

# A Shell Game?

## The Use of Science in Anticipatory Climate Litigation

I. Möller, J. Alkema, J. Chambers, J.E. Livingston, C. Macchi, N. Bernaz, A. Gupta, S. Karlsson-Vinkhuyzen, E. Turnhout

*Presented at the Earth System Governance Conference in Toronto, 20. October 2022*



# The Case

- April 2018 – March 2023 (schedule appeal)
- Charge based on violation of Dutch tort law: 'unwritten standard of care'
- Verdict called on Shell to curb scope 1,2 & 3 emissions in line with the Paris Agreement and IPCC, 45% reduction by 2030 (baseline 2019)
- First time NGOs succeed at making an oil corporation accountable for its contribution to climate change in court



# Anticipatory climate litigation

- Special case because it focuses on *ex-ante* liability charges for climate change impact rather than *ex-post* charges
- Targets a form of behaviour (in this case a business model) that is considered dangerous, rather than a damage that has already taken place
- Significant for climate litigation in general, given the difficulty of establishing causal links between cause and effect
- Focuses on attributing responsibility to take meaningful action in the present in order to prevent harm in the future

# The role of science

## Ex-post litigation

- Draws on science as a source of evidence to establish cause and effect of a certain harm in order to press charges
- Call for improvement of 'attribution science' to make causalities clearer

## Ex-ante litigation?

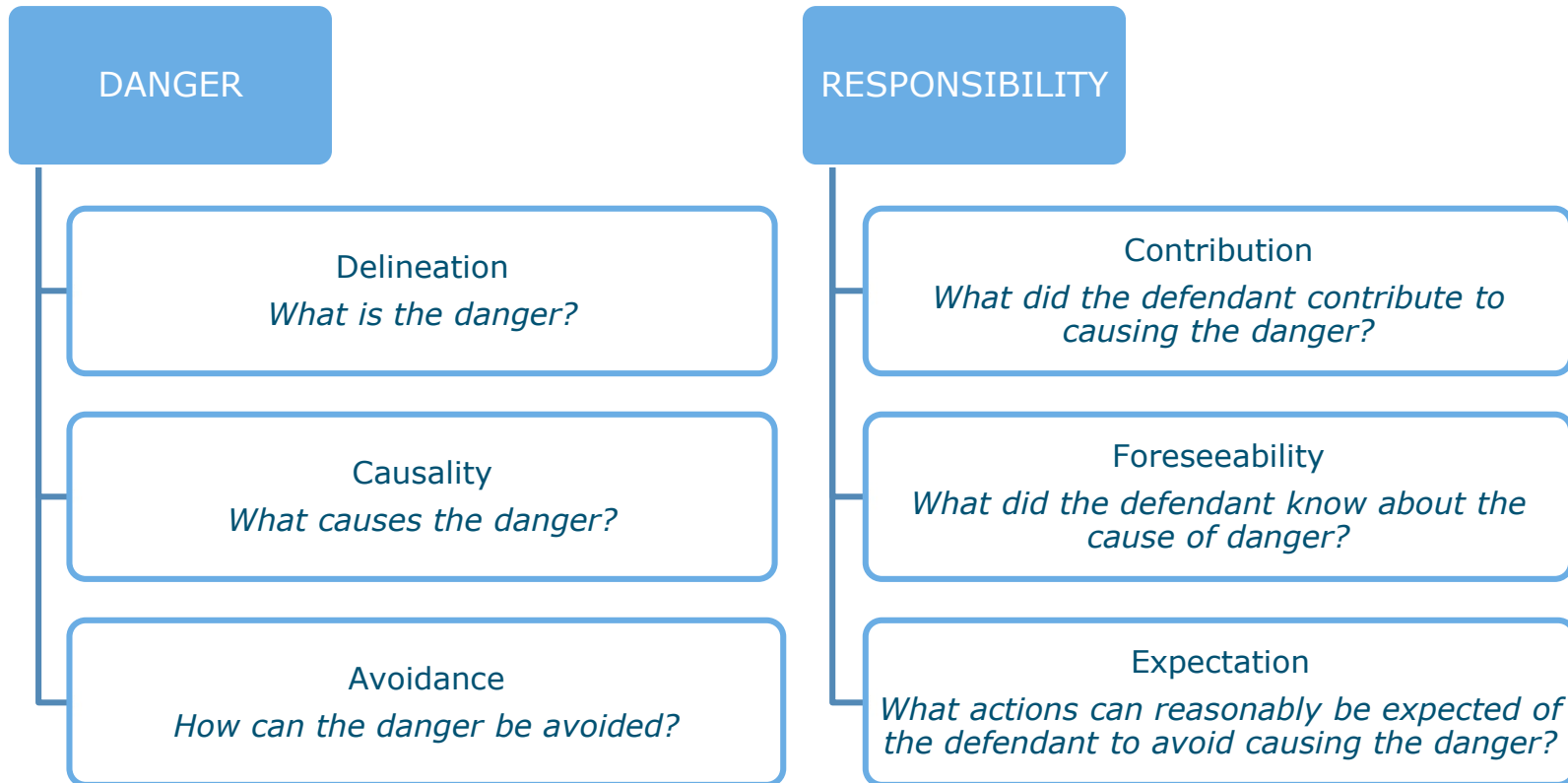
- Acknowledges limitations of science to provide 'truth' in complex situations like climate change
- Emphasises the symbolic and performative power of science in mobilizing knowledge claims

# Research question

How do the three actors involved in the case (Milieudefensie, Royal Dutch Shell, and the Dutch District Court in the Hague) interpret and arrange scientific evidence for anticipatory climate litigation?



# Analytical approach



	A	B	C	D	E	F	G	H	I
1	Shell defense								
2	topic	argument	paragr.	relevant paragraph sections	coding	type of knowledge	source of knowledge	source of knowledge 2	legitimacy of knowl
3	on 'facts'								
4	argument in 2.11?								
	overall argument (su	The pace and manner of society's transition to a low-carbon energy system remains uncertain and, even during the transition, there will be a continuing demand for fossil fuel energy products for decades to come	2.2	all of 2.2.	nature of responsibility, attribution of responsibility	see separate arguments under 1-5 below	see subarguments under ('	see subarguments under (1-5) below	see subarguments under (1-5) below)
5	(1) dual challenge	Shell argues, due to the dual challenge of the energy transition (meaning Shell's alleged responsibility to provide for energy supply and reduce emissions simultaneously), that fossil fuels are necessary in the future to comply with the growing energy demand. The energy transition, in their opinion, does not mean that the world must be fossil free by 2050. They say that this argument is not supported by the Paris Agreement. The 'consensus' is, according to RDS, that fossil fuels will still play a role in 2050. Both "the IPCC and the IEA recognise the continued role of fossil fuels in global energy demand during the transition and afterwards." Additionally, they argue that the energy transition requires global action and is not only RDS or Shell's responsibility.	2.2.1	par 2.2.1 (...) "The world is facing an enormous dual challenge. On the one hand, society must fulfil the population's continuing and growing demand for energy, which is essential for meeting basic human needs and economic development in both developed and developing countries. On the other hand, society must, at the same time, transition to a low-carbon energy system in order to reduce CO2 emissions and thereby combat the risks of climate change, as set out in the Paris Agreement." (...) "During the energy transition, society must opt for products with lower CO2 emissions, and, in addition, increase energy efficiency and offset emissions. Contrary to what Milieudefensie et al. assert, however, that does not mean that the world must be fossil fuel free by 2050. This argument is not supported by the Paris Agreement either. Instead, the consensus is that fossil fuels will still play a role in 2050. For example – as outlined below – both the IPCC and the International Energy Agency recognise the continued role of fossil fuels in meeting global energy demand during the transition and afterwards."	nature of the responsibility, attribution of responsibility	scientific concepts, number/s	Multilateral scientific reports, corporate report	Paris Agreement, IPCC, International Energy Agency. Also mentioning of Shell Sky Report	normative/societal legitimacy, scientific legitimacy
6	(2) trias politica	RDS argues that the fact that countries will contribute to the energy transition in differing ways (one more than the other) and in their own pace, means that these countries individually need to make fundamental choices on behalf of their people and weigh different interests against each other. They argue this is the task of the legislative and executive branch.	2.2.1	see par. 2.2.1. "39. Milieudefensie et al.'s claims are directed at the operations of a group of separately incorporated companies that operate in many dozens of countries worldwide and aim to enforce an "increasingly drastic, phased transformation" upon all of those companies.10 However, these claims fail to recognize that States have widely varying needs and priorities depending on local circumstances. Examples include differences in respect of the development phase countries are in, or factors such as the type of economy, availability of domestic energy resources, the ability to make investments and – resulting from the foregoing – national energy policies. The Paris Agreement explicitly takes these different factors into account by emphasizing that countries have "differentiated responsibilities".11 This approach is not novel. The concept of differentiated responsibilities between States first appeared as Principle 7 of the Rio Declaration at the first Earth Summit in Rio in 1992.12 Similar language was drafted into the UNFCCC, which also recognises that parties should act to protect the climate system on the basis of respective capabilities. 40. Each individual signatory State to the Paris Agreement makes fundamental choices on behalf of its people, which requires making its own trade-offs between reduction of CO2 emissions (and other GHG emissions) and economic, social and other factors. These may include the right to development and	attribution of responsibility	political knowledge	Multilateral agreements	Rio Declaration 1992, First Earth Summit, Paris Agreement	normative/societal legitimacy, political legitimacy

# Science and **Danger**



- Highlights consensus and strength of process around IPCC's science on CC causes and impacts
- Relies on well-known figures and concepts to emphasise urgency

- Highlights that IPCC will never present any definitive conclusions about danger
- Emphasises that IPCC does not report on risks specific to the Netherlands
- Builds alternative narrative of 'twin challenge' and SDG7

- Concludes that CC will have serious impacts on NL citizens, irrespective of uncertainties and lack of NL specific science in IPCC
- Argues that SDG7 was never meant to interfere with Paris Agreement



# Science and Responsibility



- Uses scientific articles to identify a 1.5 conform emission pathway and to estimate Shell's emissions
- Uses social science research on obstruction and delay tactics to make case for foreseeability



- Argues that there is no one "right way" to reach global climate goals and that emissions study is an outlier and commissioned by Greenpeace
- Argues that its knowledge was no different from anyone else's

- Concludes that Shell emits 'significant amounts' of CO2
- Extensively cites 'Oxford Report' to acknowledge scope 3 emissions
- While *current* emissions not unlawful, intentions are incompatible with collective reduction obligations

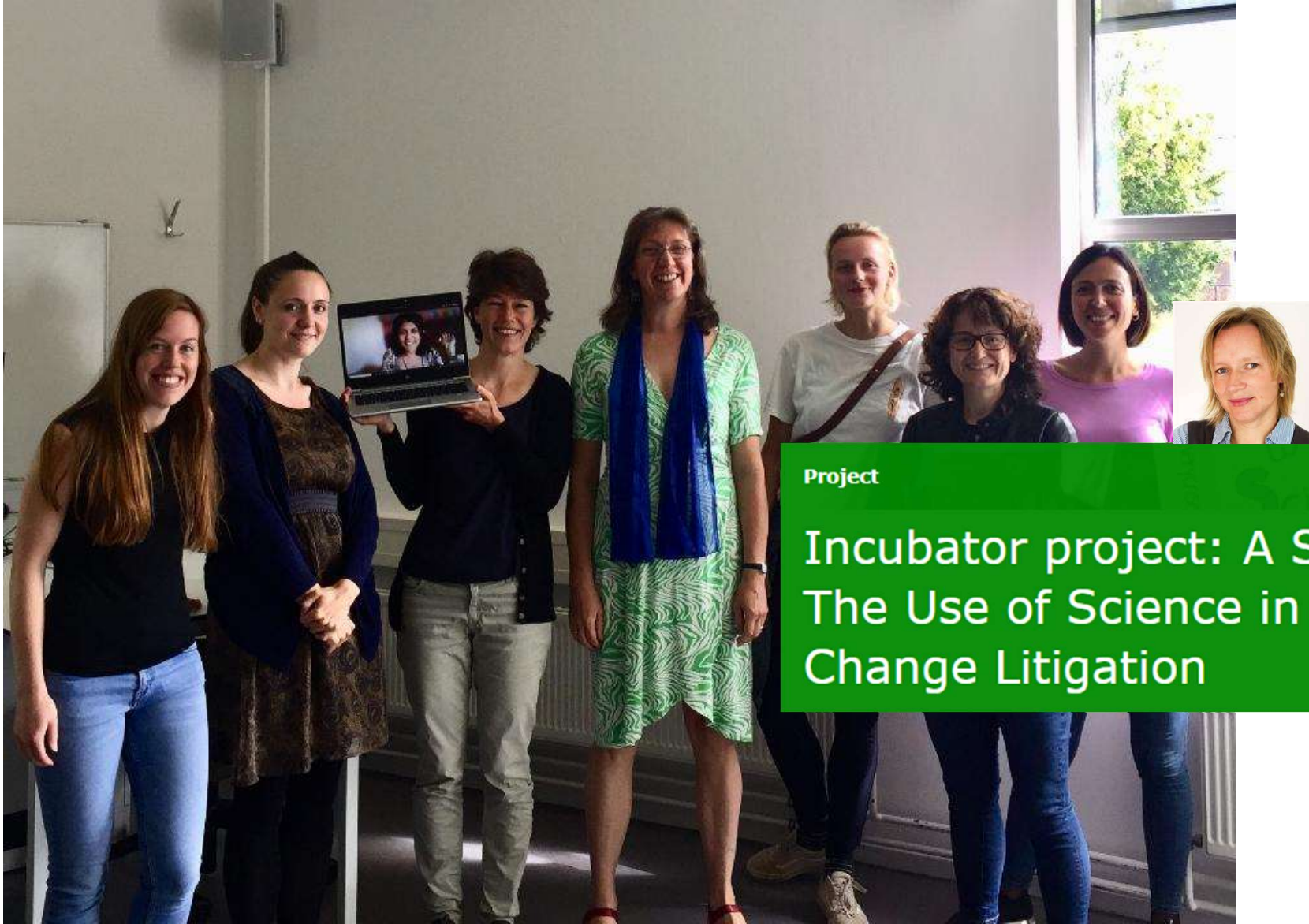
# Key insights on the use of science

- **Uncertainty is countered by concreteness:** numbers, figures and qualitative cases/narratives serve to put science in context and make it relevant despite general uncertainties
- **Legitimacy is key:** wide consensus and reference to authoritative organisations serve to strengthen role of science; limitations in procedure serve to weaken it
- **Science and politics are interwoven:** the close link between scientific consensus and political consensus (esp. IPCC and Paris Agreement) is particularly relevant for the court's decision making

# Conclusion

- In anticipatory climate litigation, ***presentations and perceptions of consensus and political endorsement*** are key for scientific impact
- The wider societal context and its acknowledgement of climate science is thus equally, or more, important than concrete numbers on cause and effect





**Thank you!**

Contact:  
[ina.moller@wur.nl](mailto:ina.moller@wur.nl)

Project

Incubator project: A Shell Game —  
The Use of Science in Climate  
Change Litigation