

## **National Consultation on value chains & policy priorities Germany**

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## Expert and Stakeholder Survey

The survey was carried out as part of the IEE-project “Biomass Policies” by the German Energy Agency (dena). The core objective was to gain insight into opinions and expectations of national experts and stakeholders on bioenergy policies.

For the survey a questionnaire was sent to selected stakeholders by e-mail. The respective stakeholders were chosen with the objective of receiving answers from a wide range of organizations of stakeholder groups. The questionnaire included ten biomass-related questions. They were designed as open questions.

The following report is a summarization of the answers of the participants.

Further information on the project “Biomass Policies” is available at:  
[www.biomasspolicies.eu](http://www.biomasspolicies.eu)

## Participants

The questionnaires were sent to stakeholders such as national authorities, research institutes, federal ministries and associations that represent a large number of enterprises in the field of bioenergy, chemistry and material use of biomass. Federal ministries are highly interested in the result of the survey, but couldn't participate. The 14 organizations mentioned below answered to the consultation. All stakeholder groups are well represented except for environmental organizations.

- Arbeitsgemeinschaft Rohholzverbraucher e.V. (AGR)
- Bundesamt für Naturschutz (BfN)
- Bundesverband der Altholzaufbereiter und -verwerter e. V. (BAV)
- DBFZ Deutsches Biomasseforschungszentrum gemeinnützige GmbH
- Deutsche Säge- und Holzindustrie Bundesverband e.V. (DeSH)
- Deutscher Energieholz- und Pellet-Verband e.V. (DEPV)
- Deutsches Pelletinstitut GmbH (DEPI)
- EnergieAgentur.NRW GmbH
- Fraunhofer-Institut für Windenergie und Energiesystemtechnik IWES
- NABU - Naturschutzbund Deutschland e.V.
- Umweltbundesamt (UBA)
- Union zur Förderung von Oel- und Proteinpflanzen e.V. (ufop)
- Verband der Chemischen Industrie e.V. (VCI)
- Verband Deutscher Papierfabriken e.V. (VDP)
- Verband der Deutschen Biokraftstoffindustrie e. V. (VDB)

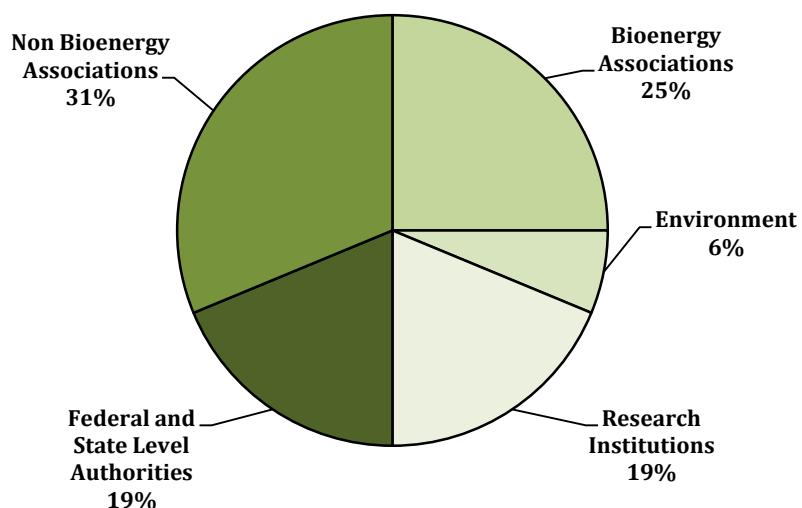


Figure 1: Structure of participants

## Results

### Biomass resources

*Question: Which biomass feedstocks should be prioritized for energy use?*

The stakeholders were asked to choose 3 out of 19 biomass feedstocks that should be prioritized for energy use. More than 50 percent of the chosen biomass feedstocks are different types of waste (see figure 2). 37 percent of the respondents prefer agricultural feedstocks and only 10 percent prioritize biomass from forestry for energy use.

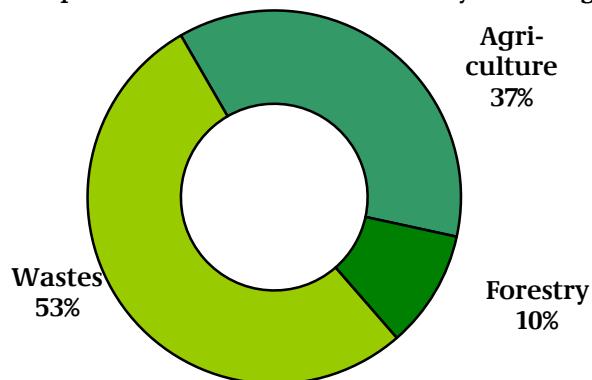


Figure 2: Feedstock priorities by category

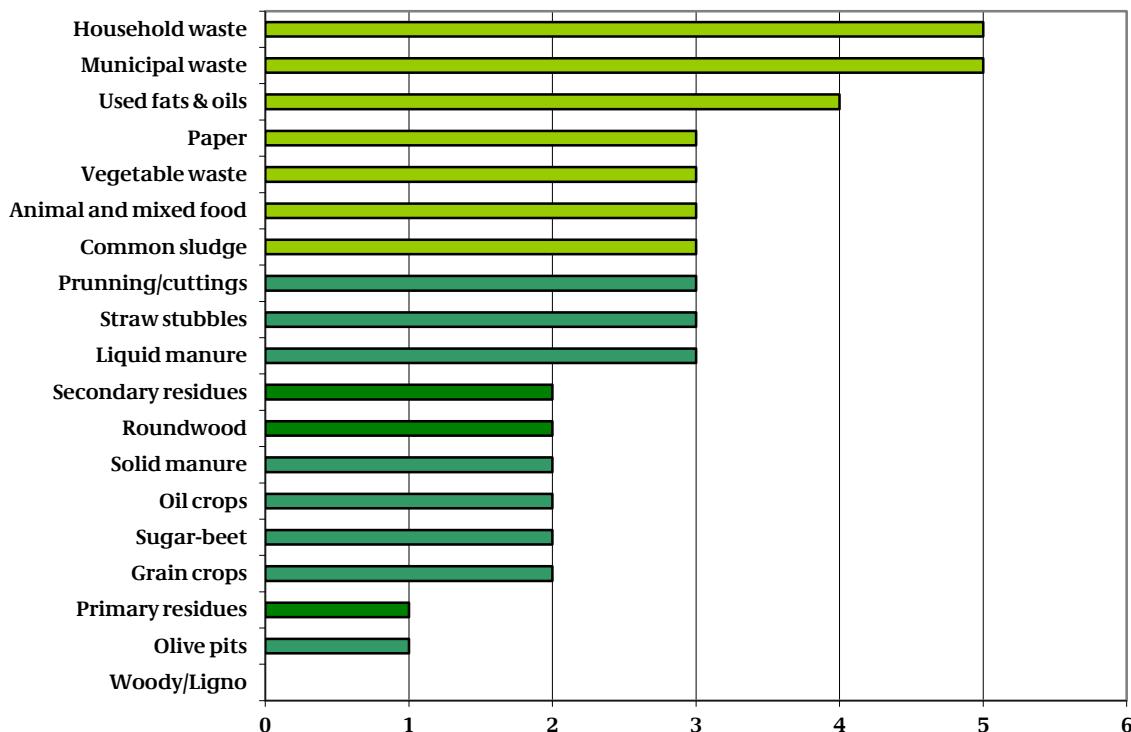


Figure 3: number of namings

Amongst the participants there is a clear preference for household and municipal waste (see figure 3). In some participants' opinion there should be a substantial focus on a sustainable and efficient use of a biomass source mix that is not competing with other material uses in the industry and without undermining other users. If possible, biomass should undergo several cascading uses before finally being supplied for energetic use. This is especially the case for woody biomass. Thus, biomass could meet the growing need for material substitutes of the non-energy-sector and optimize its climate mitigation potential. Other reasons for the participants' choice are the low value of wastes and residues for other uses.

In other stakeholders' opinion energy crops have a very high energy content and, if not required for food production, can be easily and cost efficiently converted into energy carriers.

### **Value chains**

*Based on resource efficiency concerns, which value chain would you prioritize? Explain your choice based on the value chains in slide 11.*

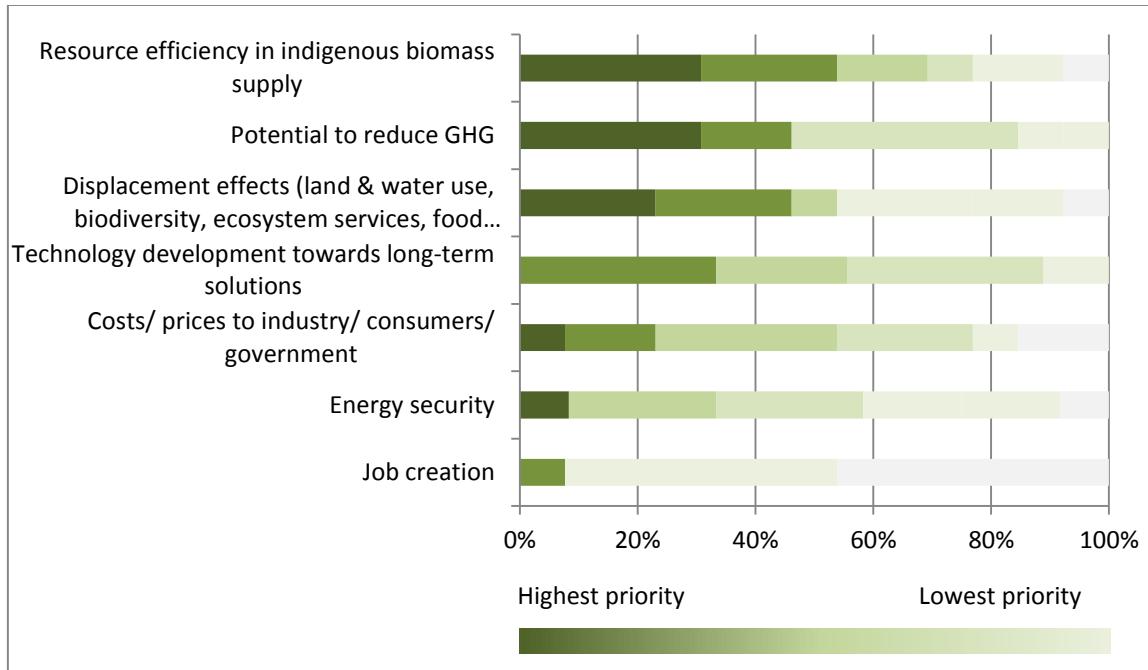
Anaerobic digestion is prioritized by most of the participants for biomass feedstock with high moisture content like organic wastes, manure and agricultural residues.

For woody biomass, the combustion in combined heat and power plants is preferred by some participants. A third group of participants did not prioritize any value chain. This is underlined by the following answer:

*"You can't answer the question with a single value chain. It will highly depend on the source, the area, the local potential and other parameters."*

## Policy priorities

*Prioritize key concerns and provide your views for future biomass policy. Please rank the following concerns/objectives (From 1 to 7, 1 being the most important for you). And explain how your first choice is relevant in your context.*



**Figure 4: Priorities of key concerns.**

The participants ranked resource efficiency and GHG reduction potential with the highest priority for future biomass policies followed shortly by displacement effects. Considering the cost debate on biomass in recent months participants give costs surprisingly little importance.

The participants argue that resource efficiency is advantageous for a cost efficient and sustainable biomass supply. Some add that a long term policy support would increase efficiency targets to secure biomass supply for future rising demands.

*“Resource and energy efficiency is the alpha and omega when fossil fuels in the future are available in shrinking extent and should be used for climate protection reasons.”*

GHG reduction is a key driver in Germany's energy policy and a key concern for most of the participating institutions. In particular the use of CO<sub>2</sub> neutral fuels in the mobility sector is named, prior to the use in stationary energy purposes, to mitigate climate change and global warming effects.

*“It's important to act now to reduce the GHG pollution. Especially the use of CO<sub>2</sub> neutral fuel is a major role to stop the global warming.”*

## Domestic use versus import of biomass

*Should indigenous biomass resources be prioritized or should a biomass policy be homogeneous with imports from other continents?*

The majority of participants prefers domestic resources over the import of biomass. Arguments for this prioritization are low emissions and a better control of positive and negative effects of biomass usage. This is especially advantageous for biomass sources with low energy density that provide high GHG-savings and ecological services. Nevertheless, in compliance with sustainability requirements, most participants stated imports as a useful addition to indigenous biomass with a high resource efficiency potential. The view on prioritization is summarized best by the following statement:

*“Prioritized should be the most sustainable source, no matter if it’s local or imported. In general only those local resources should be used that can be obtained in a sustainable way. The residual demand should be covered by the most sustainable source considering all the rebound and reallocation effects. “*

## Cascading use of biomass

*Should cascading use of biomass be steered by policy? If yes, how?*

Yes; 40%	Depends on; 40%	No; 20%
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The cascading use of biomass is clearly preferred by all participants. Only the role of steering policies is being seen differently. A majority of participants sees a clear steering role of policies to stimulate the cascading of biomass. Possible instruments are benchmarks, incentives and subsidies.

An equal part of participants sees a need for action in the field of policies for other biomass uses. Normally cascading use has advantages without regulatory laws. Therefore incentives for direct energetic usage of biomass resources are mentioned critically. In their view incentives often preclude a cascading use and should be removed.

A minority even sees regulatory and administrative laws as an instrument to eliminate unwelcome price competitors to lower biomass prices.

The following statement gives an example how cascading use can be supported by policies:

*“Create restrictive requirements for the allocation of subsidies. Where material use of a biomass feedstock is possible and goes along with a higher value added chain, no subsidies for energetic use should be given.”*

### Cost increase

*Question: What would be an acceptable level of cost increase and who should cover it (industry, policy, joint actions, etc.)?*

The participants' opinion is that a cost increase (inflation-adjusted) should not occur in the first place. An acceptable cost level will be determined by the market and will lead to the most cost efficient usage. Politics can incite this by dismantling contrary subsidies and use tax dues to steer the development.

### Policy gaps/action

*Question: Which priorities are most relevant to be integrated across the different policy fields in a future resource efficient biomass strategy?*

The participants have very different opinions about the priorities of a biomass strategy. Three issues are stated by most of the participants:

- **Climate policy / GHG avoidance.** A future policy strategy should focus on long term sustainable biomass resource supply and GHG avoidance.
- **Limitation of fresh biomass use, focus on cascading use of biomass.** Before the energetic use, it should be ensured that biomass has to be material (re-)used as often as possible. There has to be a cross-sector biomass strategy under consideration of the needs of other sectors like the food, feed and bio economy. This increases resource efficiency, supports synergies and prevents negative ecological and economic effects of biomass usage.
- **Assessment of future developments of biomass technologies.** A realistic view on the development of technologies and wider view on biomass supply are key principles for reliable long term policies.

### Key principles of tendering model

*What should be the key principles of a tendering model for biomass power capacities?*

There are only little common opinions amongst the participants regarding a tendering model for biomass power. Some even see no reason for the introduction of a tendering model. The arguments are the lack of cost reduction potential and a priority to use biomass for heating purposes. Others consider the tendering model as a crucial option to ensure a stable technology development in the field of bioenergy.

Key principles that are mentioned are

- Balancing power
- Cost efficiency
- Non displacement of traditional wood users

- Differentiation between technologies as well as new and existing installations
- High resource efficiency
- Diversity of participating market actors

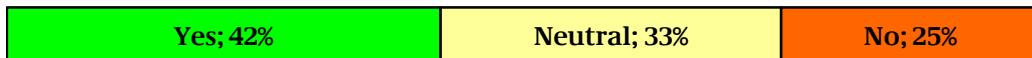
### Implications of 7%-cap for 1<sup>st</sup> generation biofuels

*What will be the implication of the recently proposed 7% cap of first generation biofuels for Germany? What are the issues of indirect land use change because of this shift and how does it impact on carbon accounting?*

Almost all the stakeholders expect no or only little impact of the proposed cap on first generation biofuels in Germany. Some fear this will lead to an increase in imports of palm oil. Those have a theoretically good but hard to verify GHG balance and the risk of negative side effects like land use change and are critical regarding the compliance with social standards.

### Measures to safeguard existing bioenergy installations

*Should measures be implemented to safeguard existing bioenergy investments?*



The participants who are in favour of measures to safeguard existing bioenergy investments emphasize different aspects. Policies should provide a reliable basis considering the future role of bioenergy in a decarbonized energy supply system, which guarantee investment but leave room for further development of existing and new installations. Especially in sectors where there are no alternatives in the short term, like the heavy duty transport sector, existing biofuel investments can deliver a contribution.

The following two statements underline these aspects:

*“Policies should therefore ensure that an already established infrastructure (e.g. built biogas plants) can be useful for further developments and be used further on”*

*“Besides economic viability we consider the future role bioenergy could play in a decarbonized energy supply system in view of its environmental and societal trade-offs and costs, respectively.”*

The critical answers to the question highlight that a biomass investment should be steered by market principles, which will lead to the most cost and resource efficient use of biomass.

*“Generally the use of biomass as feedstock for energy and other purposes should be developed by market principles and not by subsidization.”*

## Summary

The results of the survey can be considered as good overview of the current debate on bioenergy in Germany. The priority on biomass from wastes and residues is very likely to reflect the recent discussion to limit the use of energy crops. However, cascading use of biomass is not considered as a principle that should be steered by policy. In contrast some respondents propose market principles to achieve cascading use. Another issue where most participants agree is that resource and cost efficiency are crucial principles for future biomass policies.

The opinions about the future role of bioenergy are very different. Some see no need to safeguard existing bioenergy capacities in the future. They argue that there should be a level playing field between bioenergy, food, feed and bio-economy. Others highlight that bioenergy plays a crucial role to reduce GHG emissions in the future energy system. Examples are the provision of balancing power and the lack of short-and mid-term alternatives in the transportation sector. Considering all the lessons learned and the open issues, there is a need for a GHG reduction strategy that is accompanied by biomass strategy.