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| **District Court of The Hague** |
| Case number:Session: | C/09/571932 2019/37915 December 2020 | **NOTES ON ORAL ARGUMENTS 8 Merits of the claim – part 3** |
|  |  | in the matter of1. **Vereniging Milieudefensie** both on its own behalf, and in its capacity of representative ad litem and representative of the co-claimants who are listed on **Annex A**, which annex is attached to the summons and forms part thereof, having its registered office in Amsterdam, the Netherlands;
2. **Stichting Greenpeace Nederland**,

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

ClaimantsHereinafter also called: “Milieudefensie et al.” |
|  |  | Counsel: Mr. R.H.J. Cox Mr. D.M.J. Dexters Mr. A.J.M. van Diem Mr. S.J. Keuls |
| Versus |
| **Royal Dutch Shell plc**Having its registered office in The Hague, the NetherlandsDefendantCounsel: Mr. D. Horeman Mr. J. de Bie Leuveling Tjeenk Mr. N.H. van den Biggelaar  |

Your Honours,

**1.d The necessity for achieving the CO2 reduction targets in 2030**

1. Now that it has become all the more clear that RDS will not achieve any absolute emission reductions with the Shell group due to its concern policy, let alone that there would be the absolute emission reductions which are necessary, I would like to briefly explain why it is so essential that RDS immediately start with far-reaching absolute CO2 reductions and why it is so important that very drastic CO2 reductions must be achieved by 2030. Reaching the net-zero point is not enough, the reduction path that is followed to get to the net-zero point is even more important.
2. This has to do with the maximum carbon budget that is still available before the CO2 accumulating in the atmosphere reaches a concentration level of 430 ppm that will lead to a warming up of 1.5˚C or more. At the time that this maximum carbon budget has run out, the world must have reached the net-zero point. As soon as the budget has run out, humans may not add, on a net basis, any more CO2 emissions to the atmosphere. That is why the net-zero point must be achieved in time within the specified maximum carbon budget.
3. At present, annual global CO2 emissions are 40 Gt CO2 per year.[[1]](#footnote-1) Every year that the CO2 emissions remain at this level, 40 Gt is taken off the carbon budget. If global CO2 emissions increase next year, more than 40 Gt will be taken from the budget that year and the zero point will be reached that much more quickly. If the emissions decrease next year, then less than 40 Gt CO2 will be taken from the budget and the zero point will be reached later. That is the principle.
4. Against the background of this principle it is good to know that for a 50% probability of a warming up of 1.5˚C, as of 2017, according to the best estimate, a carbon budget was available of 580 Gt CO2, according to the IPCC.[[2]](#footnote-2) In the meantime three years have passed, thus of those 580 Gt CO2, 120 Gt CO2 have already been used. The budget now only has 460 Gt CO2.
5. In the event of unchanged annual CO2 emissions of 40 Gt CO2, that budget of 460 Gt will have been used up within 12 years. If the CO2 emissions continue increasing annually, this budget will of course be used up more quickly than in 12 years. However, if the CO2 emissions start decreasing every year as of now, we will have more than 12 years to make the world completely climate neutral.
6. If we want to be able to hold out until 2050 with this very limited budget of 460 Gt, giving us 30 years rather than 12 years to make the world climate neutral, then in 2030 the annual CO2 emissions must have dropped in absolute scope by a minimum of 45% compared to the emissions level of 2010. This ensues from the IPCC report on 1.5˚C from 2018, which was extensively discussed in the summons.[[3]](#footnote-3) Every year that no reduction takes place, means that the reduction will have to be even more than 45% in 2030. In essence, this reduction percentage for 2030 should be higher now, as there have been no reductions in emissions in the three years since 2017.
7. The Carbon Tracker report, submitted as Exhibit 282, provides an example to visualise the above (p. 7). This example makes use of a hypothetical carbon budget of 1,000 Gt CO2. At the current emissions level of 40 Gt CO2 per year, a budget of 1,000 Gt will be depleted in 25 years. Against that background, the following figures of the Carbon Tracker report show what the consequence are of various reduction routes reaching the same net-zero point in 2050. These figures demonstrate why it is so important to achieve the biggest reductions in the coming 10 years. I will guide the District Court through these figures.



1. These two figures (Figures 2a and 2b from the Carbon Tracker report) must be seen in conjunction with each other. The top figure represents the annual emissions for three scenarios. The bottom figure shows what will happen to the carbon budget in each of those scenarios.
2. In the top figure, the dark-green line represents the first emissions scenario. In this green emissions scenario, reductions start immediately and the first 10 years are also used to substantially reduce CO2 emissions. The zero point will be reached in 2050 and what is cumulatively emitted in CO2 in the period 2020-2050, is the surface area under the green line (the surface area under the green line in the top figure, up to the x-axis and the y-axis). The cumulative emissions in this scenario fit within the maximum carbon budget of 1,000 Gt CO2 used in this example. That this carbon budget is not overrun can be read in the bottom figure, where it can be seen that the dark-green line never falls below the zero point. In this scenario, the zero point will thus be reached in 2050 in time within the given carbon budget.
3. The second scenario is represented with the light-blue line in the top figure. In the light-blue scenario, the reduction will be far less in the first years and will only be accelerated later. This scenario also comes to the net-zero point in 2050, but according to the figure below, the carbon budget will have been exhausted shortly after 2040. In this scenario on the way to the net-zero point in 2050, there will consequently cumulatively be more emissions emitted than allowed under the carbon budget. The scope of the excess CO2 emissions which are emitted in this scenario compared to the green scenario, can be seen in the surface area in the top figure between the green and the blue line over the period 2020-2050. The consequence of this is that the light-blue scenario will result in a greater warming up than the green scenario and that this extra warming up could only be reversed if after 2050 there were negative CO2 emissions, that is why the light-blue line after 2050 continues under the horizontal zero axis. The excess that ends up in the atmosphere prior to 2050, would have to be removed from the atmosphere after 2050.
4. Milieudefensie et al. explained in the summons with regard to those negative emissions that this concerns unproven technology, which the IPCC and UNEP also warn about, as well as, inter alia, the European Academies Science Advisory Council, that has written a specific report about this.[[4]](#footnote-4) The report of the European Council has been submitted into the proceedings as Exhibit 304. The summons also explains that and why in the Urgenda case too it was held that negative emissions technologies may not be used when determining the emissions reduction path.[[5]](#footnote-5) Milieudefensie et al. refers in particular to the citations used by the Court of Appeal in the report of the aforementioned European Council (para. 49 of the judgment) which Milieudefensie et al. takes over here and which thus must be deemed repeated and incorporated here. In addition, on the point of the danger of negative emissions reference is made to the opinion of Deputy Attorney General Langemeijer and Advocate General Wissink in their opinion in the Urgenda case.[[6]](#footnote-6)
5. This brings me back to the figures which I have discussed and in particular the red line in those figures which has not yet been discussed. The red line in the top figure shows what will happen with a carbon budget of 1,000 Gt (this is thus a much bigger budget than the actual carbon budget available) if the CO2 emissions continue to rise for the time being and remain above 40 Gt per year up to approx. 2035. According to the bottom figure, the carbon budget will then already have been exhausted around 2035 and the cumulative emissions up to 2050 would be even greater than in the case of the light-blue line and the warming up will thus also have increased far more than in the light-blue scenario. This will occur unless in the future there are achievable, affordable and globally scalable and long-term technologies which can be commissioned which remove enormous quantities of emissions from the air after 2050 and which could be safely stored underground. As stated, this may not be assumed and other physics, biochemical, technological and economic reasons were discussed in the summons as to why, bearing in mind the societal duty of care and the precautionary principle, negative emissions may not be assumed.[[7]](#footnote-7)
6. In its explanation of the above figures, Carbon Tracker refers to the great dangers which are connected with the light-blue scenario and in particular the red scenario. By in these scenarios exceeding the carbon budget and becoming dependent on negative emissions, the temperature goal (temporarily or otherwise) will be overrun with all related dangers of a tipping point in the climate system, according to Carbon Tracker. I quote:

*“Following the red instead of the blue (or green) pathway in Figure 2b also increases the degree of temperature “overshoot” – where global temperatures rise above the target temperature, before subsequent assumed efforts to bring them back by 2100. This may trigger positive feedback loops in the climate system, reducing the benefits of natural sinks, and requiring even greater carbon removal; in practice it may not be possible to undo the temperature overshoot at all.”* [[8]](#footnote-8) (end of quote)

1. Carbon Tracker once again refers particularly to the greater warming up which will be the result of overrunning the carbon budget and the consequences which this can have for the climate system, even – and this is very hypothetical - if a part of that overrun could be undone later this century via negative emissions. The interim warming up which at that point is already too high can at that point already lead to irreversible tipping points in the climate. This point of excessive warming up in the short term and the consequences thereof, is also made by, inter alia, UNEP in the report which has been submitted as Exhibit 211 (pp. xiii and xvi) and this point and the relevant UNEP report have also been discussed by the District Court in the Urgenda case and were deemed relevant (para. 4.30 under 6 and also 2.32).
2. What all of this has made clear is that the reduction path to be chosen and the related interim station to be reached in 2030, will ultimately determine to a great extent how many cumulative emissions will be emitted up to 2050. It has also made clear that it is these cumulative emissions which determine how much the earth will warm up further. The reduction path to be chosen and the related interim station in 2030 furthermore stipulates to a great extent whether the carbon budget will be overrun and, if so, whether consequently the excess warming up which will be the result thereof will have to be reduced later via the unproven technology of negative emissions.
3. For all these reasons it is crucial that at global level the goals for 2030 are achieved and that the emissions gap is closed prior to 2030. This is also the global goal.
4. A comparable explanation on the basis of various similar figures can also be found in the judgment of the District Court in the Urgenda case and in the opinion of the Deputy Attorney Procurator General Langemeijer and Advocate General Wissink in that case, both recommended reading.[[9]](#footnote-9)
5. I will now speak about the emission reduction percentage of 45% which is the primary claim of Milieudefensie et al. for 2030. This emission reduction percentage is necessary for a proportional contribution of RDS towards preventing dangerous climate change.

**2. The primary claim of an emissions reduction percentage of 45% in 2030**

1. Milieudefensie et al.’s primary claim is an absolute emissions reduction on the part of RDS of 45% in 2030. The scientific basis for this necessary emissions reduction was explained in Chapter XI of the summons. RDS has not disputed the substance of this scientific explanation. As has been made clear in the summons and above, a global emissions reduction of 45% by 2030 is necessary to maintain a 50% chance that global warming can be limited to 1.5˚C. A 45% reduction will also achieve an 85% probability that global warming will be limited to 2˚C. Conversely, with a 45% reduction in 2030 there is a 50% probability that the warming up will be higher than 1.5˚C and that there is a 15% probability that the warming up will be even higher than 2˚C.
2. The reason why, despite a 45% reduction in 2030, the warming up might nevertheless be higher than 1.5˚C or even 2˚C, is that to date too many CO2 emissions have already been accumulated in the atmosphere. All of this has to do with the fact that global emissions have continued increasing instead of decreasing in the past decade. That Milieudefensie et al. is reproaching RDS significantly on this point, has already been explained in the opening arguments.
3. That 50% probability of limiting the warming up to 1.5˚C is accompanied by the above-discussed Carbon Budget, that as of 2017 was still 580 Gt, but that, as stated, has already been significantly reduced due to the fact that global CO2 emissions have continued to rise in the past three years.
4. As has already been explained above, according to the Science Based Target Initiative (which is supported by the UN Climate Change Secretariat and which is a joint venture between, inter alia, the UN Global Compact and the CDP project), it is best practice for companies to use at least the same reduction goals for 2030 as those which apply at global level. Because global emissions must have decreased by 45% by 2030, the same percentage applies as best practice for individual companies .
5. That same approach can also be found in the last report of the International Energy Agency from 2020, which Milieudefensie et al. has submitted into the proceedings as Exhibit 336 and which describes the scenario that the IEA refers to as the “Net Zero Emissions by 2050 (NZE2050)” scenario. I will briefly say the following about this.
6. First, the IEA states in this report, fully in line with the argument of Milieudefensie et al. that the coming decade is critical for the net-zero goal in 2050 and that therefore achieving the necessary emission reductions in 2030 is crucial. The IEA has the following to say about this (quote):

*“Decisions over the next decade will play a critical role in determining the pathway to 2050. For this reason, we examine what the NZE2050 would mean for the years through to 2030.”* [[10]](#footnote-10) (end of quote)

1. The IEA goes on to say that the globally applicable percentage of a 45% reduction in 2030 must be applied in the energy industry as well and that therefore the emissions in the energy sector must be reduced by 45% (quote):

*“Total CO2 emissions would need to fall by around 45% from 2010 levels by 2030, meaning that energy sector and industrial process CO2 emissions would need to be around 20.1 Gt [...]”* [[11]](#footnote-11)

1. The IEA thus applies the global emissions reduction scenario of 45% as of 2030 to the energy industry. This application supports the approach of the Science Based Target Initiative, which then applies the same percentage to individual (energy) companies. This translation from global to sectoral and from sectoral to company level is also obvious. It is obvious because there are no agreements within the energy sector about which company or which part of the energy sector will make which contribution to achieving the 45% reduction target for 2030. In that case, it is obvious that every energy company is committed to the same reduction rate of 45%. After all, in the absence of enforceable other agreements, this is the only way to ensure that every company makes its proportional contribution and that the goal can be achieved.
2. The same logic which is applied here was also applied by the District Court, the Court of Appeal and the Netherlands Supreme Court in the Urgenda case. This is an important conclusion, because it shows what legally should be the chosen approach in situations like this. The Urgenda approach is a good example of this because the reduction percentage of at least 25% in 2020 used in that case was a reduction percentage of which it was scientifically determined that this percentage should be achieved jointly by the group of developed countries, the so-called Annex I countries.

The science did not indicate that this percentage had to be achieved by each country individually. The developed countries themselves never asserted that each of them individually would have to be able to achieve this percentage as of 2020. Nevertheless, the District Court, the Court of Appeal and the Netherlands Supreme Court interpreted this as being an individual obligation of the State of the Netherlands. It is clearly set out, inter alia, in the judgment of the Court of Appeal, quote:

*“60. The State has furthermore argued that the emissions reduction percentage of 25-40% in 2020 is intended for the Annex I countries as a whole, and consequently cannot be taken as the basis for the emissions reduction which an individual Annex I country like the Netherlands would have to realise. The State has not, however, substantiated why a lower emissions reduction percentage should apply for the Netherlands than for the Annex I countries as a whole. This is not logical, based on a division pro rata to the GDP per head of the population, which has, inter alia in the Effort Sharing Decision of the EU, been taken as the basic principle in the division of the emissions reduction obligation of the EU over the Member States [...] It may be assumed that the GDP per head of the population of the Netherlands is among the highest of the Annex I countries, and it is in any event above the average of those countries [...] It can therefore be assumed that what applies to the Annex I countries as a whole, should also at least apply to the Netherlands.”* [[12]](#footnote-12) (the Court of Appeal presented the underlined words in italics)

1. The reasoning of the Court of Appeal is *de facto* that the Netherlands is one of the richest countries, has a relatively large number of emissions per head of the population and consequently has a more than average responsibility. The Netherlands should at least adhere to the emissions reduction level that applies to the group of developed countries as a whole.
2. This reasoning of the Court of Appeal (which was supported by Langemeijer and Wissink)[[13]](#footnote-13) lends itself very well for application in this case against RDS, because RDS is one of the biggest and richest CO2 polluters in the world, RDS, both for the past and for the future, is responsible for a very large worldwide CO2 pollution and RDS also has the capacity to effect far-reaching emissions reductions and to bear the heaviest burdens thereof.
3. These are all assessment criteria which appear in the Oxford study as being criteria which are used in the various climate protocols for companies. The approach of the Court of Appeal, the approach of the company protocols as analysed by Oxford University, the approach of the Science Based Targets Initiative and the approach of the IEA are thus all directly linked and show that RDS should at least do the same as what on average is deemed globally necessary.
4. RDS is itself also of that opinion and even goes a step further in this respect. RDS itself believes that it has to do more than the global average because RDS, just like the developed countries, belongs to that part of global society that can move faster than the global average and must therefore move faster than the global average.
5. The foregoing appears from, inter alia, the annual presentation of CEO Van Beurden of 16 April 2020. RDS submitted that presentation as Exhibit RK-32B. Van Beurden stated in said presentation that global society may have until approx. 2060 to get to net-zero emissions, but that those parts of the global society that can reach the goal more quickly, must reach this goal more quickly. In his words (quote):

*“those that can move fast, must move fast”*.[[14]](#footnote-14)

1. Van Beurden immediately continued by saying that it is in fact therefore right for the EU and the United Kingdom to adhere to a goal of net-zero emissions in 2050, in a scenario in which globally net-zero emissions only have to be achieved in 2060. Van Beurden then explained that not only the developed countries must reduce more quickly than the global average, but that this also applies to RDS itself because RDS belongs to that part of the global society that can move faster and thus must move faster. He states:

*“Global society, overall, may have until around 2060 to reach net-zero emissions. But Shell recognizes that it stands within a section of society that needs to move faster. And so that is what we intend to do. [...] By 2050, Shell intends to be a net-zero emissions energy business. And we will be net-zero emissions before 2050, if that is possible.” [[15]](#footnote-15)*

1. It is good that RDS believes that it can and must move faster than the global average. This shows once again why imposing the global average necessary CO2 reduction of 45% in 2030 is a suitable elaboration of the minimum that may be expected of RDS as of 2030. It also shows that Milieudefensie et al. is not asking too much with regard to this point and that its claim is on the moderate side.
2. Nor is Milieudefensie et al. asking too much at any other level. For example, in its claim it replaced the base year of 2010 by the base year of 2019. This is to RDS’ advantage. I will explain this, particularly as the District Court previously also asked the question what Milieudefensie et al. means by the level of 2010 (question 1 of the e-mail from the District Court of 8 September 2020).
3. In the summons Milieudefensie et al. presented 2010 as the base year against which the emissions reduction was to be considered. This is the base year that is also used by the IPCC. The IPCC speaks of a reduction of 45% in 2030 compared to the base year of 2010.[[16]](#footnote-16) This thus means that if in the year 2010 the global CO2 emissions were, for example, 36 Gt CO2, that the emissions in 2030 must be 45% lower than the 36 Gt of 2010. In 2030 the global CO2 emissions would then only be allowed to be a rounded 20 Gt.
4. The reference year 2010 thus has significant value. In the first instance Milieudefensie et al. therefore adhered to this reference year of 2010 which is applied by the IPCC. Scientifically seen this is also the correct approach. The consequence of maintaining this reference year would, however, be that RDS would face a much greater reduction task for 2030. This is because its emissions still grew after 2010, inter alia due to the takeover of the company British Gas and the further expansion of its oil and gas activities.
5. The consequence of the emission growth that took place after 2010 is that if the reference year 2010 is maintained, RDS will have to reduce more than 45% by 2030 from the current emission level. Milieudefensie et al. has therefore chosen to suffice with an emissions reduction of 45% compared to the last calculated emissions level of RDS and that is the year 2019. Milieudefensie et al. sees this more pragmatic approach reflected in the climate protocols for companies which are also based on the last year for which the relevant data are available. This is 2019. On this point too Milieudefensie et al. has definitely not asked for too much.
6. This brings me to the point that with regard to the reduction goal of 45% in 2030, Milieudefensie et al. is primarily claiming that this be realised fully in conformity with the IPCC standard. This thus means without RDS being permitted to continue with the same or even growing emissions and to only compensate the emissions by means of, for example, planting trees. Compensation for the emissions of the Shell group thus cannot be permitted and the emissions of the RDS group must therefore have *de facto* fallen in 2030 by 45% compared to the level of 2019. For 2030 the IPCC speaks of an absolute 45% reduction and not about a net 45% reduction.
7. That there must be a complete reduction of 45% as of 2030 without the possibility of compensation is also logical. To achieve the Paris temperature goal, the CO2 emissions will *de facto* have to be reduced, a lock-in of new fossil infrastructure must be prevented, there will have to be large-scale investments in energy efficiency and there will have to be large-scale investments in sustainable energy infrastructure. If RDS were allowed to continue in whole or in part with its “business as usual” approach and would only have to compensate for its emissions, there could not be the rapid and drastic transition to the new energy systems which are necessary to be able to achieve the Paris goal.
8. The reason why the IPCC does not speak of a net goal for 2030 but does speak of a net goal for the end point in 2050, has to do with the assumption that in 2050 some residual emissions will remain which cannot be avoided, despite the global energy transition. This concerns, inter alia, the emissions which are connected with worldwide agricultural use of land for food production. The residual emissions which cannot be avoided in 2050 and which must thus be compensated, must be kept as small as possible, as in a world with a growing global population there is only a limited amount of space available for compensation by means of reforesting.[[17]](#footnote-17) The fewer residual emissions in 2050, the better and safer it will be. With as few residual emissions as possible in 2050 there is also the greatest possible chance that in any case the ecosystems at that time can function as a source of negative emissions.
9. The IPCC is therefore not talking about net emission reductions in 2030, so that the global emissions must be reduced by 45% in an absolute sense. The same applies here - what has to occur globally as of 2030, must at least also be carried out by the Shell group. However, in the event that this District Court sees reason to allow RDS to comply with its emissions reduction target through compensation mechanisms, a net 45% emissions reduction by 2030 has been claimed in the alternative. an alternative claim has been made for a net 45% emissions reduction as of 2030. I will set aside the two alternative claims for the moment and will discuss them later. I would now first like to explain why there is a causal relationship between imposing an emissions reduction order on RDS and preventing dangerous climate change.

**3. The causality issue**

1. If RDS is made subject to an order to effect an emissions reduction of 45% as is being claimed by Milieudefensie et al., this will entail that 1.2% of the total global emissions will have been reduced by 45% in 10 years’ time. This means that within 10 years Shell alone will reduce emissions of 0.54% of current global emissions. That is a reduction that is greater than the complete reduction of all emissions of Dutch society. The contribution which RDS would make to the global climate task is therefore very large.
2. The Netherlands Supreme Court held in this respect in the Urgenda case that in view of the limited carbon budget, every emissions reduction counts. According to the Netherlands Supreme Court, every reduction of greenhouse gas emissions has a positive effect on mitigating dangerous climate change. Every reduction means, after all, that more space is left in the carbon budget and the Netherlands Supreme Court therefore stated that the defence that an obligation to reduce emissions will be of little significance, because other countries will still continue emitting, fails for the reason that no single reduction is negligible. The foregoing can be found in para. 5.7.8 of the judgment of the Netherlands Supreme Court.
3. The Netherlands Supreme Court ends para. 5.7.8 of its judgment with a footnote. With that footnote the Netherlands Supreme Court refers to the judgment of the US Supreme Court in the case of Massachusetts versus the Environmental Protection Agency (EPA), the US federal environmental agency. Parts of this case have already been discussed in the summons and in the oral arguments in relation to admissibility of the claims,[[18]](#footnote-18) and I would like to briefly refer to it again. The defence presented in this US case by the EPA was as far-reaching as RDS’ defence in this case, i.e. that the emissions which must be mandatorily reduced by one party, will immediately be compensated by other parties who will simply take over this emissions gap, so that on balance nothing will change. For that reason the EPA refused to regulate emissions in the auto industry. The EPA stated that every emissions reduction which it could effect would be immediately nullified by increasing CO2 emissions in India and China. The US Supreme Court resolutely dismissed this defence and considered as follows in this respect (quote):

*“EPA does not believe that any realistic possibility exists that the relief petitioners seek would mitigate global climate change and remedy their injuries. That is especially so because predicted increases in greenhouse gas emissions from developing nations, particularly China and India, are likely to offset any marginal domestic decrease. But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action. Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop […] While it may be true that regulating motor vehicle emissions will not by itself reverse global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to slow or reduce it […] Nor is it dispositive that developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century: a reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere.” [[19]](#footnote-19)*

1. These considerations of the US Supreme Court reinforce the arguments of the Netherlands Supreme Court and show that for reasons of principle it is correct that RDS can be held liable for its share in the global emissions. A global challenge such as mitigating climate change would, to quote the US Supreme Court, be doomed to fail if no one in the world could be obliged to take action as long as it has not been established that others are also taking the necessary action. In that case, every big polluter could keep hiding behind the other big polluters and it would be impossible to take those first steps that would make it possible for the problem to be resolved step by step. According to the US Supreme Court, big problems like climate change cannot be resolved in one go by a major lawsuit. It requires the parties who are in a position to take responsibility for a substantial part of the emissions, as in this case the EPA could exert such control over the emissions of the US auto sector, to actually take responsibility and in that manner make their own contribution to solving the problem. Just like the EPA, because of its possibility to exert control, therefore had to take action, RDS too must take action in this case.
2. This decision of the US Supreme Court is interesting for another reason too. The EPA publicly did the same thing structurally that RDS has been doing for years, i.e. emphasising how important it is that climate action is taken and encouraging others to reduce emissions. Anyone who makes public statements like this then cannot say that no single individual action is significant. The US Supreme Court states the following in this respect, quote:

*“We moreover attach considerable significance to EPA’s agreement with the President that ‘we must address the issue of global climate change’ […] and to EPA’s ardent support for various voluntary emission-reduction programs […] As judge Tatel observed in dissent below, ‘EPA would presumably not bother with such efforts if it thought emissions reductions would have no discernable impact on future global warming.” [[20]](#footnote-20)*

1. In other words, it is unacceptable to publicly support the Paris Agreement and to call upon consumers and states to take measures against climate change to then, at the time that a party’s own responsibility is at issue, state that the party’s own conduct will not have an effect on the further warming up of the earth. Why should the individual consumer, who does not contribute even a one-billionth share to the warming, take the lead in the energy transition, while RDS has control over 1.2% of global emissions. Who then must take the lead? To ask the question is to answer it.
2. RDS’ conduct shows an evidently causal relationship with the warming up of the earth and is thus also evidently causally linked to preventing excessive warming up of the earth. What according to the global community is necessary to mitigate dangerous climate change has been discussed in detail in Milieudefensie et al.’s notes on oral arguments 5, i.e. deviation from the “business-as-usual” scenario by investing in energy efficiency and climate-neutral energy forms.
3. The central instrument that has been laid down in Article 2(1)(c) of the Paris Agreement to achieve the Paris temperature goal is therefore (quote):

*“Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development”*

1. According to the global community, every climate-unfriendly investment is causally related to further increasing the climate problem, and every climate-friendly investment is causally related to reducing the climate problem. The party which over the next 10 years will globally be both the second biggest investor in new oil production and the second biggest investor in new gas production, may never hide behind the argument that it is not relevant that annually it will be investing 20 to 30 billion dollars in increasing the climate problem, and that is putting it mildly.
2. Milieudefensie et al. is claiming from RDS an emissions reduction and that is why the line must be followed which the Netherlands Supreme Court set out in the Urgenda case, i.e. that every emissions reduction matters. But as every emission matters, then naturally every action forming the basis of the emission in question also matters. That is why the same applies with regard to the production and sale of oil and gas as applies with regard to the emissions which they cause: every emissions reduction matters and every reduction of fossil fuels which are produced and sold matters. One thing cannot be seen separately from the other. If fossil fuels are not produced, they cannot be burned and no additional emissions will be released into the atmosphere.
3. RDS’ defence that if it does not produce any oil and gas, that others will then completely take over the production for the full 100%, is the same defence as that presented by the EPA with regard to the growing emissions in India and China. For that reason alone this defence of RDS must be dismissed.
4. RDS’ argument that a perfect substitution of production will take place if it reduces its production of oil and gas, is not correct and this argument can also be fairly easily refuted by the various exhibits which Milieudefensie et al. has submitted into the proceedings.
5. The Production Gap report states the following with regard to the argument of perfect substitution:

*“There is a popular misconception that reducing production in one location will simply lead to an equal amount being produced elsewhere – a game of “perfect substitution” that would, if true, negate the emission reductions and other benefits of supply-side actions (Roberts 2015). However, this argument of perfect substitution defies basic economics of supply and demand. If there is less available of a commodity – such as oil – its price will increase, meaning less of it will be consumed.”* [[21]](#footnote-21)

1. As soon as less is produced, the basic economic principle of supply and demand entails that if less of a product is available and thus, as it were, more scarcity arises, the price of that product goes up. And if the price of a product goes up, there will be less consumption of the product. As the Production Gap report indicates, these are the basic economics of supply and demand.
2. In legal cases in which the same defence was presented by the fossil industry, courts also relied on this basic economic principle. An example of such a lawsuit is the US lawsuit of Wild Earth Guardians versus the United States Bureau of Land Management (abbreviated to the BLM) and the Wyoming Mining Association. This appeal case was before the United States Court of Appeals in 2017.[[22]](#footnote-22) The Wild Earth Guardians appeared as appellants against four newly granted permits for coal mining in the state of Wyoming. The BLM had granted permits, stating that these four permits would not lead to higher CO2 emissions than would have been the case if these permits had not been granted. In the latter case, according to the BLM, the coal would be mined and sold somewhere else, in or outside the United States. According to the BLM, there would be perfect substitution, so that there was no causal relationship between the granting of the permits and the increase of the CO2 in the atmosphere. The Court of Appeals set aside this argument as unfounded and unlawful, quote:

*“Turning to the merits, the central issue in this case is whether the BLM’s assumption that there was no real world difference between issuing the Wright area leases and declining to issue them because third party sources of coal would perfectly substitute for any volume lost on the open market should the BLM decline to issue the leases was arbitrary and capricious. We hold that it was [...] [T]he blanket assertion that coal would be substituted from other sources, unsupported by hard data, does not provide “information sufficient to permit a reasoned choice” between the preferred alternative and no action alternative. It provided no information. Even if we would conclude that the agency had enough data before it to choose between the preferred and no action alternatives, we would still conclude this perfect substitution assumption arbitrary and capricious because the assumption itself is irrational (i.e. contrary to basic supply and demand principles).”* [[23]](#footnote-23) (underlining added by counsel)

1. Under no circumstance did the US Court of Appeals wish to accept that the limiting of the production of coal in Wyoming would not have any effect on the consumption of coal. The Court of Appeals came to that conclusion despite the predictions that the demand for coal in the United States during the entire term of the permits would continue to increase. Because of that increasing demand for coal, according to the BLM there would therefore be little or no price increase due to the restriction in production. The result of this was, according to BLM, that there would be no muffling effect on the demand for coal and that there would thus be perfect substitution.[[24]](#footnote-24) The Court of Appeals did not follow that line of reasoning for the above-mentioned reasons.
2. The argument presented by RDS of perfect substitution is not only not believable, it is also demonstrably incorrect. The Production Gap Report makes reference to various studies which show what the effect of a restriction on the production of oil is on the global market, quote:

*“[S]tudies using elasticities from the economics literature have shown that for oil, each barrel left undeveloped in one region will lead to 0.2 to 0.6 barrels not consumed globally over the longer term (Erickson et al. 2018).”* [[25]](#footnote-25)

1. Economic studies thus show that the restricting of oil production does indeed have a measurable effect on the global oil market and that every barrel of oil not produced leads to a drop of consumption between 20% and 60%. There is thus a clear causal relationship between restrictions of production and restrictions of emissions.
2. Milieudefensie et al. has submitted various of these studies into the proceedings. These are Exhibits 310 through 313. These studies show the following, inter alia.
3. The study which has been submitted into the proceedings as Exhibit 313 shows that the causal effect of 20% to 60% between restrictions on production on the one hand and restrictions on emissions on the other, is of the same order of magnitude as the causal effect resulting from other climate measures. This appears from a study into the measures which President Obama had included in his climate package and which consisted of both the restriction of the production of oil and the restriction of the demand for oil by, inter alia, setting new efficiency standards for the auto industry. The measures to restrict the production of oil were at least as effective as the measures to restrict the demand for oil.[[26]](#footnote-26)
4. The study which has been submitted as Exhibit 310 shows that the causal link between a restriction of production and a restriction of emissions was not only from an economic perspective. Research of political scientists and sociologists shows that production-restricting measures for fossil fuels increase the public support for more ambitious climate action and lead to modification of public standards with regard to the developments which are still acceptable. According to these studies this can bring about the supporting wave of change which is necessary to achieve a climate-neutral society.[[27]](#footnote-27)
5. The study which has been submitted as Exhibit 311 shows that the continuing investments in new fossil infrastructure maintain and even increase the political and economic interests relating to the fossil industry. According to this study, this makes it much more difficult to achieve the climate goals. The restriction of the production of fossil fuels can break through this status quo which impairs the climate approach and can also address the lock-in problem which is becoming ever-bigger due to the continuing investments in fossil infrastructure. According to this study, due to production-restricting measures the transition costs will be lower and the blocking interest of the fossil industry will be decreased. This, inter alia, because the risks of the energy transition for the fossil industry will decrease due to production-restricting measures because consequently they will have fewer assets invested in fossil infrastructure. This considerably simplifies the energy transition and is thus also causal for achieving the climate goals, or in any event increases the chances of doing so.[[28]](#footnote-28) According to the study, it is, however, still difficult for politicians at this time to take production-limiting measures, because the political influence of the fossil industry is great, quote:

*“Given the many reasons to consider supply-side policies, why have they been slow to enter the climate policy discussion? As noted above, the political obstacles can be tough to surmount, Policymakers can anticipate strong political opposition from powerful coal, oil and gas interests towards actions that directly constrain their production. Indeed, as political economists have long noted, policies benefitting concentrated interests are hard to change even if the diffuse benefits are great […] Fossil fuel producers comprise some of the world’s largest companies and wield geopolitical influence powerful enough to stymie energy and climate policies not to their liking.” [[29]](#footnote-29)* (end of quote)

1. In the conclusion the study sums up the reasons discussed as to why production-restricting measures are effective measures for solving the climate problem. It makes the many forms of causality between restricting production and restricting emissions clear once again, quote:

*“[I]t is increasingly clear that supply-side policies can bring important benefits. They can widen the mitigation cost curve, allowing greater emission reductions at the same (or lower) cost than demand-side policies alone. They can help address carbon leakage risks. They can reduce carbon lock-in effects, making it easier for lower-carbon alternatives to compete with fossil fuels, and weakening the carbon entanglement that makes it hard for many governments to adopt strong climate policies. Lastly, focusing directly on fossil fuels and the actors that supply them can bring added pressure to bear on climate change mitigation efforts and could help make the case for more ambitious global climate action.”* [[30]](#footnote-30)

1. In view of the many positive effects which may be expected of production-regulating measures, in addition to the direct market effect of a 20% to 60% consumption reduction for every barrel of oil that is not produced, it is undeniably the case that the emissions reduction order claimed by Milieudefensie et al. and the production reduction which will be the result thereof, help to prevent dangerous climate change. The causal relationship between the requested order and the preventing of the threat which emanates from the RDS concern policy, is consequently also undeniable. [[31]](#footnote-31)
2. With regard to the causality issue I would, as a final point, like to indicate that the report of Mulder et al. which RDS submitted into the proceedings does not actually contradict the above conclusions, and where the report does do so, it evidently concerns conclusions which are not scientifically justified. All of this appears from the response of Peter Erickson of the Stockholm Environment Institute, co-author of the Production Gap Report and many scientific articles on the topic of production restriction in the fossil industry. In short, Erickson has established that Mulder et al. too acknowledge the relationship between production restriction, price effect and consumption. In other words, the relationship that I have set out above. He then determined that the report of Mulder et al. failed to make a scientific comparison between, on the one part, the situation of price development without production-restricting measures and, on the other, the situation of price development with production-restricting measures. No conclusions can be drawn without comparing these two situations to each other. Mulder et al. only show that despite various production interruptions, there is a growing demand for oil and gas.

But the conclusion cannot be drawn from this that the interruptions did not have any effect, as it has to be studied in this respect how much greater the growth would have been without these interruptions. Mulder et al. did not study this, even though this is possible and did happen in other studies. According to Erickson, these studies consistently show that the restriction of oil and gas production leads to increasing prices and to reduced consumption.
3. Another important point that Erickson makes relates to the assertion of Mulder et al. that in the event an order is made against RDS, the licences for oil and gas production will be transferred to other companies. According to Erickson that argument is incomplete and not convincing for three reasons.
4. First, it is not convincing because if RDS were to return licences to the government which the government issued, it is not necessarily the case that these licences will be re-issued. For example, Shell has been active in Denmark for a century and Denmark has recently indicated it would not issue any more new licences. France, Ireland and New Zealand have taken comparable decisions. I will add to this that there will probably be little or no question of RDS and the Shell group having to hand in existing licences, because the requested order will particularly have influence on the intended future oil and gas projects of RDS.
5. Second, other oil and gas companies are not as such able to develop new oil and gas fields at the same cost price or at the same speed as Shell. He points out that the Rystad Energy data show that Shell can operate at a cost price which is below the market average. For other oil and gas companies with a higher cost price, these new projects can therefore be more risky or less feasible. In this respect I would like to point out myself that certain oil and gas companies will also not be interested or will be less interested in new licences, like BP, which has announced its wish to reduce the production of oil and gas by 40% as of 2030.[[32]](#footnote-32) In view of the developments in connection with the Paris Agreement, the market is expected to undergo further changes so that for that reason too it cannot be automatically assumed that licences will simply continue passing from hand to hand.
6. Third, according to Erickson the requested order to be made against RDS might have a broader effect on the risk perception and the investment climate for oil and gas projects, which can lead to decreased production on the part of other oil and gas companies. According to him it will lead to a re-evaluation in the sector of legal and reputation risks as well as of financial risks, so that the capital costs and project costs of new oil and gas projects will increase. This cost increase will lead to restriction of production and consequently will have an effect on the consumption of oil and gas and the related CO2 emissions.
7. For all the reasons mentioned here, the requested court order to reduce emissions will also *de facto* lead to a reduction in global emissions. The order will for many reasons help accelerate the energy transition, thereby contributing to mitigating dangerous climate change. I will now make clear what the consequences will be for RDS and why it is reasonable for RDS to bear these consequences.

**4. The convenience of the requested order for RDS (Kelderluik criterion 5)**

1. In the summons it was pointed out that the Court of Appeal had considered in the Urgenda case that because of the great dangers which dangerous climate change entails for humans and the environment, far-reaching (precautionary) measures may be demanded, as well as financial sacrifices and other sacrifices. It was explained in the summons why this also applies with regard to RDS and the measures to be taken by RDS.[[33]](#footnote-33)
2. Against the background of all arguments which Milieudefensie has in the meantime presented and against the background of the serious imputable acts of RDS since 2007, it will be clear why Milieudefensie et al. is taking that position. In supplementation of the summons, the statements and the arguments that have already been presented, I would now specifically like to focus on a number of defences presented by RDS in that respect. I will start with RDS’ defence that the level playing field would be disrupted if only RDS were obliged to act in conformity with the Paris goal. This would lead to a disadvantaging of the competitive position and this would be unacceptable, according to RDS.
3. Milieudefensie et al. believes that the argument of a level playing field cannot provide an exculpatory defence for RDS and that RDS’ competitive position will not be affected or in any event not to a degree which would entail that it should be allowed to continue with its wrongful concern policy, which is catastrophic for humans and the environment. I will explain this.
4. With regard to the defence of the level playing field, I am making a distinction between the position of the Shell group in the oil and gas market and the position of the Shell group in the market for sustainable energy. I will first discuss RDS’ position on the oil and gas market.
5. Milieudefensie et al. has submitted the CDP Carbon Majors Report 2017 as Exhibit 281. As previously explained, CDP is the organisation to which RDS presents an annual report regarding its climate policy.[[34]](#footnote-34)
6. In that CDP report an overview has been included as Appendix I which shows that RDS was cumulatively responsible in the period 1988-2015 for 1.7 % of global emissions. This makes RDS the 9th biggest polluter over this period. RDS holds this 9th position on a list which includes all state-owned companies like China Coal, Gazprom, Saudi Arabian Oil Company (Aramco), India Coal and the China National Petroleum Corporation. There is only one non-state-owned company on this list which is a bigger CO2 polluter than RDS and that is ExxonMobil.[[35]](#footnote-35)
7. This conclusion is important because it shows that RDS has an absolute dominant position on the oil and gas market and is a much bigger company than most other oil and gas companies. How much bigger can be determined from another list that is included in the CDP report as Annex II. This shows that when only looking at the year 2015, 1.2% of global emissions are attributable to RDS. That 1.2% makes RDS no. 11 of that list.
8. Looking at the other big oil and gas companies, Chevron, which is no. 20 on that list, emits 25% less than RDS and is thus a substantially smaller company than RDS. No. 30 on the list is Total, which is more than 40% smaller than RDS. Nos. 35 and 36 are Eni and Statoil, both of which are 60% smaller than RDS. All other oil and gas companies on nos. 35 to 100 are then all at least 60% smaller than RDS. This shows that RDS is a giant among giants and thus holds a special position in the market.
9. If all these other oil and gas companies, the great majority of which are less than half RDS’ size, have been able to operate profitably on the oil and gas market for decades, then RDS would be able to survive on this market if in 2030 it were approx. half the size it is now. If RDS could not do this, and 80 other companies could, then this is not the result of a court order, but of poor management on the part of RDS itself. If the oil and gas company BP, which is no. 14 on this list and is almost as big as RDS, indicates that in 2030 it can reduce the production of oil and gas by 40% and asserts in this respect that it will thereby create “*long term value for shareholders*”,[[36]](#footnote-36) shows all the more that RDS should be able to get along fine if via the emissions reduction order to be imposed it would become a smaller oil and gas company.
10. For these reasons it is not clear why there would be an impairment of the level playing field in the oil and gas market which is inconvenient for RDS or which is so inconvenient, that the District Court should not impose the requested order. To say nothing of the fact that the seriousness of the damage which RDS is globally helping to cause is of such scope, that it would even justify a substantial impairment of RDS’ market position.
11. I would briefly like to say something about RDS’ position on the market for sustainable energy and the level playing field on that market. Although this has no legal relevance because RDS is not obliged by the requested judgment to enter the sustainable energy market (RDS can affect the emissions reductions by transforming into a smaller oil and gas company), nevertheless Milieudefensie et al. would like to signal a number of things.
12. First, it can be established that RDS is of the opinion that from a technical and commercial perspective, wind power and solar power are on an equal footing with oil and gas and therefore must be able to compete with oil and gas on their own merits. This follows from the exhibit which RDS submitted as Exhibit RO-90 and in which it states:

 *“We advocate different levels of government support depending on the technical and commercial maturity of low-carbon technologies. For example, Shell calls for technology-neutral carbon pricing and targets to reduce emissions intensity for commercially viable sources of energy such as oil, natural gas, wind and solar.”* [[37]](#footnote-37) (underlining by counsel)

1. If RDS itself believes that these sustainable energy sources are commercially profitable, there is nothing that need prevent it from more large-scale investment in these sustainable energy sources and the question may rightly be asked why 95% or more of all investments of RDS still go to oil and gas projects. In its Management Day presentation of last year, RDS also made it clear that the 1 to 2 billion dollars which it intended to invest in sustainable energy would generate a profit of 8-12%. RDS can thus easily make excellent profits with sustainable energy investments.[[38]](#footnote-38)

1. Globally there must be large-scale investment in solar and wind power to generate sustainable electricity. Contrary to the experimental hydrogen projects of the past which RDS keeps citing to indicate how difficult those projects were, electricity networks have been rolled out all over the world which must be provided with sustainable energy instead of fossil energy as a source of electricity generation. These projects are certainly no more difficult to achieve than, for example, the complex deep-sea oil projects and North Pole projects which RDS is taking on to be able to keep expanding its oil and gas portfolio. And there is more than enough demand for sustainable electricity. In 2030 the Africa Renewable Energy Initiative of the African Union which was discussed in notes on oral arguments 5, wants to have installed a minimum of 300 GW in sustainable electricity generation, enough to help hundreds of millions of Africans to have sustainable energy in 2030.[[39]](#footnote-39)
2. RDS also believes that the Shell group is in an excellent position to take further steps in sustainable electricity generation. RDS has the following to say about this, quote:

*“We currently produce electricity through renewable projects in the USA, and in Europe. We have decades of experience trading electricity and we supply it wholesale to energy retailers. In the USA, we have consistently been ranked in the top three power wholesalers over the past decade.[[40]](#footnote-40)*

1. More than enough chances and opportunities for RDS to be able to access the sustainable energy market on a larger scale if it wanted to and if it were willing to shift its attention to other kinds of energy projects. However, RDS is simply lacking any genuine desire to transform the Shell group. This is also the reason why high-ranking managers within the company who are engaged in wind, sun and the energy transition resigned because they concluded that within RDS’ board of directors there is no desire to transform the company. The above came out through the Financial Times and was also in Dutch news in the past week.[[41]](#footnote-41)
2. There is thus nothing stopping RDS from expanding on the sustainable energy market, if it wanted to do so. However, as stated, RDS can implement the requested judgment without taking this step toward renewable energy because to reduce CO2 emissions, it only has to transform into a smaller oil and gas company, which is also possible, as has been discussed above. This has also already been explained in further detail in the summons.[[42]](#footnote-42)
3. The argument of a level playing field therefore cannot help RDS. But even if the inconvenience of the measures to be taken were substantial for RDS, this could still be justifiably demanded of it in view of the seriousness of the danger that is to be avoided with it and the other circumstances which have been discussed in this case. It must also be considered in this respect that RDS is well aware that the risk can materialise that it will be reined in by the court and that this can have material consequences for the business and its investors. These investors know that themselves as well and have taken this into account, which was extensively dealt with in the opening arguments. If these calculated risks and losses arise, they were knowingly and willingly accepted and they must bear the costs and the consequences thereof themselves.
4. There is no reason why the entire world should have to suffer catastrophic climate change because it would inconvenience Shell (and other big CO2 emitters) too much to change. How can it be justified that RDS’ shareholders earn tens of billions of euros in profits from the sale of fossil fuels, while at the same time causing the world to enter an ecological and humanitarian crisis. Why should global or Dutch society and their citizens have to suffer increasingly dangerous changes year after year because it would inconvenience RDS too much to change? To ask the question is to answer it.
5. In connection with RDS’ inconvenience argument, Milieudefensie et al. will lastly go into the assertions which it included in para. 39 of its opening arguments and about which the District Court asked Milieudefensie et al.
6. The first inconvenience argument is the one which was discussed by RDS under para. 39(b). RDS asserts in this respect that in the formulation of the claim for reduction, neither the base year 2019 nor any other base year should be allowed to be used, because this presumes a static system. RDS is objecting to this because this would prevent it from being able to expand its oil and gas activities by, e.g., taking over a competing oil and gas company. RDS’ reasoning cannot be followed for several reasons.
7. First, no claim for reduction can be formulated without a base year being linked to it as reference year. That is the reason why the IPCC and all other institutions do that and that is also the reason why RDS itself also uses a base year in its Net Carbon Footprint ambition. RDS uses the base year 2016 in this respect.[[43]](#footnote-43) Without a base year, the claim for a reduction cannot be formulated, nor can it be monitored whether what has been claimed, has in fact been implemented and achieved.
8. Nor is RDS particularly concerned with the phenomenon of a base year, but rather with the conclusion that if it must effect absolute emissions reductions, this will hinder the expansion of its oil and gas activities, both expansion by means of its own projects and by means of taking over other oil and gas companies or projects of other oil and gas companies. The reasons why RDS cannot keep expanding its oil and gas activities are evident and have already been sufficiently explained. It has also been explained that there are no division agreements in the energy market, and that therefore it is legally correct and, moreover, best practice that RDS must effect as a minimum the same reductions as of 2030 that are globally required to mitigate dangerous climate change. If a takeover of another company does not fit within the reduction goal to be achieved, then RDS will indeed not be able to effect this takeover and that is rightly so. If it were possible, then RDS’ oil and gas activities and the related emissions could simply continue growing. Not only that, the selling party can also simply keep investing in new oil and gas projects because no one is prohibiting the seller from doing so. Everything will thus remain the same and the existing status quo will be maintained because both RDS and the seller can continue growing in production and emissions. It is thus just and right that this is prevented as a result of the requested judgment.
9. The second argument relating to inconvenience is set out in para. 39(c) and is connected with the fact that in the amended claim in relation to the scope 3 emissions, mention is made of the CO2 emissions of “energy-carrying products sold” instead of the term “fossil products sold” which was used in the summons. Energy-carrying products are now being talked about because the claimed emission reduction concerns the entire energy portfolio of RDS as it will shape it in the next decade.. This portfolio could be a limited portfolio which only consists of oil and gas, but it could also be a portfolio which only consists of other energy-carriers such as electricity and biofuels. In both cases, however, the requested emissions reductions must be achieved in 2030, which is why the general term “energy-carrying products” is used to be able to deal with various scenarios and to leave RDS completely free in its portfolio choice as long as it satisfies the requested emissions reduction goal.
10. The sale of energy-carrying products falls under scope 3 emissions, so that it is not clear why in para. 39(c) RDS presents questions on the construction of installations. The related emissions are not scope 3 emissions, but scope 1 emissions of RDS. These are emissions of a company’s own business activities, which fall under the category scope 1.
11. It does lead me to the desire to make it clear that RDS has more freedom within what is being claimed than it perhaps assumes. The claim has been framed in such way that it in fact does not matter in what category emissions fall, because RDS is entirely free to determine for itself where it places the emphasis in the reduction of emissions, as long as the requested reduction in emissions takes place over the total of the scope 1, 2 and 3 emissions. Milieudefensie et al. is only asking that the total volume of the scope 1, 2 and 3 emissions be reduced by 45% in 2030, it is not claiming that each of these scopes must be reduced by 45% individually. If RDS wants to reduce its scope 3 emissions by 55% in 2030 so that it does not have to reduce its scope 1 emissions or barely has to reduce them, it is entirely free to do so. RDS only has to ensure that the total of the emissions is reduced by 45% in 2030. In that manner RDS can decide for itself within the given reduction task what it wishes to prioritise. This therefore cannot be inconvenient.
12. The third objectionable argument of RDS is presented under section 39 sub d and implies that it is uncertain whether society as a whole will achieve the emission reductions that are necessary in 2030. For this reason RDS cannot be held accountable for its part of the solution.
13. This is in essence the same defence as the causality defence that RDS has presented and in respect of which I have already shown that it cannot succeed, inter alia with a reference to the considerations of the Netherlands Supreme Court and the US Supreme Court. RDS is being held to account for its partial responsibility in causing dangerous climate change, in the same way that the State of the Netherlands has also been held to account for its partial responsibility in the Urgenda case. In that case the Netherlands Supreme Court considered, with reference to the Kalimijnen case, that the Netherlands, just like many other countries, has laid down rules in the liability legislation regarding partial responsibility and that in view of the serious consequences of dangerous climate change, with this partial responsibility the defence cannot be accepted that a state does not have to take any responsibility because other countries are not complying with their partial responsibility.[[44]](#footnote-44) Milieudefensie et al. also referred in its summons to the significance of the Kalimijnen case in determining causality and partial responsibility.[[45]](#footnote-45)
14. In other words, the decision of the Netherlands Supreme Court in the Urgenda case shows that even if it is uncertain whether society as a whole will achieve the climate goal, because not everyone is doing his part, this does not release the state – and in this case, RDS – from the obligation to do its part. The Netherlands Supreme Court added to this that the defence that the State’s own share in the global emission of greenhouse gases was very slight and would therefore make little difference on a global scale, could not be accepted. According to the Netherlands Supreme Court, accepting these defences would entail that a country – and in this case, RDS – could easily evade its partial responsibility by pointing to other countries or to its minor share. According to the Netherlands Supreme Court, these defences should be ruled out so that countries can be effectively held accountable for their partial responsibility, because this creates the greatest possible chance that ultimately all countries will actually make their contribution and dangerous climate change can still be prevented .[[46]](#footnote-46)
15. In view of the control which RDS has over much larger global CO2 emissions than the State of the Netherlands, of the bigger role that it has in the global energy transition than the State of the Netherlands and in view of all other facts and circumstances which have been presented by Milieudefensie et al. in this case, this reasoning of the Netherlands Supreme Court should also be applied to RDS’ legal responsibility. It is the only legally correct outcome.
16. In addition, this outcome would be fully in line with the consensus which has arisen within the UN climate regime since 2012, that in order to achieve the climate goals it is essential that non-state parties also actively take climate action. As was already explained in the opening arguments, the action of non-state actors, and certainly the action of the biggest non-state actors like RDS, is of great importance for closing the ever-increasing emissions gap. Independent climate action of the large non-state actors will result in the CO2 emissions being reduced more rapidly and this will also increase the chance that states can achieve their climate goals and can set the higher climate goals which are necessary to mitigate dangerous climate change. [[47]](#footnote-47)
17. This brings me to the fourth and last defence presented by RDS in para. 39 of its opening arguments concerning the inconvenience of the reduction order which Milieudefensie et al. is seeking. This concerns the defence set out under para. 39, that RDS will soon have to tell customers who want oil and gas that they can’t have it, while customers do not want that and want to continue flying or want to continue heating their home with gas.
18. It must first be noted that this defence does not relate to the inconvenience of the reduction order for RDS itself (as referred to in the relevant Kelderluik criterion) but relates to the inconvenience which that order may have for RDS’ customers or for society as a whole if said society remains addicted to the excessive use of oil and gas. This defence is part of RDS’ broad defence of the double challenge of the climate approach and the universal access to energy and Goal 13 and Goal 7 of the Sustainable Development Goals.
19. Milieudefensie et al. addressed this topic in very great detail in its notes on oral arguments 5. What this comes down to is that the entire global community is of the opinion that preventing dangerous climate change is a prerequisite for all national and international 17 development goals and that to prevent that danger, they will have to implement a policy which is geared to the large-scale shifting of financial flows to energy efficiency and to sustainable energy, so that the comprehensive risk of dangerous climate change will be prevented and the world will be provided with climate-neutral energy, which is technically and economically possible. Where RDS, as one of the biggest CO2 polluters in the world, must take its responsibility to reduce the emissions of the Shell group, so that, inter alia, a lock-in of fossil infrastructure which makes the transition as good as impossible is prevented, so too will states have to take their part of the responsibility, so that from that side too there is management of a transition relating to energy efficiency, climate-neutral energy and change in human behaviour. There is universal consensus on the limits within which activities are to be carried out to prevent dangerous climate change and within those limits states will thus have to modify their policy and prepare society for the changes which are necessary. RDS does not have to bear that responsibility, however, nor does the District Court, as explained in detail in the notes on oral arguments 5, which is why the District Court does not have to show reserve when awarding the claim against RDS, as was explained in that section of the oral arguments.

**The two alternative reduction percentages of 35% and 25% respectively as of 2030**

1. This brings me to the last topic to be discussed, being the two alternative reduction percentages requested for 2030 of 35% and 25% respectively. With regard to these claims, except for the modified reduction percentages, exactly the same thing applies as was explained by Milieudefensie et al. with regard to the claim for a reduction of 45% in 2030.
2. Milieudefensie et al. added the two alternative claims to the relief sought with a heavy heart. According to Milieudefensie et al. there cannot be any misunderstanding about the need to follow the scenario that an emissions reduction of 45% in 2030 as interim station, must lead to a net-zero emissions world in 2050. This is the only scenario that still gives a 50% probability of limiting the warming up to 1.5˚ and an 85% probability that the warming up can be limited to 2˚C.
3. As conversely this scenario already gives a 15% probability that the earth will nevertheless warm up by more than 2˚C, in the opinion of Milieudefensie et al. this is the only scenario that still provides the greatest possible chance to prevent the most serious consequences of climate change for humans and the environment and the violation of human rights this will entail.
4. Nevertheless Milieudefensie et al. believes it has done the right thing in presenting a scenario that is no longer focused on limiting warming up to 1.5˚C and that is exclusively geared to limiting the warming up of the earth to well below 2˚C. In that case the District Court would thus be deciding that a warming up of more than 1.5˚C can be justified, but that the warming up must remain well below 2˚C because this is the absolute upper limit of the Paris goal.
5. This raises the question what reduction path should be followed if RDS did not have to focus on the 1.5˚C goal, would be allowed to ignore this goal and would only have to focus on proportionally contributing to limiting the warming up to well below 2˚C.
6. What would be necessary for this can be seen in the UNEP Emission Gap report, which has set three goals next to each other, being the old 2˚C from before the Paris Agreement, the 1.5˚C goal of the Paris Agreement and the well below 2˚C that has been set as the new upper limit in the Paris Agreement.[[48]](#footnote-48)
7. UNEP has presented the “well below 2˚C” goal as a 66% probability that the warming up of the earth will be no more than 1.8˚C. UNEP maintains the same probability percentage of 66% that was previously, i.e. pre-Paris, maintained for the old 2˚C goal. That probability percentage of 66% was also applied in the Urgenda case with regard to the 2˚C goal. [[49]](#footnote-49) As we will see in a minute, the International Energy Agency (IEA) provides the same explanation for the “well below 2˚C” scenario.
8. For those reasons Milieudefensie et al. believes it is most appropriate to adhere to the explanation of UNEP and the IEA and to deem the “well below 2˚C” to be equivalent to a scenario that provides a 66% probability of limiting the warming up of the earth to 1.8˚C. Milieudefensie et al. deems this to be all the more appropriate because a warming up of 1.9˚C cannot qualify as a warming up which remains well below 2˚C. A warming up of 1.7˚C could certainly be so qualified, so that a warming up of 1.8˚C must really be deemed the absolute upper limit.
9. UNEP indicated that in the 1.8˚C scenario there is a maximum carbon budget of between 600 and 900 Gt.[[50]](#footnote-50) If the upper limit of this bandwidth is then sought, this leaves a maximum carbon budget of 900 Gt.
10. The International Energy Agency (IEA) assumed this maximum carbon budget that belongs with a 66% probability of 1.8˚C and on the basis thereof developed the Sustainable Development Scenario. That Sustainable Development Scenario was fleshed out in further detail by the IEA in Chapter 2 of its World Energy Outlook of 2019. Milieudefensie et al. has submitted this chapter as Exhibit 306.
11. The IEA describes this scenario as follows in its WEO 2019:

*“The Sustainable Development Scenario is constructed on the basis of limiting the temperature rise to below 1.8˚C with a 66% probability [...] The Sustainable Development Scenario adopts a principle of early action and sees energy sector CO2 emissions peak immediately at around 33 Gt, and then fall at an average of 3,8% per year to less than 10 Gt by 2050, on course to net zero by 2070. In the Sustainable Development Scenario, the cumulative level of CO2 that is emitted between 2018 and 2070 is 880 Gt.” [[51]](#footnote-51)*

1. The IEA illustrated by means of the following figure what emissions reduction path must be followed in the energy sector to remain within the carbon budget of 880 Gt CO2.



1. The IEA describes with regard to the Sustainable Development Scenario that, as also appears from the graph, the CO2 emissions must fall from 33 Gt CO2 to 25 Gt CO2 in 2030.[[52]](#footnote-52) This is a reduction of 25% with regard to the level in 2019. In other words: that reduction of 25% as of 2030 is necessary to achieve the goal of net-zero CO2 emissions as of 2070 and to be able to remain within the carbon budget of 880 Gt CO2.

1. The IEA is showing with this scenario what must be achieved in the energy sector as of 2030 if the biggest possible carbon budget is assumed that still fits with a 66% probability of limiting the warming up to 1.8˚C. This requires a 25% reduction in 2030 and achieving net-zero emissions in 2070, taking account of the specified interim station in 2050. The IPCC also indicates that for a net-zero scenario in 2070, a 25% reduction must be achieved globally as of 2030.[[53]](#footnote-53)
2. Milieudefensie et al. believes that in all cases RDS must be made subject to at least a reduction obligation of 25% as of 2030. This minimum reduction of 25% seeks the outer limits of what can be deemed a fleshing out of the Paris temperature goal.
3. This scenario of the IEA, that seeks the outer limits, was supplemented by the IEA in 2020 with the previously discussed “Net Zero Emissions by 2050 (NZE2050)” scenario. This new scenario reaches net-zero in 2050 and requires the 45% reduction as of 2030 which is Milieudefensie et al.’s primary claim.[[54]](#footnote-54)
4. Up to now I have discussed the primary reduction claim which assumes 45% in 2030 and net-zero in 2050, and the other alternative claim which assumes 25% in 2030 and net-zero in 2070. These two outer limits represent the bandwidth of scenarios. For 2030 this reduction bandwidth is thus the bandwidth of 45-25%. The bandwidth for the year in which the net-zero point must be achieved, lies between 2050-2070.
5. This brings me to the alternative claim of a 35% reduction in 2030, which reduction percentage of 35% is based on a scenario that comes to net-zero emissions in 2060.
6. The alternative claim of 35% in 2030 is based on a scenario that, both for 2030 and for achieving the net-zero point, remains in between the above-mentioned bandwidths. The alternative claim partly assumes this 35% in 2030 because this percentage of 35% is also maintained by the IEA in its “Below 2 Degree” Scenario. In that scenario, that can be found on page 33 of the IEA report which RDS submitted as Exhibit RK-10, the IEA assumes a reduction to 21 to 22 Gt in 2030. This is a reduction of approx. 35% compared to the starting point of 33 Gt applied by the IEA (see Figure 1.9). Maintaining the reduction percentage of 35% as of 2030 as the middle of the maximum bandwidth and geared to net-zero emissions in 2060, could be a solution for the District Court in the event the District Court were to see cause not to align with either of the two outer limits.
7. The District Court might find this appropriate because RDS, in its own Net Carbon Footprint ambition, also assumes the global scenario in which the net-zero point is achieved in 2060 latest. I will quote the previously cited words of Mr Ben van Beurden again, quote,

 *“Global society, overall, may have until around 2060 to reach net-zero emissions. But Shell recognizes that it stands within a section of society that needs to move faster. And so that is what we intend to do [...] By 2050, Shell intends to be a net-zero emissions energy business.”[[55]](#footnote-55)*

1. Van Beurden also indicated on behalf of RDS that it is technically and economically feasible to achieve the net-zero point globally in 2060.[[56]](#footnote-56)
2. RDS has acknowledged the feasibility of achieving the net-zero emissions in 2060 for some time, as may be deduced from the Mission Possible report of 2018 of the Energy Transitions Commission (ETC). RDS submitted that report into the proceedings as Exhibit RK-9 and it evidently attaches great value thereto because RDS explained in the statement of claim that it was a co-founder of this Commission. RDS also stated in this respect that RDS’ chairman, Mr Chad Holiday, is also a commissioner of the Energy Transitions Commission.[[57]](#footnote-57) The following can be read in the Mission Possible report of this Commission (abbreviated to ETC), quote:

*“To achieve even the 2˚C goal, and to have any chance of reaching the aspired 1,5˚C limit, it is essential for energy and industrial systems to achieve net-zero CO2-emissions within themselves – i.e. without permanently relying on offsets from the land-use sector. The ETC strongly believes that this is achievable by 2050 in developed economies and 2060 in developing economies.”* [[58]](#footnote-58) (underlining by counsel)

1. The Mission Possible report thus indicated that it strongly believes that the global net-zero point can be reached in 2060 the latest. In the summary of the Mission Possible report it is, moreover, made clear that even the most difficult industrial sectors (“the harder-to abate sectors”) like the steel and cement industry can reach the net-zero point in 2050 and for an economic cost price of less than 0.5% of global GDP and with a minimum impact on the living standards of consumers. In short, reaching net-zero emissions in 2060 is feasible and affordable.
2. If the District Court were to come to the conclusion that there is no legal obligation for RDS to proportionally contribute to achieving the net-zero point in 2050, but the District Court were to see an obligation to contribute to achieving net-zero emissions in 2060, then it would be logical that to achieve the reduction of 2030, the middle of the bandwidth established therefore is maintained, in order to remain in the middle of the upper carbon budgets. That is the reason for the alternative claim of a reduction of 35% in 2030.
3. Having said this, Milieudefensie et al. is and remains of the opinion, however, that even in a scenario of net-zero emissions in 2060, it primarily remains logical to claim a 45% reduction on the part of RDS for 2030. This is because RDS is able to achieve this 45% reduction, that by doing so RDS will, cumulatively speaking, emit as little CO2 as possible over the period until the net-zero point in 2060, and it is also reasonable to demand this of RDS in view of the excess in cumulative CO2 emissions that RDS has continued to emit since 2007.[[59]](#footnote-59) A 45% reduction as of 2030 is furthermore not only necessary for still being able to achieve the net-zero point in 2050, but it also increases the probability that in any event the zero point will be reached in 2060 or 2070.
4. In this respect Milieudefensie et al. would lastly like to refer to the warning of the IPCC that the world must not count its chickens with the presented maximum carbon budgets. According to the IPCC, account must be taken of the fact that due to the further warming up, in this century there will probably also be positive feedback loops in the climate system. This means that nature, due to further warming, on balance will absorb less CO2 and/or will emit more CO2 due to the warming up. According to the IPCC, for that reason, as a precautionary measure, approx. 100 Gt CO2 should be deducted from each carbon budget.[[60]](#footnote-60) For that reason the maximum available carbon budgets should not be taken as the starting point.
5. Everything therefore indicates that RDS must be made subject to the order sought in the primary claim, even in the scenarios which reach the net-zero point later than 2050. This precaution has everything to do with the fact that the coming decade will be all-decisive in the fight against dangerous climate change. This is underlined in the concluding part of the Mission Possible report of the Energy Transitions Commission, quote:

*“Action over the next decade will be vital, both to deliver the early emissions reductions needed to limit the growing stock of CO2 in the atmosphere, and to make it possible to reach net-zero emissions from the energy and industrial systems by mid-century [...] this vital and technically possible transition will not be achieved unless policymakers, investors and businesses jointly take immediate and forceful action to transform economic systems.”*

1. And this brings me back to what I already made clear in my opening arguments, i.e. that the coming decade is all-decisive for the future of humankind and the environment. RDS has such an important share in determining that future, that for all the reasons and circumstances cited by Milieudefensie et al., it should be compelled to apply its control over the Shell group in such way that the scope 1, 2 and 3 emissions of the Shell group will have decreased by at least 45% in 2030.

Counsel

This case is being handled by R.H.J. Cox, D.M.J. Dexters, A.J.M. van Diem and S.J. Keuls
Paulussen Advocaten in Maastricht

1. See the figures to be discussed hereinafter [↑](#footnote-ref-1)
2. Exhibit 135, IPCC SR15 report from 2018, Summary for Policymakers, p. 12, C.1.3. [↑](#footnote-ref-2)
3. Summons, paras. 733-756. [↑](#footnote-ref-3)
4. Summons, paras. 757-765 and Exhibit 304. [↑](#footnote-ref-4)
5. Ibid. [↑](#footnote-ref-5)
6. Opinion of Deputy Procurator General Langemeijer and Advocate General Wissink, paras. 4.58-4.67, 4.75, 4.143, 4.148-150, 6.8. [↑](#footnote-ref-6)
7. Summons, paras. 757-765. [↑](#footnote-ref-7)
8. Exhibit 282, p. 7. [↑](#footnote-ref-8)
9. Opinion of Procurator General Langemeijer and Advocate General Wissink under 4.57-4.67 and District Court under 2.32 and under 4.32-4.34. [↑](#footnote-ref-9)
10. Exhibit 336, p. 1. [↑](#footnote-ref-10)
11. Exhibit 336, p. 1. [↑](#footnote-ref-11)
12. Court of Appeal, para. 60. [↑](#footnote-ref-12)
13. Opinion of Deputy Procurator General Langemeijer and Advocate General Wissink, paras. 4.180-4.183. [↑](#footnote-ref-13)
14. Royal Dutch Shell plc Responsible Investment Annual Briefing 2020, 16 April 2020, Exhibit RK 032 B, p. 5. [↑](#footnote-ref-14)
15. Ibid, p. 5 at the top. [↑](#footnote-ref-15)
16. Exhibit 135, p. 12 under C.1. [↑](#footnote-ref-16)
17. IPCC, Exhibit 136, Chapter 5, p. 462*: “Emerging evidence indicates that future mitigation efforts that would be required to reach stringent climate targets,* particularly *those associated with carbon dioxide removal (CDR) (e.g., afforestation and reforestation and bioenergy with carbon capture and storage; BECCS), may also impose significant constraints upon poor and vulnerable communities (SDG 1) via increased food prices and competition for arable land, land appropriation and dispossession [..]”* [↑](#footnote-ref-17)
18. Summons, 646-651, oral arguments on admissibility of claim (notes on oral arguments 2) paras. 115-117. [↑](#footnote-ref-18)
19. Exhibit 212, pp. 21, 22 and 23. [↑](#footnote-ref-19)
20. Exhibit 212, p. 23. [↑](#footnote-ref-20)
21. Exhibit 276, p. 50, Box 6.1 Leakage and supply-side policy. [↑](#footnote-ref-21)
22. For a link to this judgment of the US Court of Appeals see <https://www.ca10.uscourts.gov/opinions/15/15-8109.pdf>. [↑](#footnote-ref-22)
23. See US judgment, pp. 17 and 24. [↑](#footnote-ref-23)
24. See US judgment, p. 9. [↑](#footnote-ref-24)
25. Exhibit 276, p. 50, Box 6.1 Leakage and supply-side policy. [↑](#footnote-ref-25)
26. Exhibit 313, in particular pp. 29, 37 and 39. [↑](#footnote-ref-26)
27. Exhibit 310, p. 1039. [↑](#footnote-ref-27)
28. Exhibit 311, 1-5. [↑](#footnote-ref-28)
29. Exhibit 311, p. 5 and p. 9. [↑](#footnote-ref-29)
30. Exhibit 311, p. 10. [↑](#footnote-ref-30)
31. See for further forms of causality in this case, inter alia, notes on oral arguments 1, paras. 130-147 and notes on oral arguments 2, paras. 110-128. [↑](#footnote-ref-31)
32. Exhibit 283, p. 1. [↑](#footnote-ref-32)
33. Summons, inter alia, paras. 57-62 and 619-633. [↑](#footnote-ref-33)
34. See also Exhibit 315. [↑](#footnote-ref-34)
35. Exhibit 281, p. 14. [↑](#footnote-ref-35)
36. Exhibit 283, p. 1. [↑](#footnote-ref-36)
37. Exhibit RO-90, p. 11 under 3. [↑](#footnote-ref-37)
38. Exhibit 279, p. 1 right-hand column, setting out that the expected ROACE percentage (ROACE = Return On Average Capital Employed) on the 1 to 2 billion that is to be sustainably invested is 8-12%. [↑](#footnote-ref-38)
39. Exhibit 299, p. 3 and notes on oral arguments 5, paras. 58-67. [↑](#footnote-ref-39)
40. Exhibit RK-7, p. 64. [↑](#footnote-ref-40)
41. See news report <https://www.nu.nl/economie/6095486/leidinggevenden-bij-shell-vertrekken-wegens-te-trage-vergroening.html>. [↑](#footnote-ref-41)
42. Summons, paras. 815-826. [↑](#footnote-ref-42)
43. Exhibit RK-32a, p. 2. [↑](#footnote-ref-43)
44. Netherlands Supreme Court in the Urgenda case under 5.7.6 with a reference via footnote 35 to the Kalimijnen case and under 5.7.7. [↑](#footnote-ref-44)
45. Summons, paras. 39, 642-644. [↑](#footnote-ref-45)
46. Netherlands Supreme Court in the Urgenda case under 5.7.7. [↑](#footnote-ref-46)
47. Opening arguments, notes on oral arguments 1, paras. 130-147. [↑](#footnote-ref-47)
48. Exhibit 274, pp. 22-23. [↑](#footnote-ref-48)
49. See also in the Urgenda case the District Court under 2.19 and 4.21, the Court of Appeal under 12 and the Netherlands Supreme Court under 12, see further the summons, paras. 45-48, in which it was explained that the decision and the reason therefore in the Urgenda case was based on the old 2˚C goal. See also Netherlands Supreme Court, 7.2.7-7.2.11. [↑](#footnote-ref-49)
50. Exhibit 274, p. 23. [↑](#footnote-ref-50)
51. Exhibit 306, p. 88. [↑](#footnote-ref-51)
52. Exhibit 306, p. 80: *“Global energy related decline rapidly, in line with the objectives of the Paris Agreement. They reach 25 Gt in 2030, reduce to under 10 Gt in 2050, and are on track for net zero in 2070*”, (underlining added by counsel). [↑](#footnote-ref-52)
53. Exhibit 135, p. 12 under C.1. [↑](#footnote-ref-53)
54. Exhibit 336. [↑](#footnote-ref-54)
55. Exhibit RK-32B, p. 5 at the top. [↑](#footnote-ref-55)
56. Exhibit RK-32B, p. 3. [↑](#footnote-ref-56)
57. Statement of defence, para. 169 and footnote 236. [↑](#footnote-ref-57)
58. Exhibit RK-9, p. 15. [↑](#footnote-ref-58)
59. See in this respect the statement of 6 November for more detail. [↑](#footnote-ref-59)
60. IPCC, Exhibit 136, p. 113. [↑](#footnote-ref-60)