

Towards a Sustainable Bioeconomy: Integrating Environmental Concerns in Germany's Bioeconomy Discourse

Towards a Sustainable Bioeconomy
Innovative Methods and Solutions for the Agriculture and Forest Sectors
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Albert-Ludwigs-Universität Freiburg

Alexandru Giurca and Daniela Kleinschmit

Forest and Environmental Policy Group



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Outline

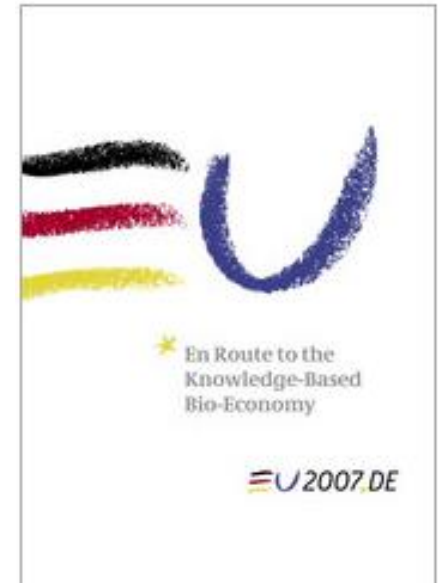
- **Background**
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“The knowledge-based bioeconomy can combine economic prosperity with environmental compatibility.”
(BMBF 2011)



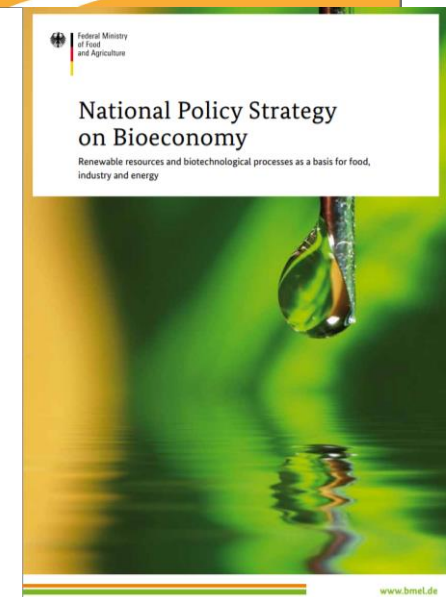
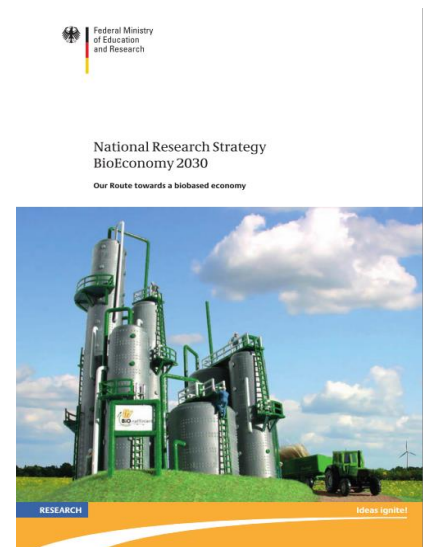
Bioeconomy : a top priority in Germany

- **2007-** One of the first initiatives was formulated during the conference "*En route to the Knowledge-Based Bio-Economy*", held under the German Presidency (Cologne Declaration, 2007)
- **2008-**The global financial crisis accentuated the focus on “green growth”

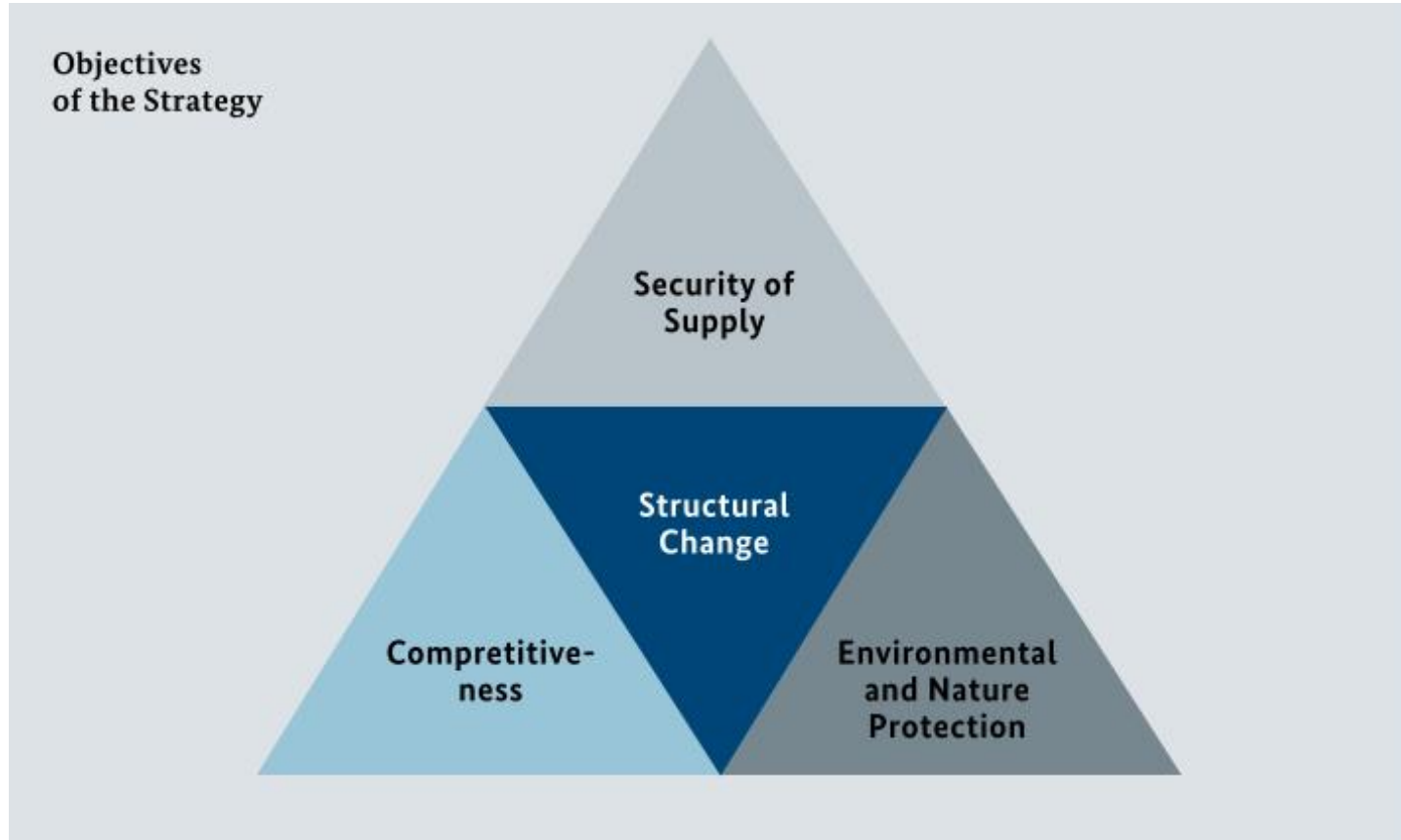


Bioeconomy : a top priority in Germany

- **2009-** bioeconomy advisory board to the German government (Bioökonomierat)
- **2011-** official national **research strategy**: “*National Research Strategy Bioeconomy 2030: Our Route Towards a Biobased Economy*”
- **2014-** official **policy strategy** “*National Policy Strategy on Bioeconomy: Renewable resources and biotechnological processes as a basis for food, industry and energy*”



Bioeconomy: a top priority in Germany



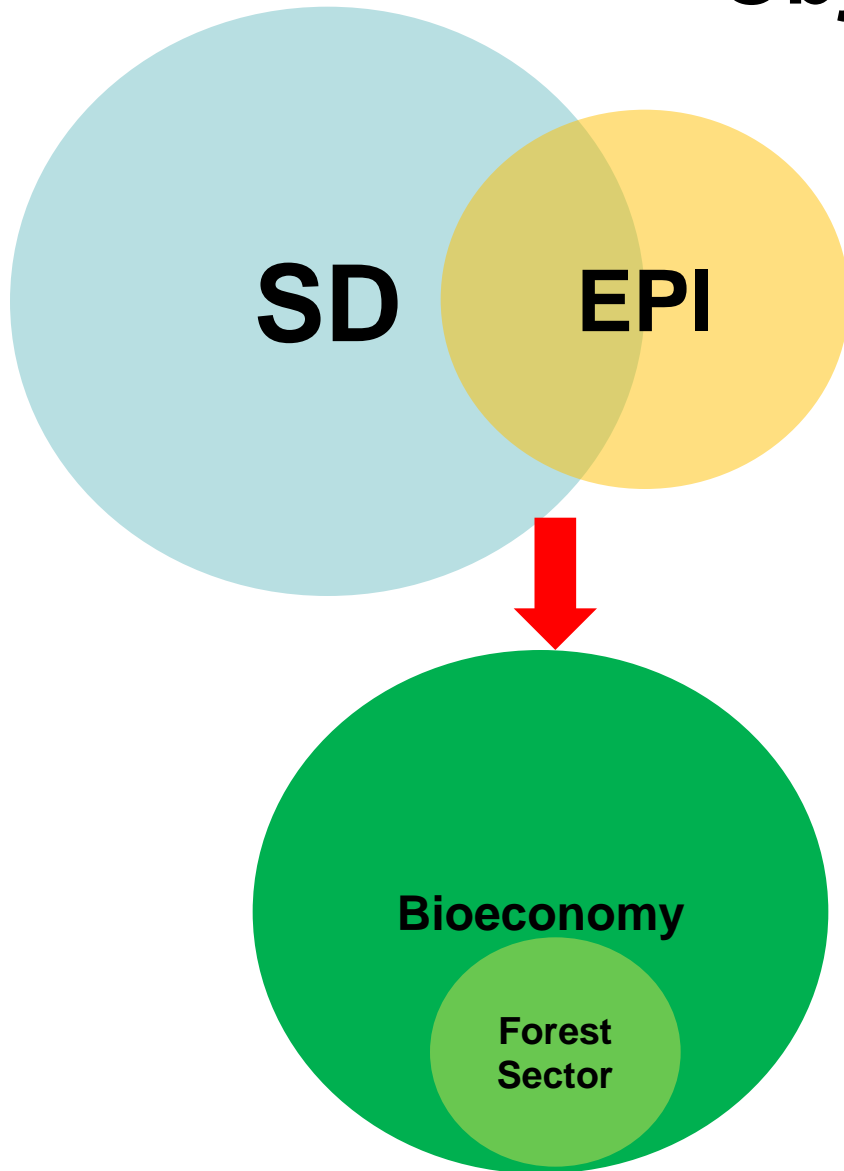
Sustainable Development (SD) and bioeconomy

- SD strategies aim to balance the economic, social and environmental aspects;
- SD is repeatedly highlighted in the German strategies as the **overarching goal** of the shift towards Bioeconomy;
- However, the Bioeconomy in itself **cannot** be considered as **self-evidently sustainable**;
- There are **different visions** about the relationship between Bioeconomy and sustainability (Pfau et al. 2014);
- Bioeconomy is supposed to support SD but **economic aspects are clearly dominant** (Pülzl et al. 2014);

Environmental Policy Integration (EPI)

- EPI means including **environmental considerations** into other policies, with a view to achieving SD;
- Regarded as a “ **first-order operational principle**” to implement and institutionalize the idea of SD (Lenschow 2002);
- However, integration has not yet reached the desired goals;
- “Economic” sectors, such as **forest or agricultural sectors** have been identified as “**resistant**” when it comes to integrating environmental concerns (Lenschow 1997);

Objectives



- If and how the concepts of SD and EPI have been integrated in Germany's political bioeconomy discourse
- If the forest sector discourse on bioeconomy integrates environmental concerns, and if so in which way

Theoretical Considerations

- General theoretical concept of **policy integration** focusing on idea based integration - across different political levels (from the EU to Germany - and the other way around) and across different policies (Environmental, SD and bioeconomy policy).

Empirical Approach

- **Qualitative document analysis:** Germany's national and EU political strategies concerning and/or related with bioeconomy, as well as political strategies of the forest sector dealing with bioeconomy;
- In order to trace **frames** (Entman 1993) **thematic idea analysis** was applied (Söderberg 2011);
- **Qualitative interviews** with key stakeholders;

Preliminary Results and Conclusions

- **Ambiguous relationship between SD and EPI** seems to prevail in Germany's discourse on bioeconomy;
- Some indication of environmental learning, however it **cannot be considered that EPI has been consistently and unambiguously integrated** in the bioeconomy strategies;
- Mainstreaming SD-related concepts into the national bioeconomy strategies has **diverted attention from EPI**;
- Quite often there is a **blurry line between the promoted values**;
- **Economic aspects** at the forefront while **environmental concerns** are secondary- seen as directly dependent on economic growth;

Preliminary Results and Conclusions (continued)

- **The importance of forests is repeatedly highlighted together with their role in climate change mitigation;**
- **Challenges** : provision of sufficient **biomass** , intensifying **competition for land use** between agriculture and forestry;
- Environmental considerations and sustainable forest management are frequently advocated, however **no concrete integrations pathways for EPI are suggested;**

Thank you for your attention!

Contact: alexandru.giurca@ifp.uni-freiburg.de

Find out more about our research



Cited Literature

- BMBF, 2011a. National Research Strategy BioEconomy 2030 Our Route towards a biobased economy. Berlin.
- Entman, R.M., 1993. Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication* 43, 51–58.
- Lenschow, A. (1997). Variation in EC environmental policy integration: agency push with complex institutional structures. *Journal of European Public Policy* 4(1): 102-127.
- Lenschow, A. (2002). Greening the European Union – An Introduction. In: Lenschow, A. (ed): *Environmental Policy Integration: Greening Sectoral Policies in Europe*. London, Earthcan: 3-21.
- Pülzl, H., Kleinschmit, D., Arts, B., 2014. Bioeconomy – an emerging meta-discourse affecting forest discourses? *Scandinavian Journal of Forest Research* 29, 386–393.
- Pfau, S.F., Hagens, J.E., Dankbaar, B., Smits, A.J.M., 2014. Visions of sustainability in bioeconomy research. *Sustainability* 6, 1222–1249
- Söderberg, C., 2011. *Environmental Policy Integration in Bioenergy Policy learning across sectors and levels ?* Umeå University.