

## Supplemental Materials

Table 1. A detailed overview of the discursive expression of values of the opposition discourse

<b>Discursive value expressions</b>	<b>Basic entities</b>	<b>Assumptions about biomass</b>	<b>Key actors</b>	<b>Rhetorical devices</b>	<b>Normative judgments</b>
<b>Climate security</b>	Scale: national and international	Production, transportation and burning of biomass increases CO <sub>2</sub> emissions and, therefore, contributes to global warming	Scientists, national politicians and political parties, and environmental NGOs and climate activists that advocate against biomass	Negative, affective, and fairytale rhetoric in general Misinformation about the facts	Stop with biomass Energy supply needs to be fully sustainable
	Biomass cannot be considered renewable energy	Biomass is not carbon-neutral, as the growth of replanted trees takes too long to compensate for CO <sub>2</sub> emissions during production	International forest owners and pallet producers seen as the bad guys	Disturbing and clear reports with facts that proof that biomass is not a solution	We need to build the energy system of the future
	Climate change as urgent threat	Not enough biomass available from residual flows	European Union and scientists seen as bad actors for qualifying biomass as sustainable	Political ignorance and procrastination	In 2050, we need to have reduced the emissions with 95% since 1990
	Social movement against biomass			Dubious practices, due to a lack of control and measures	In 2030, we need have reduced the emissions with 49% since 1990
	Political insufficiencies			Biomass is sustainable in theory, but not in practice. EU regulations rest on wrong assumptions and are misleading	Stop deforestation EU should not qualify biomass as sustainable
				Climate emergency demands urgency. No time to waste An increase in resistance or little support in general Subsidies spur climate change	
<b>Ecological benevolence</b>	Scale: local, national and international	Logging for biomass in countries such as the United States, Estonia,	Scientists, national politicians and political parties,	Negative, affective, and fairytale rhetoric in general	Stop with biomass Stop deforestation

	Threat for ecosystems	and Latvia, leads to deforestation	environmental NGOs and climate activists advocating against biomass	Disturbing and clear reports with facts that proof that biomass is not a solution	Sustainable forest management is needed
	Social movement against biomass	Deforestation has a negative effect on the survival of wild animals, mosses, and fungi species	International forest owners and pallet producers portrayed as the bad guys	Dubious practices, due to a lack of control and measures	We cannot save the climate by affecting biodiversity
	Need for control and transparency	Primeval forest makes way for monoculture	European Union portrayed as bad guy for qualifying biomass as sustainable	An increase in resistance or little support in general	
		Potential harmful effects of hazardous substances (e.g., nitrogen) on nature reserves	Scientists and other experts that provide evidence that argues against biomass as heroes	Subsidies spur deforestation	
		Biomass production has a negative effect on the soil and water quality.	Flora and fauna suffer	Distrust toward companies	
		Biomass leads to an ecological disaster			
<b>Local security</b>	Scale: local and national	Burning biomass increases particulate matter (e.g. nitrogen), which in turn causes air pollution and related health problems (e.g. asthma, chronic diseases)	Locals and local action groups that advocate against biomass plants in their local areas	Negative and affective rhetoric in general	Biomass plants need to be shut down
	Biomass as local risk		National health organizations that provide expert advice	Locals are insufficiently informed and are suddenly faced with a fait accompli	Subsidies for biomass production based on wood need to be phased out
	Social movement against biomass		Energy companies that burn biomass	Biomass seen as public health threat	Energy companies need to be compensated
	Responsibilities of energy companies	Biomass plants increase the risks of fire and explosion		Measures and sustainability criteria are insufficient and not controlled	Biomass plants need certificates to prove their sustainability

---

Political insufficiencies	Local effects of biomass largely unclear	seen as the bad guys	An increase in resistance or little support in general
	Biomass more polluting than fossil fuels	Locals who are not informed	Protesting/resistance is effective
		Locals suffering from breathing in polluted air	Not in my backyard
		Local/regional politicians that provide licenses	Politicians do not represent their citizens, but corporate interests. Their ignorance is a strategy
		National politicians as decisionmakers, in particular the Dutch Minister for Economic Affairs and Climate	Subsidies put public health at risk
			Nitrogen crisis most effective argument to legally stop biomass

---

Table 2. A detailed overview of the discursive expression of values of the advocacy discourse

<b>Discursive value expressions</b>	<b>Basic entities</b>	<b>Assumptions about biomass</b>	<b>Key actors</b>	<b>Rhetorical devices</b>	<b>Normative judgments</b>
<b>Climate achievement</b>	Scale: national, international	Biomass is sustainable / is a sustainable cycle and can reduce CO2	Political actors supporting biomass pathway (government)	Biomass is a solution and political strategy to meet climate goals	Emissions have to decrease; stop with fossil fuels; transition to renewables is needed
	Politics & regulations: Biomass is needed to reach climate goals	Biomass is better than fossil energy	Energy companies, public organizations, scientists in support of biomass	Subsidies are important, but only for sustainable biomass	We need (more) biomass to reach the climate goals
	Biomass as renewable energy, contributing to sustainability	Biomass is good for environment		Biomass is important for the Netherlands	Political decisions are needed
		Limited pollution		Wind- and solar energy are not reliable for continuous energy supply	
	Increased harvesting in the Netherlands is possible			Climate change is a huge task	
				Biomass power stations are in line with environmental regulations; stricter regulation not necessary	
				EU regulations are guiding	
				Support by statistics	
<b>Technological security</b>	Scale: national	Amount of available sustainable biomass is limited	Political actors following science	Biomass is a temporary solution	Development of new technologies is important
	Science: focus on developments and alternative technologies	Residual biomass instead of deforestation	Companies (e.g., investors)	Biomass as political strategy to meet climate goals	We must use biomass for other applications
	Politics & regulations: biomass is needed to	Use of residual biomass reduces climate impact	Scientists, public organizations weighing pros and cons	Using biomass for other applications – and for energy only if there is a lack of (sustainable) alternatives	
				Biomass works as enabler for circular or bio-based economies	

	reach climate goals	Sustainability of biomass depends on production, transportation and usage	NGOs agreeing with ambivalence	Scientists support biomass	
	Future			Climate change is a huge task	
	Sustainability			Energy bills go up when stopping with biomass at once	
<b>Economic security</b>	Scale: national, local	Biomass is sustainable	Companies portrayed as taking responsibility	Biomass is a solution	Companies have to take responsibility
	Companies & economy	Biomass good for environment and limited pollution	Companies seen as leading examples of good conduct	Companies take responsibility and comply with agreements	Companies need to be compensated
	Politics & regulation	Woody biomass does not need to contribute to deforestation		Subsidies are important	Corporations have to prove sustainability
	Renewable energy	Use of residual biomass reduces climate impact		Biomass power stations are consistent with regulation	Certainty of rules and regulations needed
		Biomass reduces CO2 and extraction of CO2 yields negative emissions		Biomass is important for the Netherlands	
			Stricter rules are bad for companies		
			Change requires time		
			(Local) public support is necessary		

Table 3. Distribution of Basic entities (dimension 1) across the newspapers

	Algemeen Dagblad	Financieel Dagblad	NRC	Telegraaf	Trouw	Volkskrant
Climate	0	1	3	1	1	2
Complexity	2	2	3	1	0	2
Consequences of biomass	0	0	0	3	2	2
Corporations	0	3	1	2	2	3
Deforestation	0	2	3	7	4	2
Economy	2	3	1	5	2	5
Future	2	3	1	2	0	1
Health	0	0	0	2	1	2
Justice	1	0	4	2	1	1

Lobbying	0	0	1	1	0	0
Media	0	0	0	2	0	0
Policy	4	7	4	11	10	5
Politics	1	5	6	10	10	7
Production of biomass	0	0	2	2	2	2
Renewable energy	3	8	4	3	5	8
Resistance	5	6	6	15	9	7
Science	2	2	3	6	3	6
Social Movement	0	0	2	4	4	2
Support	0	0	1	1	0	0
Technology	1	2	2	6	5	5

Table 4. Distribution of geographical scale of reporting (dimension 1) across the newspapers

	Algemeen Dagblad	Financieel Dagblad	NRC	Telegraaf	Trouw	Volkskrant
Scale: international	2	4	6	6	5	3
Scale: local	2	2	2	13	6	5
Scale: national	5	10	10	13	16	15



Table 5. Distribution of rhetoric and normative judgments about subsidies for biomass (dimension 4 & 5) across the newspapers

	Algemeen Dagblad	Financieel Dagblad	NRC	Telegraaf	Trouw	Volkskrant
Companies grow through subsidies (5)	0	2	2	0	0	1
Critique on subsidies (5)	13	11	9	15	8	17
Subsidies for sustainable biomass (5)	0	2	3	1	1	0
Subsidies cause wrongdoings abroad (5)	1	0	0	0	0	0
Advocates of subsidies (5)	1	4	0	8	0	0
Scientists support subsidies (5)	0	0	0	0	1	0
Energy companies must be compensated after stop subsidies (6)	0	1	1	0	1	1
Subsidies must be stopped (6)	0	2	1	4	1	0