

**Climate change litigation in the news: Litigation as public campaigning tool to legitimize climate-related responsibilities and solutions**

**Online Supplemental Materials**

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Table 1A. Search terms for article selection

Case	Search string
Urgenda vs the state	Urgenda AND klimaat! AND (staat OR rechtbank OR regering)
FoE vs the state	Milieudefensie AND lucht! AND (staat OR regering OR rechtbank OR rechter*)
FoE vs Shell	Milieudefensie AND Shell AND (klimaat* OR rechtbank OR rechter*)

*Note.* The search strings were tested and expanded by comparing the number of search results, manually checking a selection of articles for false positives as well as additional search terms. Search strings were kept broad to minimize omissions. Remaining false positives were subsequently removed during manual coding.

Table 2A. Frame coding scheme

Category	Operational definition
<b><i>Generic frames</i></b>	
Civic	The civic world is defined by the political environment. It considers a functioning collective as highest common good and values collective consensus. Central values include legal, official, governance, or civil rights. Central actors are citizens, politicians, judges. Examples are: Discussing (in-)sufficiency of policies; discussing climate policies as political versus legal issues; violation of human rights; consequences for citizens (e.g., public health).
Economic	Arguments concern costs, economic advantages, or market competitiveness. Key values relate to a free market. Central actors are consumers, customers, merchants, companies. Examples include: Stressing that consumers must pay for solutions; costs attached to solutions; specific measures such as kilometer charge.
Ecological	The ecological world aims at sustainability and preserving healthy ecosystems. It focuses on values surrounding nature/environment and is future oriented. Climate change, pollution etc. are perceived as threats. Examples include: Justifying climate change litigation to protect the environment or guarantee a livable environment for future generations; any references to environmental problems including climate change, air pollution etc.
Domestic	This perspective focusses on trustworthiness, esteem, reputation, and authority. Arguments are often connected to cultural identify, national or local heritages. Examples include: Governmental responsibility toward citizens; stressing the meaning of agriculture for Dutch culture.
Functional	(Technical) efficacy is a main goal from this perspective. Key values are (technical) competence, reliability, planning, methods, and measures. Central actors are engineers, other technical professionals, and experts. Examples are: Measuring air pollution; presenting statistics about air quality; measures to solve problems, such as a speed limit or reducing animal farming; referring to scientific knowledge.
Popular	Focused on popularity, audiences, recognition. Oftentimes linked to celebrities. For example: Public opinion in general or public support of litigation cases.
Inspired	Centered around passion, emotional involvement, creativity; oftentimes linked to arts, religion, myths, or eschatology. An example is: A statement of the pope or other religious leaders.
<b><i>Issue-specific frames</i></b>	
Diagnostic	Diagnostic frames identify a given situation as problematic or unjust and define the nature of a problem including its causes, consequences, and the actors who are responsible for causing the problem as well as those who are affected by it.
Prognostic	Prognostic frames propose solutions for a problem including specific actions that can or should be taken and/or references to actors who are held responsible for solving the problem.

Table 3A. Issue-specific diagnostic and prognostic frames used by Urgenda and the government

	Urgenda		Government	
	Diagnostic	Prognostic	Diagnostic	Prognostic
Ecological	<b>Dangerous consequences of climate change</b>	<b>Urgent need to reduce GHG emissions</b>	<b>Climate change is a problem</b>	<b>Action is needed</b>
Civic	<b>Violation of citizen and human rights; threat of future generations; violation of the government's duty of care; lack of political action</b> 2015: Judge confirms urgency of climate problem; urgency of climate change outplays any political interests	<b>Litigation is legitimate; governmental responsibility to protect citizens</b> 2012, 2013: Aim of accelerating political response 2013-2015: Responsibility of judges to enforce political action 2013: Only government can determine climate measures 2018, 2019: Suggesting political solutions		<b>Litigation is not legitimate</b> 2015: Critical assessment of judgement 2016: Discussing possible policies ("Urgenda measures") 2017, 2018: Government on right path to fulfill judgement 2019: Specific reduction measures
Domestic	<b>Dangerous consequences of climate change for citizens and country</b> 2013, 2014: National contribution to global climate change 2015: Government is actively spreading uncertainty 2016: National emission raising; Paris agreement not effective enough	<b>Adhering to international agreements</b> 2013: Court judgement can depoliticize the issue 2014: Government must join citizens and companies in their efforts 2015: Judge confirms responsibility of government; government needs to act now; danger of political game 2015: Government agrees with necessity of emission reduction 2015: Let's act together	<b>Climate change is not a national but global problem</b> 2013, 2015: Goals of Urgenda not in conflict with governmental goals; disagreement on pace of needed action 2015: Judgement will inspire other interest groups to sue the state	<b>Weighing interests and responsibilities</b> 2012: National government not responsible for solving climate change 2015: Adequate political action taken; international cooperation needed 2016: International dimension, e.g., only joint European environmental policy possible; Paris agreement more important than Urgenda judgement 2018: Government has to weigh in other interests and domains
Economic		2015: Society profits from investing in sustainable energy		2012: Limited governmental responsibility due to market forces 2018: Considerable budget increase for emission reduction

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	<b>Urgenda</b>		<b>Government</b>	
	Diagnostic	Prognostic	Diagnostic	Prognostic
Popular		<b>Public support for litigation</b> 2012: Mobilizing public support 2014, 2015: Broad public support for litigation		
Inspired	<b>Prophecy of doom in case of inaction</b>	<b>Litigation as moral duty</b> 2015: Euphoric response to first judgment 2016-2018: Pioneering role of lawsuit		<b>Optimism about reaching targets</b>

*Note.* Generic and issue-specific frame types were first determined based on quantitative coding of articles. The issue-specific positions presented here were subsequently derived from the qualitative analysis within these coding categories. Most prevalent positions in bold followed by temporal differences.

Table 4A. Issue-specific diagnostic and prognostic frames used by FoE and the government

	FoE		Government	
	Diagnostic	Prognostic	Diagnostic	Prognostic
Ecological	<b>Insufficiency of air quality</b> 2016, 2017: Overall improvement but structural norm violations	<b>Urgent need to improve air quality</b>	<b>Downplaying the problem</b> 2017: Air quality has improved with few exceptions in large cities	<b>Denying urgency</b>
Civic	<b>Violation of human and citizen rights (fundamental right of health)</b> 2016-2018: Damaging policies and investments 2016: Government is morally and legally responsible 2017: Government lacks sense of urgency and acts complacent	<b>Critique on (lack of) regulation and policy plans</b> 2016: Legitimacy of court procedure 2016: A plan to reach norms is needed within half a year 2016, 2017: Regulations to reduce traffic emissions 2017-2018: Implementing regulative measures and air quality plan	2017: Regulation has led to firm decrease of nitrogen rates	<b>Sufficient action is taken</b> 2016: Action plan with municipalities 2017: Potentially effective action not realistic and disproportionate
Domestic	<b>Negative consequences for public health and increased mortality</b>	<b>National government responsible to act</b> 2017: Support from European Committee; court deems government responsible for air quality	<b>Balancing interests and priorities</b> 2017: EU member states have the right to balance between different interests (environment versus economy) 2017: Appeal to ban of any measures that violate air quality	<b>Limited government responsibility</b> 2016: Government not responsible for local regulations After first judgement: government will accelerate plans in collaboration with provinces and municipalities After second judgement: court supports current action of government
Economic	2017: Government has budgeted large sum that is still not invested 2018: Economic interests get priority over public health			<b>Protecting the economy</b> 2017, 2018: Negative economic consequences and high costs of too strict regulation
Functional	<b>Violations of air quality norms</b> 2016-2018: European norms exceeded; current EU norms not sufficient - need to follow WHO 2017: Specifically in larger cities norms violated	<b>Need to comply to international norms and agreements</b>	2016: Government is monitoring air quality 2017: FoE consults research in a selective manner 2017: Small number of measure points violating norms and % of inhabitants effected	

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	<b>FoE</b>		<b>Government</b>	
	Diagnostic	Prognostic	Diagnostic	Prognostic
Inspired	2016, 2017: Comparable successful cases abroad; Urgenda judgement	2017: Hope based on positive judgement in short procedure 2017: Disappointment of negative interim judgement	2017: FoE presents a doom story	

*Note.* Generic and issue-specific frame types were first determined based on quantitative coding of articles. The issue-specific positions presented here were subsequently derived from the qualitative analysis within these coding categories. Most prevalent positions in bold followed by temporal differences.

Table 5A. Issue-specific diagnostic and prognostic frames used by FoE and Shell

	FoE		Shell	
	Diagnostic	Prognostic	Diagnostic	Prognostic
Ecological	<p><b>Dangerous consequences of climate change when exceeding 2 degrees</b> Shell’s contribution to climate change + corporate knowledge</p>	<p><b>Urgent need to reduce GHG emissions</b></p>	<p><b>Current corporate engagement is sufficient</b></p>	<p><b>Acknowledging need for climate action</b></p>
Civic	<p><b>Shell is violating its duty of care and human rights; insufficient change despite knowledge</b> 2018: Shell causes societal damage 2019, 2020: Following Urgenda and other cases abroad 2019: Democratic values are at stake 2020: Who protects citizens, the poor, future generations? 2021: Comparing Shell with tabaco industry concerning responsibilities</p>	<p><b>Legal mitigation responsibility of Shell</b> 2019: Litigation justified because Shell does not plan to adapt 2020: Litigation justified because government refuses to address large corporations 2020: Litigation judgement is taken for future generations</p>	<p>2018: Societal responsibility for emissions (e.g., consumer demands) 2021: Shell contributes to society: Energy is not a lifestyle choice</p>	<p><b>Governmental and consumer responsibility; Litigation is not legitimate</b> 2018, 2020: No legal basis for litigation 2018, 2020: Requests by FoE are not realistic 2019: Litigation polarizes 2020: Rather dialogue than litigation 2021: Shell can contribute by proposing new policies</p>
Domestic	<p><b>Shell on collision course with Paris agreement</b> 2018: Shell collides with global climate targets 2018: Company must comply with national law (duty of care) 2020: Shell is favored by government</p>	<p><b>Corporate responsibility to protect citizens globally</b> 2018 - 2020: Shell has duty of care to align its policy with Paris agreement</p>	<p><b>Corporate compliance with current laws and regulation</b> 2019: Fossil investments justified by growing global population 2020: Paris agreement among countries, not companies 2020: Investments of Shell not in proportion to global crisis 2021: Shell is a Dutch company</p>	<p><b>Corporate engagement</b> 2018: Support of Paris agreement 2019: Energy transition as societal challenge</p>



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		FoE		Shell	
		Diagnostic	Prognostic	Diagnostic	Prognostic
Functional	<p><b>Shell as major emitter</b>                      2018: Shell’s contribution to GHG emissions (5% over last 150 years; 2% of global emissions)                      2018: Insufficient investments in renewables                      2019: Shell emits twice as much as the Netherlands per year; 1.2% of global industrial GHG emissions</p>	<p><b>Demanding emission reduction targets</b>                      2018-2020: Zero emissions by 2050; 50% reduction by 2030                      2020: Without interference of judge 35% additional emissions in 2030</p>		<p><b>Acknowledging need for energy transition</b>                      2018: Zero emissions only in 2070 possible; 50% reduction by 2050                      2018: Large investments in renewables                      2019, 2020: Carbon capture as solution                      2021: By 2030 20% lower emissions than 2016                      2021: Zero emissions around 2050                      Marginalizing public support</p>	
Popular		<p><b>Public support for litigation</b>                      2018: Mobilizing public support                      2019, 2020: Support of six environmental NGOs; broad public support</p>			
Inspired	<p>2019: Response from Shell is disappointment</p>	<p>2020: Judgement will affect other oil companies; emotional response to Shell's climate impact</p>	<p>2018: Litigation is a disappointment</p>		

*Note.* Generic and issue-specific frame types were first determined based on quantitative coding of articles. The issue-specific positions presented here were subsequently derived from the qualitative analysis within these coding categories. Most prevalent positions in bold followed by temporal differences.