

Court of Appeal of The Hague
Case number: 200.302.332
Cause-list date: 5 March 2024



DEFENCE BRIEF FOR THE SUBMISSION OF EXHIBITS OF MILIEUDEFENSIE ET AL.

in the matter of:

- 1. Vereniging Milieudefensie**
having its registered office in Amsterdam,
the Netherlands
- 2. Stichting Greenpeace Nederland**
having its registered office in Amsterdam,
the Netherlands
- 3. Landelijke Vereniging tot Behoud van de Waddenzee**
having its registered office in Harlingen,
the Netherlands
- 4. Stichting ter bevordering van de Fossielvrij-beweging**
having its registered office in Amsterdam,
the Netherlands
- 5. Stichting Both ENDS**
having its registered office in Amsterdam,
the Netherlands
- 6. Jongeren Milieu Actief*,**
having its registered office in Amsterdam,
the Netherlands

Respondents, original claimants,

Collectively called: "**Milieudefensie et al./Friends of the Earth Netherlands et al.**" (hereinafter: Milieudefensie et al.)

Legal counsel:

mr. R.H.J. Cox, mr. M.J. Reij, mr. A.J.M. van Diem

versus:

Shell plc

having its registered office in London, United Kingdom
Appellant, original defendant

Legal counsel:

mr. D.F. Lunsingh Scheurleer, mr. T. Drenth

and:

Stichting Milieu en Mens

having its registered office in Zwolle, the Netherlands

Joined party on the part of Shell plc Legal counsel:

mr. Dr D.J.B. Bosscher

* Vereniging Jongeren Milieu Actief, the youth organisation of Vereniging Milieudefensie, was dissolved as of 1 September 2022. Its activities have continued within Milieudefensie.

Your Honours,

1. With reference to the procedure agreements made at the session of 6 June 2023, Milieudefensie et al. is hereby submitting into the proceedings in relation to the (written) arguments Exhibits MD-561 to MD-579. A list of exhibits is attached to this brief. These are (i) new exhibits that have been published since the beginning of December 2023 and (ii) reactive exhibits in connection with the documents submitted by Shell and M&M.

(I) Reactions to Shell's expert statements

Exhibit MD-561: P. Erickson and Dr F. Green, Expert letter: Review of Druce and Mulder reports

2. Erickson and Green respond to the very comprehensive report of Richard Druce of NERA Economic Consulting (Shell's Exhibit S-122) and the statement of Prof. Mulder (Shell's S-124). They refute Druce and Mulder's arguments in an orderly and clear statement of 16 pages.
3. Erickson is a researcher with the Stockholm Environmental Institute and author of a large number of peer-reviewed studies about the way in which policy, actions and infrastructure projects have an effect on greenhouse gas emissions. His work is published in important scientific journals, including Nature, Nature Climate Change, Nature Energy, Environmental Research Letters and Climatic Change. Green is specialised in the political, administrative and ethical dimensions of sustainable transitions. His work is also published in peer-reviewed journals including Nature Climate Change, Climatic Change, Climate Policy, the American Political Science Review and Global Environmental Politics. Short CVs of Erickson and Green can be found on p. 17 of Exhibit MD-561.
4. Erickson and Green are also co-authors of the expert letter that Druce discusses in his report (Exhibit MD-469). Erickson also wrote two expert letters at first instance as a reaction to Mulder (Exhibits MD-337 and MD-339).

Exhibit MD-562: Statement of Prof. S. van Wijnbergen and Prof. R. van der Ploeg, Comments on the Mulder/NERA (MN) reports

5. Like Erickson and Green, Van Wijnbergen and Van der Ploeg also respond to the Druce report and the Mulder statement. They too refute Druce and Mulder's arguments.
6. Van Wijnbergen was a professor at Warwick University, Princeton and the London School of Economics and secretary-general of the Ministry of Economic Affairs with special responsibility for competition policy and reform of the energy markets. He also worked as an economic with the World Bank for 13 years. At present Van Wijnbergen is a professor at the University of Amsterdam and board adviser at the Dutch Central Bank (DNB). Van der Ploeg is a professor of economics at the University of Oxford and part-time professor at the University of Amsterdam. His research focuses on, inter alia, the economic aspects of climate change and energy. Short CVs of Van Wijnbergen and Van der Ploeg are included on p. 8 of Exhibit MD-562.

Exhibits MD-563A to MD-563D: Various documents on Shell's trading business

7. The following four exhibits are submitted in connection with the Druce report and his argument relating to Shell's trading business.
 - A. *Data Desk 28 February 2024, 'An overview of Shell's trading unit'*
 - B. *Financial Times 3 May 2023, 'Shell, BP and Total out-trade Vitol, Trafigura, Mercuria and Gunvor'*
 - C. *The Washington Post 30 July 2020, 'There's a Wheeler-Dealer Inside Shell'*
 - D. *Bloomberg 30 March 2021, 'Big Oil's Secret World of Trading'*

Exhibit MD-564: Brian C. Prest April 2022, Partners, Not Rivals: The Power of Parallel Supply-Side and Demand-Side Climate Policy

8. This report of Brian C. Prest is also submitted in reaction to the Druce report and the Mulder statement.

Exhibits MD-565A and MD-565B: Findings on the influence of OPEC and non-OPEC countries on oil prices

9. The documents below of the American Energy Information Administration relate to the price forming of oil. This is in reaction to, inter alia, the Druce report.
 - A. *US Energy Information Administration, What drives crude oil prices: supply non-OPEC*
 - B. *US Energy Information Administration, What drives crude oil prices: supply OPEC*

Exhibit MD-566: Expert Report Professor J. Rogelj

10. Professor Rogelj is Professor of Climate Science & Policy at Imperial College London, Director of Research of the Grantham Institute and author of more than 125 peer-reviewed articles about climate change, the reduction of greenhouse gas emissions and climate scenarios. He is the lead author of various IPCC reports, lead author of the Emissions Gap reports and advisor of the EU in the European Union Scientific Advisory Board on Climate Change. Prof. Rogelj's CV is attached as an appendix to his statement.
11. In reaction to the statement of Prof. Hawkes (Shell's Exhibit S-123), Prof. Rogelj describes the conceptual background, important characteristics and limitations of modelled reduction scenarios and he assesses Hawkes' calculations.

Exhibit MD-567: Expert Statement of Dr L. van Beek

12. Dr Van Beek is post-doctoral researcher with the Copernicus Institute of Sustainable Development in Utrecht and is an expert in the area of the use of Integrated Assessment

Models (IAMs) in climate policy. This was the topic of Dr Van Beek's dissertation. Her expertise is described on p. 1 of Exhibit MD-567.

13. Dr Van Beek too is responding to Prof. Hawkes' statement (Shell's Exhibit S-123) and provides an important explanation for a better understanding of IAMs.

Exhibits MD-568A to MD-568H: Information and background on IEA modelling and information on Shell's turnover based on IEA country groups

14. The documents below serve as a reaction to the many documents of Shell and M&M on the feasibility of the energy transition and the many references to IEA reports and the modelling/scenarios that form the basis thereof.
 - A. *IEA 11 May 2021, A closer look at the modelling behind our global Roadmap to Net Zero Emissions by 2050*
 - B. *IEA, Understanding GEC Model scenarios*
 - C. *IEA, 24 March 2022, At IEA Ministerial Meeting, global energy leaders vow to strengthen energy security and accelerate clean energy transitions*
 - D. *IEA 24 March 2022, 2022 IEA Ministerial Communiqué*
 - E. *IEA 7 December 2023, COP28 and IEA High-Level Dialogues conclude with strong consensus on energy transition*
 - F. *IEA 14 February 2024, At IEA Ministerial Meeting and 50th Anniversary, global leaders pledge to strengthen energy security and accelerate clean transitions to keep 1.5 °C target alive*
 - G. *IEA 14 February 2024, 2024 IEA Ministerial Communiqué*
 - H. *Shell's turnover based on IEA country groups*

(II) COP28 developments

Exhibits MD-569A to MD-569D: Various documents about COP28

15. The following four exhibits are new documents on the COP28 climate conference, that took place in December 2023.
 - A. *UNFCCC press release of 13 December 2023 about COP28*
 - B. *UNFCCC 13 December 2023, Outcome of the first global stocktake*
 - C. *Nature 14 December 2023, COP28: the science is clear — fossil fuels must go*

- D. *Fossil Fuel Non-Proliferation Treaty, 2 December 2023, At COP 28, Colombia joins call for Fossil Fuel Treaty, strengthening international climate leadership*

(III) Developments in climate lawsuits

Exhibits MD-570A to MD-570G: developments in foreign climate lawsuits

16. The following seven documents relate to foreign climate lawsuits. The first five documents are new. The last two are judgments in American climate cases, to which reference is made in the new judgment in the Juliana case (Exhibit MD-570E). These documents serve partly as reaction to the judgments submitted by Shell in other foreign climate cases.
- A. *Judgment of Supreme Court of New Zealand of 7 February 2024 in the case of Smith v. Fonterra et al.*
- B. *Unofficial Dutch translation of the judgment of the Brussels Court of Appeal of 30 November 2023 in Vzw. Klimaatzaak v. Belgium (original French version previously submitted as MD-533)*
- C. *Press release 20 February 2024, Mayor Johnson, City of Chicago sues oil and gas companies for climate deception*
- D. *Lord Robert Carnwath, February 2024, ClientEarth v Shell: What future for derivative claims?*
- E. *United States District Court for the District of Oregon 29 December 2023 in the case of Juliana v. the United States of America*
- F. *Supreme Court of the State of Hawai'i, 13 March 2023, Hawai'i Electric Light Company, Inc (opinion of the court and concurring opinion)*
- G. *Montana First Judicial District Court, 14 August 2023, Held v. State of Montana*

(IV) Reactive documents in connection with Shell's exhibits on EU regulations Exhibits MD-

571A to MD-571F:

17. The following documents are submitted in addition to and as a reaction to the many exhibits that Shell has submitted on EU regulations.
- A. *European Scientific Advisory Board on Climate Change 18 January 2024, Towards EU climate neutrality: progress, policy gaps and opportunities*
- B. *European Commission 18 December 2023, Commission calls on Member States to improve their National Energy and Climate Plans to ensure collective achievement of the EU's 2030 targets*

- C. *Carbon Disclosure Project Comment on EU climate ambition for 2030 and for the design of certain climate and energy policies of the European Green Deal*
- D. *Climate Analytics September 2022, 1.5°C Pathways for the EU27: accelerating climate action to deliver the Paris Agreement*
- E. *Prof. J. Rogelj, Grantham Institute Science Brief, March 2023, Belgium's national emission pathway in the context of the global remaining carbon budget*
- F. *De Groene Amsterdammer 13 February 2024, Opnieuw door de morele ondergrens ['Sinking past the moral lower limit once again']*

(V) Other reactive exhibits MD-572A to

MD-572C

- 18. The following two documents on the Science Based Targets Initiative are submitted in addition to and in reaction to the exhibits that Shell has submitted on this initiative (S-141 and S-142). The extract from the Sustainable Gas Institute extract is submitted as a reaction to Exhibit S-123.
 - A. *SBTi en Mott McDonald January 2023, Oil and Gas Project: Expert Advisory Group Review Evaluation Report*
 - B. *Press release 18 March 2022, Science Based Targets initiative kicks out oil companies, delays validation criteria*
 - C. *Extract from the Sustainable Gas Institute website from 2022*

(VI) Analysis and developments relating to Shell's policy Exhibit

MD-573A to MD-573D

- 19. This concerns four documents with analyses on Shell's policy, Shell's investments in oil and gas, as well as Shell's involvement in interest groups in the oil and gas sector. The Oil Change International report serves partly as a reaction to the Hawkes statement on reduction pathways. The item from the Financial Times is a response to various Shell exhibits on its policy choices.
 - A. *Oil Change International March 2024, Shell vs. The Climate: Expanding Oil and Gas, Fueling the Climate Crisis*
 - B. *Het Financieele Dagblad , 8 February 2024, 'Ook pensioenfondsen voor de zorg stapen uit Shell en BP' [Health care pension fund also divests from Shell and BP]*
 - C. *Financial Times, 3 March 2023, 'Can Shell close the valuation gap with US rivals?'*
 - D. *ACCR March 2024, In the dark: gaps in Shell's climate lobbying disclosures*

(VII) Latest updates on climate science

Exhibits MD-574A and MD-574B: Global Tipping Points Report 2023

20. This concerns an important new report with the latest insights into the area of tipping points.
- A. NOS 8 December 2023, *Wetenschappers waarschuwen in Dubai voor 'domino-effecten' klimaatverandering* ['Scientists at Dubai conference warn against "domino effect" of climate change'],
 - B. Lenton et al, *The Global Tipping Points Report 2023*. University of Exeter, Exeter, UK

Exhibits MD-575A to MD-575I: Various documents on the state of the climate in 2023

21. This concerns new documents on the consequences of climate change in 2023.
- A. World Meteorological Organization 12 January 2024, *WMO confirms that 2023 smashes global temperature record*
 - B. NRC 18 January 2024, *Dit zijn de extremen van 2023, het warmste jaar sinds mensenheugenis*, ['These are the extremes of 2023, the warmest year in human memory']
 - C. World Meteorological Organization 30 November 2023, *2023 shatters climate records, with major impacts*
 - D. BBC 8 February 2024, *World's first year-long breach of key 1.5C warming limit*
 - E. Copernicus Climate Change Service 12 December 2023, *We've 'lost' 19 years in the battle against global warming since the Paris Agreement*
 - F. KNMI, *The state of Our Climate in 2023*
 - G. *Two news items about the floods in Pakistan*
 - H. NOS 15 February 2024, *Wadplaten verdrinken, schelpen leggen het loodje: opwarming bedreigt waddennatuur* ['Wadden tidal flats are drowning, shells are dying: warming threatens nature in the Wadden Sea region']
 - I. C.J.M. Philippart et al, 2024, *Wadden Sea Quality Status Report Climate change*

Exhibit MD-576 – 10 new insights in climate science 2023/2024

22. This is a scientific update with ten important climate science insights of the past year.

Exhibits MD-577A to MD-577C – documents on the Amazon forest

23. This concerns a study and two news items on the state of the Amazon rainforest. The Amazon rainforest is also an important part of the global hydrological cycle and the

Carbon cycle. Long-term and/or structural drying out of the Amazon rainforest can have global consequences.

- A. CNN 14 February 2024, 'The Amazon has survived changes in the climate for 65 million years. Now it's heading for collapse, a study says'
- B. Flores et al, Nature 2024, 'Critical transitions in the Amazon forest system'
- C. NOS 31 January 2024, 'Recorddroogte in het regenwoud: zorgen over toekomst Amazonegebied' ['Record drought in the rainforest: concerns about the future of the Amazon region']

Exhibits MD-578A to MD-578C - new scientific study on the weakening of the warm Gulf Stream

24. These exhibits are new scientific study and two news items on this study. The study contains new insights into the speed with which the warm Gulf Stream could collapse. The collapse of the Gulf Stream is deemed a tipping point in the climate system with large consequences across the world, particularly for Western Europe.

- A. The Guardian 9 February 2024, 'Atlantic Ocean circulation nearing 'devastating' tipping point, study finds'
- B. CNN 9 February 2024, 'Critical Atlantic Ocean current system is showing early signs of collapse, prompting warning from scientists'
- C. Van Westen et al, Science Advances 2024, 'Physics-based early warning signal shows that AMOC is on tipping course'

(VIII) Other new documents Exhibits

MD-579A to MD-579H

25. Lastly, a number of other new scientific reports and news items are submitted, as well as a new report of the UN Special Rapporteur. Exhibit MD-579I serves in part as a response to various exhibits of Shell and M&M regarding the pressure on the electricity grid.

- A. Wetzler et al, Science 2024, 'Climate risk assessments must engage with the law'
- B. Deprez et al, Science 2024, 'Sustainability limits needed for CO2 removal'
- C. The National, 4 January 2024, 'Rosebank oil will not be kept in UK, Government admits'
- D. Nature Climate Change, 9 February 2024, 'Globally representative evidence on the actual and perceived support for climate action'
- E. Frank Elderson (member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB), 8 June 2023, 'The economy and banks need nature to survive'

- F. IMF, 5 December 2023, 'Benefits of Accelerating the Climate Transition Outweigh the Costs'
- G. David R. Boyd (Special Rapporteur on human rights and the environment), 2 January 2024, 'Business, planetary boundaries, and the right to a clean, healthy and sustainable environment'
- H. Lara Wolters (Rapporteur on the Corporate Sustainability Due Diligence Directive), transcript of the statement of 28 February 2024 before the European Parliament
- I. Two NOS reports: 'Bedrijven in haven Amsterdam gaan onderling stroom verdelen' ['Companies in port of Amsterdam will divide power among themselves'] and 'Jetten wil bedrijven mogelijk verplichten in piekuren minder stroom af te nemen' ['Jetten may mandate that companies consume less energy during peak hours']

Let this be entered in the record!

Legal counsel