Case no. 200.302.332/01 Shell / Milieudefensie c.s.

Questions of the Court of Appeal relating to the oral arguments on 12 April 2024

1. *In its Statement of Defence on Appeal (no. 814, no. 883) Milieudefensie/Friends of the Earth Netherlands et al. (hereinafter Milieudefensie et al.) made a number of requests seeking clarification of the judgment. During the first part of the oral arguments, Milieudefensie et al. asked the Court to make it clear that Shell cannot perform its reduction obligation by (in short) selling its assets. In view of the fact that Milieudefensie et al. did not file a cross-appeal, how do these requests correlate with the opinion of the District Court (paras. 4.4.39, 4.4.45) that when executing the order imposed by the District Court, Shell has the leeway to establish its own reduction pathway for the Shell group? In what manner would Shell then, according to Milieudefensie et al., be able to comply with the requested reduction obligation, if the reduction obligation were to be interpreted in the manner argued by Milieudefensie et al.?*

Answer of Milieudefensie et al.:

Introductory remarks

According to Milieudefensie et al., the requests for clarification of the Judgment align with the considerations of the District Court, including the considerations set out in paras. 4.4.39 and 4.4.54. The District Court makes it very clear in those considerations what Shell's "freedom" and "leeway" is to develop its own reduction pathway. What the District Court means is that Shell is free to determine within what countries or business units it achieves CO_2 reductions, and how it divides the total CO_2 reductions within the Shell Group.[1]

Milieudefensie et al.'s requests for clarification do not detract from this freedom as formulated by the District Court. The requests relate to the interpretation of the Judgment and Shell's legal obligation that was laid down in the Judgment, the same Judgment that is now being appealed before this Court. The requests do not impair Shell's freedom and leeway as referred to by the District Court to further shape its own reduction pathway, within the framework of the reduction obligation. Milieudefensie et al. believes that the Court of Appeal is free to provide such clarification and supplementation.

In this case the Court would only be establishing what is already encompassed in the considerations of the District Court, so that there is no impairment of Shell's position. In addition, the prohibition on impairment relates to the dictum and not the considerations of the Judgment, so that in Milieudefensie et al.'s view, there is also room to tighten up the considerations.[2]

In addition to the EU ETS, which we will discuss separately in a little while, the requested clarifications relate to three topics. I would like to start with the sale of assets.

Sale of assets: Shell must limit CO_2 emissions to the atmosphere

In the oral arguments, Milieudefensie et al. brought up the point that Shell cannot perform its reduction obligation simply by selling its assets. The District Court's considerations and Milieudefensie et al.'s assertion that Shell cannot comply with the Judgment purely through the unlimited and unconditional sale of assets are not at odds with each other.

---

[1] See also Milieudefensie et al.'s Notes on Oral Arguments Day 3, part 2, paras. 104 et seq.

[2] Van Malssen and Andes in Sdu Commentaar Burgerlijk Procesrecht artikel 347 Rv, note 2 (up to date to 21 July 2023), Koerts in T&C Rv, commentaar op art. 347 Rv, note 4b (up to date to 1 January 2024). See also Ras/Hammerstein, De grenzen van de rechtsstrijd in hoger beroep in burgerlijke zaken (Burgerlijk Proces & Praktijk nr. 4), 2017/85, Groene Serie Burgerlijke Rechtsvordering, Art. 347 note 10 and note 14, Opinion of A-G Verkade of 5 October 2012, ECLI:NL:PHR:2012:BY1533, para. 5.52.2.

In order to do justice to the Judgment, the District Court's considerations must be seen in conjunction with both the dictum and the debate between the parties at first instance. I will discuss this relationship between the debate between the parties and the considerations and the dictum of the Judgment in greater detail in the rejoinder.

For the moment we can perhaps suffice by pointing out that Milieudefensie et al. at first instance - prior to the oral arguments, on 15 October 2020 - submitted a Statement of Amendment of Claim. Milieudefensie et al. amended the relief it was seeking in this statement. I have copied and inserted the relevant part of the amended relief sought and highlighted the elements that are relevant to this discussion in yellow.

To order: that Royal Dutch Shell plc, both directly and via the companies and legal entities it commonly includes in its consolidated annual accounts and with which it jointly forms the Shell group, limit or cause to be limited the aggregate annual volume of all CO_2 emissions into the atmosphere (Scope 1, 2 and 3) due to the business operations and sold energy-carrying products of the Shell group to such an extent that this volume, at the end of the year 2030:

Primarily: will have been reduced by at least 45% or net 45% relative to 2019 levels;

By means of the amendment in the relief sought, Milieudefensie et al. wished to make it clear that Shell must use its control and influence to limit CO_2 emissions to the atmosphere or to see to it that such emissions are limited. The District Court then took over this amended relief sought verbatim as dictum in the Judgment.

By statement of 6 November 2020, Milieudefensie et al. explained the amendment of claim in further detail as follows (emphasis added):

"*As has been made clear in the summons and the relief sought, through this lawsuit Milieudefensie et al. is combatting the CO_2 emissions that are emitted to the atmosphere [...]*"

The amended relief sought thus demands of Shell that it use the control it has over its Scope 1, 2 and 3 emissions in such way that this will lead to reducing CO_2 emissions to the atmosphere.

The District Court also made it clear in para. 4.4.54 that the issue is that by complying with the Judgment, Shell will create room in the carbon budget. Shell will create this room in the carbon budget by ensuring that a 45% share of the emissions over which it has control, are actually kept out of the atmosphere. This is what Milieudefensie et al. has always wanted. This is how the District Court understood the matter, to wit, inter alia, the considerations of the District Court that it realised that the Judgment may entail that Shell may have to forego investments in fossil fuels and reduce its production of fossil fuels.

The essence of the Judgment is thus that Shell must use its control and influence to prevent CO_2 emissions to the atmosphere. How Shell is to then ensure that this specific quantity of CO_2 is not emitted to the atmosphere, is entirely at Shell's discretion. Milieudefensie et al. has always emphasised this freedom of action and that is why it has been reflected in the Judgment in this manner.

This freedom entails that Shell can itself determine how it will limit its emissions to the atmosphere. It can do this, for example, by no longer investing in new fields, by selling less oil and gas, by prematurely writing off assets or by, for example, attaching production-limiting conditions to an asset sale. These are significant measures for Shell and will require financial sacrifice on the part of Shell. But the District Court literally considered that Shell may be asked to take far-reaching measures and make financial sacrifices, in view of the enormity of the danger that it is otherwise helping to cause. The above therefore means that Milieudefensie et al. is not asking the Court

for a blanket prohibition on the sale of assets by Shell, but merely to make it clear that Shell must keep the emissions to be reduced out of the atmosphere. Shell is capable of doing this. Limiting emissions to the atmosphere has been the key point of the case since day 1 and this interpretation of the reduction obligation therefore does not concern a new position.

I would also like to point out that both at first instance and on appeal, Milieudefensie et al. has always made it clear that implementation of the reduction order will not or will only marginally require the hiving off of assets. Shell can achieve the CO_2 reduction on the production side by ceasing the development of new fields, and can continue extraction from its existing fields. Milieudefensie et al. has always emphasised this point and Shell has never disputed it. But again, the requested clarification is not suddenly a request for a blanket prohibition on the sale of assets, nor is it a new claim.

Net component

With regard to the net component, the basic principle is of course that Milieudefensie et al. should have filed a cross-appeal had it wished to challenge the dictum in relation to that point.

However, Milieudefensie et al.'s request does not relate to challenging Shell's option to make use of negative emissions technologies, or, in the words of the District Court: "*compensation of CO_2 emissions*". The request seeks a further qualification, in the light of the legal obligation to which Shell is subject.

Milieudefensie et al. has already frequently explained in these proceedings, based on authoritative sources, that the use of carbon credits to "offset" fossil fuel CO_2 emissions must be approached with great reserve.[3] The risks of Carbon Dioxide Removal have been extensively discussed in a broader sense. It was explained that it is very widely acknowledged that there are great risks involved with carbon credits and that the use of carbon credits for "carbon offsetting" is deemed questionable. It has also been explained in a general sense that relying on Carbon Dioxide Removal will be at the expense of substantial and immediate reductions of Shell's own CO_2 emissions.[4]

In view of all of the foregoing and in view of Shell's legal obligation, which encompasses an "*individual partial responsibility to contribute to the fight against dangerous climate change according to its ability*"[5], Milieudefensie et al. believes that there is cause for the Court to consider that although Shell may make use of negative emissions technologies to comply with its reduction obligation, it must ensure that carbon credits can only be used as a last resort, when other mitigation options are not possible. The Court could think of such things as formulating a specific limit on the use of carbon credits, as the European Union has done on the basis of the European Climate Act. An absolute limit of 2.2% was set for the net component.[6] This could be a suitable solution.

---

[3] See, inter alia, Statement of Defence on Appeal, section 6.4, Defence Brief of 19 December 2023, para. 45 (Race to Zero), para. 67 (IEA), para. 78 (UNEP). Milieudefensie et al. et al.'s Oral Arguments Day 3, part 2, para. 45 (UN Expert Report), para. 47 (ISO Net Zero Guidelines, Net Zero Stocktake, 1,5C Business Playbook), para. 85 (OECD Guidelines), para. 87 (Information Note UNGP).

[4] Milieudefensie et al.'s Statement of Defence on Appeal, section 6.4, Defence Brief of 19 December 2023, sections 13, 21, 33, 35 to 37, Milieudefensie et al.'s Written Arguments, section 2.8, Milieudefensie et al.'s Notes on Oral Arguments Day 3, part 3 (models and their limitations).

[5] Judgment, para. 4.4.37. See also paras. 4.4.49, 4.4.53, 4.4.54.

[6] Exhibit S-87, p. 52. The total emission reduction of 55%, including the agricultural sector, is included in the table. Excluding the land sector this comes down to 52.8%. Removals from the land sector thus contribute 2.2% to the 55%.

Significant best-efforts obligation

Lastly, the clarification regarding the significant best-efforts obligation. Milieudefensie et al. has already explained on this point that it has no problem whatsoever with this significant best-efforts obligation, because the Judgment makes it crystal clear that a great deal can be expected of Shell in relation to limiting or causing the limiting of the total CO_2 emissions to the atmosphere. Shell has chosen, however, contrary to its own, individual legal obligation as formulated by the District Court, to make its own action dependent to a significant extent on the action of clients.[7] Milieudefensie et al. believes that the Court of Appeal has the leeway to either (i) qualify the significant best-efforts obligation as an obligation of result, or (ii) to further specify the significant best-efforts obligation with additional considerations, whereby first and foremost Shell must use its control and influence to reduce the Scope 1, 2, and 3 emissions of the Shell Group in line with the reduction obligation. This is Shell's own, individual responsibility that it can and must effect via the group policy of the Shell Group.[8] The primary point is that Shell must sell less oil and gas.[9] As stated, it is therefore Shell's own responsibility to reduce its Scope 1, 2 and 3 emissions. This responsibility is thus not a derivative responsibility of clients.

Regulation (EU) 2021/119 establishing the framework for achieving climate neutrality, and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ("European Climate Law"), Article 4(1): *"When implementing the target referred to in the first subparagraph, the relevant Union institutions and the Member States shall prioritise swift and predictable emission reductions and, at the same time, enhance removals by natural sinks. In order to ensure that sufficient mitigation efforts are deployed up to 2030, for the purpose of this Regulation and without prejudice to the review of Union legislation referred to in paragraph 2, the contribution of net removals to the Union 2030 climate target shall be limited to 225 million tonnes of CO2 equivalent. […]"*

[7] Statement of Defence on Appeal, section 7.4.

[8] Judgment, para. 4.4.52.

[9] This is also how the District Court saw it, see paras. 4.4.25, 4.4.53, 4.4.54.

2. *Could you present your reaction to the ECtHR's judgment of 9 April 2024 in the case of Verein KlimaSeniorinnen Schweiz v. Switzerland. To what extent is the judgment in this case relevant when determining the dispute between Shell and Milieudefensie et al.?*

Answer of Milieudefensie et al.:

1. The judgment of the Grand Chamber of the European Court of Human Rights of last Tuesday in the *KlimaSeniorinnen* case[10] can rightly be called a historic event. According to Milieudefensie et al., the judgment is relevant in a variety of ways with regard to assessing this dispute.

2. First and foremost, the essence of the decision is as clear as it is simple: in the words of the ECtHR, climate change is a "*serious current and future threat to the enjoyment of human rights guaranteed under the Convention*".[11]

3. It is these fundamental human rights that Milieudefensie et al. is fighting for, fundamental human rights that are seriously threatened by climate change and for which it is seeking effective protection. This is partly with an eye on the effective legal protection that the domestic court must provide pursuant to Article 13 ECHR.[12] What is more, the determination that climate change threatens human rights has an influence on the application of soft law in these proceedings, such as the UNGP and OECD Guidelines. The starting point for this soft law is that companies have to respect human rights and the judgment of the ECtHR confirms once again that human rights apply in the context of climate change.[13]

4. In the second place, it is important to emphasise that the ECtHR indicated several times that the threat to human rights in the context of climate change is of a special nature. At the very start of its substantive analysis, the ECtHR states that "*climate change is one of the most pressing issues of our time*."[14]

5. The judgment in *KlimaSeniorinnen* consequently confirms that the human rights interests that Milieudefensie et al. is fighting for in these proceedings must be attributed a special and exceptionally substantial weight. This is precisely the conclusion that the Court in Strasbourg made and I quote (emphasis added):

   "*Having regard, in particular, to the scientific evidence as regards the manner in which climate change affects Convention rights, […] the Court finds it justified to consider that climate protection should carry considerable weight in the weighing-up of any competing considerations. Other factors militating in the same direction include […] the States' generally inadequate track record in taking action to address the risks of climate change that have become apparent in the past several decades, as evidenced by the IPCC's finding of "a rapidly closing window of opportunity to secure a liveable and sustainable future for all*".[15]

[10] ECtHR 9 April 2024, Case of *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*, Application no. 53600/20.

[11] *KlimaSeniorinnen*, para. 436.

[12] Statement of Defence on Appeal, para. 301 and the references made there.

[13] See also: Exhibit MD-493, UN, Information Note Climate Change and UNGPs, paras. 4-5; Exhibit MD-492, OECD Guidelines for Multinational Enterprises, pp. 25, 33 & 37.

[14] *KlimaSeniorinnen*, para. 410.

6. This week's decision of the Strasbourg Court shows that the District Court attributed the right weight to the human rights interests that are at issue.[16] It was established, first in *Urgenda*[17] and now by the ECtHR, that in a state based on the rule of law, the protection of human rights cannot be subordinated to political choices and compromises about climate action, so it then speaks for itself that in these proceedings fundamental human rights must prevail over Shell's commercial interests.

7. In the third place, the decision in *KlimaSeniorinnen* is relevant for these proceedings because said judgment was based on important grounds and principles that also play an important role in these proceedings. I will mention a few:

    - In order to limit the risks to human rights posed by climate change, the ECtHR believes that urgent action must be taken to remain below the 1.5°C warming limit, partly in light of the inadequate global action to date.[18]
    - The acknowledgement by the ECtHR of the great importance of the principle of a proportional intergenerational division of burden.[19]
    - The acknowledgement of the principle of Common But Differentiated Responsibilities.[20]
    - The determination, including on the basis of the CBDR principle, that every State must 'do its part' and that it cannot escape this individual responsibility by pointing to the responsibility of other States or by asserting that its emission reductions do not make a difference anyway.[21]

8. In the fourth place, the content of the positive obligations of States in the context of climate change that the ECtHR formulates is relevant for this case. The 'bottom line' is clear: the ECHR requires the reducing of emissions with an eye on achieving "*net neutrality within, in principle, the next three decades.*"[22] The Court then set out what criteria are relevant to decide whether States have performed their positive obligations. The ECtHR emphasises in this respect that it reviews whether the national authorities, including the judiciary, have taken account of the need to calculate a carbon budget or an equivalent method for quantifying future greenhouse gas emissions.[23] The Court refers in this respect to the importance that the IPCC attaches to carbon budgets and also approvingly refers to the decision of the German Constitutional Court in the *Neubauer* case, in which the argument of the German state that it would not be possible to establish a carbon budget was rejected and the importance of the CBDR principle was emphasised.[24] This is the same as the approach that Milieudefensie et al. referred to, and that is expressed in the Tyndall report and leads to a global oil and gas reduction of 45% in 2030 relative to 2021.

---

[15] *KlimaSeniorinnen*, para. 542.
[16] Statement of Defence on Appeal, para. 315.
[17] Van Dam, *Aansprakelijkheidsrecht* (2023), p. 411.
[18] *KlimaSeniorinnen*, paras. 413 & 436.
[19] *KlimaSeniorinnen*, para. 420.
[20] *KlimaSeniorinnen*, paras. 442 & 478.
[21] *KlimaSeniorinnen*, paras. 442 & 444.
[22] *KlimaSeniorinnen*, para. 548.
[23] *KlimaSeniorinnen*, para. 550 under (a).
[24] *KlimaSeniorinnen*, para. 571.

It once again shows the importance of assuming a carbon budget for the reduction task and consequently the importance of the Tyndall report.

9. In conclusion, I would like to point out that the ECtHR has imparted an important message for Contracting States, including the domestic court. In very clear words, the ECtHR sets out that there is an important role for courts in the complex debate on preventing dangerous climate change. The ECtHR made it clear that the role of the domestic court in the climate issue is much greater than the role of the ECtHR itself, which had to remain at somewhat more of a distance. To quote the Grand Chamber:

"*[D]emocracy cannot be reduced to the will of the majority of the electorate and elected representatives, in disregard of the requirements of the rule of law. The remit of domestic courts and the Court is therefore complementary to those democratic processes. The task of the judiciary is to ensure the necessary oversight of compliance with legal requirements. The legal basis for the Court's intervention is always limited to the Convention, which empowers the Court to also determine the proportionality of general measures adopted by the domestic legislature […]. The relevant legal framework determining the scope of judicial review by domestic courts may be considerably wider and will depend on the nature and legal basis of the claims introduced by litigants*."[25]

10. The Strasbourg Court gave the Swiss judiciary a dressing down, because the 'essence' of the right to access to the court of the *KlimaSeniorinnen* association - as laid down in 6 ECHR – had been violated.[26] According to the ECtHR, by fully ignoring the content of its legal objections and an inadequate studying of the underlying climate science,[27] "[t]*he domestic courts did not engage seriously or at all with the action brought by the applicant association*".[28] Nevertheless, the Strasbourg Court gave domestic courts across all of Europe a positive message and instruction, i.e. that they have a central and crucial role to play in solving the climate problem:

"[…] the Court considers it essential to emphasise the key role which domestic courts have played and will play in climate-change litigation, a fact reflected in the case-law adopted to date in certain Council of Europe member States, highlighting the importance of access to justice in this field."[29]

11. It makes it clear that the ECtHR believes that domestic courts in particular have a large role to play in protecting human rights in relation to the dangers of climate change.

[25] *KlimaSeniorinnen*, para. 412. See also paras. 450-451.
[26] *KlimaSeniorinnen*, para. 638.
[27] *KlimaSeniorinnen*, para. 635-637.
[28] *KlimaSeniorinnen*, para. 636.
[29] *KlimaSeniorinnen*, para. 639.

3. *How do the parties perceive the opinion of the District Court that the EU ETS system (and other similar systems elsewhere in the world) have "an indemnifying effect" (para. 4.4.47)? In line with this: can Milieudefensie et al. explain its request for further clarification (Statement of Defence on Appeal no. 1085) in further detail?*

Answer of Milieudefensie et al.

In the response to Ground of Appeal I(f), Milieudefensie et al. explained that the EU ETS system and other similar systems elsewhere in the world do not have an exhaustive effect and do not indemnify against civil law liability. Nor did the District Court establish that the EU ETS system and other emissions trading systems provided indemnification against civil law liability and that this would stand in the way of determining the legal obligation that applies to Shell. The District Court rightly determined in this respect that Milieudefensie et al.'s claim does not interfere with the EU ETS.[30]

Milieudefensie et al. understands the District Court's opinion in such sense that Shell can 'move along' with the reductions that are encompassed in the EU ETS system and other systems, but that this does not help Shell if pursuant to the Judgment it would have to bring about a greater CO_2 reduction. On the basis thereof Milieudefensie et al. asks this Court to clarify that there was no indemnifying effect or to clarify the interpretation of the District Court, that any indemnifying effect cannot detract from following the reduction order.

Milieudefensie et al. again emphasises in this respect that the EU ETS does not have an exhaustive or indemnifying effect. Nor has the EU ETS set aside liability law. Milieudefensie et al. already briefly discussed this during opening arguments, with reference to the opinion of the Supreme Court of New Zealand in the case of *Smith v. Fonterra*.[31] In this case the Supreme Court of New Zealand explicitly considered that "*the ETS neither authorises nor immunises GHG emissions. It merely facilitates state-introduced market signals via a trading scheme in emissions units. […] Parliament has not pre-emptively excluded a common law response to damage caused by GHG emissions. On the contrary, it has retained that possibility.*"[32]

The Supreme Court thus makes it clear that the ETS as such does not provide an absolute 'right' to emit CO_2 emissions, that the ETS does not have an exhaustive effect and that this system does not stand in the way of liability law. What the Supreme Court considered with regard to the ETS, also applies to the EU ETS. The ETS Directive itself also makes this clear. For example, the ETS Directive defines an 'allowance' as follows (emphasis added by legal counsel): *"[an] allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this Directive and shall be transferable in accordance with the provisions of this Directive."*[33]

The ETS Directive itself thus makes it clear that the 'rights' granted on the basis of the directive have no further-going purport than the mere facilitation of the created trading system, and therefore do not grant a 'right' to CO_2 emissions outside of this system. It is therefore not surprising that governments are taking all kinds of additional measures within the ETS sector, like shutting down coal-fired power stations, to enable the necessary fast emission reductions.[34] There is thus no exhaustive effect.

[30] Judgment, para. 4.4.47.

[31] See also Milieudefensie et al.'s Opening Arguments of 2 April 2024, paras. 70 et seq. with reference to the opinion of the Supreme Court of New Zealand in the case of *Smith v. Fonterra*.

[32] Exhibit MD-570A, paras. 99-100. See also para. 45.

[33] Directive 2003/87/EC, Article 3, beginning and under a.

[34] See for the way in which member states take measures in addition to the ETS, Milieudefensie et al.'s Notes on Oral Arguments 4 (permits), pp. 16 et seq. and Milieudefensie et al.'s Notes on Oral Arguments 9 of 17 December 2020 (Reply), pp. 10 et seq.

This lack of exhaustive effect still applies after the entry into force of ETS2. The impact assessment for the ETS2 legislative bill explicitly makes this clear.[35]

Furthermore, there is no indication whatsoever that the ETS sets aside liability law. There are clear indications to the contrary, however. For example, Milieudefensie et al. already pointed out at first instance that a general public law duty of care with regard to the environment has been laid down in the Environmental Management Act – the statute in which the EU ETS has been implemented in the Netherlands.[36] This duty of care serves as a safety net, so that action can be taken against environmental pollution if no specific statutory provision is available. The article that creates the duty of care makes it specifically clear that this public law duty of care does not affect the liability ensuing from civil law.[37] The legislature has thus explicitly opted for a parallel system of public law and civil law (liability-attracting) duties of care that exist side by side.

The duty of care laid down in the Environmental Management Act has in the meantime been replaced by the Environment and Planning Act. The aforementioned public law duty of care for the environment is now laid down in Articles 1.6 and 1.7 of this statute. With regard to Articles 1.6 and 1.7, the Explanatory Memorandum with the bill proposing the Environment and Planning Act again made it clear that these public law duties of care are independent of civil law liabilities: "*For the record, it is pointed out that these articles do not affect the liability arising from civil law, nor the options of public authorities, as legal entities, to demand compliance with legal rules, making use of private law.*"[38]

Bearing in mind the above, there can be no misunderstanding about the fact that liability law has not been set aside in any way; not by the ETS, nor by any other Dutch or European regulations. Shell has not presented any leads for this. There thus cannot be an exculpatory effect.

---

[35] See, e.g., the Impact Assessment for ETS2, 14 July 2021, SWD(2021) 611 final, p. 29: "*Conversely, the achievement of the ESR cannot be assumed to be only driven by the ETS. Firstly, it does not cover all emissions in the ESR. Secondly, the ESR-driven incentive to undertake action at government level should not be limited to the sectors not covered by the new ETS. In fact, for the sectors covered by a separate ETS, there is no certainty for all Member States that the private sector would deliver an emission profile in these sectors that meets the fairness- based differentiated targets under the ESR. There will thus be a need for those Member States to take national action also in sectors to be covered by the new ETS*".

[36] See first instance, Milieudefensie et al.'s Notes on Oral Arguments 4 (permits), para. 61. The relevant article is Article 1.1a of the (old) Environmental Management Act. This article has in the meantime lapsed due to the entry into force of the Environment and Planning Act.

[37] See Article 1.1a, third paragraph of the (old) Environmental Management Act.

[38] Netherlands House of Representatives, parliamentary year 2023-2014, 33 962, no. 3, p. 395.

4. *What is the effect of the EU ETS2 on Shell's emissions in Europe? After ETS2 has come into full force, to what extent will European activities of Shell fall outside of ETS1 and ETS2? Can you explain what part (percentage) of Shell's activities (divided into Scope 1, 2 and 3) falls under ETS1, ETS2 or other cap and trade systems elsewhere in the world?*

Answer of Milieudefensie et al.
We will explain what emissions of Shell are estimated to fall under the EU ETS system.

In its CDP report, Shell reports on its global Scope 1 and 2 emissions. Those emissions are 5% of the total global emissions of the Shell Group.[39]

Shell reports how many of its global Scope 1 and 2 emissions fall under the EU ETS. In 2022 this was 20% of Shell's Scope 1 emissions and 0% of Shell's Scope 2 emissions.[40] This comes down to 1% of Shell's total global Scope 1, 2 and 3 emissions.

Shell does not report how many of its Scope 3 emissions fall under the EU ETS. The District Court asked that question at first instance as well and it was not answered at the time. Shell did not provide this information in appeal either. Consequently Milieudefensie et al. made its own estimate. This estimate was made on the basis of Shell's global revenue relative to its revenue within the EU. The information from 2019 shows that in that year 16.6% of Shell's revenue was earned in the EU.[41]

We assume that this revenue of 16.6% also provides a picture of Shell's share of the emissions that are generated in Europe. This is probably an overestimation, as these revenue figures also include sales where no emissions are released, such as chemical products and the sandwiches that Shell sells at the petrol stations. The prices of oil and gas are relatively high in the EU compared to some other parts of the world. Shell is expected to achieve a relatively larger part of the revenue with a relatively smaller share in the oil and gas sales in the EU. With the assumption of 16.6% we are at the top of the range.

According to the European Environment Agency, in 2019 approximately 40% of the total emissions within the EU fell under the EU ETS.[42] Based on that division, this would mean that 40% of the previously mentioned 16.6% falls under the EU ETS system. This is 6.6%. Including the 1% Scope 1 emissions, this would mean that of Shell's global Scope 1, 2 and 3 emissions, a share of 7.6% would fall under the EU ETS.

Upon the introduction of ETS2, it is estimated that 75% of the total emissions in the EU will fall under the EU ETS.[43] This is thus more than the current 40%. If we apply the same calculation to this situation, after the introduction of ETS2, 75% of 16.6% will fall under the EU ETS. This is 12.5%. If we add 1% in Scope 1 emissions to this, this is 13.5%.

---

[39] Statement of Defence on Appeal, para. 662. That this is still the case appears from Shell's Annual Report 2023, p. 104 (Exhibit S-289).
[40] https://www.shell.com/sustainability/transparency-and-sustainability-reporting/performance- data/greenhouse-gas-emissions/_jcr_content/root/main/section_1654294871/simple_copy/text.multi.stream/1690290549709/b9538ef191288186ffa45797947d884c383da00b/2023-cdp-climate-change-shell-plc.pdf, p. 192.
[41] Exhibit MD-314, Shell's Annual Report 2019, p. 208. Of the total turnover of USD 344.88 billion, USD 98.45 billion was earned in Europe (including the UK). Without the UK (that no longer falls under the EU ETS), the amount concerned is USD 57.36 billion. This is 16.6% of the global turnover.
[42] https://www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/trends-and-projections-in-europe-2019/the-eu-emissions-trading-system: "*The European Union (EU) Emissions Trading System (ETS) governs about 40 % of total EU greenhouse gas emissions*."
[43] Exhibit S-266, p. 154 (p. 22 of part 2): "*With the extension to new sectors, around 75% of total EU emissions will be subject to carbon pricing […]*"

It can be deduced from these calculations that according to the best estimate, only a small part of Shell's global emissions fall under ETS1, being 7.6%. After ETS2 enters into force this is estimated to be 13.5%. The discussion about the EU ETS therefore in any event only has limited relevance for this case. This limited relevance applies all the more because the ETS2 system will only come into effect in 2027 or 2028. The effect thereof will thus primarily be seen after 2030 – i.e. after the critical decade.

This concludes the discussion of the EU ETS. I would now like to say the following about global emissions trading systems. As explained in the oral arguments (session day 3, part 5 regarding effectiveness), at present worldwide only 17% of the global emissions fall under some form of emissions trading system.[44] In other words, 83% of the global emissions do not fall under an emissions trading system.

The global emissions trade has not been very effective to date. After all, global emissions have risen to record highs in the past few years. Following are a number of important reasons that emissions trading systems have not turned out to have been very effective to date.

As mentioned, 17% of the global emissions fall under a form of emissions trading system. More than half of them have a CO_2 price of less than USD 10 dollars per ton.[45] This is despite the fact that according to the IPCC the bandwidth would require a CO_2 price of between USD 40 and 120 dollars to achieve a 2°C- target.[46] Much higher prices are necessary to achieve 1.5°C, varying from 170 to 290 dollars per ton CO_2.[47]

Of the 17% of the global emissions that fall under an ETS system, more than half have a price lower than 10 dollars per ton, which is why little to no effect need be expected. The other part of the emissions that fall under an ETS system, can be divided into two categories, of approx. 20% each. One category has a CO_2 price of 10-50 dollars. The other category has a CO_2 price of more than 70 dollars.[48]

On balance, it appears that only the EU, the UK, Switzerland and New Zealand have an ETS system with a CO_2 price of more than 40 dollars per ton CO_2.[49] All other systems are below this, some even far below, and therefore cannot be considered effective. In fact, in Mexico the CO_2 price is zero.[50]

The above means that only a fraction of the 17% of the global emissions that fall under an ETS system, has a CO_2 price which involves any effectiveness. There is a good reason why the IPCC concludes:

---

[44] This appears from the ICAP 'Emissions Trading Worldwide, Status Report 2023', p. 7. Shell submitted a part of this report as Exhibit S-227, but not this part. The report can be viewed on: https://icapcarbonaction.com/system/files/document/ICAP%20Emissions%20Trading%20Worldwide%202023%20Status%20Report_0.pdf.

[45] Ibid, p. 37.

[46] Exhibit S-140, p. 1385: "*Few of the world's carbon prices are at a level consistent with various estimates of the carbon price needed to meet the Paris Agreement goals. In modelling of mitigation pathways that limit warming to 2°C (>50%)(Section 3.6.1) marginal abatement costs of carbon in 2030 are about 60 to 120 USD2015 per tCO2, and about 170 to 290 USD2015 per tCO2 in pathways that limit warming to 1.5°C (>50%) with no or limited overshoot (Section 3.6). One synthesis study estimates necessary prices at USD40–80 per tCO2 by 2020 (High-Level Commission on Carbon Prices 2017). Only a small minority of carbon pricing schemes in 2021 had prices above USD40 per tCO2, and all of these were in European jurisdictions (World Bank 2021a).*"

[47] Ibid.

[48] https://icapcarbonaction.com/system/files/document/ICAP%20Emissions%20Trading%20Worldwide%202023%20Status%20Report_0.pdf, p. 37.

[49] Ibid, figure on pp. 37 and 38, and the country-specific pages 45, 72, 66.

[50] Ibid, p. 32.

"*Few of the world's carbon prices are at a level consistent with various estimates of the carbon price needed to meet the Paris Agreement goals.*"[51]

In addition, in many of the ETS systems a large part of the carbon credits are not auctioned, but are provided free of charge, which is why the prices are so low.[52] With such low prices the ETS systems are not incentivising the necessary transformation to a sustainable energy system and to more energy efficiency. This means that in this critical decade, these systems will not bring the cumulative CO_2 emissions down to a sufficient extent, nor provide the necessary alternative energy sources and infrastructure. A good example is the situation where, despite the fact that the EU has had an ETS system for over 20 years, the Netherlands is facing bottlenecks on the electricity network.

It is thus not sufficient to only have an ETS system. Direct action is required to create the scope for sustainable alternatives. Another example is the additional measures that member states are taking, such as additional CO_2 pricing at domestic level and the accelerated closure of coal power stations. These measures are necessary to achieve the required CO_2 reductions, and the member states are not waiting until such time as the EU ETS system makes those power stations unprofitable.[53]

[51] Exhibit S-140, p. 1385.

[52] https://icapcarbonaction.com/system/files/document/ICAP%20Emissions%20Trading%20Worldwide%202023%20Status%20Report_0.pdf, p. 33. This appears from the low 'Auction shares', being the "*Proportion of allowances that is not allocated for free, but must be acquired either at auction or otherwise (in %).*"

[53] See for the way in which member states take measures in addition to ETS, Milieudefensie et al.'s Notes on Oral Arguments 4 (permits), pp. 16 et seq. and Milieudefensie et al.'s Notes on Oral Arguments 9 of 17 December 2020 (Reply), pp. 10 et seq.

5. *What obligations in the area of climate would Shell become subject to on the basis of the CSDDD? To what extent would Shell be obliged on the basis of this (future) directive to formulate concrete and enforceable reduction plans? To what extent does the (future) directive make provision for the civil court in the Netherlands to be able to compel Shell (or another company) to comply with its reduction plan?*

Answer of Milieudefensie et al.

What obligations in the area of climate would Shell become subject to on the basis of the CSDDD?

1. I must start with the current status of the CSDDD, and the process of its creation. The CSDDD has not yet been formally accepted and there is no guarantee that the CSDDD will in fact see the light of day. The establishing process of the CSDDD is plagued by a strong corporate lobby, that is trying to prevent the CSDDD from being adopted. In February of this year it twice almost succeeded in doing so.[54]

2. It now looks like the CSDDD will become a reality. The European Council adopted a watered-down compromise text on 15 March.[55] Milieudefensie et al. is basing its position on this text.

3. If the CSDDD is indeed adopted, after implementation in domestic law, the earliest it can be applied to Shell will be the middle of 2027.[56] This is only a few years before the time when Shell must have achieved the targets in the reduction order.

4. If Shell comes to fall under the CSDDD, as Milieudefensie et al. assumes that it will, Shell will have to comply with a package of obligations in the area of human rights, the environment and climate to deal with its adverse impacts in these areas.[57]

5. It is important to emphasise that the obligations under the CSDDD are not new for Shell. These obligations have been part of societal expectations in relation to companies for some time now. The CSDDD is thus only a (further) codification thereof in specific legislation. These societal expectations are already expressed in soft law (such as the UNGP and the OECD Guidelines) to which the SDDD makes explicit reference,[58] and to which Shell has committed itself.[59] They already have an effect in civil law, including Article 6:162 paragraph 2

[54] Exhibit MD-579H Speech by Lara Wolters (EU rapporteur CSDDD).
[55] See: https://data.consilium.europa.eu/doc/document/ST-6145-2024-INIT/en/pdf (hereinafter: 'CSDDD Compromise Text'). The Legal Affairs Committee of the European Parliament has in the meantime agreed to this compromise text; see: https://www.europarl.europa.eu/news/en/press- room/20240318IPR19415/first-green-light-to-new-bill-on-firms-impact-on-human-rights-and-environment. The plenary vote will take place on 24 April 2024 in the European Parliament, which according to the current expectations intends to adopt the CSDDD; see: https://www.europarl.europa.eu/sedcms/documents/PRIORITY_INFO/1282/SYN_POJ_April%20II_STR_EN.pdf.
[56] The CSDDD will be phased in gradually. Non-EU companies with more than 1500 million in the EU will be the first required to comply with the Directive three years after the expected entry into force in 2024; see: Article 30 paragraph (b) CSDDD Compromise Text.
[57] See in particular: Arts. 4-11 and Art. 15 CSDDD Compromise Text.
[58] Recitals (5) and (6) CSDDD Compromise Text.
[59] Milieudefensie et al. pointed this out back in 2019; see: Summons, para. 692.

Dutch Civil Code, as Prof. Van Dam, for example, rightly concludes.[60] I will come back to the legal basis of that effected in rejoinder.

To what extent would Shell be obliged on the basis of this (future) directive to formulate concrete and enforceable reduction plans?

6. Article 15 CSDDD sets out a duty of care relating to the climate. Such a duty of care would entail Shell being required to establish and implement a transition plan, in order to ensure that its business model and strategy are compatible with, inter alia, the 1.5°C target of the Paris Agreement and the European Climate Act. That transition plan should contain emission reduction targets for 2030 (in steps of five years up to 2050) based on '*conclusive scientific evidence*'.[61] All of this applies to Scope 1, 2 and 3 emissions.

7. In Milieudefensie et al.'s opinion, the application of these obligations to Shell, translated to its specific context should, *in concreto*, lead to a reduction obligation that goes at least as far as the reduction order in the Judgment.

8. Nevertheless, as soon as Article 15 CSDDD enters into force, it will in the first instance be up to Shell to tailor this implementation to the context of its individual business. It is not to be expected that Shell will appropriately shape such implementation. The facts and conduct of Shell, already discussed in great detail, do not provide any reason to expect such, nor do Shell's intentions for the future. It is quite telling that we are where we are now because Shell disputes the reduction order and does not wish to give it any valid substance.

9. In addition, the enforceability of the transition plan, as a result of the business lobby, has been watered down. In the compromise text, Article 15 CSDDD is formulated as a '*best efforts*' obligation.[62] For the reasons just mentioned, it is expected that Shell will clamp on to this formulation to escape the enforcement of its reduction targets. To the extent Shell sets such targets, Shell will undoubtedly take the position that certain absolute reduction targets (e.g. for Scope 3) are not "appropriate" for Shell. The qualification that absolute reduction targets in Scope 1, 2 and 3 must be determined "*where appropriate*", is another back door in Article 15 CSDDD by which Shell will probably try to avoid its reduction obligation.[63]

---

[60] C.C. van Dam, 'Verantwoordelijkheid en aansprakelijkheid voor leveranciers en afnemers', *NTBR* 2022/45, issue 10, para. 4.

[61] This is "*evidence with independent scientific validation that is consistent with the limiting of global warming to 1.5°C as defined by the Intergovernmental Panel on Climate Change (IPCC) and taking into account the recommendations of the European Scientific Advisory Board on Climate Change*"; see: recital (50) CSDDD Compromise Text.

[62] This is interpreted as "*an obligation of means and not of results. Being an obligation of means, due account should be given to the progress companies make, and the complexity and evolving nature of climate transitioning. While companies should strive to achieve the GHG emission reduction targets contained in their plans, specific circumstances may lead to companies not being able to reach these targets, where this is no longer reasonable*"; see: recital (50) CSDDD Compromise Text.

[63] Article 15(1) under (a) CSDDD Compromise Text.

To what extent does the (future) directive make provision for the civil court in the Netherlands to be able to compel Shell (or another company) to comply with its reduction plan?

10. It is therefore important that even after the CSDDD has entered into force, the civil court can review whether a company like Shell is properly performing its human rights obligations and its climate obligations, whether or not pursuant to Article 15 CSDDD. This option will indeed be available in the Netherlands. I will explain this.

11. Article 1(2) of the CSDDD states that the CSDDD cannot be a ground for lowering the protective level of domestic law for human rights, the environment and climate.[64] In line with this, Article 22(4) CSDDD states that the CSDDD does not detract from the civil law liability of companies under domestic law.[65]

12. The CSDDD therefore does not impede the Dutch civil court in reviewing whether Shell's transition plan and reduction targets are sufficient. According to the CSDDD, the civil court must apply its own domestic law. In that review, soft law (like the UNGP and the OECD Guidelines) will remain in force, and the court therefore does not have to restrict itself to Article 15 CSDDD, should a conflict arise between the two.

13. Not only the CSDDD,[66] but also Dutch domestic law makes it clear that in addition to public law duties of care, there are (farther-reaching) private law duties of care. This appears from established case law of the Dutch Supreme Court, e.g. regarding the banking duty of care, that arises from both public and private law. The decision of the Dutch Supreme Court in the *De Treek/Dexia* case, involving share leases:[67]

> "*Insofar as the section recognises the opinion that this private law duty of care cannot have any greater scope than the duties of care laid down in public law regulations, it fails. This view is incorrect.*"[68]

14. This principle was further clarified and continued in subsequent case law of the Dutch Supreme Court.[69] This shows clearly that specific legislation, or self-regulation, cannot indemnify companies against a possible more comprehensive civil law duty of care. According to that case law, this is precisely what characterises the civil law duty of care, because it is applied to a concrete case taking account of all relevant circumstances.[70] What is more, this more comprehensive civil duty of care can anticipate future legislation.[71]

---

[64] Article 1(2) under CSDDD Compromise Text.
[65] Article 22(4) under CSDDD Compromise Text.
[66] Article 1(2) and 22(4) under CSDDD Compromise Text.
[67] Dutch Supreme Court, 5 June 2009, ECLI:NL:HR:2009:BH2815, NJ 2012/182 (*De Treek/Dexia*).
[68] Dutch Supreme Court, 5 June 2009, ECLI:NL:HR:2009:BH2815, NJ 2012/182 (*De Treek/Dexia*), para. 4.10.3.
[69] See, inter alia: Dutch Supreme Court, 16 June 2017, ECLI:NL:HR:2017:1107, NJ 2017/363 (*SNS/Stichting Gedupeerden Overwaardeconstructie W&P*), para. 4.2.5; Dutch Supreme Court, 14 December 2018, ECLI:NL:HR:2018:2298, NJ 2019/184 (*Amstelsteate/Verweerders*), para. 3.4.2.
[70] See, inter alia: Dutch Supreme Court, 5 June 2009, ECLI:NL:HR:2009:BH2815, NJ 2012/182 (*De Treek/Dexia*), Opinion of acting P-G De Vries Lentsch-Kostense, paras. 3.20, 3.21 and 3.26; and Dutch Supreme Court, 16 June 2017, ECLI:NL:HR:2017:1107, NJ 2017/363 (*SNS/Stichting Gedupeerden Overwaardeconstructie W&P*), Opinion of A-G Timmerman, paras. 4.4 and 4.5.
[71] See, inter alia: Dutch Supreme Court, 5 June 2009, ECLI:NL:HR:2009:BH2815, NJ 2012/182 (*De Treek/Dexia*), Opinion of acting P-G De Vries Lentsch-Kostense, paras. 3.20, 3.21 and 3.26; Dutch Supreme Court, 14 December 2018, ECLI:NL:HR:2018:2298, NJ 2019/184 (*Amstelsteate/Verweerders*), para. 3.4.2 and Opinion of A-G Wissink, para. 3.20.

15. The banking duty of care that was discussed in that case can be applied by analogy to the climate duty of care of companies like Shell under Article 6:162(2) of the Dutch Civil Code and under the CSDDD. The duty of care in relation to the climate must also be established in the context of an individual company. Even more than with the banking duty of care, the climate duty of care entails the need to protect the interests that are impacted if a company fails to perform its duty of care in a specific case. The duty of care relating to climate is not only concerned with the protection of financial interests, but also protection against the threatened harm to property and persons.

16. It is not only Dutch law that applies the principle that specific legislation or market custom cannot indemnify companies with regard to their civil law duty of care: in our opening arguments of last week it was discussed in detail that the Supreme Court of New Zealand recently held that the societal duty of care under New Zealand law has not been set aside by specific climate legislation.[72]

17. In any event, as far as Milieudefensie et al. is concerned, a conflict between the civil law duty of care and Art. 15 CSDDD is only a hypothetical matter; as stated, the obligations under Article 15 CSDDD, when applied in relation to Shell, will lead to at least the same reduction obligation as the Judgment. Indeed: if the CSDDD were to apply to Shell as of mid-2027, the requisite reductions and the emission growth foreseen by Shell will have only grown further apart, which will require an even faster reduction obligation.

18. There is therefore no reason whatsoever to wait for the CSDDD to enter into force, if it is actually enacted. The debate in this Court today regarding what Shell's reduction obligation encompasses from a legal perspective, will have to be held in any case.

19. There is every reason to seek a rapid decision by this Court, as time is running out. It is evident that the globally available carbon budget for 1.5°C is shrinking faster than thought. At the beginning of 2023 the budget was only 250 Gt.[73] This carbon budget will probably have been run down within 5 ¼ years.[74] Taking action as quickly as possible and limiting the mounting accumulating emissions in the atmosphere is therefore crucial. It was made clear in the Statement of Defence on Appeal in this respect why achieving the reduction target of 2030 is crucial to keep the accumulating emissions within the carbon budget.[75]

20. I will conclude this section. As far as Milieudefensie et al. is concerned, even in light of the CSDDD there is every reason and scope for the Court of Appeal to express its view on the civil law obligations of Shell, by upholding the reduction order. Everyone will benefit from this. There is nothing to stand in the way of upholding the Judgment. The CSDDD confirms the existence of a duty of care relating to the climate for individual companies, thereby providing extra support for upholding the Judgment.

---

[72] Milieudefensie et al.'s Opening Arguments, part 1, 2 April 2024, paras. 70-75 (particularly paras. 71-73).
[73] Written Arguments, para. 35.
[74] On the basis of the current global level of CO_2 emissions of 40 Gt C02 per year and counted from the start of 2024; see: Written Arguments, para. 19.
[75] Statement of Defence on Appeal, para. 658.

6. *Would Shell like to respond to Milieudefensie et al.'s argument about possible obligations that arise from soft law instruments, e.g. the OECD Guidelines for Multinational Enterprises (version 2023) or the report of the "United Nations's High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities" (Exhibit MD-487)? To what extent can the standards laid down therein carry weight in giving substance to the unwritten standard of care as referred to in Art. Art. 6:162 Dutch Civil Code?*

Answer of Milieudefensie et al.

Although this question was addressed to Shell, Milieudefensie et al. will briefly discuss this question in rejoinder.

7. *Can Milieu & Mens explain what it believes the influence of the reduction order would be on the price of fossil fuel energy in the Netherlands. In other words: what price increases do you believe to be realistic in the short and mid term?*

Answer of Milieudefensie et al.

Milieudefensie et al. has not been able to find any quantification or other substantiation of the possible consequences of the Judgment in the M&M documents. The M&M documents contain a number of assertions about possible consequences of the energy transition, but these are not about the Judgment and in many cases do not come from experts in this area.

Milieudefensie et al. refers in this respect to its Statement of Defence on Appeal after Joinder, in which it is substantiated that M&M's fear of far-reaching and unacceptable price increases as a result of the Judgment is unfounded.[76] It is also substantiated that a fast, sustainable energy transition will precisely be of benefit to the energy interests of Dutch citizens.[77]

I would also like to refer to the stress test of the European Central Bank (ECB), which in fact shows that European households will benefit greatly from a fast, sustainable energy transition. In case of a late and delayed energy transition, energy costs in 2030 will be 31% to 50% higher than in 2022, according to the ECB.[78] According to the ECB, a fast, sustainable energy transition in line with 1.5°C means a scenario with an emission reduction of 67% in 2030 in Europe, in which the consumption of fossil fuels in 2030 is halved. Oil and gas use in Europe will have halved in 2030 in that scenario.[79] According to the ECB this fast transition, with a halving of oil and gas use, is thus the most beneficial for households.

The IEA is also very clear in its findings on the consequences for the access to and affordability of energy under the NZE scenario:

"*By 2030 in the NZE Scenario, total household energy expenditure in emerging market and developing economies decreases by 12% from today's level, and even more in advanced economies*"[80]

Governments must, of course, ensure that vulnerable households are protected in case of any price fluctuations and are assisted in the switch to clean energy technologies. The costs of the energy transition must be divided fairly, something Milieudefensie et al. has been seeking to achieve for years.[81] However, it cannot be a reason to kick the urgent and achievable fast, sustainable energy transition into the long grass. It certainly cannot be any reason for Shell not to accept a duty of care.

---

[76] Milieudefensie et al.'s Statement of Defence on Appeal after Joinder, para. 3.4.
[77] Ibid, para. 3.5.
[78] Exhibit MD-531B, pp. 51-52. See also Exhibit MD-531A, pp. 1 to 3.
[79] Exhibit MD-531B, pp. 6-7 ("*Based on the scenarios calibrated for this exercise, to achieve the temperature targets of the Paris Agreement by the end of this century, EU-wide GHG emissions would need to be drastically reduced by cutting current fossil fuel consumption by half until 2030.*"), p. 24 (Chart 5, which shows that the fast (1.5°C) scenario requires a 67% emission reduction in 2030 in the EU relative to 1990. See also p. 25 (Chart 6 shows that both oil and gas use has halved).
[80] Exhibit MD-525, p. 17. See also Exhibit MD-526B (WEO 2023), p. 187: "*In the NZE Scenario, bills fall by close to 40% to 2030 mainly thanks to higher energy efficiency gains from home retrofits, heat pumps, more efficient appliances and faster uptake of EVs. While these all require additional upfront capital costs, on average they generate larger savings over their lifetimes.*"
[81] Milieudefensie et al.'s Statement of Defence on Appeal after Joinder, para. 19 with reference to a number of examples.

I would like to point out that the Belgian authorities in the appeal in the Belgian climate case also presented a very large number of arguments to argue that a faster emission reduction would have large societal consequences.[82] The Belgian Court of Appeal dismissed all those arguments a few months ago. The Belgian Court of Appeal considered in this respect that the consequences of delayed climate action, which will lead to far more drastic emission reductions having to take place between 2030 and 2050, "*without a doubt are far more harmful for the Belgian population as a whole than the limitations and restrictions that are to be expected of a higher ambition level from now to 2030.*"[83]

The Belgian court of appeal then, partly on the basis of carbon calculations of Professor Rogelj, imposed a reduction target of at least 55% in 2030 on the Belgian governments.

I would like to mention two more things. It is striking that nowhere does M&M discuss the consequences of dangerous climate change for Dutch citizens. Nor does Shell, for that matter. The written arguments, using the best available science, explain how dangerous climate change can lead to substantial societal and economic disruption. It is also explained how those consequences are probably still being considerably underestimated.

Contrary to what M&M asserted during the oral arguments, the serious and far-reaching consequences that Milieudefensie et al. discussed are for the greater part not based on a worst-case scenario: these are consequences and risks that science warns of in relation to the current increased CO_2 concentration, which risks and dangers will increase considerably in case of any further warming and in particular when the warming exceeds the 1.5℃ limit. Milieudefensie et al. only added to this that the IPCC and the KNMI describe that the worst case scenarios are not excluded.

Lastly, I would like to refer to UNEP, which has mapped out that the benefits of climate mitigation will be far greater than the costs, if account is taken of all additional advantages and the climate damage that can be avoided with urgent and drastic emissions reductions.[84]

[82] Exhibit MD-570B, para. 154.
[83] Exhibit MD-570B, para. 244 (p. 135).
[84] Exhibit MD-522, pp. 31-32.

8. *On session day 2, Shell referred to a graph called "Estimated share of energy sales 2016-2030" (Appendix with Shell's oral argument notes, 1.9; the graph comes from Shell's Energy Transition Strategy 2024, Exhibit S-288, p. 21). This graph shows the (expected) shares in percentage of oil products, LNG, pipeline gas, electricity and biofuels in Shell's total energy sales in 2016, 2023 and 2030.*

   Can Shell add 2019 to this graph? Can Shell indicate what the (expected) absolute quantities of these five product categories are that Shell sold/will sell in 2016, 2019, 2023 and 2030? Can Shell indicate, in addition, what the (expected) absolute CO_2 emissions are/will be in the years mentioned?

Answer of Milieudefensie et al.:

Based on Shell's own documents and various external analyses, Milieudefensie et al. substantiated that based on Shell's current policy no or barely any absolute CO_2 reductions are to be expected up to and including 2030.

In the first place, this ensues from Shell's CDP statement for 2021 and 2022, in which Shell states that on the basis of the intensity goal for Scope 1, 2 and 3 no absolute emission reductions are expected by 2030.[85]

In the second place, Shell's goal to have the average intensity of its energy portfolio fall by 15-20% leaves room for an increase in absolute CO_2 emissions.[86]

In the third place, Shell's policy and investment plans show that Shell wants to increase its LNG sales by 20-30% relative to 2022.[87] Shell thus wants to sell a great deal more gas. This will inevitably lead to an increase in its Scope 3 emissions from gas. It is worth pointing out that LNG is more carbon-intensive than pipeline gas. Making LNG liquid, transporting it and converting it to gas again is an energy-intensive process, whereby worldwide on average 10% extra gas is used.[88,89]

In the fourth place, although Shell has an ambition to reduce the Scope 3 emissions from the sale of oil products in an absolute sense by 15-20% by 2030 (compared to 2021), that possible reduction in absolute emissions, insofar as this actually occurs, can be reversed again by the growth of Scope 3 emissions from an increase in the sale of gas. As previously explained, Shell's explanation at the session showed that although this is called an ambition, it is rather a forecast of the developments that Shell expects in the market. An ambition, just like a target, is conditional under all circumstances.

---

[85] Milieudefensie et al.'s Defence Brief of 19 December 2023, paras. 88 et seq., with reference to Exhibits MD-388 and MD-389. See also Milieudefensie et al.'s Statement of Defence on Appeal, section 6.2.4.

[86] Milieudefensie et al.'s Statement of Defence on Appeal, sections 6.2.1 – 6.2.4 and section 6.2.8.

[87] Exhibit MD-536A, p. 23.

[88] Exhibit MD-528, pp. 82-83: "*Liquefying natural gas is an energy-intensive process that emits anywhere in range of 50-150 kg CO2-eq per boe from extraction of the raw feedgas to delivery to end consumers. Around 40% of this comes from cooling the gas down to -162 °C, a process that is usually powered by consuming a portion of the gas flowing to the (often remote) facility. The amount of gas used in this way varies markedly between facilities, but averages around 10% globally*."

[89] Exhibit S-163, p. 14. Shell reported an average CO_2 intensity for LNG of 70 gCO2e/MJ for LNG, compared to 65 gCO2e/MJ for pipeline gas.

9. *Can Shell respond to points 17 to 20 of the Appendix with Milieudefensie et al.'s speaking notes on session day 3? Can Shell, as part of its response, provide an overview of its (expected) production of oil and gas in 2019 and 2030 (and if possible 2016 and 2023 as well)? How much of this production is or will come from oil and gas fields which were already in production at the time of the judgment of the District Court? And can Shell indicate what it has invested and expects to invest in the exploration of new oil and gas fields between 2019 and 2030? What percentage is that of Shell's (expected) capex over this period?*

Answer of Milieudefensie et al.:

I refer to the court documents in which Milieudefensie et al. provided insight into Shell's production and investment plans, Shell's oil and gas reserves, as well as Shell's exploration plans based on Rystad data.[90] I will explain a number of plans in further detail. The footnotes contain references to the relevant source in the court documents and exhibits. For the sake of oversight I have included relevant citations from the documents in the footnotes.

It is important to emphasise that Shell's exploration plans do not say much about the expected development by Shell of new oil and gas fields. Shell has a large number of undeveloped projects in its portfolio for which no further exploration is required.[91] This concerns an estimated volume of 10.3 billion barrels of oil equivalent. This is equal to almost 10 times Shell's volume in oil and gas production in 2022.[92] Based on only the current oil and gas assets already in production, Shell still has 14 times the production level of 2022 in its portfolio.[93] If we add the oil and gas fields in construction to this, we come to 17 times the production level of 2022.[94] This means that Shell has a total of 27 times the volume in oil and gas production in 2022 in its portfolio, without further exploration being required.

The USD 1.5 billion in annual investments in exploration in 'new frontiers' is geared to further expanding the portfolio of oil and gas projects.[95]

---

[90] Milieudefensie et al.'s Statement of Defence on Appeal, section 6.2.7, Milieudefensie et al.'s Written Arguments, section 3.3., and in particular para. 121. See also p. 23 of Exhibit MD-573A: "*Shell's projected investment further reveals a concerning lack of alignment with climate objectives. From 2024 through 2030, Shell is on track to invest USD 13.4 billion (real $2024) per year in upstream oil and gas extraction, accumulating up to USD 93.8 billion over seven years, based on Rystad Energy projections. These Rystad projections align closely with Shell's own stated plans to "spend some $13 billion per annum in Integrated Gas and Upstream going forward," and to continue directing the majority of its investment into oil and gas. A significant portion of Shell's upstream investment is projected to go towards developing new oil and gas extraction assets, despite the clear evidence that new fossil fuel supply threatens to push the world beyond 1.5°C of warming*."

[91] Exhibit MD-573A, pp. 15 and 16. See p. 14 for the definition of undeveloped fields, consisting of already discovered oil and gas fields (discovered assets) and undiscovered fields (assets where Shell has an interest in an exploration licence, but has not yet completed the exploration and/or has not yet confirmed a find).

[92] In 2022 the volume of Shell's oil and gas production was 2.86 million barrels of oil equivalent per day (see Exhibit MD-534A, pp. 29 and 30). That is 1.04 billion barrels of oil equivalent per year. In ten years that will add up to 10.4 billion barrels of oil equivalent.

[93] Exhibit MD-573A, pp. 15-16: "*When only considering Shell's developed assets (both producing and under construction), the volume of these assets is still equivalent to more than 17 times Shell's production at the 2022 level. While only producing assets amount to a volume of 14 times Shell's production at the 2022 level. For comparison, the carbon budget for a 50% chance of limiting global warming to 1.5°C would be depleted in five to seven years of worldwide emissions at current rates*."

[94] Ibid.

[95] Milieudefensie et al.'s Written Arguments, para. 105.

Oil Change International determined on the basis of Rystad data that Shell still has over 4.4 billion barrels or oil equivalent in reserves that have not yet been explored.[96] Lastly, it is important that the anticipated end of new frontier exploration in 2025 does not appear to mean that Shell will completely halt exploration. New frontiers are areas where no fossil fuel production at all occurs.[97] In Shell's documents no commitments can be found regarding a complete end to exploration for new fields. Shell also makes it clear that even to maintain its oil production, new oil fields are being developed and exploration is being carried out.[98]

As stated, even without new exploration Shell has fields in production, in construction and already discovered reserves that are 27 times the production volume of oil and gas in 2022. This means that Shell's exploration plans do not say that much about Shell's options and plans for developing new oil and gas fields. The point is that Shell is sitting on enormous quantities of reserves, and that it has no plans to stop the development of these reserves. It therefore does not need any new exploration to develop new fields and emit far too many emissions.

[96] See Exhibit MD-573A, pp. 30-31 for the explanation on the data, including: "*Reserves of oil and gas are a measure of how much can be extracted, given a company's plan for investments and operations. They constitute a subset of the total amount of the oil and gas resources that are geologically in place. Given their inherent uncertainty, oil and gas resources are generally quoted in terms of low estimates, best estimates, and/or high estimates. The three common measures of reserves are 1P (P90, or proven), 2P (P50, or proven+probable), and 3P (P10, or proven+probable+possible). Shell and other companies are required to report proven, or 1P, reserves in their financial statements and annual reports because this provides investors with a highly conservative estimate for evaluating financial risk. Proven reserves represent a likely underestimate of future extraction from projects already producing or under development – by definition, the amount ultimately extracted is very likely to be higher. […] For developed fields, Rystad UCube estimates used in this briefing are similar (though not equivalent to) 2P estimates. For undiscovered fields, they are comparable to best estimates of commercially recoverable, prospective resources (or 'unrisked', i.e., less certain, shale).*"

[97] Exhibit S-288, p. 25: "*A frontier entry refers to Shell participating in new exploration activities (seismic activities, exploratory drilling) outside countries where hydrocarbons have been discovered already (by Shell or other companies).*"

[98] Exhibit S-288, p. 25 (emphasis added): "*To keep production of crude oil and natural gas liquids stable to 2030 at 1.4 million barrels per day, we are focusing exploration on our existing positions and basins where hydrocarbons have been discovered already. This includes our high-margin deep-water positions.*" This shows that for its oil production Shell is focusing on exploration and new fields in existing production areas, not on new frontiers.

10. On p. 49 of the Shell Energy Transition Strategy 2024, Shell states:

"*Acknowledging uncertainty in the pace of change in the energy transition, we have also chosen to retire our 2035 target of a 45% reduction in the NCI*"

What does Shell mean by "*uncertainty in the pace of change in the energy transition*"?

Answer of Milieudefensie et al.:
As far as Milieudefensie et al. is concerned, dropping this ambition is the so-manieth example that Shell does not plan to proactively contribute to the necessary sustainable energy transition and has no credible plan for moving in the direction of net zero in 2050. It is evident that the large-scale investments in oil and gas that Shell intends to make up to and including 2030, mean that the intended 45% reduction in intensity in 2035 is not credible. Shell has now seen itself forced to share this with the public and its shareholders.

Shell's intensity target of 45% in 2035 would mean that in 2035 Shell should have an average carbon intensity of approx. 43.5 gCO2e/MJ.[99] It is clear that virtually all of Shell's energy products far exceed this intensity, as appears from Shell's illustration below. This makes it clear that even Shell's inadequate intensity target will be unachievable if Shell does not significantly reduce its oil and gas sales to shift the balance between its fossil fuel and its sustainable branch to sustainable energy to such extent that the intensity of its energy portfolio will drop substantially. That is precisely what Shell has not done and does not intend to do.[100] This is likely the reason why Shell has dropped this target.

a Oil products and gas-to-liquids (GTL) (carbon intensity in 2022 was 91 gCO_2e/MJ)
b Gas (carbon intensity in 2022 was 65 gCO_2e/MJ)
c Liquefied natural gas (LNG) (carbon intensity in 2022 was 70 gCO_2e/MJ)
d Biofuels (carbon intensity in 2022 was 39 gCO_2e/MJ)
e Power (carbon intensity in 2022 was 58 gCO_2e/MJ)

[99] Exhibit S-163, p. 8. This page shows that Shell's average carbon intensity in 2016 (its reference year) was 79 gCO2e/MJ. An intensity reduction of 45% comes to 43.5 gCO2e/MJ.
[100] Exhibit S-163, p. 14.

11. *Does Shell still have the ambition of allocating approx. 50% of total expenditure on products and services that are low-emission or emission-free (Statement of Appeal, 3.3.11 under c)? If so, can Shell explain how this ambition relates to the expected investments in low-carbon energy solutions of USD 10 to 15 billion, compared to USD 40 billion in the upstream oil and gas activities (cf. p. 20 of the presentation on the Capital Markets Day 2023, Exhibit MD-536A)? And the "(…) about USD 13 billion a year of capex in our integrated Gas and Upstream businesses through the decade (2020-2030)" (cf. p. 22 of the same presentation)?*

Answer of Milieudefensie et al.:

As explained at the session on day 3, according to Milieudefensie et al. that ambition no longer applies. This term of "*Energy Transition Spend*", made up by Shell itself, related to a very broad definition that covered a wide range of expenditure, including the trade in gas and fossil fuel electricity, marketing expenditure for the petrol stations, etc.[101] Aside from the fact that said definition was misleading, Shell let this policy intention go. This also follows from Shell's investment plans, which show that Shell intends to invest USD 13 billion per year in Upstream and Integrated Gas, and USD 3 - 5 billion per year in "low-carbon energy solutions", only a part of which relates to investments in solar and wind energy.

[101] Milieudefensie et al.'s Statement of Defence on Appeal of 18 October 2022 , para. 691.

12. On p. 57 of the Shell Energy Transition Strategy 2024, Shell states in response to the District Court's judgment:

"The Court is also asking Shell to reduce emissions significantly faster than the EU (…)".

Can Shell explain this, in the light of the EU target of a reduction of 55% in 2030?

Answer of Milieudefensie et al.

1. I would like to make a few more remarks about this, partly in connection with this Court's question as to Milieudefensie et al.'s view of Shell's assertion that "EU policy works", because the European Commission asserts that an extension of EU policy in 2040 would lead to an emissions reduction of 88% in 2040.

2. This remark of the European Commission regarding 2040 is in essence irrelevant for two reasons. First, this case is about the action required up to 2030, and the contribution Shell must make to said action. This case is not about the action to be taken up to 2040. Second, this case concerns reducing global emissions of the Shell Group and EU policy does not cover this. The great majority of Shell emissions takes place outside of the EU.[102]

3. It has been established without challenge in this case that globally there is a wide gap between the expected emission reduction in 2030 based on current government policy and the necessary emission reduction in 2030 to retain a chance of limiting the warming to 1.5˚C.[103]

4. In the Written Arguments it was explained on the basis of the last UNEP Emissions Gap Report that continuation of the current policy of states worldwide can lead to a catastrophic warming of 2.7˚C.[104]

5. In the annual COP decisions, the most recent one being COP28, it has been determined with great concern that states are not yet on course in limiting the warming to 1.5˚C.[105] In addition, the implementation of policy is lagging.[106]

---

[102] Exhibit MD-314, Shell's Annual Report 2019, p. 208. Of the total turnover of USD 344.88 billion in 2019, USD 98.45 billion was earned in Europe (including the UK). Without the UK, the number is USD 57.36 billion. This is 16.6% of global turnover. In 2019 Shell earned 83.4% of its turnover outside of Europe.

[103] Judgment, para. 2.4.5.

[104] Milieudefensie et al.'s Written Arguments, paras. 36-37, with reference to Exhibit MD-523, pp. 28 and 31.

[105] Exhibit MD-569B (emphasis added). See para. 5: "*Expresses serious concern that 2023 is set to be the warmest year on record and that impacts from climate change are rapidly accelerating, and emphasizes the need for urgent action and support to keep the 1.5 °C goal within reach and to address the climate crisis in this critical decade*.", para. 6: "*Commits to accelerate action in this critical decade on the basis of the best available science […].*" See also paras. 24 and 25: "24. *Notes with significant concern that, despite progress, global greenhouse gas emissions trajectories are not yet in line with the temperature goal of the Paris Agreement, and that there is a rapidly narrowing window for raising ambition and implementing existing commitments in order to achieve it.*
25. Expresses concern that the carbon budget consistent with achieving the Paris Agreement temperature goal is now small and being rapidly depleted and acknowledges that historical cumulative net carbon dioxide emissions already account for about four fifths of the total carbon budget for a 50 per cent probability of limiting global warming to 1.5 °C."

[106] Exhibit MD-569B, para. 23.

6. Nor can there be any debate about the fact that the carbon budget for limiting the warming to 1.5˚C will be depleted before 2030, if global CO_2 emissions are not immediately, drastically and permanently reduced.[107] In order to reach the 1.5˚C target, it is necessary that the total quantity of emissions – the cumulative emissions – is limited as much as possible on the road to 2030 and then on the road to net zero in 2050.

7. States as a whole are therefore still doing too little to protect citizens worldwide from the catastrophic consequences of climate change. This also applies to the EU in this critical decade. I will explain this.

8. I would first like to point out that the Court of Appeal need not present any opinion at all regarding the suitability of the EU targets or the European climate policy. This policy is not being reviewed here. This applies to the EU target for 2030 and also to the EU target of 2040. The regulations of the EU are not exhaustive, and only contain purely minimum targets.[108] Nor do the EU climate regulations stand in the way of applying the law relating to unlawful acts and it does not in any way have an indemnifying effect.

9. It is not a matter of discussion between the parties that a global reduction of at least 45% in 2030 relative to 2010 is necessary to retain a 50% chance of limiting the warming to 1.5˚C.[109]

10. The European reduction target for 2030 is a reduction of 55% relative to 1990. We explained in the Statement of Defence on Appeal that this comes down to 47% relative to 2010.[110] This is not disputed by Shell. This means that Europe in essence is doing nothing other than adhering to the global average. On the basis of the CBDR principle it is consequently evident that the EU is dropping the ball in this critical decade.

11. In the Statement of Defence on Appeal we have also shown that the global task has in the meantime increased. Cumulative emissions have increased. With reference to AR6 it has been shown that the global action required now comes to a reduction of 48% relative to 2019.[111]

---

[107] Exhibit MD-569B, para. 25. Milieudefensie et al.'s Written Arguments, para. 35 with reference to Exhibit MD-518, para. 2312 and 2316 (Figure 7). See also Exhibit MD-523, p. 27: "*Until global CO2 emissions reach net-zero levels, the carbon budget will continue to be depleted with each passing year. IPCC AR6 reported remaining carbon budgets of 500 GtCO2 for a 50 per cent chance of limiting global warming to 1.5°C from 2020 onward […]. A recent update that considers further warming until 2022 shows a reduction of these budgets to 250 GtCO2 from 2023 onward for a 50 per cent chance of limiting warming to 1.5°C […].*"

[108] See also Statement of Defence on Appeal, paras. 967 to 969. See also Dutch Supreme Court, 19 December 2019, ECLI:NL:HR:2019:2006, para. 7.3.3. See also Opinion of A-G Wissink and P-G Langemeijer for *Urgenda*, ECLI:NL:PHR:2019:887, paras. 4.105/4.106. See also Exhibit MD-570B (Belgian climate case), para. 161: "*The fact that there is a binding framework at European Union level is not a reason for the State of Belgium and the Regions to hide behind the provisions laid down therein: this concerns minimum requirements and in theory it cannot be excluded that the ECHR imposed more ambitious reductions of greenhouse gases. It is therefore not correct to assert that the mere fact that the State of Belgium is performing the obligations that the European Union imposed on it, leads to the conclusion that there is compliance with Articles 2 and 8 ECHR.*"

[109] Statement of Defence on Appeal, para. 3.

[110] Statement of Defence on Appeal, para. 973.

[111] Statement of Defence on Appeal, para. 512.

12. If we compare the European reduction target of 55% relative to 1990, this entails that the EU will reduce emissions by 37% relative to 2019.[112] The reduction target of the EU is thus far below the global average.

13. It is furthermore important to realise that the EU target for 2030 is not based on a fair share of the global action required. The 55% target is a political compromise.[113]

14. In 2019 the European Commission set the target of achieving climate neutrality in 2050. At that time the EU had a reduction target of 40% for 2030. The determination of the European Commission was that in order to achieve the new target of 2050, the target for 2030 had to be increased.[114]

15. The European Commission therefore did not inventory whether the interim target for 2030 is a fair share of the global action required and did not assess whether a greater reduction than 55% was possible.

16. We are not aware of any scientific analysis which shows that the EU is contributing its fair share with the current 55% target. Shell did not make any statements in this respect. It only referred to the European Commission, that states that 55% is enough, but that is the same as the statement of the Dutch government that the target of 20% in 2020 was fine.

17. There are a number of authoritative sources that substantiate that the EU's 55% target is not sufficient. I will mention a few:
    - I just referred to the analysis of the European Central Bank, that calculates that the emissions in the EU must fall by 67% to remain within a 1.5°C pathway, whereby the use of oil and gas in 2030 is halved;[115]
    - Professor Rogelj, in the capacity of expert, mapped out in the Belgian climate case that the EU, even under the principle of grandfathering, would come to an emission reduction of 62% relative to 1990.[116] This is despite the fact that grandfathering is not a fair share approach, because it is based on the principle that every actor is allocated a part of the carbon budget on the basis of their current share in global emissions. This means that big emitters are allocated a bigger part of the carbon budget;[117]

---

[112] https://unfccc.int/documents/461931 European Union. 2022 National Inventory Report (NIR) 27 May 2022, Table ES.6, on the basis of which the calculation was made.

[113] Statement of Defence on Appeal, para. 973(i).

[114] Exhibit S-87, p. 8. See also Article 2(1) of the European Climate Act: "*In order to reach the climate-neutrality objective set out in Article 2(1), the binding Union 2030 climate target shall be a domestic reduction of net greenhouse gas emissions (emissions after deduction of removals) by at least 55 % compared to 1990 levels by 2030.*"

[115] Exhibit MD-531B, pp. 6-7 ("*Based on the scenarios calibrated for this exercise, to achieve the temperature targets of the Paris Agreement by the end of this century, EU-wide GHG emissions would need to be drastically reduced by cutting current fossil fuel consumption by half until 2030.*"), p. 24 (Chart 5, which shows that the fast (1.5°C) scenario requires a 67% emissions reduction in 2030 in the EU relative to 1990. See also p. 25 (Chart 6 shows that both oil and gas use has halved).

[116] Exhibit MD-571E, p. 11. See also Exhibit MD-570B, para. 284 with reference to paras. 198-202.

[117] Exhibit MD-570B, para. 284 in conjunction with paras. 189 , 192 and 199.

- The rapporteur for the environment of the European Parliament, with reference to the Emissions Gap Report, referred to the need for the EU to reduce emissions by at least 68% in 2030, even without taking account of equity;[118]
- Research agency Climate Analytics assesses that the EU should make a necessary reduction contribution of 64-77% in 2030, relative to 1990;[119]
- Lastly, CDP and SBTi have established that the EU's contribution should encompass a reduction of 60-65%.[120]

18. In short, many leads can be found establishing that the EU's 55% target is not in line with the 1.5°C target. In addition, the EU member states are not on course to achieve the 55% target.[121] In the light of all of this it is difficult to claim that EU policy "works".

19. For all of the reasons stated above, it is neither material nor relevant to this case what the target for 2040 is. The issue is that global CO_2 emissions must be reduced with the greatest possible urgency to limit the total quantity of emissions in this critical decade as much as possible.

20. But as long as we are talking about 2040, the following is important to know.
    - Setting a target is one thing, but the target must be met and there is no guarantee this will happen;
    - In addition, the issue is an 'extension of current policies', i.e. the situation in which the EU succeeds in extending the relevant legislative packages.[122] This is with the exception of, inter alia, EU ETS, which will remain in force. It is not a given that this will happen, all those packages are in turn subject to lobbying and influence from the industry;
    - As an example: Shell took advantage of the announced establishing of the EU target for 2040 to indicate its own vision that a 78% reduction, i.e. 12% to 17% lower than the scientific advice, would be very ambitious.[123]

21. Once again, this does not justify the conclusion that EU policy "works".

22. Shell refers in this respect to the Bosphorus presumption. Firstly, the *Bosphorus presumption* only applies when an EU member state does not have any discretionary power or assessment margin on the basis of Union law.[124]

---

[118] Milieudefensie et al.'s Statement of Defence on Appeal, para. 973(iv).
[119] Exhibit MD-571D, pp. i and ii.
[120] Exhibit MD-571C, pp. 1 and 3.
[121] Exhibit MD-571A, press release on the report of the European Scientific Advisory Board, entitled 'Towards EU climate neutrality: progress, policy gaps and opportunities', p. 1: "*With only seven years left until 2030, the Advisory Board urgently calls on national governments to enhance and implement their national energy and climate plans to secure EU emission reductions of 55% or more by 2030 compared to 1990 […] One key recommendation is to make EU policies fully consistent with the need to phase out fossil fuels. Whereas the EU has pushed for an ambitious outcome on this topic at the recent COP28, the Advisory Board warns that the EU's own policies are not yet fully aligned with such phase out and risk locking EU's energy infrastructure into emission- intensive fossil fuels.*" See also Exhibit MD-571B, Commission calls on Member States to improve their National Energy and Climate Plans to ensure collective achievement of the EU´s 2030 targets, p. 2.
[122] Exhibit S-266, p. 22.
[123] Exhibit S-178, p. 1.
[124] ECtHR, *Bivolaru and Moldovan v. France* (25 June 2021), Applications nos. 40324/16 and 12623/17, para. 98. See also ECtHR, *Avotins v. Latvia* (23 May 2016), Application no. 17502/07, para. 105.

One of the characteristics of EU legislation in the area of climate change is, however, that it allows member states significant leeway, as is acknowledged by the European Commission in its written remarks in the *Duarte Agostinho* case.[125] This ensues, inter alia, from Article 193 TFEU, on the basis of which an EU member state can take farther-reaching climate protection measures than EU law provides for in this area.

23. Second, the *Bosphorus* assumption is not, as Shell wrongly asserts, "*an established principle that the protection of the fundamental rights under EU law is deemed equivalent to the protection that the ECHR demands*".[126] The ECtHR in fact repeated in its jurisprudence that "*any such conclusion of "equivalent protection" must be open to review in the light of any relevant change in the protection of fundamental rights*".[127] The *Bosphorus* assumption is thus not an 'established principle', but an assumption that must always be reviewed and can be refuted, as the ECtHR indeed did in practice.[128]

24. Last, in the Urgenda case both the Dutch Supreme Court and the Advocate General/Procurator General made short shrift of the argument of the State of the Netherlands that compliance with the EU's reduction goals would be sufficient to perform its human rights obligations under Articles 2 and 8 of the ECHR.[129] The Belgian Court of Appeal came to the same conclusion.[130] If this defence cannot succeed for a state that is required to perform its human rights obligations, it should be clear that this argument certainly cannot be successful for Shell.

[125] Exhibit Shell S-208, para. 21.
[126] Shell's Speaking Notes, day 2 of the session – Part 1 of 4, 3 April 2024, para. 6.4.8.
[127] ECtHR, *Bivolaru and Moldovan v. France* (25 June 2021), Application nos. 40324/16 and 12623/17, para. 97. See also ECtHR, *Avotins v. Latvia* (23 May 2016), Application no. 17502/07, para. 101 and considerations of earlier jurisprudence cited there.
[128] ECtHR, *Bivolaru and Moldovan v. France* (25 June 2021), Application nos. 40324/16 and 12623/17, para. 126.
[129] Dutch Supreme Court, 20 December 2019, ECLI:NL:HR:2019:2006, para. 7.3.3. See also the opinion with this judgment of 13 September 2019, ECLI:NL:PHR:2019:887, paras. 4105 et seq.
[130] Exhibit MD-570B, para. 161.

13. *In part I, Introduction to the notes on oral arguments at first instance, Shell indicated, with reference to the annual report 2019 in percentages from what countries its oil and gas production came. What is this division now? Does Shell expect large shifts in that division in the period to 2030? Can Shell also indicate in percentages what the division of its sales of oil and gas are over the regions mentioned in para. 36 of Milieudefensie et al.' s notes on oral arguments, part 3 (models and their limitations), p. 6? Does Shell expect large shifts in that division in the period to 2030?*

[Milieudefensie et al.'s response will follow later]

14. *Milieudefensie et al. asserted in para. 35 of the notes on oral arguments "Effectiveness of the reduction obligation" that in 2022 Shell earned approx. USD 86 per traded barrel of oil and gas. Is that correct, in view of the fact that the average oil price in 2022 was USD 96? If this is not correct, can Shell indicate what the average margin per traded barrel of oil and gas is? And what can be attributed of that amount to the actual trade and how much to related services like transport and storage?*

Answer of Milieudefensie et al.:

Milieudefensie et al. has had contact with Erickson regarding this question. The following information arose from this contact.

The USD 86 per traded barrel of oil mentioned by Erickson is based on the Shell 2022 annual report. This number follows from Shell's revenue in the Upstream segment of its business, divided by the quantity of oil and gas sold within this segment. Shell states the following regarding the Upstream segment in its annual report under the heading "*Trading and supply*": "*Shell markets and trades crude oil from most of its Upstream operations*".[131] This makes it clear that Shell's Trading business is active within the Upstream segment.

Erickson divided the revenue earned within the Upstream segment (USD 60.637 million) in 2022 by the "*production available for sale*" during this year (692 million barrels of oil equivalent). This results in a revenue per barrel of USD 87.6.[132] As explained, this is substantially more than 80% of the 2022 oil and gas prices.

Even if one does not look at the revenue of the Upstream segment, but at the profit in this segment, or at the income after deduction of costs (USD 16.222 million), divided by the traded barrels, this comes to over USD 23 per barrel.[133] This too concerns almost a quarter of the oil and gas prices in 2022 and is thus a significantly higher income per barrel than reported by Enron.[134]

Erickson indicated in this respect that Shell does not report on the precise quantities of oil and gas traded by its Trading business, how much of this comes from its own production and how much from the production of others, and what revenue and margin this generates. Druce says nothing about this either. Druce thus made a general assertion that Enron is supposedly comparable to Shell, without specifying with what trading volumes and activities he is making the comparison. This alone is sufficient reason not to follow the comparison with Enron that Druce made. The fact remains that Enron's income per traded barrel appears to be substantially lower than Shell's income per traded barrel, which is an indication that Shell provides more value to the oil market than Enron.

Even based on the detailed description of Shell's integrated trading activities, as the biggest trader in the world, with activities in oil and gas extraction, refining, transport, storage, and distribution to business and private buyers, it remains clear that Shell's Trading branch is incomparible with Enron's trading activities.[135] Because of the scope of Shell's activities it cannot be said that this would not have any effect if Shell were to phase out these activities. As already explained during the oral arguments 5 on session day 3, this conclusion of Druce is illogical, not properly substantiated and is also contrary to how Shell views matters itself. Shell itself in fact believes that its current

[131] Exhibit MD-534A, p. 51.
[132] Exhibit MD-534A, p. 45. The USD 86 mentioned in the expert letter is a typo.
[133] Exhibit MD-534A, p. 45.
[134] Exhibit MD-561, p. 10.
[135] See Milieudefensie et al.'s Notes on Oral Arguments, session day 3 regarding the effectiveness of the reduction obligation, paras. 16-37.

scale size as the biggest oil and gas trader in the world results in price advantages and other advantages for its clients.

One final remark about the related services that Shell provides. Shell is a vertically integrated systemic player. Its Trading business has the central and integral function of trading the oil and gas produced by Shell and others globally. As soon as that trade is reduced, the related services will also be reduced. If Shell can no longer procure oil itself from an independent oil producer, it will no longer finance that oil production, it will not ship that oil, nor provide any other logistics services to this producer.

15. *On what does Milieudefensie et al. base its assertion that the supply elasticities cited by Druce in his report are in the same order of magnitude as the demand elasticity he mentioned? The Court of Appeal does not read this in the Druce report, and has the impression that, based on the current targets of oil- and gas-producing countries, in the coming years there will be a considerable (over)supply of oil and gas, and with that rather a high supply elasticity.*

Answer:

Milieudefensie et al. bases its assertion on the supply elasticities on pages 5 and 6 of the Erickson and Green expert letter, in which they state that *"Druce's own research shows estimates of the elasticities of supply that are similarly inelastic (in the range of 0. 16) to his average estimate of the elasticity of demand"*.[136] Erickson and Green refers in this respect to the supply elasticities that Druce cites in Table A.19 of the Druce report.[137]

Milieudefensie et al. had contact with Erickson in connection with the question asked by the Court of Appeal. In this contact, Erickson explained in further detail that the figures that Druce presents for the supply elasticity in Table A.19, to a great extent overlap with his estimate of the demand elasticity.

To be more specific: of the nine supply elasticities that Druce mentions in Table A.19,[138] four are smaller than the demand elasticity estimated by Druce.[139] Five of the mentioned supply elasticities are greater.[140] Erickson points out in this respect that the study that reviewed the most recent state of the oil market, the period of 2000-2014, in fact shows lower supply elasticities[141] than the demand elasticity mentioned by Druce. According to Erickson this points out that the elasticities of supply and demand are comparable, as stated in this expert letter, in which he also referred to other economists who come to similar conclusions.[142]

It should be noted that none of the supply elasticities mentioned by Druce lead to the conclusion that a supply reduction will not have an effect and that there will be a perfect substitution. This is relatively easy to calculate on the basis of the specified offer elasticities and Druce's estimate of the demand elasticity. If requested, I can make the calculations relating to specific supply elasticities for you right here or later on today.

The Court of Appeal also indicated that the elasticity of the supply might be higher in the future, because there is a considerable oversupply of oil and gas.

---

[136] Exhibit MD-561, pp. 5 and 6.
[137] Exhibit S-122, p. 121.
[138] Erickson is looking at the global, long-term supply elasticities, to compare them with the long-term demand capacity of -0.16 mentioned by Druce (para. 260, p. 109 of Exhibit S-122). Erickson does not discuss the negative elasticities in Table A.19, because a negative supply elasticity is not logical. In such case a price increase would lead to a decrease in the supply.
[139] Namely, the supply elasticities as reported by Arezki et al. (2017) of 0.09 to 0.13, based on the period from 2000-2014, by Askari and Krichene (2010) of 0.04, based on the period of 1986 and 2001, by Krichene (2002) of 0.10, based on the period 1973-1999, and by Taghizadeh and Yoshino (2014) of 0.03, based on the period of 1960-2011.
[140] Namely, the supply elasticities reported by Askari and Krichene (2010) of 0.66, based on the period 1970-1986, by Krichene (2002) of 0.25, based on the period 1918-1999, by Krichene (2002) of 1.10, based on the period 1918-1973, and the two supply elasticities of 0.99, for the period 1965-1983, and 0.39, for the period 1984-2012, reported by Weijermars and Sun.
[141] Namely, the supply elasticities as reported by Arezki et al. (2017) of 0,09 to 0.13, based on the period 2000-2014.
[142] Exhibit MD-561, p. 6, footnote 37.

Erickson states in this respect that it is very difficult to predict the future elasticities and that he is not aware of an institution or scientist willing to do so with any degree of certainty. This depends, of course, on how the transition develops. Erickson points out in this respect that the IEA assumes over-investments in oil and gas in comparison to the NZE scenario. The IEA has precisely indicated in this respect that waiting until demand has changed is not an option and that it is a misconception that the transition must be led by a change in demand: *"When the energy world changes, so will we" is not an adequate response to the immense challenges at hand. […] In practice, no one committed to change should wait for someone else to move first."*[143] The over-investments should thus in fact be a reason to reduce the supply of oil and gas.

I would also like to point out that it is also possible that the demand elasticity will continue to develop as a result of the transition and that it will become less inelastic (i.e. more elastic). After all, if due to the rise of renewable energy, electric cars and other sustainable technologies, consumers have more choices, it will become easier to move away from oil and gas. At COP28 the global community decided to turn down this road. This makes it quite feasible that, as the transition progresses, the demand for oil and gas will become less inelastic. An increasing supply elasticity would then be compensated by a demand elasticity that is also increasing. As explained by Erickson and Green, a supply and demand elasticity that are in the same order of magnitude, leads to an effect of approx. 0.5.

If the supply elasticity were to increase and were to be greater than demand elasticity, according to Erickson this would be the result of a demand limitation closer to the lower threshold of the bandwidth indicated by UNEP of 0.2 to 0.6. But whether this will happen is uncertain and an effect of 0.2 is still a large effect, according to Erickson.

[143] Exhibit MD-528, p. 16. See also p. 40. The same point was also already made in the expert report of Erickson et al. (Exhibit MD-469, p. 8).

16. *Can Milieudefensie et al. explain how, based on the most recent IEA NZE scenario, it calculated the reduction percentages in 2030 relative to 2019 of 36.2% for oil and 30.1% for gas, and how this calculation can be reconciled with the figures for fossil fuel supply mentioned on p. 105 of this report?*

Answer of Milieudefensie et al.

Milieudefensie et al. has calculated the CO_2 emissions reductions connected with oil and gas in the NZE scenario based on Table A.4 '*World CO_2 emissions*' on page 198 of the updated NZE scenario of 2023.[144] Based on this table it can be established that the emissions connected with oil would fall by 28% in 2030[145] and that the CO_2 emissions from gas would fall by 23% in 2030,[146] both relative to the reference year 2022.[147]

Because Milieudefensie et al.'s claim is based on the reference year 2019, it is necessary to calculate these percentages back from 2022 to 2019. Milieudefensie et al. did this in its oral arguments on the third session day by assuming the annual percentage change in the NZE scenario (and the other scenarios mentioned). In the NZE scenario the emissions from oil fall annually by 4% to 2030. The emissions from gas fall annually by 3.2% to 2030. Milieudefensie et al. included the annual reduction percentages for all reduction pathways discussed in the table set out on page 9 of the oral arguments of session day 3, part 4. For the NZE scenario, the Court of Appeal can find the annual reduction percentages of 4% and 3.2% in the updated NZE scenario of 2023, in the already mentioned Table A.4, in the column '*CAAGR (%) 2022 to 2030*'.[148]

The annual percentages of 4% and 3.2% can then be applied to the period from 2019 to 2030. In this manner the annual reduction effort that must be delivered according to the NZE scenario, must be extrapolated to the period from 2019 to 2030. Specifically for the NZE scenario this leads to reduction percentages of 36.2% for oil[149] and 30.1% for gas.[150] The precise calculation is included in the footnotes.

By taking the annual percentage change in the NZE scenario as the starting point and on the basis thereof calculating the reduction efforts to be provided back to 2019, account is taken with what according to this scenario is a feasible annual reduction pace, but Shell is not 'rewarded' by taking emission reductions that only start in 2023 as the starting point, while it had long been clear to Shell what was to happen. This method of calculating back in time consequently entails that Shell cannot (continue) to claim that there are always new scenarios with, logically, ever lower targets for 2030, because 2030 is getting closer every day and the fossil fuel infrastructure has in the meantime not been reduced.

---

[144] Exhibit MD-525, p. 198.

[145] Exhibit MD-525, p. 198. It ensues from Table A.4 that the emissions from oil in 2022 were 10,963 MtCO2 and that according to the NZE scenario, these should be 7,910 MtCO2 in 2030. This concerns a difference of (rounded) 28%.

[146] Exhibit MD-525, p. 198. It ensues from Table A.4 that the emissions from oil in 2022 were 7,499 MtCO2 and that according to the NZE scenario, these should be 5,795 MtCO2 in 2030. This concerns a difference of (rounded) 23%.

[147] See in this respect also the table on pp. 8 and 9 of Milieudefensie et al.'s Notes on Oral Arguments of session day 3, part 4.

[148] Exhibit MD-525, p. 198.

[149] If the reductions of 4% per year must start in 2020, then at the end of 2030 a reduction percentage of 36.2% must have been achieved in the oil sector relative to the reference year 2019. With a 4% reduction per year the growth factor is 0.96 per year, and that to the 11th power (rounded) is 0.638, i.e. a reduction of 36.2%.

[150] If the reductions of 3.2% per year must start in 2020, then at the end of 2030 a reduction percentage of 30.1% must have been achieved in the gas sector relative to the reference year 2019. With a 3.2% reduction per year the growth factor is 0.968 per year, and that to the 11th power (rounded) is 0.699, i.e. a reduction of 30.1%.

Shell's expert, Professor Hawkes applies a different method for calculating back in time. He has opted to calculate the reduction percentages of the IEA NZE scenario back to 2019 by simply comparing the emissions for oil and gas in 2030 according to this scenario to the oil and gas emissions in 2019.[151] This is neither a correct nor equitable approach. As already explained, the last NZE scenario is based on emission reductions as of 2023. In the years 2019 to 2022 the world stood still and global emissions in fact increased slightly. Professor Hawkes' calculation method favours Shell. Specifically in relation to the reductions in gas, Professor Hawkes' approach in fact leads to a lower reduction task for the period between 2019 and 2030 than is assumed by the NZE scenario for the period between 2022 and 2030,[152] even though solving the climate problem has only become more urgent. It is evident that this is an inequitable and indefensible approach.

The Court asked as to the figures for fossil fuel supply on page 105 of the 2023 NZE report. The following figures are concerned:

Milestones	2022	2030	2035	2050
Fossil fuel supply (EJ)	**511**	**362**	**237**	**88**
Oil	189	148	110	42
Natural gas	144	118	77	32
Coal	179	95	50	15

These figures are virtually that same as the figures from Table A.1 '*World Energy Supply*' on page 194.[153] This concerns the figures for the supply, i.e. the production, of fossil fuels.

However, Milieudefensie et al. is not basing its position on these figures, but on the figures for CO_2 emissions from fossil fuels in Table A.4. Milieudefensie et al.'s claim is based on a CO_2 reduction and not on a production reduction. Because of its claim Milieudefensie et al. is basing its position on the CO_2 emission figures, particularly because the production figures also encompass the production of fossil fuels for non-energy use. This part of the production of fossil fuels is not used as fuel (energy use), but is used as a raw material for, e.g., plastics, which cause far fewer CO_2 emissions. Table A.1 makes this clear and also states for oil the share that is used for 'non-energy use', i.e. use as a raw material.[154] Because the part of the production of oil and gas that is intended for non-energy use as a raw material does not have to decrease as quickly or can, indeed, grow, the production figures show a less rapid decrease between 2022 and 2030 than the CO_2 emissions for oil and gas in this period.[155] Milieudefensie et al. already explained this in greater detail in its Defence Brief of 19 December 2023.[156]

---

[151] Exhibit S-123, p. 20.

[152] Exhibit S-123, p. 20, Table 2. This is a lower reduction task of 20% per 2019 compared to the reduction from the NZE scenario of 23% per 2022. Milieudefensie et al. points out in this respect that the CO_2 emissions of 2019 mentioned by Professor Hawkes do not appear to fully correspond with Table A.4 of the NZE scenario of 2021 (Exhibit MD-362, p. 199). Professor Hawkes presents CO_2 emissions for oil that are too low.

[153] Only the figure for oil in 2022 deviates, whereby page 105 speaks of 189 EJ, while Table A.1 speaks of 187 EJ. It is not clear what is the cause of this (very slight) difference, as the other figures can be found (note: for gas, the figures for unabated natural gas and natural gas with ccs must be added together for 2030 to make the comparison).

[154] Exhibit MD-525, p. 194. The IEA does not make such a sub-division for gas.

[155] Between 2022 and 2030 the decrease of the oil production concerned is 22% and the decrease of gas production is 18%. This in comparison to, as explained, a decline of the CO_2 emissions from oil of 28% and from gas of 23%.

[156] Milieudefensie et al.'s Defence Brief of 19 December 2023, paras. 52 and 53.

In view of this, for this case the CO_2 emission figures must be taken as the basis and not the production figures. Shell acknowledges this too and itself refers to the CO_2 emission figures of the NZE scenario.[157] In addition, in its carbon accounting Shell only includes the sale of energy products and not the sale of non-energy products.[158] In order to make a good comparison between the reduction order and the emissions to be reduced by Shell, the CO_2 emissions figures must therefore be taken as the starting point.[159]

Lastly, Milieudefensie et al. points out that the calculation method just described for 2019 and the reduction percentages of 36.2% for oil and 30.1% for gas ensuing therefrom, do not sufficiently comply with the precautionary principle and the principle of intergenerational fairness. On day 3, Milieudefensie et al. explained that the NZE scenario kicks a great part of the reduction task into the long grass[160] and as a result, the reductions in oil and gas remain relatively low to 2030, while these reductions will then increase very rapidly to 2035. The figures from Table A.4 for the period between 2022 and 2050 confirm this picture and show that after 2035 the reduction pace remains very high.[161]

Milieudefensie et al. also showed on session day 3 that the relatively low reductions in the short term are caused by, inter alia, the NZE scenario taking account of the most recent investments in new oil and gas fields and the resulting lock-in. This keeps moving the goalposts.[162] Milieudefensie et al. argued in this respect, with reference to the Neubauer case that the precautionary principle and the principle of intergenerational fairness demand a fairer distribution of the reduction task both before 2030 and after 2030.[163]

These legal principles demand that the reduction of emissions is embarked upon as quickly and as deeply as possible, instead of slow reductions to protect recent fossil fuel investments in new oil and gas fields.

---

[157] See, e.g., the Statement of Appeal, para. 1.4.2(c)(iii), para. 2.3.9(b), para. 5.3.7 and para. 10.2.7(b). Shell also keeps citing the CO_2 emissions figures of a reduction of 35% in oil and 18% in gas from the 2021 NZE scenario.

[158] Exhibit S-160, p. 9: "*Non-energy products such as chemicals, lubricants and bitumen are outside the scope of the NCF methodology because the end-use of these products is generally not to be consumed as fuel.*" and pp. 28-29: "*Only the sales of energy products are included i.e. gasoline, kerosene, gas/diesel oils, fuel oil, and LPG. Other products such as naphtha, bitumen, lubricants, and sulphur are treated either as intermediates/feedstocks or non-energy products and are not included*."

[159] For the reduction pathways of IPCC IAM scenarios mentioned during the session day 3, oral arguments 4, they are all based on production figures, because these scenarios do not report any CO_2 emissions figures linked to fossil fuels. Consequently these figures are expected to all be underestimations of the necessary CO_2 reductions.

[160] See Milieudefensie et al.'s Oral Arguments of session day 3, part 4, paras. 59-73. See also Milieudefensie et al.'s Oral Arguments of session day 3, part 3, paras. 106-111.

[161] Table A.4 confirms that after 2030 the reduction pace is significantly higher than before 2030. The column 'CAAGR (%) 2022 to 2050' shows that the average annual reduction percentage between 2022 and 2050 lies at 8.8% for oil and at 10% for gas. The average annual reductions in the period between 2022 to 2050 are thus more than two times as large for oil (8.8% compared to 4%) and more than three times as fast for gas (10% compared to 3.2%), in comparison to the reductions in the period between 2022 and 2030.

[162] See Milieudefensie et al.'s Oral Arguments of session day 3, part 4, paras. 59-73. See also Milieudefensie et al.'s Oral Arguments of session day 3, part 3, paras. 106-111.

[163] See Milieudefensie et al.'s Oral Arguments of session day 3, part 4, paras. 69-71.

As explained on session day 3, such a fair distribution of the reduction task over the years leads to a reduction of 45.7%[164] for oil and 50%[165] for gas in 2030, relative to 2019. This calculation is made in the same manner as has just been described, but then on the basis of the average annual reduction percentage of the NZE scenario between 2022 and 2035.[166] A reduction of 45% is therefore certainly no excessive demand for Shell. This applies all the more now that, according to the NZE scenario, it has become clear that in a timespan of approximately one decade, a global reduction of 45% can be achieved within the broad oil and gas sector. [167]

[164] If the reductions of 5.4% per year must start in 2020, then at the end of 2030 a reduction percentage of 45.7% must have been achieved in the oil sector relative to the reference year 2019. With a 5.4% reduction per year the growth factor is 0.946 per year, and that to the 11th power (rounded) is 0.543, i.e. a reduction of 45.7%.

[165] If the reductions of 6.1% per year must start in 2020, then at the end of 2030 a reduction percentage of 50% must have been achieved in the gas sector relative to the reference year 2019. With a 6.1% reduction per year the growth factor is 0.939 per year, and that to the 11th power (rounded) is 0.5, i.e. a reduction of 50%.

[166] The annual reduction percentage in the IEA NZE scenario between 2022 and 2035 is an annual reduction of 5,4% for oil and an annual reduction of 6.1% for gas. This is thus still significantly lower than the average annual reduction in the NZE scenario between 2022 and 2050, of 8.8% for oil and 10% for gas.

[167] See Milieudefensie et al.'s Oral Arguments of session day 3, part 4, paras. 70-73.