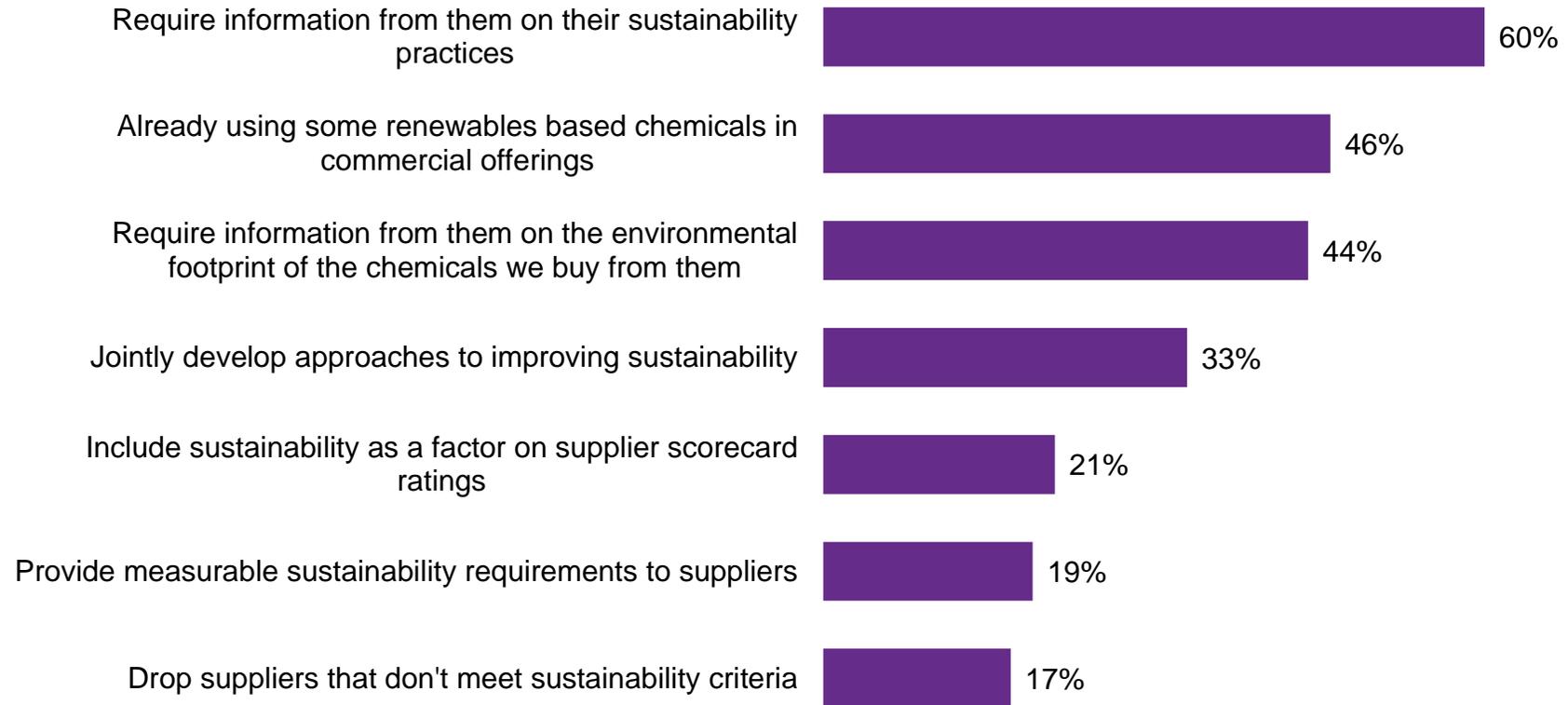
# One third of producers have fully adopted / implemented sustainable chemistry practices, compared to one quarter of users / distributors



Q6 & 20: To what extent has your company adopted and implemented sustainable chemistry practices? (please select on a scale of 1-5, where 1 is 'not at all' and 5 is 'fully adopted')

# Users / distributors require information from suppliers on sustainability practices

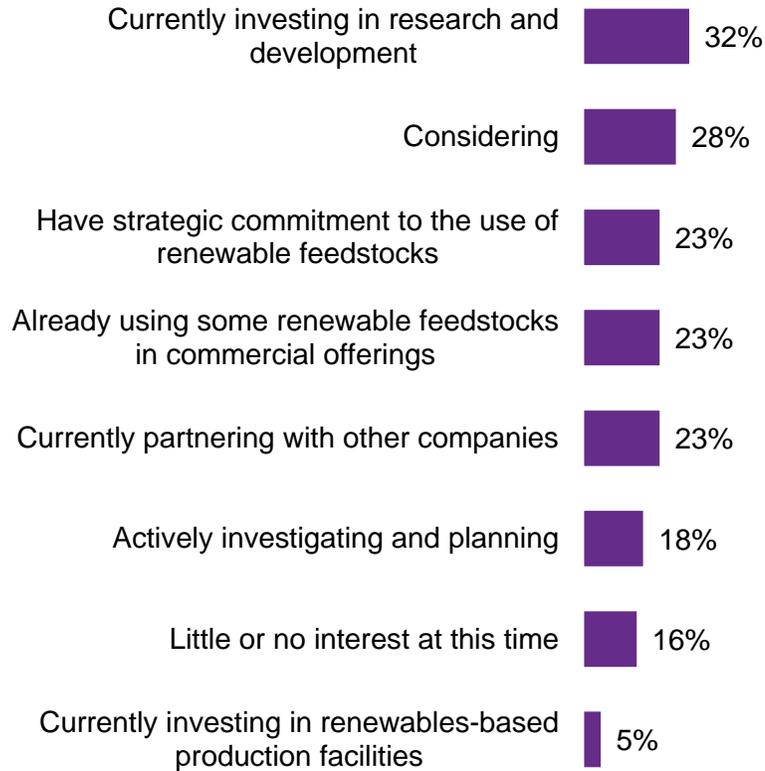
## Users / distributors



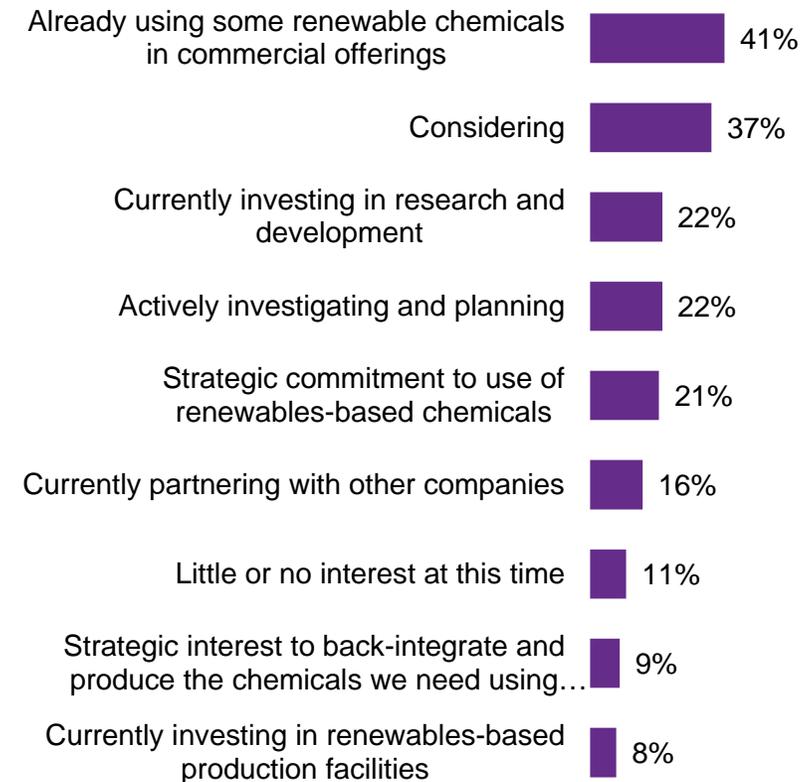
Q21: In which of the following ways do you work with your suppliers to improve the sustainability of your products and processes?

# One in three producers are currently investing in Research & Development whereas users / distributors are more likely to already be using renewable chemicals

## Producers



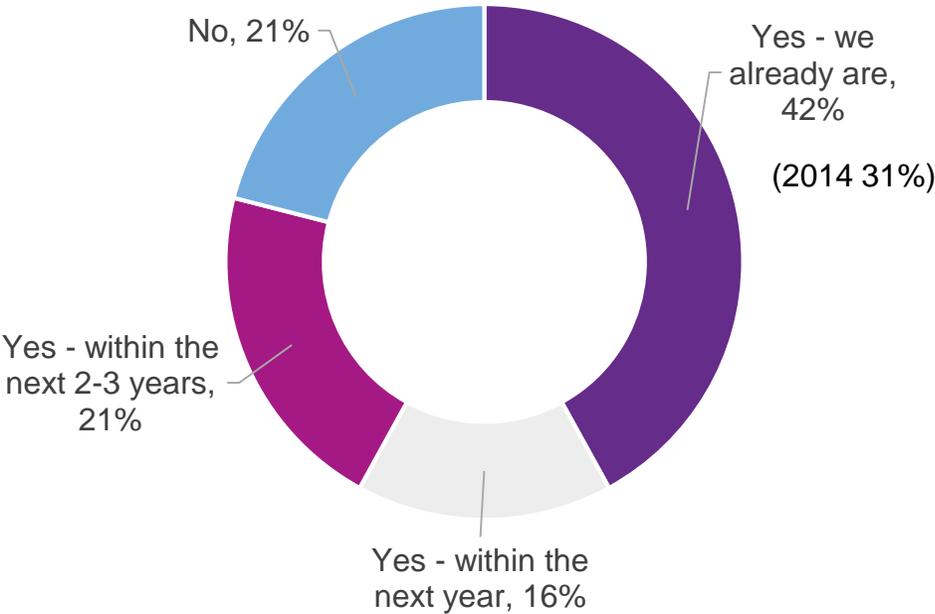
## Users / distributors



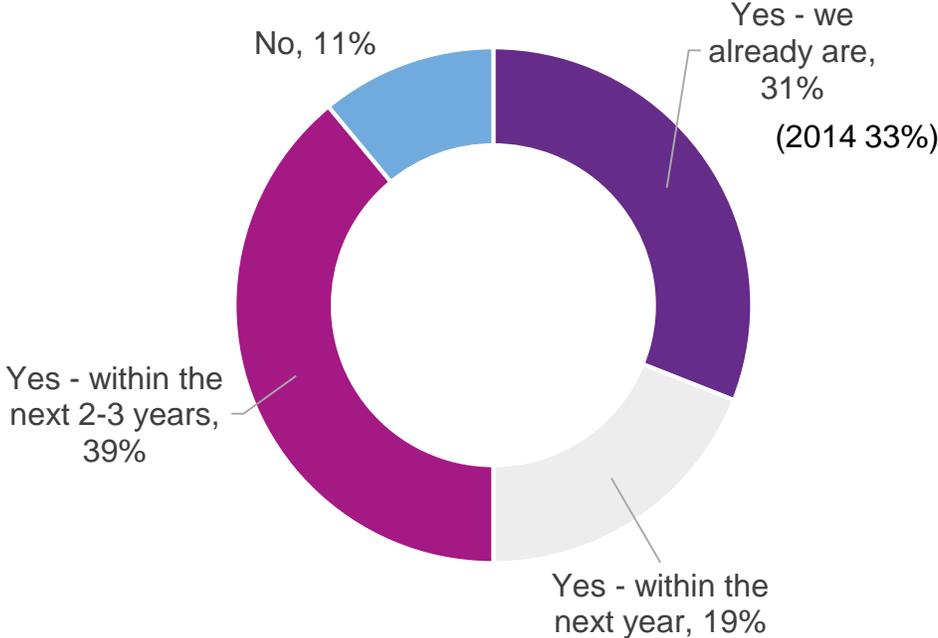
Q7 & 22: Which of the following describes your company's strategy with regard to the use of renewable feedstocks, such as sugars, starches or biomass? / In which of the following ways do you work with your suppliers to improve the sustainability of your products and processes?

# 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

## Producers



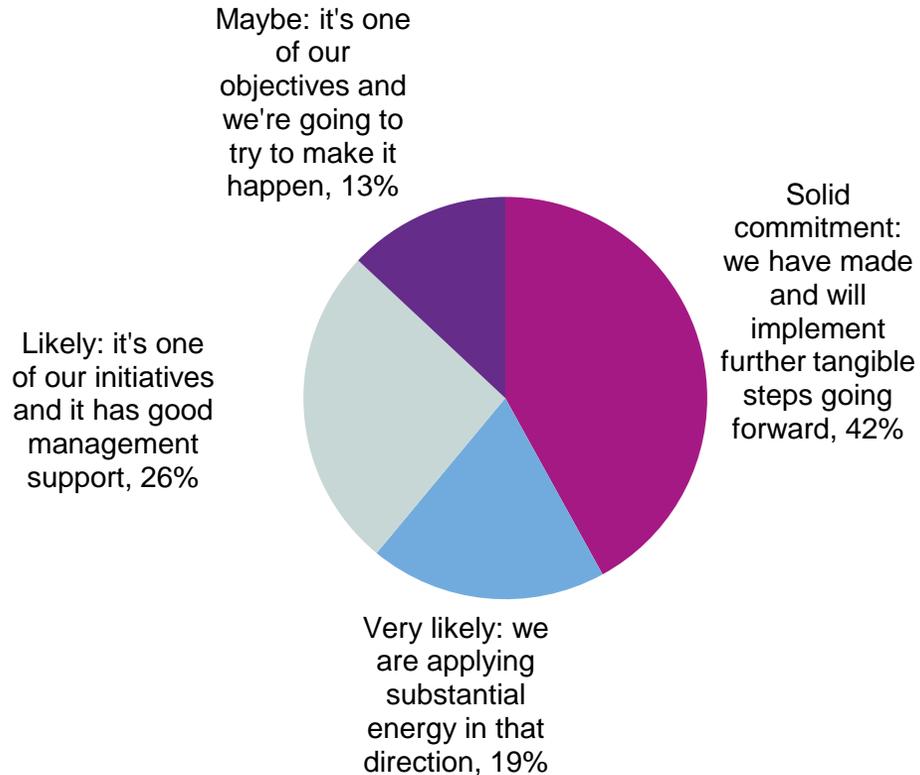
## Users / distributors



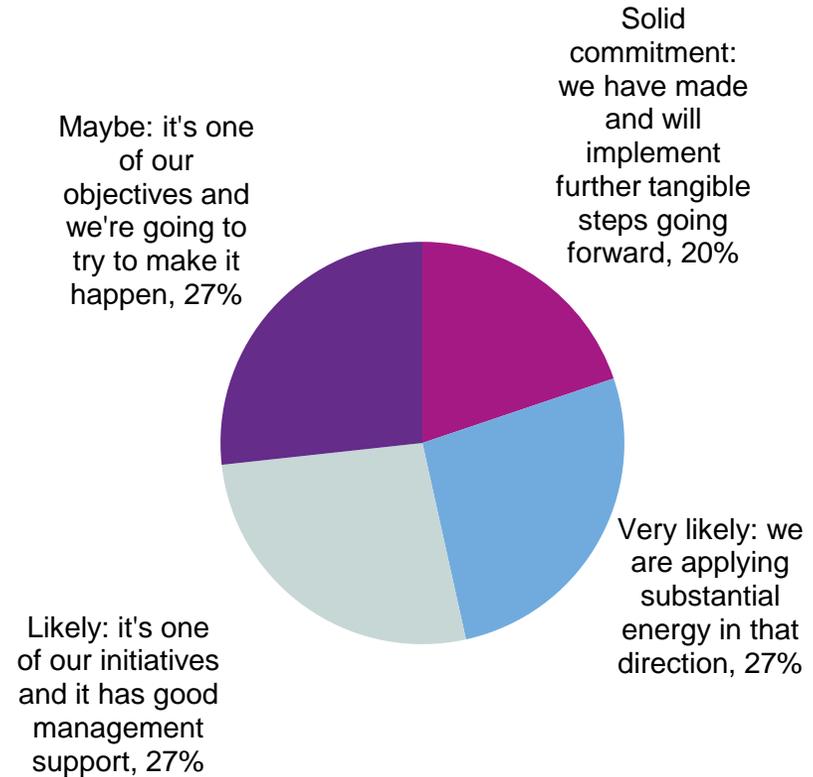
Q8: Do you expect to offer more sustainable versions of the chemicals you produce?  
Q23: Do you expect to use more sustainable versions of chemicals to make your products?

# A similar proportion of those who are already offering / using sustainable versions of the chemicals they produce describe their commitment as 'solid'

## Producers



## Users / distributors



Q9 & 24: How would you describe the degree of commitment to offer more sustainable versions of chemicals? / How would you describe the degree of your commitment to use more sustainable versions of chemicals to make your products?

**Producers estimate on average 21% of the chemicals made by their company in three years will be made using renewable feedstocks and users / distributors 16%**

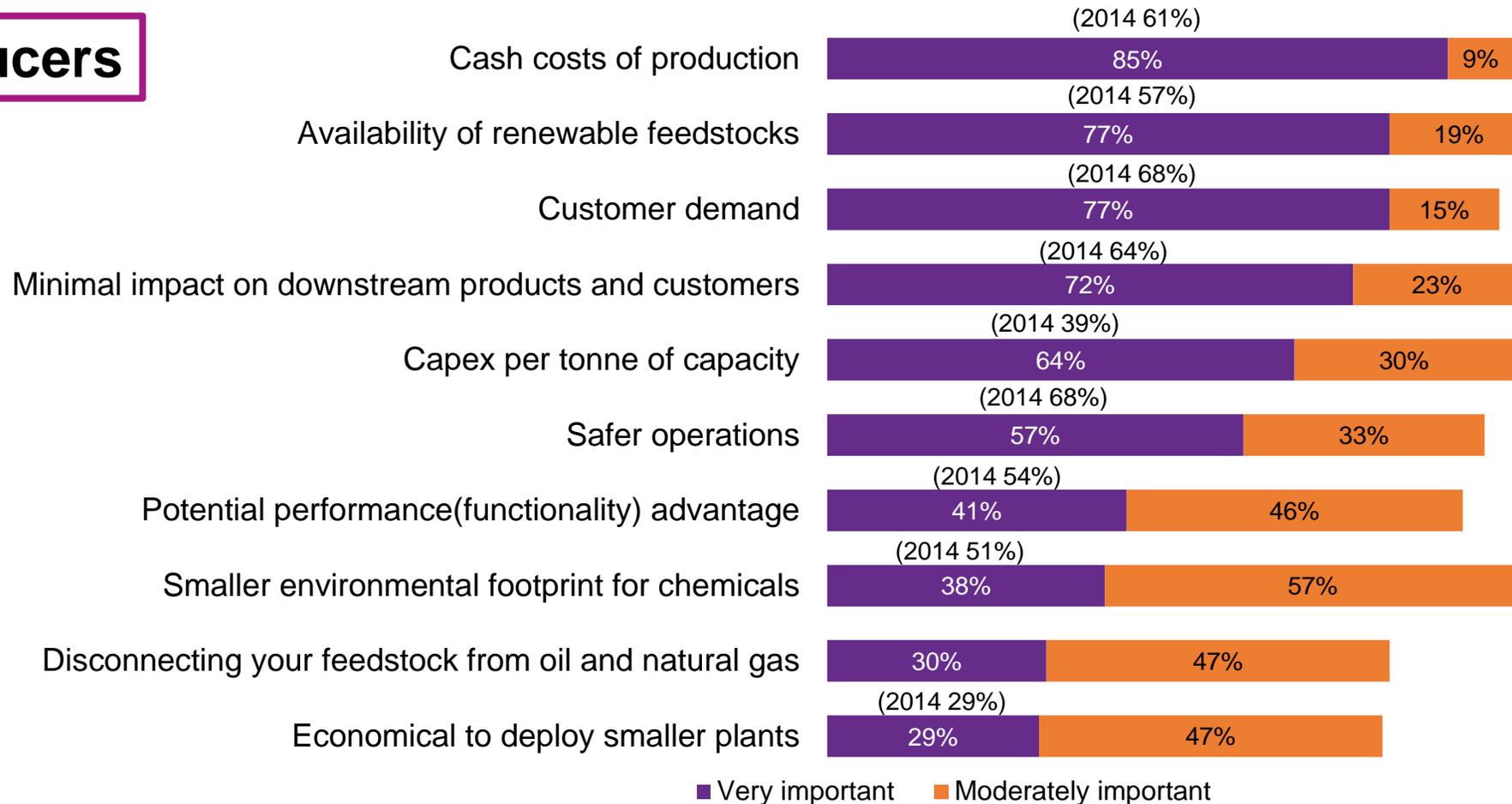
**Producers**  
**Mean: 20.87%**

**Users / distributors**  
**Mean: 15.63%**

Q10 & 25: What percentage of the chemicals made by your company will be made using renewable feedstocks in three years? (please enter a number between 0 and 100)

# The most important factors for producers when considering renewable-based production are costs of production, availability of renewable feedstocks and smaller environmental footprint

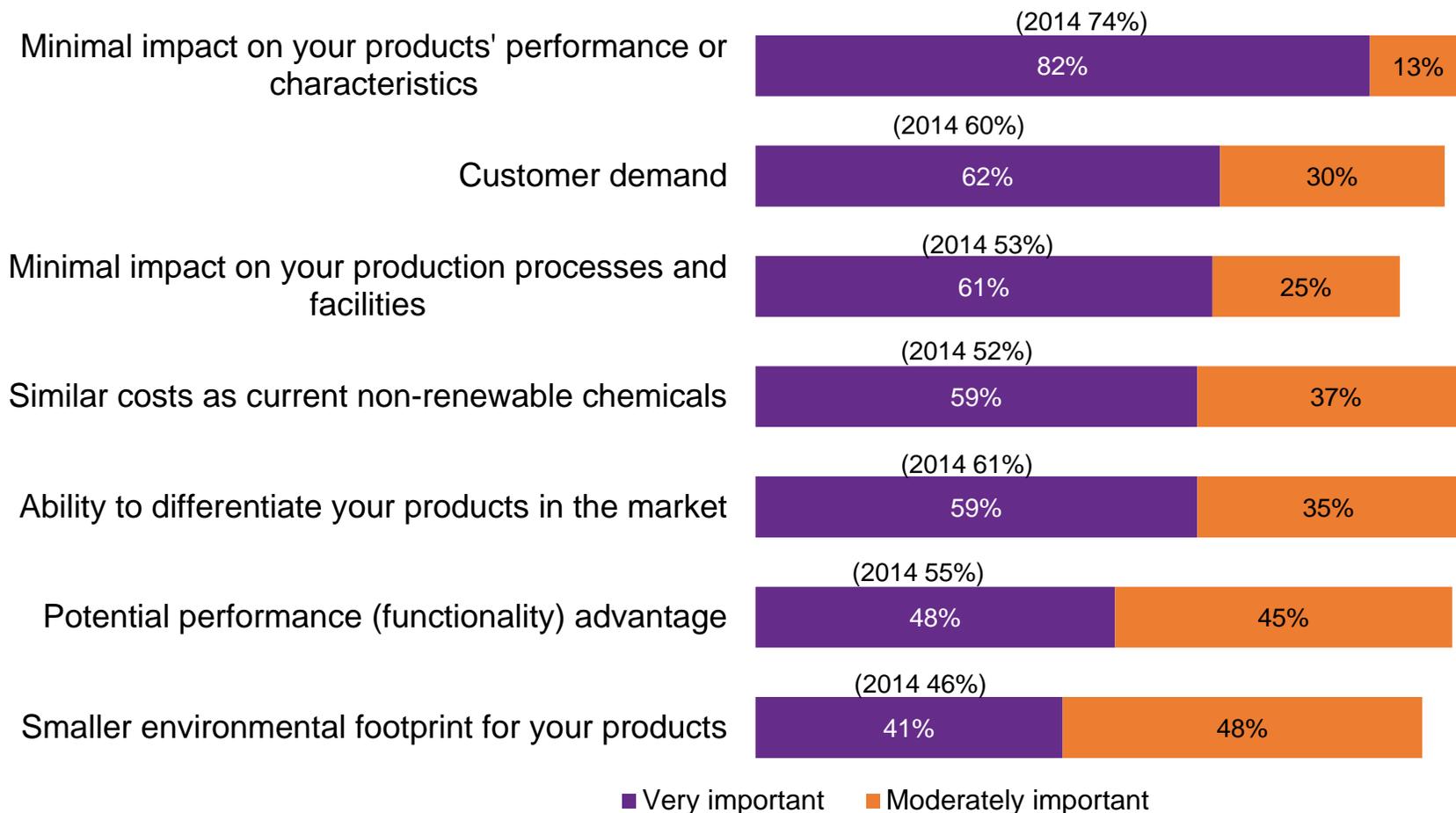
## Producers



Q11: How important are each of the following factors when considering renewable-based production?

# The most important factors for users / distributors when considering renewable-based chemicals in their products are minimal impact on product performance & customer demand

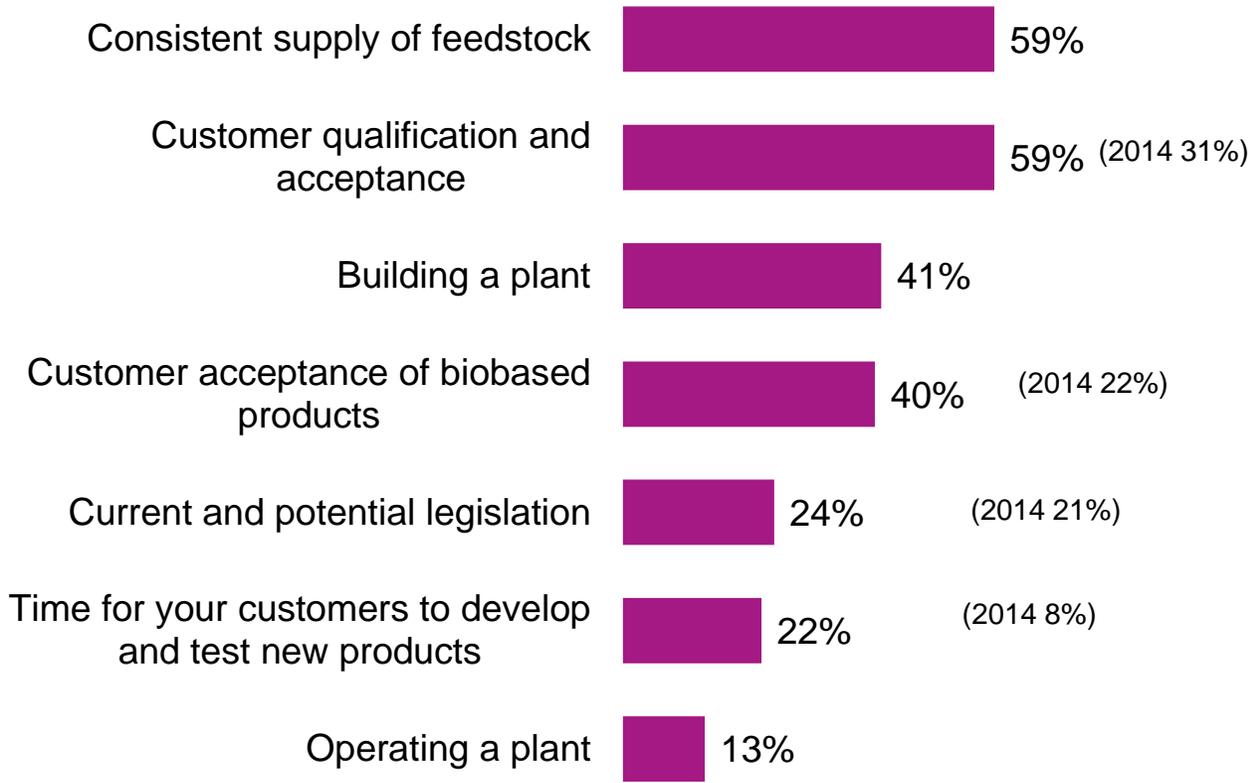
## Users / distributors



Q26: How important are each of the following factors when considering using renewable-based chemicals in your products?

# The main production issues of biobased chemicals are consistent supply of feedstock and customer qualification & acceptance

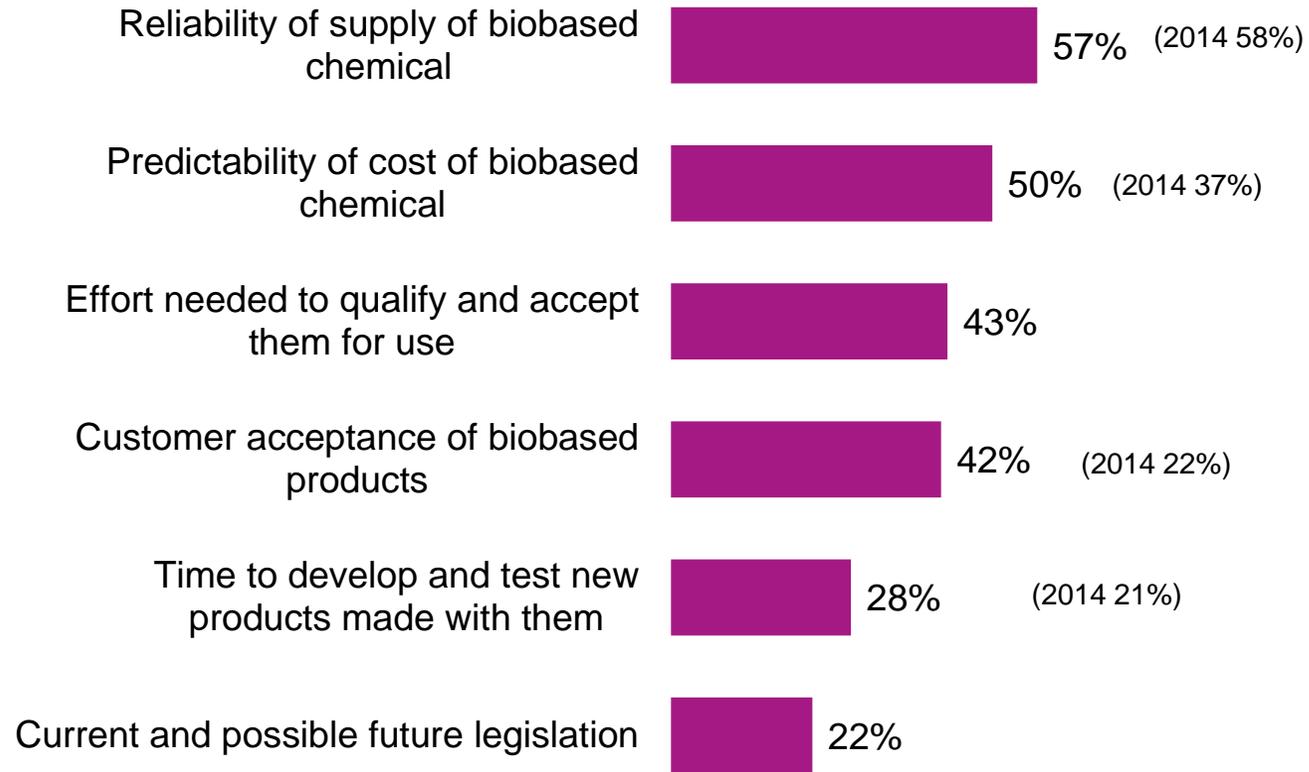
## Producers



Q12: What do you see as the main issues regarding production of biobased chemicals?

# The main usage issues of biobased chemicals are reliability of supply and predictability of cost

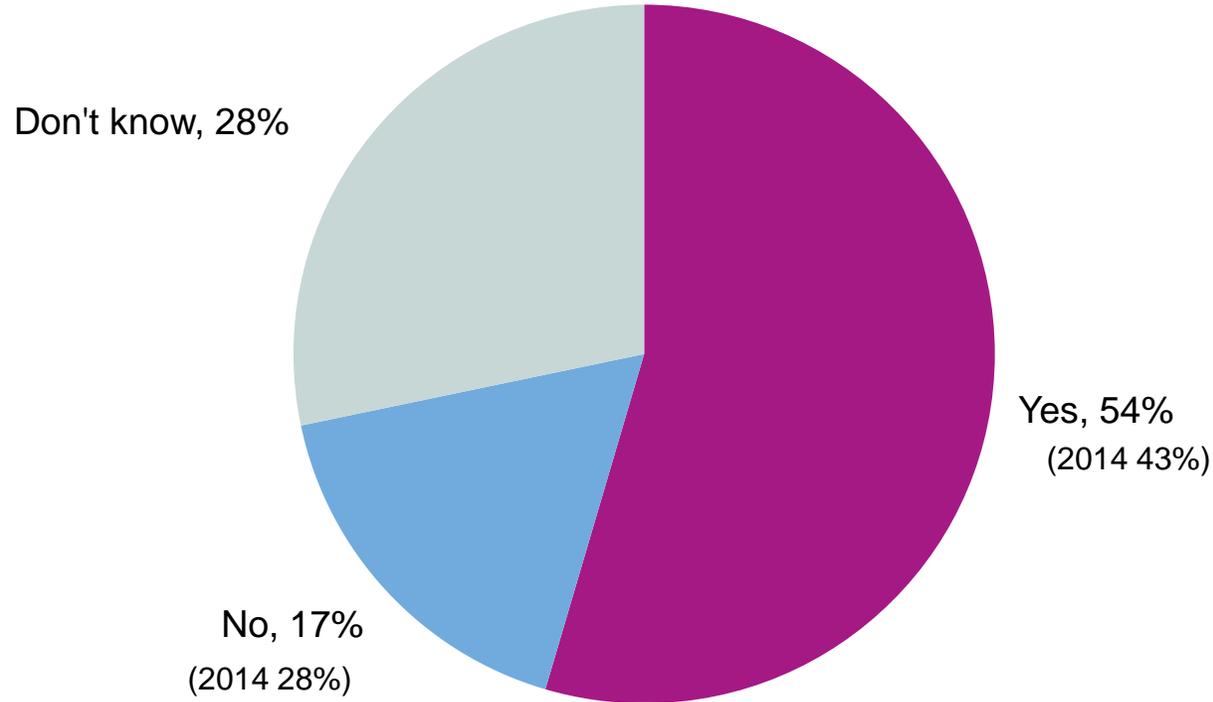
## Users / distributors



Q27: What do you see as the main issues around the use of biobased chemicals?

# Half of respondents believe there will be long-term economic advantage in switching some of the feedstocks for your chemical production to renewable feedstocks

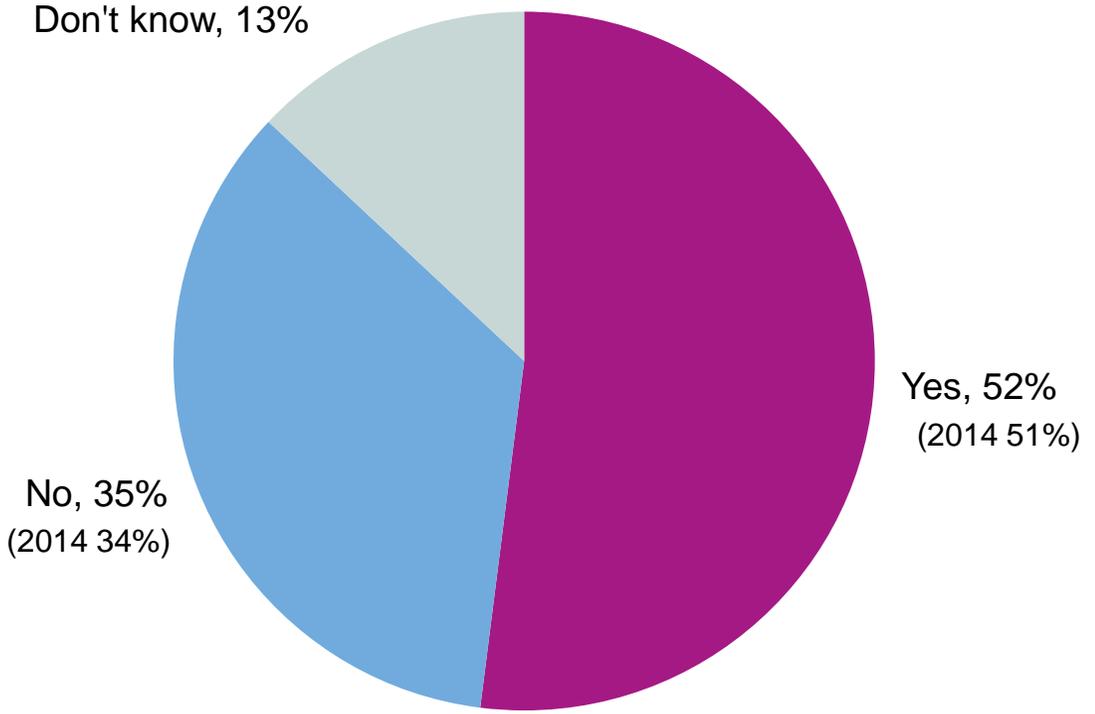
## Producers



Q13: In your opinion, will there be long-term economic advantage to you in switching some of the feedstocks for your chemical production to renewable feedstocks, like sugars, starches or biomass?

# Half of respondents believe their company should reduce its exposure to the petroleum-based commodity market

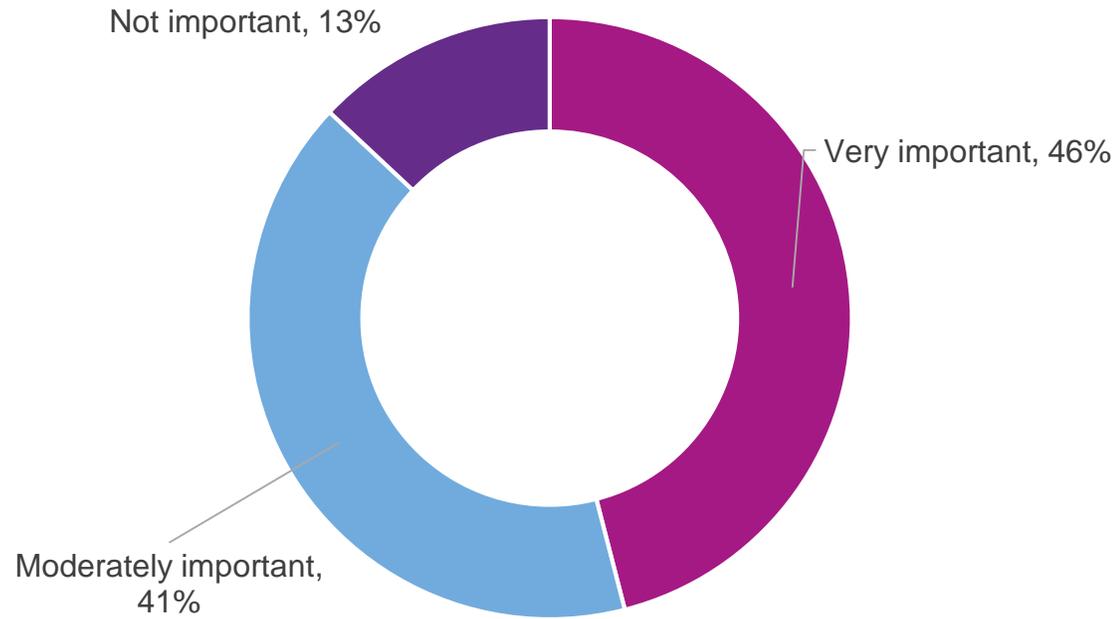
## Producers



Q14: In your opinion, should your company reduce its exposure to the petroleum-based commodity market?

# Almost half believe it is important for their company to be a leader in terms of sustainable chemicals

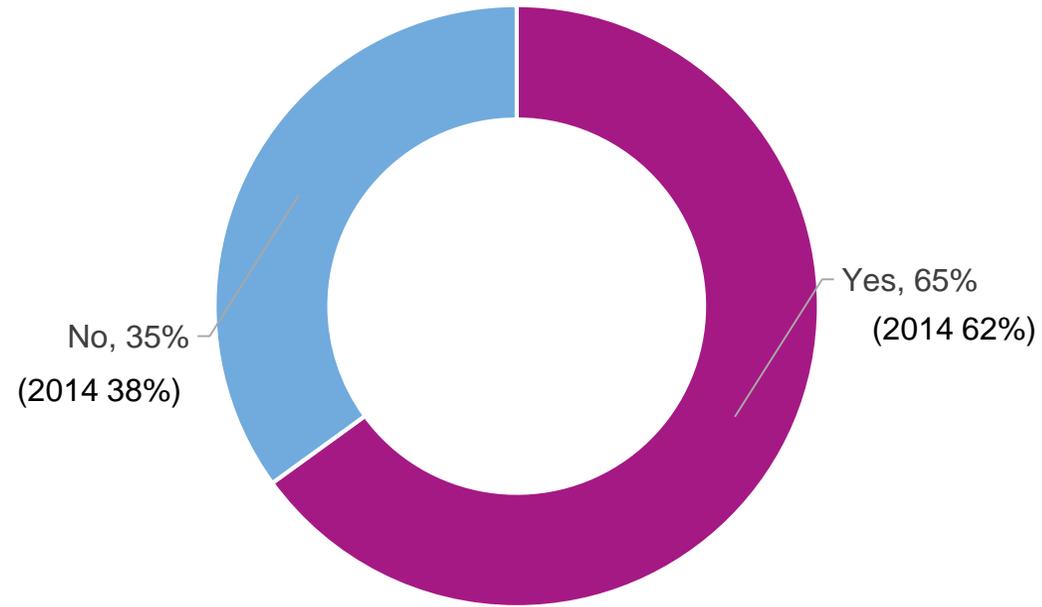
## Producers



Q15: How important is it for your company to be a leader in terms of sustainable chemicals?

# Two thirds of respondents have had customers express interest in sustainably produced chemicals

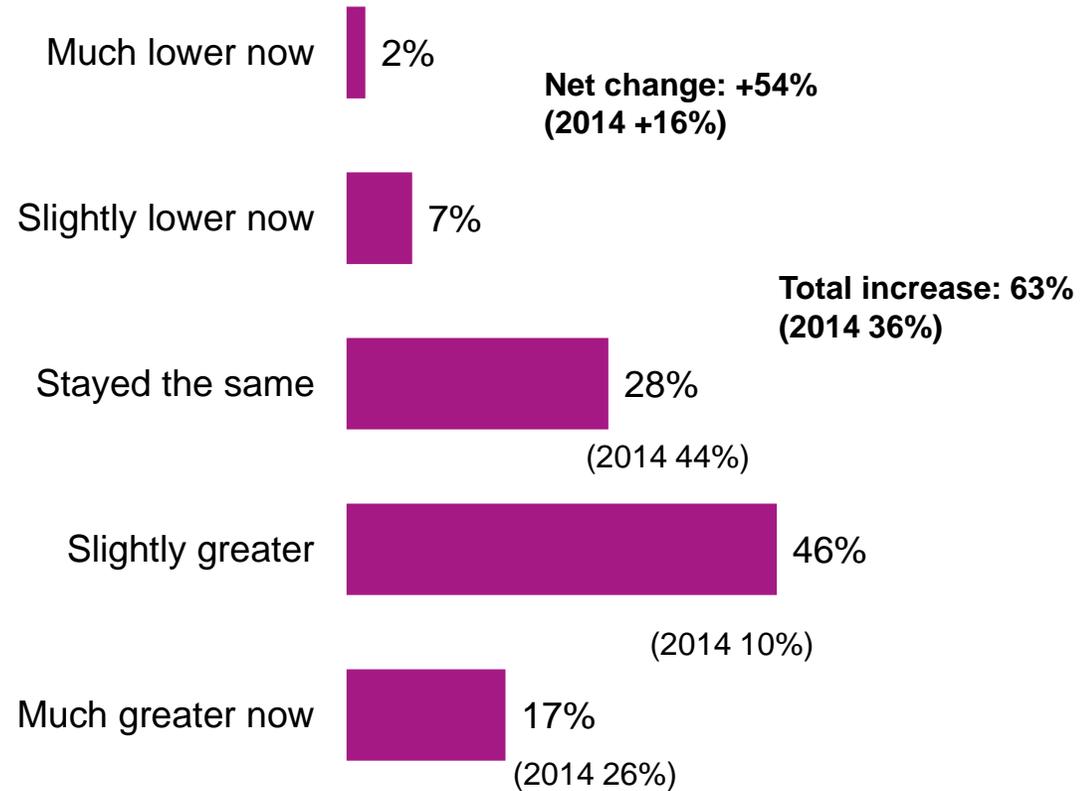
## Producers



Q16: Have your customers expressed interest in sustainably produced chemicals?

# Interest from customers in sustainably produced chemicals over the last three years has increased for almost two thirds of respondents

## Producers



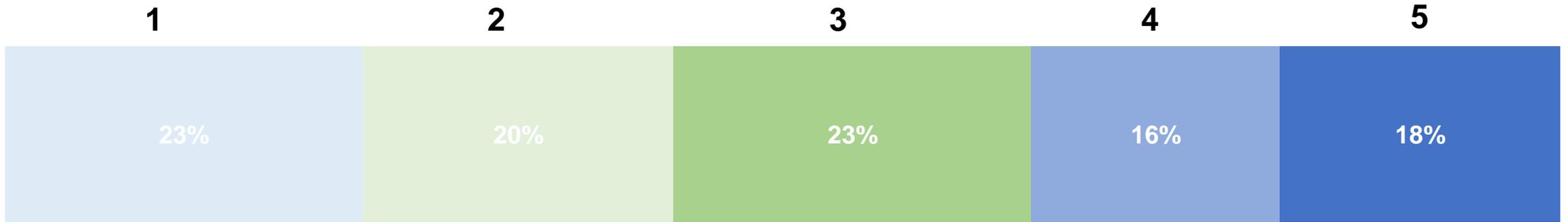
Q17: In the last three years, how has the level of interest your customers have shown in sustainably produced chemicals changed?

# Twice the number of producers than users / distributors set targets on all activities

## Producers

Not at all

We set targets on all our activities



## Users / distributors

Not at all

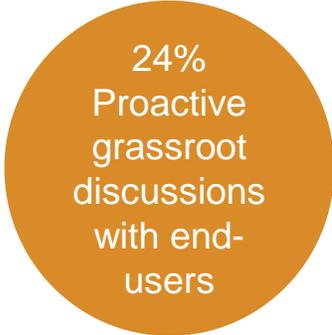
We set targets on all our activities



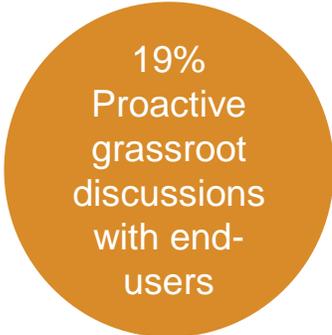
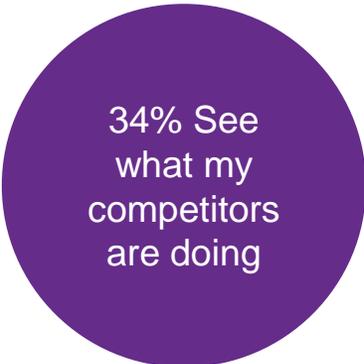
Q18 & 28: To what extent do you set targets for your renewables-based product efforts and benchmark them against peer performance and your past performance? (Please select on a scale of 1-5, where 1 is 'not at all' and 5 represents 'we set targets all our activities')

# Over a third of respondents are having proactive discussions with brand owners

## Producers



## Users / distributors



Q19 & 29: What is the primary way that your company develops and implements strategy with respect to renewables-based products?

## Other comments on sustainable chemicals...

“Hopefully it will find sufficient traction (with the needed politics and society drive) to make it happen.” – **Producer, Europe, CXO**

“The key driver for sustainable chemicals will be legislation as customers are generally not willing to pay for it. Also there are too little choices available today.” – **Producer, North America, Manager**

“Comments: / 1) the push for the use of sustainable chemicals is more a marketing activity of brand owners - to get customer's sympathy - than the push for possible environmental benefits / 2) the market of biobased chemicals will slowly grow, as economical and mechanical aspects are playing an important role, like improved studies of the total footprint of bio-culture. / 3) sustainability is a trend. No guarantee for the future.” – **Distributor, Europe, EVP**

“Though future of renewable chemicals is bright still we have miles to go.”  
– **User, India, Manager**

“It is need of time for big company to do more R & D in making use of renewable feedstock in chemical manufacturing.” – **Producer, South East Asia, Manager**

“There has been increasing noise on sustainable materials for some time now, but in real terms, it still all depends on the performance and costs in the final end produced materials. There needs to be a greater draw from customers, and acknowledgement that until the scales are larger, the prices will be higher.”  
– **Distributor, Europe, Group Technical Head**

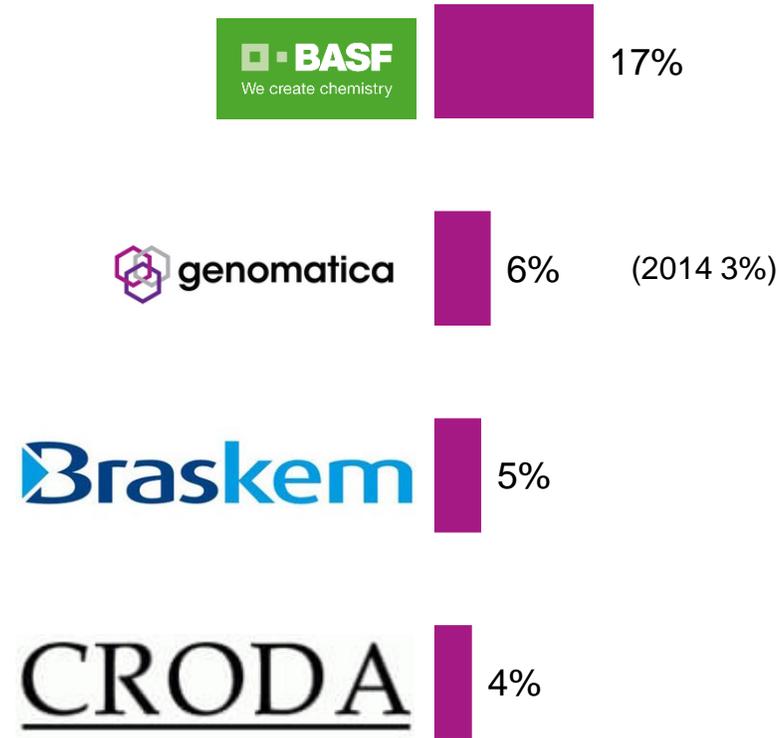
“Transition needs to be driven also from legislative point of view also.”  
– **User, Europe, Manager**

Q34: Do you have any other comments you would like to make on the issue of sustainable chemicals?

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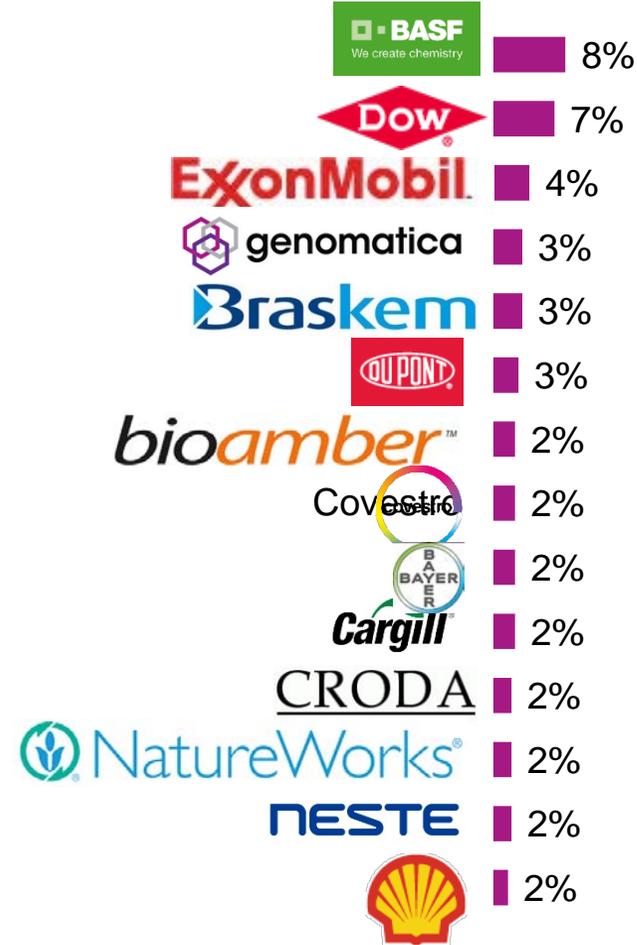
**MAIN FINDINGS – BRAND AWARENESS**

# Technology leaders for sustainable chemicals – FIRST spontaneous mention



Q30: When you think of technology leaders for sustainable chemicals, which companies come to mind?

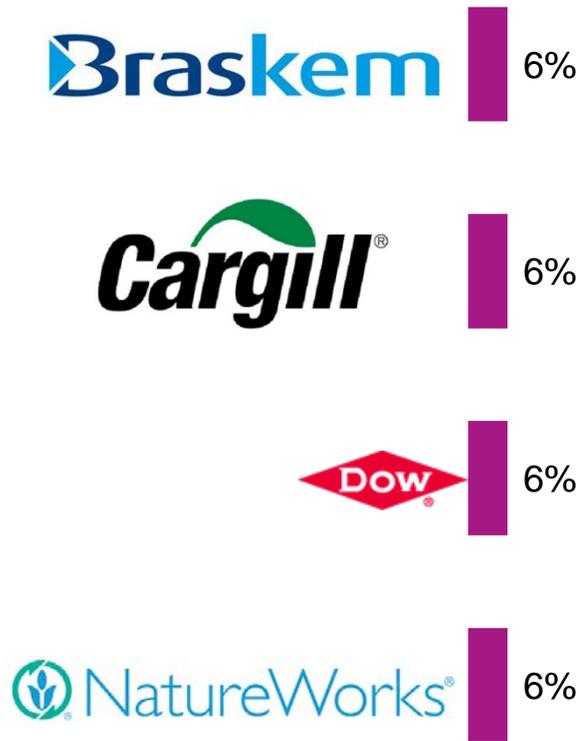
# Technology leaders for sustainable chemicals - TOTAL spontaneous mentions



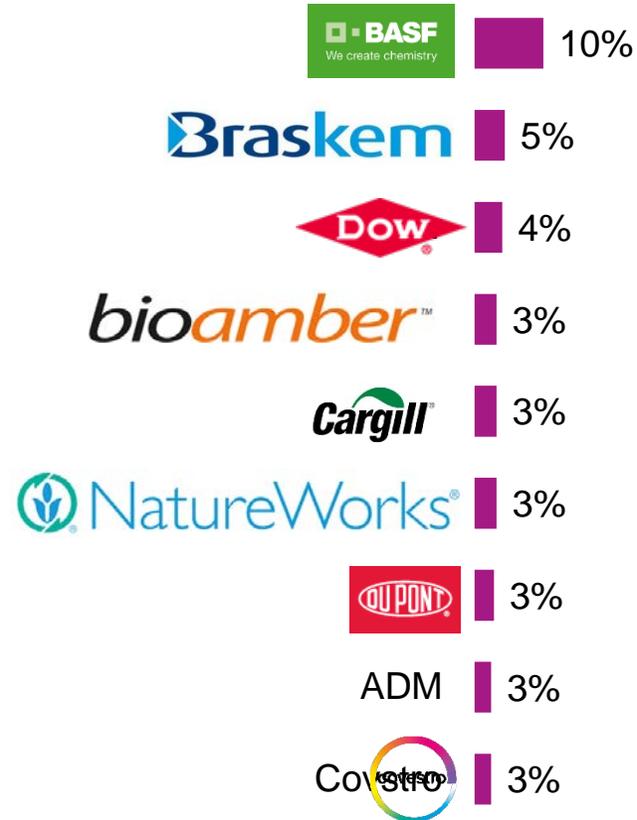
Q30: When you think of technology leaders for sustainable chemicals, which companies come to mind?

# Producers of sustainable chemicals - spontaneous mentions

## First mention

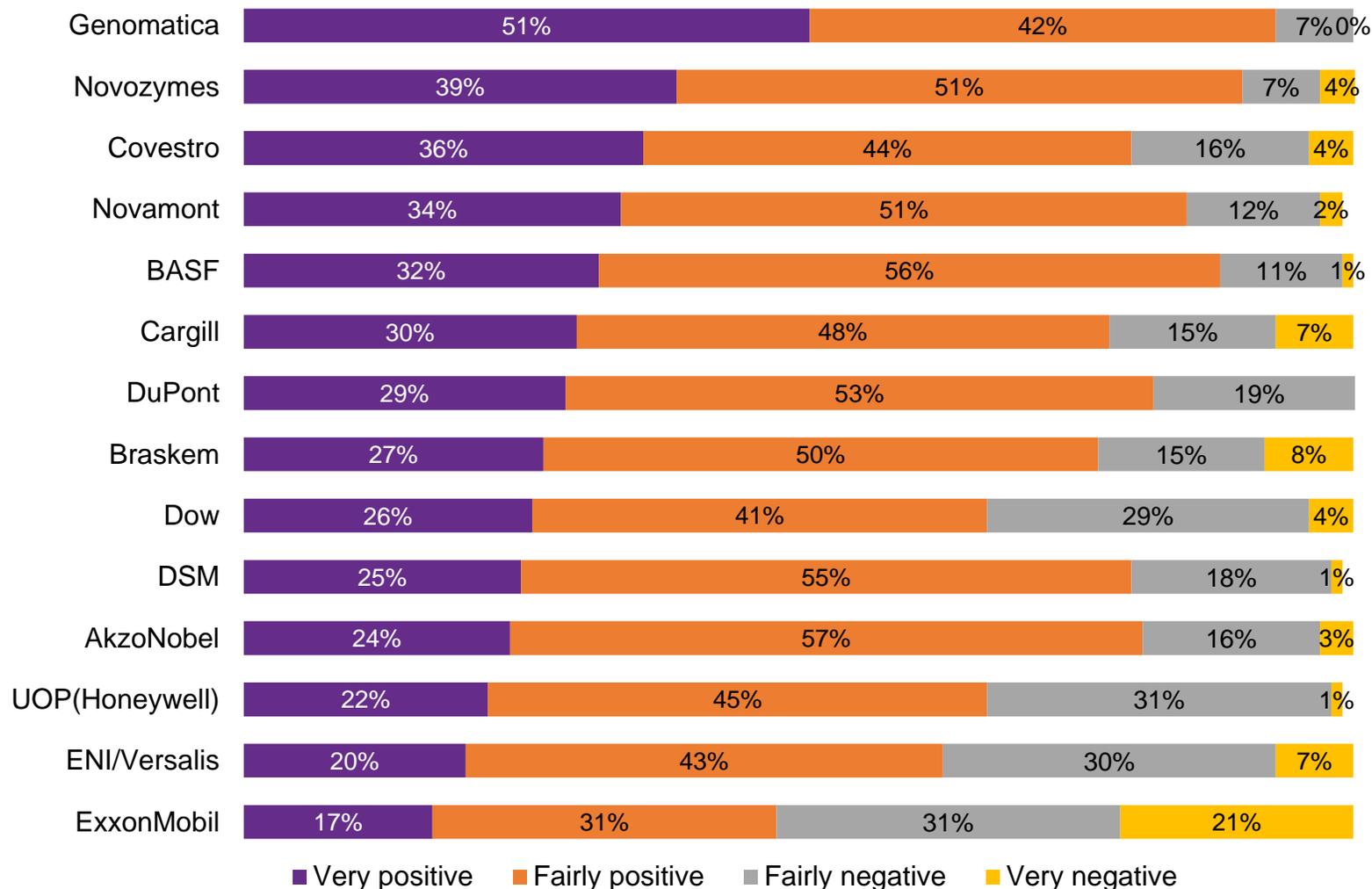


## Total mentions



Q31: When you think of producers of sustainable chemicals, which companies come to mind?

# 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?



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**SUMMARY OF FINDINGS**

## Summary of Findings

- The vast majority of respondents believe renewables-based chemicals will be in common use in five years time (71%). To date, a third of producers (35%) and a quarter of users / distributors have fully adopted sustainable chemistry practices.
- Strategy for producers is investing in Research & Development and users / distributors are already using some renewable chemicals in commercial offerings. Over a third of producers are already offering more sustainable versions of the chemicals they produce (42%) and a third of users / distributors are using them (31%).
- The most important factors for producers when considering renewable-based production are 'Cost of production', 'Availability of renewable feedstocks' and 'Smaller environmental footprint', whereas for users / distributors it was 'Minimal impact on product performance' & 'Customer demand'.
- The main production issues for biobased chemicals are consistent supply of feedstock and customer qualification & acceptance. The main usage issues were reliability of supply and predictability of cost.
- Twice the number of producers (18%) are setting targets on all activities for renewables-based product efforts and benchmark them against peer and past performance, compared to 8% of users / distributors. Over a third of both producers (39%) and users / distributors (37%) are having proactive discussions with brand owners to implement strategy for renewables-based products.
- In terms of spontaneous recall, technology leaders for sustainable chemicals were most likely to be BASF, Genomatica & Dow. Producers of sustainable chemicals most recalled were BASF & Braskem. The brands with the most positive prompted brand impression for sustainability technology are Genomatica, Novozymes and BASF.



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**APPENDIX**



# Sustainability Research November 2017



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