

Biofuels Policy in Germany

Between Noble Goals and Vested Interests



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Energy transitions in an interdependent world:
what and where are the future social science
research agendas?

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Conflicts and Driving Forces behind Biofuels Promotion



- **Many drivers behind biofuels policy debates**
- **Between hope and horror for**
 - the climate
 - the environment
 - domestic agriculture
 - developing countries
 - energy security
- **Biofuels are a complex product: no simple good or bad, yes or no, ...**
- **Biofuels are a complex governance matter**

German Biofuels Policy – a Success Story?



- At a first glance, the German biofuels policy seems to be a European success story → massive rise of biofuels market share
- Prevailing explanation: long-term political promotion via comprehensive tax exemptions
- In 2006, a policy change occurred: gradual reduction of tax exemptions and replacement by obligatory biofuel quotas
- Subsequently, the domestic market broke down and the market share dropped
- Ever since: constant struggle for the right policy to be pursued

Research Questions



- How did the German biofuels policy and its changes come about?
- How can the policy change in this context be explained?
- Which actors were significantly responsible for this?
- What was the particular influence of non-state actors?
- Which were the key drivers for the current development of biofuels policy?

Analytical Framework: the Advocacy Coalitions Approach (ACF)



- Numerous methodological approaches for the analysis of the effects of actor constellations and their explanatory power regarding policy change exist
- The ACF has an explicit focus on the interaction between actors and the explanation of policy change over time
- The ACF conceptualizes the policy domain as a policy subsystem, in which state and non-state actors interact and form coalitions
- Coalitions are based on shared belief systems and remain relatively stable
- The coalition “wins” that can shape policy decisions according to its convictions and preferences

Biofuels Policy and Market Development between 1998 and 2005/6



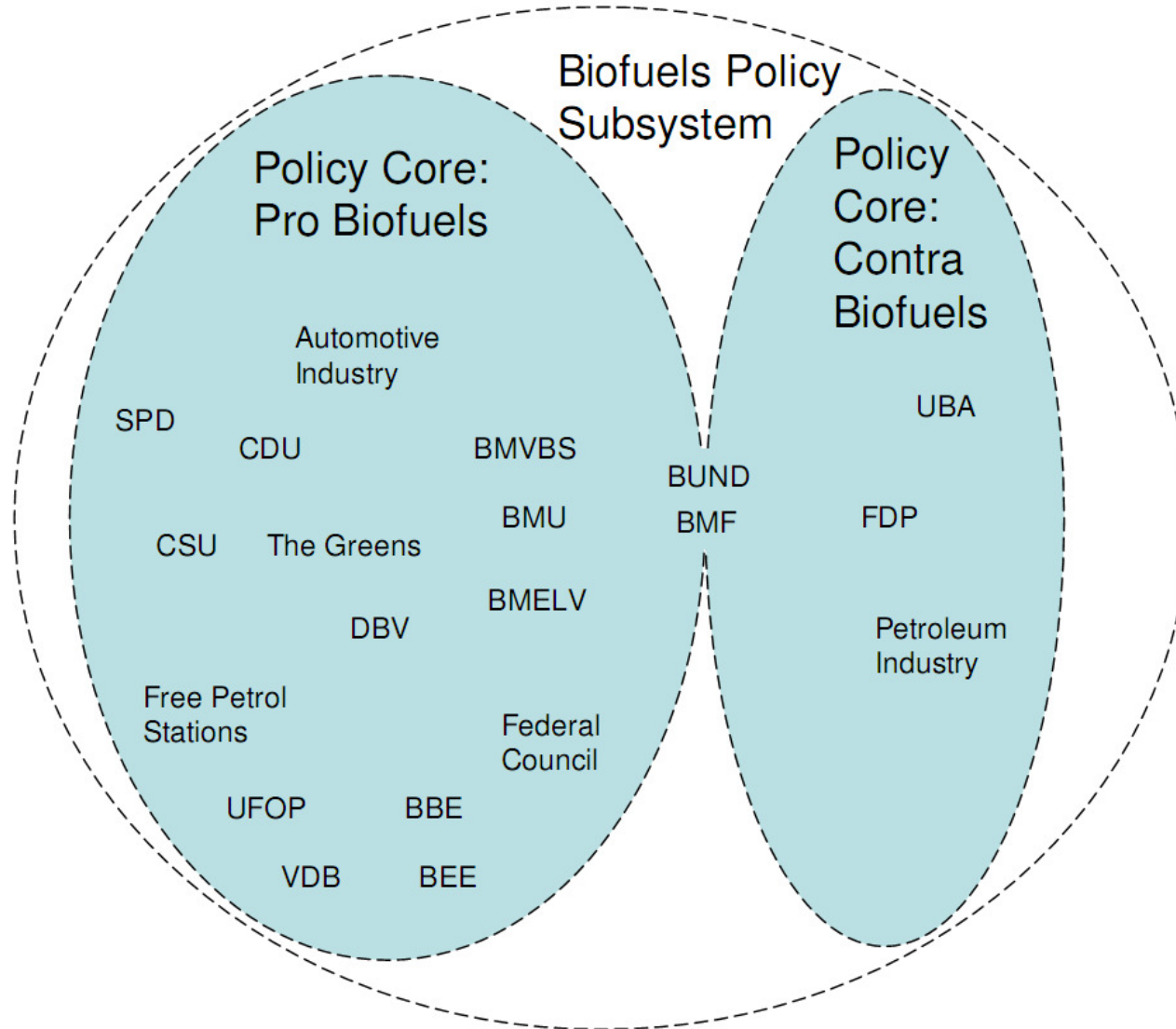
- **1998: the newly elected Red-Green coalition aimed to enter an era of ecological modernization**
 - Eco taxes on fossil fuels
 - Total tax exemption for all biofuels
 - Competitive edge for biofuels over fossil fuels
- **Massive rise in market share for biofuels**
 - From virtually nothing in 2000 to 6.3% in 2006
 - A relatively big biofuels industry developed in this time

Actors and Coalitions between 1998 and 2005/6



- Strong position of the ministry for agriculture at this time, which strongly supported tax exemptions for biofuels
 - Except for the Liberal Democrats, all political parties supported the comprehensive tax exemption
 - Regarding the non-state sector, especially the bioenergy industry as well as the farmers lobbied strongly for financial support
 - Only a few actors were skeptical towards biofuels
- Rather homogeneous actor constellation
- Broad support for a tax exemption on biofuels

Actor constellation in the first phase



Biofuels Policy and Market Development between 2005/6 until 2007/8



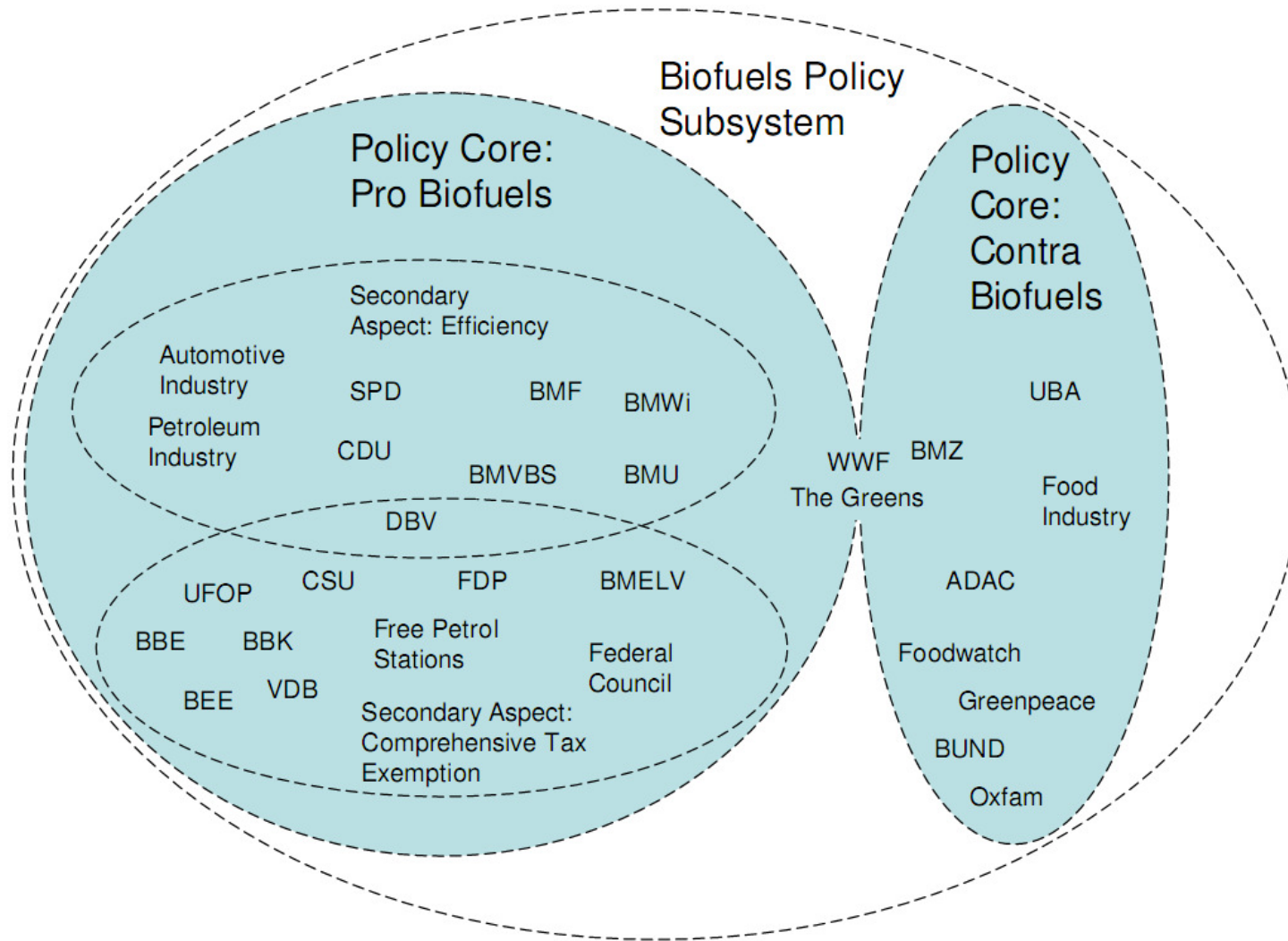
- **Change of biofuels support policy instruments**
 - In mid-2005 report by ministry of finance proposing to modestly start charging taxes on biofuels because of overcompensation
 - Proposal gained momentum after change of government in fall 2005
 - Decision in mid-2006 to immediately introduce taxes on biofuels as well as to establish a mandatory quota on biofuels as of 2007
- **Domestic market breakdown as of 2007**
 - Peak in market share for biofuels in 2007 (7.3%)
 - Dropped to 5.9% in 2008
 - Domestic production of pure biodiesel (B100) declined from 1.84 million tons to 200.000 tons between 2007 and 2009

Actors and Coalitions between 2005/6 until 2007/8



- More heterogeneous actor constellation
- Ministry of finance not willing to tolerate tax revenue losses anymore
- Petroleum and automotive industries become attracted to biofuels
- Change of government shifts responsibilities on the ministerial level
- Social Democrats pursue an industry-friendly policy („ecological industry policy“) → stronger support for second-generation biofuels
- First generation biofuels industry loses support on the ministerial and political level
- Contra Biofuels Coalition gains in importance, but still lacks support on the ministerial and political level

Actor constellation in the second phase



Developments since 2007/08



- **Debate on sense and senselessness of biofuels heats up**
- **The EU adopts the Renewable Energy Directive (REN) that stipulates a binding target of a 10% market share for biofuels in 2020**
- **Sustainability criteria are supposed to ensure the sustainable production of biofuels → adopted in mid-2009**
- **No structural change concerning the actor constellation in German biofuels policy, but ...**
 - the contra biofuels coalition grows stronger → more environmental and social NGOs as well as churches and other actors speak out on their concerns on biofuels
 - Government change in fall 2009 changes the situation again
 - EU becomes a much more important actor
- **Still too early to judge...**

Driving Forces behind German Biofuels Policy



Table 1: Development over time of the relative importance of the different motivations for biofuels, according to the author's impression. The darker the colour, the more important the motivation was in this period.

	1997	2000	2003	2006	2009
Agricultural Development	Black	Black	Dark Grey	Medium Grey	Light Grey
Climate Protection	Light Grey	Medium Grey	Dark Grey	Black	Black
Security of Energy Supply	White	Light Grey	Light Grey	Light Grey	Light Grey
Technological Innovation	White	White	Dark Grey	Black	Black
Development Countries	White	White	Light Grey	Light Grey	Light Grey

Conclusions



- The insufficient definition of the goals to be reached by adopting a biofuels policy brought forth a development that led to an increasing influence of certain vested interests
- Thus, thanks to their strong ties with certain state actors, certain industry branches were able to achieve a position within the policy subsystem, which allowed them to partly “capture” German biofuels policy and to put through their own interests.
- Consequently, the goal of transforming the energy system in the transport sector gradually got lost sight of.

Further Research



- **Discourse Perspective**

- Hajer's discourse coalitions approach offers a more dynamic, discourse-analytic alternative to the ACF

- **Multilevel Perspective**

- The interdependencies and repercussions between the nation-state and the EU level have to be analysed more in-depth

Brief information on the IÖW and the project “Fair Fuels?”



- **Institute for Ecological Economy Research (non-profit)**
 - Founded in 1985
 - Responsible unit: sustainable energy & climate protection
 - Main fields of work: renewable energies, in particular biomass
- **Recently started large-scale, joint research project on biofuels: “Fair Fuels?”**
 - A socio-ecological multi-level analysis of transnational policy on biofuels and their potential to transform current energy systems
 - Projection duration: 2009–2013, funded by the German Federal Ministry of Education and Research (BMBF), partners: German Development Institute, Institute for Latin American Studies at the Free University Berlin

Thank you for your attention.



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Research Field
Sustainable Energy Systems
and Climate Protection

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