

# Public perception of the bioeconomy – a content analysis of media contributions in Germany



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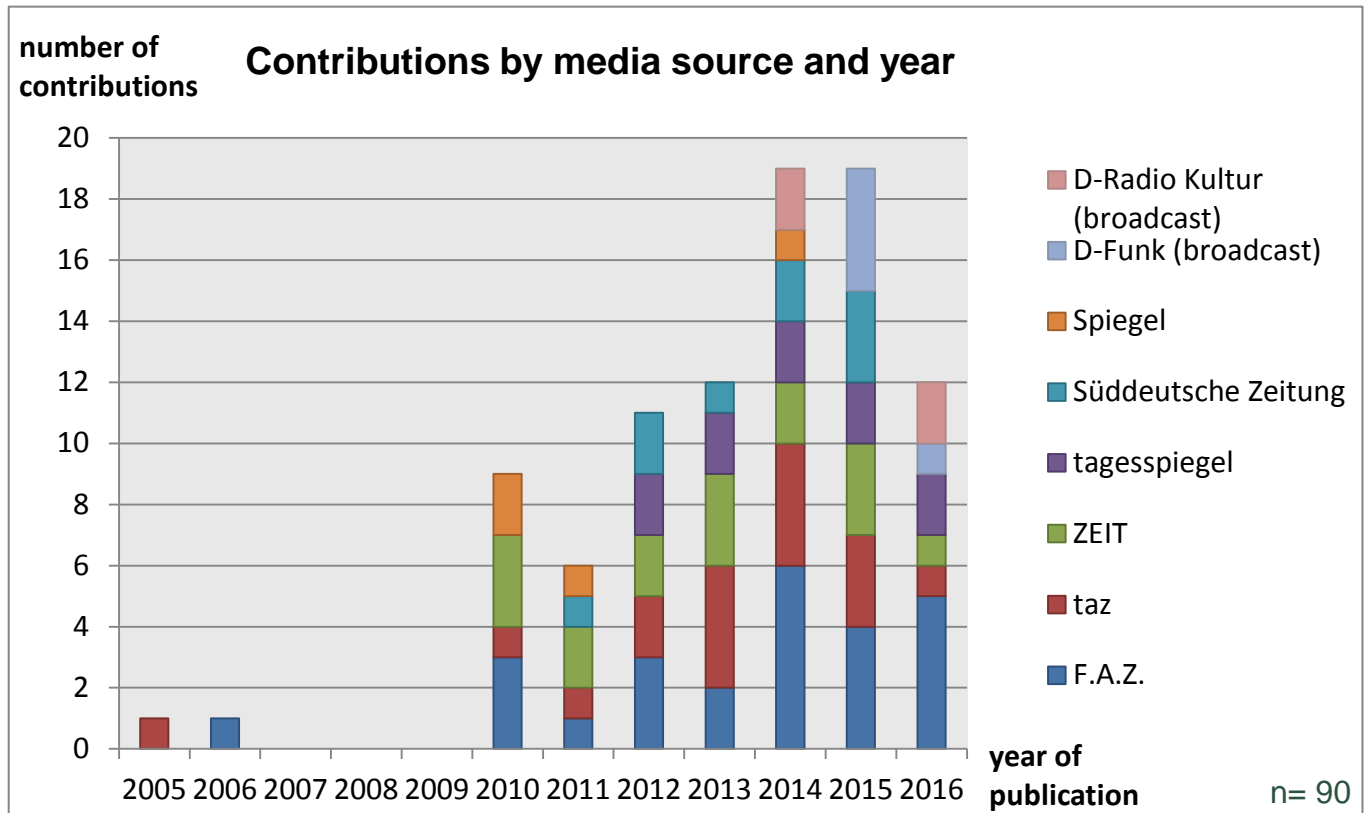
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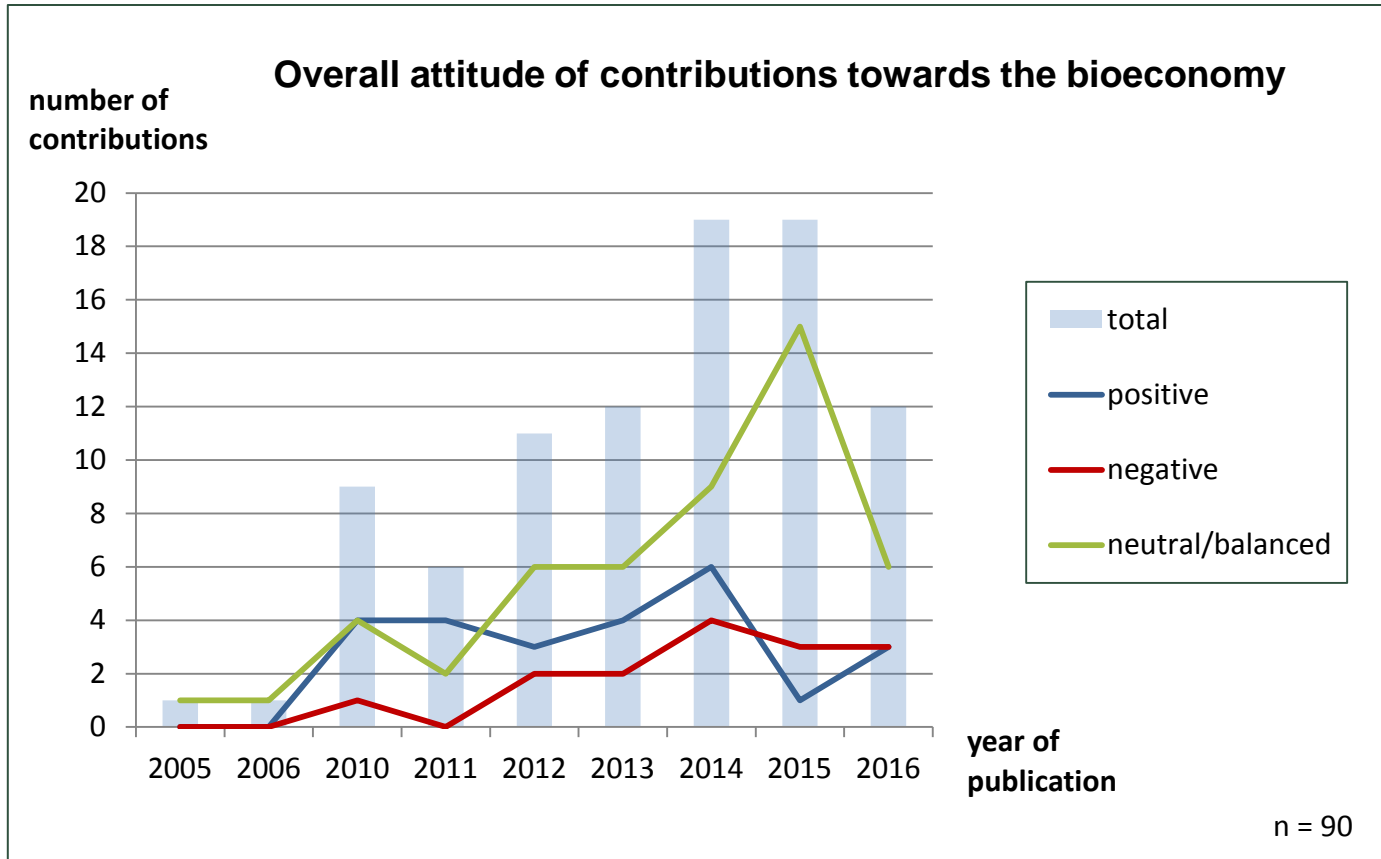
## How is the bioeconomy presented in public media?

- **Content analysis** of leading **print and broadcasting media** in Germany between 2005 und 2016 (n = 90 contributions)
- **Keyword:** bioeconomy/bioeconomic
- **Evaluation:** frequency analysis, structuring content analysis
- **Categories**
  - Development of media contributions over time
  - Relevant actors and organizations
  - Impacts of the bioeconomy on societal aims

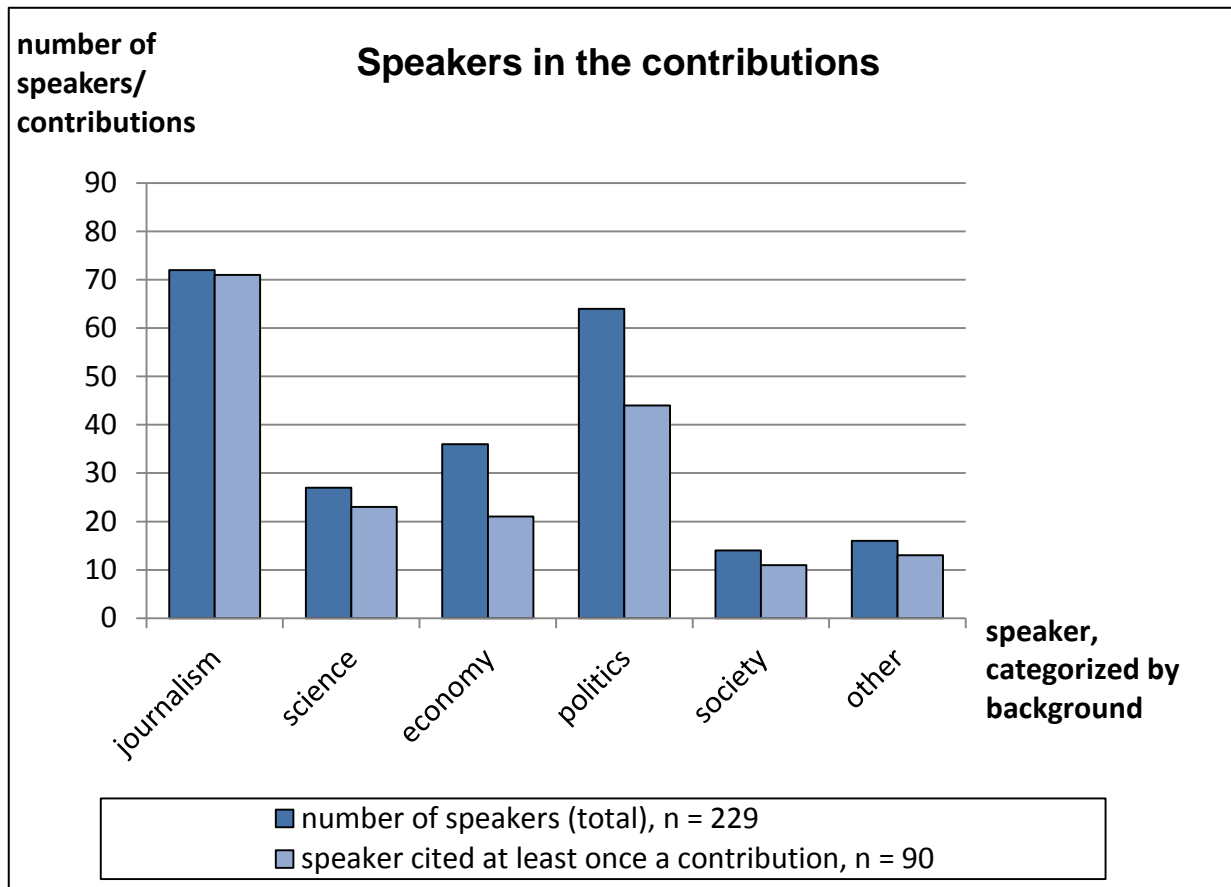
## Results: Development of media contributions over time



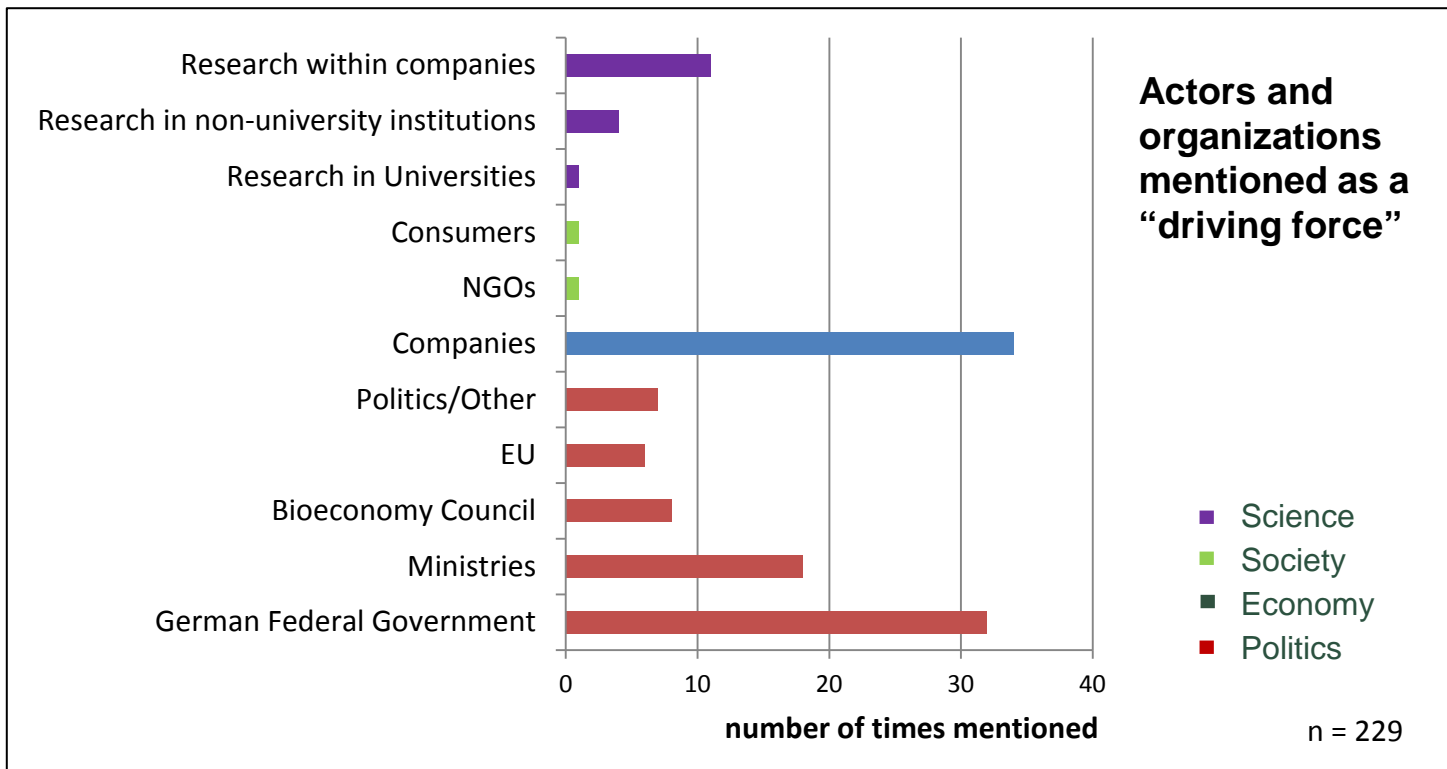
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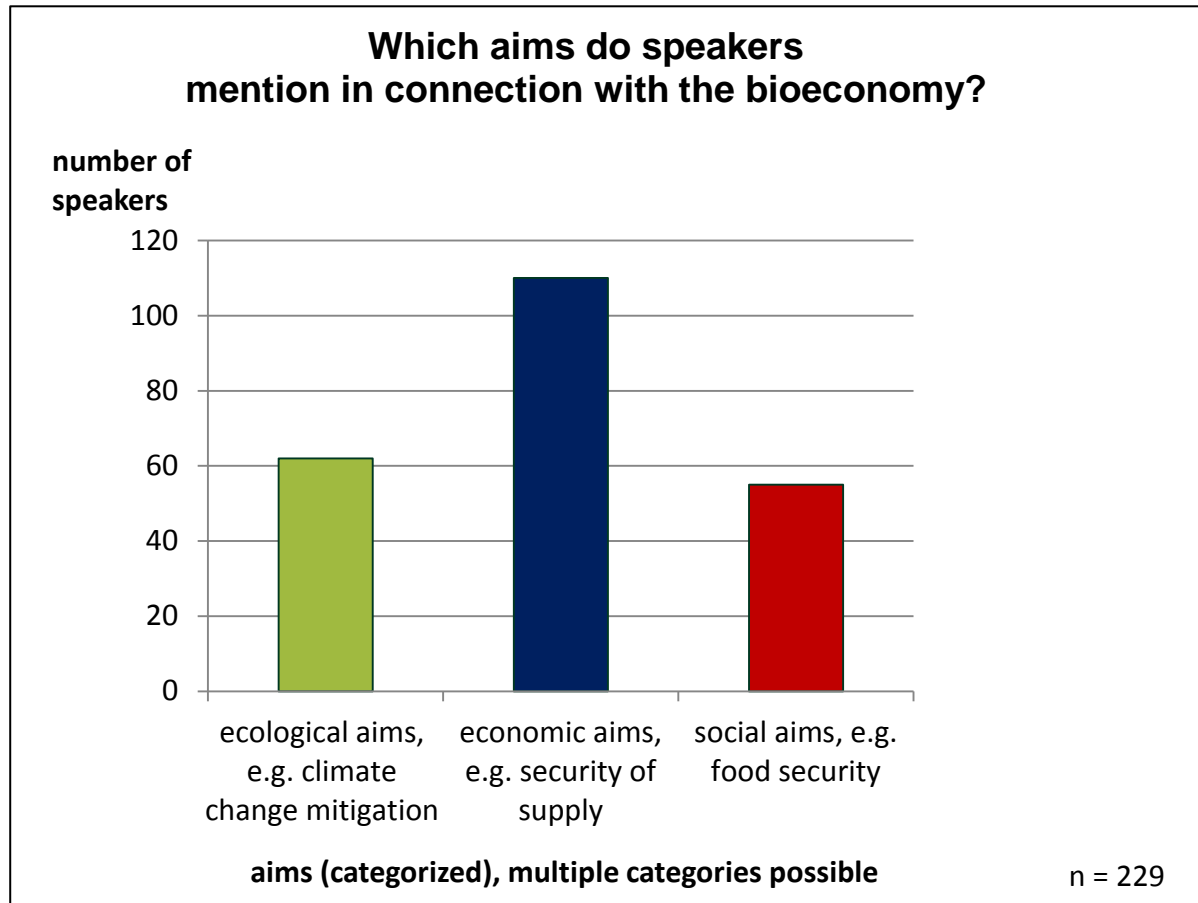
## Results: Relevant actors and organizations



## Results: Relevant actors and organizations



## Results: Impacts of the bioeconomy on societal aims



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### Societal aims named as relevant for the bioeconomy

Economic dimension	Environmental dimension	Social dimension
1a Economic growth	2a Climate change mitigation	3a Food security
1b Employment	2b Biodiversity	3b Distributive justice
1c Rural value creation and development	2c Environmental protection (esp. soil quality)	3c Acceptance
1d Innovation	2d Conservation of non-renewable resources	3d Mitigation of international conflicts
1e Security of supply (resources, energy)	2e Circular economy and waste reduction	3e Resource access
1f Economic efficiency	2f Land use efficiency (increase in output without increase in land input)	3f Participation
	2g Reduction of land consumption	



## Results: Impacts of the bioeconomy on societal aims

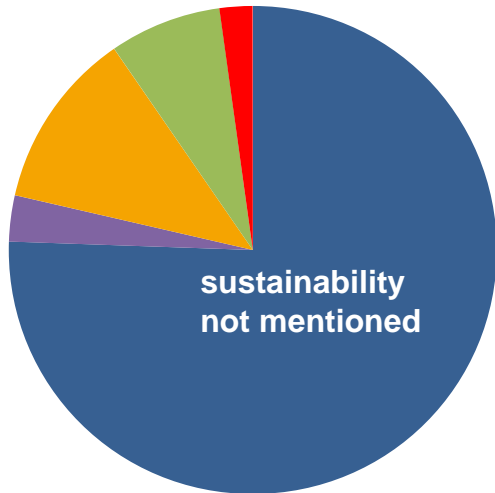
### Treatment of impacts on security of supply as an example\*

Pro	Contra
<p>Bioeconomy provides “<b>answers for the central question of the 21st century</b>” – “How can [...] more and more people be supplied with food, energy and materials, while available resources are decreasing?”</p>	<p>“A large share of wood [...] is already <b>imported</b> from Russia. There is real clear-cutting. The <b>oil of the future is getting scarce</b> before the new age starts.”</p>
<p>“If plant materials are to <b>substitute fossil resources in the chemical and pharmaceutical industries</b>, research needs are immense. But so are potentials.”</p>	<p>“Green genetic engineering and bioenergy instead of ecological land use further increase human <b>utilization of nature</b>. Meanwhile, <b>environmental protection</b> and the <b>rights of nature</b> come under the wheels.”</p>
<p>“The <b>fuel of independence</b>.”</p>	

*\*Original quotes in German, own translation*

## Results: Impacts of the bioeconomy on societal aims

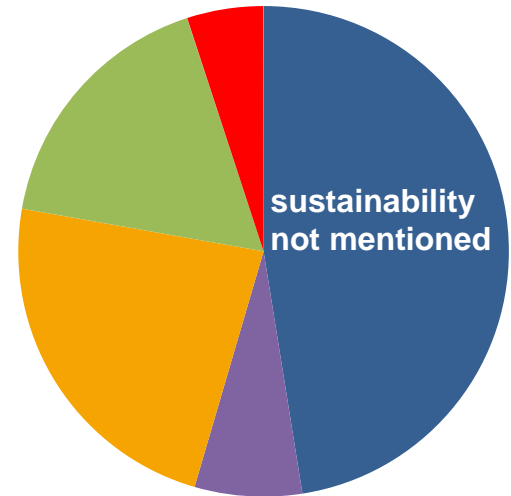
**Sustainability mentioned by speakers**



n = 229

- sustainability mentioned, but not specific
- bioeconomy can be sustainable
- bioeconomy is sustainable
- bioeconomy is not sustainable

**Sustainability mentioned at least once in a contribution**



n = 90

- **Frequent point of critique: “technical fix” instead of structural change and changes in consumption behavior**

## Conclusions

- The articles provide an overall **balanced view of pro and cons**, however, this might be based on the selected media
- **Attention towards bioeconomy** increased since 2005 with a peak in 2014 and 2015 → topic more prominent
- Consumers and NGOs are not in the forefront as drivers, instead stronger **focus on politics, companies/economic actors and science** → similar to findings in policy papers and scientific publications
- **Economic aims** of the bioeconomy **dominate the discussions**, but still the complexity (range of sectors and variety of resources) is outlined
- **Bioeconomy is not yet established as a clear concept** in the media (compared to e.g. the “Energiewende”)



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