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The decision of the Hague District Court in the climate case Urgenda Foundation v The State of the Netherlands

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Case:

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***J.P.L. 323 Abstract**

On 24 June 2015, The Hague District Court rendered an historic judgment in the climate case of Urgenda Foundation v The State of the Netherlands. The ruling marks the first successful climate change action founded in tort law as well as the first time a court has determined the appropriate emission-reduction target for a developed state, based on the duty of care and regardless of arguments that the solution to the global climate problem does not depend on one country's efforts alone. This submission provides a summary and background information on the case, some context as regards to the developments in climate change litigation and rounds off with some observations on the significance of the decision for climate change litigation in other jurisdictions.

Introduction and background

In 2014, the Journal of Planning and Environment Law published an article that I authored on the legal climate action in the Netherlands brought by the Urgenda foundation and 886 Dutch citizens against the Dutch state for its ongoing contribution to climate change.¹ The article explained why there is good reason to expect that by not adequately regulating and curbing the Dutch greenhouse gas emissions, the state commits a tort of negligence against its citizens. It also explained that the same can be argued in relation to the greenhouse gas emissions of other European states whose emissions evidently also contribute to the warming of the Earth. It

concluded that citizens and non-governmental organisations seem to be in a position to request their nation state's competent court to compel the nation's government to implement stricter emissions reductions in accordance with what is deemed necessary to help avoid dangerous climate change.

On 24 June 2015, the Hague District Court rendered its decision in the *Urgenda* case, confirming in most part the facts and legal argumentation described in the JPEL article. In this unprecedented decision the court considered the current Dutch climate policies inadequate and unlawful, labelled them as hazardous negligence and ordered the Dutch Government to limit the joint volume of Dutch annual greenhouse gas emissions by at least 25 per cent at the end of 2020 compared to the level of the year 1990.

Based on the State's current policy, the Netherlands are targeting a 16 per cent reduction while current prognoses of the State show that the Netherlands will achieve a reduction of 17 per cent at most in 2020. According to the court this is below the norm of 25–40 per cent deemed necessary in climate science and **J.P.L. 324* international climate policy for developed countries to achieve by 2020 to avoid a more than two degree warming of the average temperature of the Earth. Hence the order to curb emissions by at least 25 per cent in 2020.

The Hague District Court apparently realised the significance and historic nature of its decision, as it was immediately made available in an English translation, probably expecting it to generate worldwide attention, as it did.²

Indeed, the ruling marks the first successful climate change action founded in tort law as well as the first time a court has determined the appropriate emission-reduction target for a developed state, based on the duty of care and regardless of arguments that the solution to the global climate problem does not depend on one country's efforts alone.

Urgenda's case in context of other climate litigation

The tort law approach in climate litigation has been tried before, but so far only against large fossil fuel companies such as the lawsuits against the US private companies ExxonMobil³ and American Electric Power Company.⁴ Thus far these US cases have been without success because the suits were dismissed by the US courts on the grounds that regulating greenhouse gas emissions is a political issue rather than a legal issue, one that needs to be resolved by the legislator and the executive branch.

Climate change litigation against political institutions on the other hand has mainly been relying on administrative environmental and planning law and not on private (tort) law. Some of these administrative cases have been successful, such as the Australian case *Gray v Minister of Planning*⁵ in which it was held that the greenhouse gas impacts of burning coal had to be taken into account in the environmental

impact assessment of a new coal mine in New South Wales, and most notably the case of *Massachusetts v Environmental Protection Agency* ("EPA") in the US, in which 12 states and several cities successfully brought suit against the EPA to force the federal agency to regulate greenhouse gases as air pollutants.⁶

In the *Urgenda* case, it was a conscious decision to bring liability law to bear against a national government rather than the fossil fuel sector. In contrast to companies, national governments have made quite explicit statements—in the context of the UN Climate Treaty and the annual climate change **J.P.L. 325* conferences—regarding the danger of climate change and what should be done about it. They have consistently done so based on the scientific findings of the UN Climate Panel, the Intergovernmental Panel on Climate Change ("IPCC").

In international climate politics, for instance, countries that have signed the UN Climate Treaty jointly decreed during the 2010 UN Climate Change Conference in Cancun that an increase in the average global temperature of 2°C or more (compared to the 1850 level) must be regarded as dangerous climate change.⁷ This decree was preceded by a joint statement issued by the participating countries during the 2009 UN Climate Change Conference in Copenhagen:

"[T]o achieve the ultimate objective of the Convention to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius ... enhance our long-term cooperative action to combat climate change."

Since the initial drafting of the UN Climate Treaty in 1992, the industrialised countries (i.e. the Annex I countries)⁸ have committed to take the initiative with respect to dealing with the climate problem. They have done so in light of their historic emissions of greenhouse gases into the atmosphere, their prosperity accumulated due to the use of fossil fuels and their better economic, financial and technological position for dealing with and financing the climate approach. At the 2010 UN Climate Change Conference in Cancun, the Annex I countries once again jointly acknowledged that they should be expected to take the initiative in combating climate change and asserted their awareness that, based on the scientific findings of the IPCC, they would have to reduce their greenhouse gas emissions by 25–40 per cent by 2020.⁹

Another reason that it is better to bring action against national governments than large fossil fuel companies is that the former have jointly adopted the IPCC reports and relied on them as points of departure during climate change conferences. As long as the claimant in a climate case bases its argumentation on the IPCC findings, there is little to nothing a national government can do from a legal perspective to contest these findings. This puts the judge in an easier position to pass judgment and reach a verdict.

For this and other reasons, wrongful act climate cases brought against national

governments would appear to have better chances of success than lawsuits brought against the fossil fuel sector: a scientific basis has been established and governments have acknowledged the need to achieve a certain amount of reduction within a certain period of time. When it comes to demands for reduction, this is an important point.

This is not to say that it will not be possible in the present or near future to hold fossil fuel companies accountable for wrongful acts if they have no policy for contributing to the 2°C target; however, at the time that the *Urgenda* case was submitted, the legal basis was better for bringing a case against the Dutch Government than it was for bringing a case against a multinational oil company like Royal Dutch Shell. Incidentally, it is becoming increasingly clear that the large fossil fuel companies are paying heed to the 2°C target and the corresponding need to achieve significant emission reductions at both the national and international level. However, they are publicly speculating that the 2°C goal will not be achieved due to the increasing global demand for energy and the lack of signs that legislation will be implemented that ***J.P.L. 326** could prevent the Earth from warming up by more than 2°C. In an open letter from 2014, for instance, Shell writes:

"[W]e concur with the view in the recent Intergovernmental Panel on Climate Change ("IPCC") report that there is a high degree of confidence that global warming will exceed 2°C by the end of the 21st century ... Shell does not believe that any of its proven reserves will become 'stranded' as a result of current or reasonably foreseeable future legislation concerning carbon." [10](#)

This kind of argument is also used by other fossil fuel companies to assure shareholders that their recoverable fossil fuel reserves will retain their value in the long term and that there is no reason, therefore, to doubt the long-term right of existence and attractive financial valuation of fossil fuel companies.[11](#) The fact that fossil fuel companies knowingly continue to base their business model on the assumption that governments will not be capable of implementing sufficient effective legislation in time to prevent the dangerous temperature increase of more than 2°C might well improve the chances of bringing successful climate proceedings to bear against those companies.

That being said, it was a conscious decision that the action arising from a wrongful act was brought against the Dutch State rather than against a company. In the *Urgenda* case, it was also a conscious decision not to base the action taken against the State on administrative environmental law, as such cases mainly involve assessing the actions of the government in light of current environmental laws. The essence of the climate problem, however, is precisely the fact that current environmental laws do not provide sufficient protection against the risks of dangerous climate change. For this reason, it would not make sense to use environmental law to attempt to impose a stricter reduction obligation on the State than that which the State itself has taken as a point of departure. Achieving such an outcome would not appear to be likely by means of environmental law. In contrast, the open standard in

liability law with respect to formulating the duty of care provides many more grounds for such an outcome. This is mainly because when establishing the civil duty of care in a specific case, judges can weigh a large number of facts and circumstances, and—in the case of duty of care with respect to climate change—the universal consensus regarding dangerous climate change and the consensus among industrialised countries regarding the contribution they should make, on the basis of scientific arguments, in order to avert this danger can be important in defining what should be regarded as socially responsible behaviour.

While parties like Urgenda and private citizens cannot directly derive rights from treaty provisions or resolutions that have been adopted during the various climate change conferences, these provisions and resolutions can help—by means of the open standard of a socially responsible duty of care—in defining the duty of care standard that a government must practise in judicial matters. This applies even if these resolutions do not have any legally binding force between governments. As "soft law", they can still carry weight, at least as it pertains to Dutch law. The court ruling also shows that the State's obligations pursuant to other treaties, such as the European Convention on Human Rights and the Treaty on the Functioning of the European Union ("TFEU"), further define the duty of care standard. The same applies to the State's constitutional obligations.

In essence, the combination of the open standard for the duty of care and its definition by climate science and international climate politics, its definition based on the various relevant treaties, the Dutch constitution and the acknowledgements made by the State in the national context (in ministerial letters, policy documents etc) form the foundation upon which the ruling was based. ***J.P.L. 327**

The decision of the Dutch court in *Urgenda v the Dutch State* creates new angles for using a tort law based approach against governmental inaction to address climate change. Within the climate movement it has generated hope that this kind of successful legal action can be replicated in other countries and be used to press for more governmental action on climate change. A similar climate case demanding at least a 25 per cent reduction of emissions by 2020 is already pending in Belgium, instituted by a Belgium NGO and no fewer than some 9,000 Belgian citizens.[12](#)

Against the backdrop of this introduction and the aforementioned JPEL article, I will summarise the main aspects and findings of The Hague District Court's ruling below and conclude with some remarks about its significance. But, before doing so, I will first briefly reproduce the positions taken by Urgenda and the State, respectively, as this is necessary for a good understanding of the ruling.

The position of Urgenda

Briefly summarised, Urgenda supported its reduction claim as follows.[13](#)

The current global greenhouse gas emission levels, particularly the CO₂ level, leads

to or threatens to lead to a global warming of over 2°C, and thus also to dangerous climate change with severe and even potentially catastrophic consequences. Such an emission level is unlawful towards Urgenda, as this is contrary to the due care exercised in society. Moreover, it constitutes an infringement of, or is contrary to, ECHR arts 2 and 8, on which both Urgenda and the parties it represents can rely. The greenhouse gas emissions in the Netherlands additionally contribute to the (imminent) hazardous climate change. The Dutch emissions that form part of the global emission levels are excessive, in absolute terms and even more so per capita. This makes the greenhouse gas emissions of the Netherlands unlawful. The fact that emissions occur on the territory of the State and the State, as a sovereign power, has the capability to manage, control and regulate these emissions, means that the State has "systemic responsibility" for the total greenhouse gas emission level of the Netherlands and the pertinent policy. In view of this, the fact that the emission level of the Netherlands (substantially) contributes to one of several causes of hazardous climate change can and should be attributed to the State. In view of the Dutch Constitution art.21, among other things, the State can be held accountable for this contribution towards causing dangerous climate change. Moreover, under national and international law (including the international-law "no harm" principle, the UN Climate Change Convention and the TFEU) the State has an individual obligation and responsibility to ensure a reduction of the emission level of the Netherlands in order to prevent dangerous climate change. This duty of care principally means that a reduction of 25–40 per cent, compared to 1990, should be realised in the Netherlands by 2020. A reduction of this extent is not only necessary to continue to have a prospect of a limitation of global warming of up to (less than) 2°C, but is furthermore the most cost-effective. With its current climate policy, the State seriously fails to meet this duty of care and therefore acts unlawfully.

The counter arguments of the Dutch state

Briefly summarised, the State argued as follows.¹⁴ Urgenda's claims are not allowable, as there is no (real threat of) unlawful actions towards Urgenda attributable to the State, while the requirements for a liability based on tort law (Dutch Civil Code Book 6 s.162) have also not been met. In that context, the State amongst other arguments has pointed out that there is a lack of causation between Dutch emissions and ***J.P.L. 328** the climate change consequences that Urgenda seeks protection against. The Dutch emissions make a relatively small contribution to climate change because no more than 0.5 per cent of global emissions are discharged from the Dutch territory. The State acknowledges the need to limit the global temperature rise up to (less than) 2°C, but its efforts are, in fact, aimed at achieving this objective. The current and future climate policies, which cannot be seen as being separate from the international agreements nor from standards and (emission) targets formulated by the European Union, are expected to make this feasible. The State has no legal obligation, either arising from national or international law, to take measures to achieve the reduction targets stated in Urgenda's claims.

The implementation of the Dutch climate policy, which contains mitigation and adaptation measures, is not in breach of ECHR arts 2 and 8. Allowing (part of) the claims is furthermore contrary to the State's discretionary power. This would also interfere with the system of separation of powers and harm the State's negotiating position in international politics.

After this brief summary of respective positions, it is time to analyse the court's reasoning on the main issues in this decision.

The issue of standing

The case was instituted by Urgenda acting on its own behalf as well as acting as representative of the 886 individual citizens that joined the lawsuit.

Urgenda is a foundation established under Dutch law with the statutory aim "to stimulate and accelerate the transition process to a more sustainable society, beginning in the Netherlands". It relies on the definition of the word sustainability as set out in the 1987 report of the World Commission on Environment and Development of the United Nations, also known as the Brundtland report, which reads as follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The court started with the premise that under Dutch law, NGO's are allowed to institute public interest cases. Under the Dutch Civil Code, a foundation or association with full Legal capacity may bring an action to the court pertaining to the protection of general interests or the collective interests of other persons, in so far as the foundation or association represents these general or collective interests based on objectives formulated in its by-laws.¹⁵ Based on its by-laws Urgenda is defending the interest of a "sustainable society". The court agreed with Urgenda that it has standing to defend the rights of not just the current but also the future generations to availability of natural resources and a safe and healthy living environment. The court considered that the term "sustainable society" has by its very nature an intergenerational dimension. Also the court considered in establishing standing that Urgenda relied on legally relevant norms as laid down in for instance UN Climate Treaty art.216 and ECHR arts 2 and 8 ¹⁷ and that invoking these articles can be viewed as being in line with the objectives of Urgenda's by-laws. After all, the court said, these articles also aim at the protection of the interests that Urgenda seeks to defend, namely protection against activities which threaten to lead to serious threats to ecosystems and human societies.¹⁸

The court concluded that Urgenda's claims, in so far as it acts on its own behalf, are allowable and that the court therefore can assess the case in its entirety. Later on in the decision, once the court had motivated that Urgenda's own claim would be awarded, the court rejected the claim that was instituted on behalf of the 886

claimants. The court argued:

"Even if it is assumed that the individual claimants can rely on Articles 2 and 8 ECHR, their claims cannot lead to a decision other than the one on which Urgenda can rely for itself. In this situation, **J.P.L. 329* the court finds that the individual claimants do not have sufficient (own) interests besides Urgenda's interest. Partly in view of practical grounds, this has let the court to reject the claim in so far as it has been instituted on behalf of the [individual] claimants. The question of locus standi can therefore be left unanswered." [19](#)

Because the question of locus standi of the individual citizens was left unanswered, it is not clear whether individual citizens could ask the court for protection against inadequate climate policies. However, the court seems to hint that if Urgenda's own claim would not have been awarded, the individual citizens might have had sufficient interest and therefore standing, because the court considered:

"In the opinion of the court, the possibility of damages for those whose interests Urgenda represents, including current and future generations of Dutch nationals, is so great and concrete that given its duty of care, the State must make an adequate contribution, greater than its current contribution, to prevent hazardous climate change." [20](#)

The courts assessment on the substantive issues

According to the court the case had at its core the question of whether Urgenda can force the State to reduce the emission of greenhouse gases to a greater degree than would be effectuated by the policy intentions of the Dutch Government.[21](#) As the court explained (sub.4.3), the claims submitted by Urgenda involve many difficult and extensive "climate-related" issues that the court does not have expertise in. Therefore the court based its assessment on these issues on the facts that both parties agreed on, relating to both current scientific knowledge and other data that the State recognised to be correct.

Since the State, as expected, had not denied the IPCC findings that were brought forward by Urgenda, nor the reports of other international institutions such as United Nations Environment Programme ("UNEP") and the International Energy Agency ("IEA"), nor the reports of national agencies and institutions such as PBL Netherlands Environmental Assessment Agency ("PBL") and the Royal Netherlands Meteorological Institute ("KNMI") the court could de facto rely on all climate science that was put forward.

The court basically considered three main questions in this case:

- How severe is the problem, the scale of the alleged danger of climate change and what emission reductions are needed to avert the danger?

- Does the Dutch State have a legal obligation to Urgenda to take farther-reaching reduction measures in view of the alleged danger of climate change?

- And if this is so, is this an appropriate matter to be decided in a courtroom?

The severity of the climate problem and the reductions needed

With regard to the first question about the severity of the problem of climate change, the court first considered that the IPCC has established that a worldwide climate change is taking place and that it is very likely that human actions, particularly the combustion of fossil fuels and deforestation, are the main causes. Based on IPCC science and the acknowledgement thereof in the Cancun Agreements the court found that the 2°C target has globally been taken as the starting point for the development of climate policies. **J.P.L. 330* [22](#)

The court furthermore considered it for certain that global emissions are still increasing rather than decreasing [23](#) and continued: [24](#)

"It is not disputed between the Parties that dangerous climate change has severe consequences on a global and local level. The IPCC has reported that the ice at the North and South Poles as well as alpine glaciers are melting due to global warming, which will result in a rise in sea levels. Moreover, the warming of the oceans is expected to result in increased hurricane activity, expansion of desert areas and the extinction of many animal species because of the heat, the latter causing a decline in biodiversity. People will suffer damage to their living environment because of these changes, for instance, a deterioration of food production. Furthermore, the temperature rise will lead to heat-related deaths, particularly among the elderly and children. The IPCC reports also state that the current temperature rise causes damage to man and the environment. The 2°C target, also assumed by the Netherlands, is intended to prevent climate change from becoming irreversible: without intervention, the aforementioned processes will become unstoppable."

Specifically on the consequences for the Netherlands the court considered as follows: [25](#)

"The reports of the PBL and KNMI are based on the IPCC reports and also describe that in the next hundred years the Netherlands will face higher average temperatures, changing precipitation patterns and a sea level rise. Chances of heat waves in the summer will increase and extreme precipitation will become more prevalent. The basins of major rivers will on the one hand have to contend with more extreme precipitation, while on the other hand chances of a decreased amount of supplied

water are high in the summer. High levels of river discharge, in combination with rising sea levels and high water levels at sea, could more frequently lead to dangerous situations in the downstream areas. Less water in the summer means, among other things, higher risks of salinization in the coastal areas and less freshwater for agriculture. The Netherlands will also feel the consequences of climate change elsewhere in the world. Some import products will become more expensive."

On the basis of considerations like these the court concluded that a highly hazardous situation for man and the environment will occur with a temperature rise of over 2°C compared to the pre-industrial level and that it is therefore necessary to stabilise the concentration of greenhouse gases in the atmosphere, which requires a reduction of the current anthropogenic greenhouse gas emissions.

The court next established the maximum level of greenhouse gas concentrations in the atmosphere and the associated reduction targets and reaches the following conclusions on the basis of IPCC science, decisions of various climate summits, and decisions by the European Council and the Dutch Government:[26](#)

"The foregoing leads to the further intermediate conclusion that according to the current scientific position, the prevention of dangerous climate change calls for a 450 scenario[27](#) with an associated reduction target for the Annex I countries, which includes the Netherlands and the EU as a whole, of 25–40% in 2020, and 80–95% in 2050. The EU and the Netherlands have acknowledged this finding as such and (initially) focused on an emission reduction target of 30%. However, the EU subsequently refused to commit to more than a 20% reduction, with the Netherlands joining this path from about 2010.[28](#) For 2030, the EU and the Netherlands have committed to a 40% reduction target; **J.P.L. 331* and to an 80% reduction target for 2050. This brings the reduction target back in line with the IPCC's proposed reduction target for a 450 scenario for 2050."

The court then first determined that the Dutch target for 2020 is below the standard deemed necessary by climate science and international policy, meaning that a 25–40 per cent reduction target for Annex 1 countries (including the Netherlands) is necessary to realise the 2°C target and thus to prevent dangerous climate change.[29](#)

The court then addressed (sub.4.32 onwards) the State's argument that the current Dutch target of 16 per cent is nevertheless sufficient (effectively a maximum reduction of 17 per cent) because the European Union is planning to implement a 40 per cent reduction by 2030, and the Netherlands will be contributing to this reduction. Based on this new target for 2030, it would still be possible to achieve the set target of a 80–95 per cent reduction by 2050. This would adequately contribute to achieving the 2°C target, the State argued.

The court did not follow this line of reasoning because the result of a lower target for 2020 is that the Netherlands would, on balance, release more greenhouse gases into the atmosphere over the entire period up to 2050 than would be the case if emissions were to be reduced by 25 per cent or more by 2020. The court formulated its

stance as follows:[30](#)

"Urgenda is correct in arguing that the postponement of mitigation efforts, as currently supported by the State (less strict reduction between the present day and 2030 and a significant reduction as of 2030), will cause a cumulation effect, which will result in higher levels of CO₂ in the atmosphere in comparison to a more even procentual or linear decrease of emissions starting today. A higher reduction target for 2020 (40%, 30% or 25%) will cause lower total, cumulated greenhouse gas emissions across a longer period of time in comparison with the target of less than 20% chosen by the State. The court agrees with Urgenda that by choosing this reduction path, even though it is also aimed at realising the 2°C target, will in fact make significant contributions to the risk of hazardous climate change and can therefore not be deemed as a sufficient and acceptable alternative to the scientificallly proven and acknowledged higher reduction path of 25–40% in 2020."

In order to illustrate this difference in cumulative emissions, explanatory graphs were submitted to the court during the plea on behalf of Urgenda. A few of these graphs, including the one shown here, were included in the court's ruling. **J.P.L. 332*

The following is the full text that was provided with this graph during the plea on behalf of Urgenda, as this would seem to be the best way to explain the importance of following the right emission reduction scenario:

1. "If one starts at a particular emission level (shown on the graph as point A) and ultimately aims to arrive at a much lower emission level in 2050 (point B), there are essentially three reduction paths for getting there.
2. The first reduction path, shown in orange, is characterised by larger amounts of reductions at the beginning of the period than at the end of the period. While the curve exhibits a relatively sharp drop during the first phase until 2020, it becomes quite gradual towards the end of the period from 2040 onwards.
3. Of all three scenarios, this scenario features the least cumulative emissions during the entire period up to 2050, represented by the total surface of the orange section.
4. This orange reduction path appears to require disproportionately severe reduction efforts at the beginning of the period and far too few

reduction efforts at the end of the period. Appearances can be deceiving, however, as the efforts required remain the same from year to year between point A and B. The orange line in fact represents the fixed annual reduction percentage that is required for arriving at point B in 2050 when starting from point A.

5. If this fixed annual reduction percentage is 5 per cent, for instance, the orange line shows what will happen if the emission level is reduced by 5 per cent each year in comparison to the previous year. **J.P.L.*

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6. If the starting point A represents 100 emission units, a 5 per cent reduction during the first year would amount to a reduction of 5 units, meaning that the emission level would drop to 95 units.

7. During the second year, this emission level of 95 units would drop by 5 per cent, which is now only 4.75 emission units, resulting in an emission level of 90.25 units after two years.

8. In the third year, this emission level of 90.25 would once again be reduced by 5 per cent, which is now only 4.51 emission units.

9. The percentage thus remains the same from year to year (5 per cent), while the annual reduction drops from 5 units, to 4.75 units, to 4.51 units and so on towards 2050. This is why the curve is at its steepest during the first year and gradually begins to level off after that.

10. And since the requirement is the same each year in terms of percentage, this approach evenly spreads out the reduction efforts over the entire period up to 2050.

11. This reduction method also fits with the reality of emission reduction scenarios, in that larger steps can be taken early on due to the principle of 'low-hanging fruit', while later on reduction becomes increasingly more difficult.

12. The straight blue line represents a second possible reduction path. This path is linear from point A to point B, with emissions being reduced by the same amount of units each year until point B is reached in 2050. This is another way in which reduction efforts can be spread out evenly over the entire period.

13. It is clear, however, that this linear scenario leads to significantly more emissions than the orange scenario, as the emission volume is equal to the orange and blue sections of the graph combined.

14. The reason for the larger emission volume is that the emissions in 2020 and 2030 are much higher than they are in the orange scenario. Both paths arrive at the same point B in 2050, but the cumulative greenhouse gas emissions are much greater in the blue scenario because there were not enough reductions in 2020 and 2030. This demonstrates the importance of maintaining the right reduction percentages for 2020 and 2030, and that the focus cannot only be on achieving a reduction percentage in 2050.

15. As submitted in exhibit U96,[31](#) the British Government puts it shortly and succinctly as follows: '[I]t is not simply the level of emissions in a future target year that we should be concerned about. It is cumulative emissions over the whole period that matter'.

16. The third scenario is represented by the bulging grey line on the graph. As can be seen, this scenario features a more gentle downward slope in the period up to 2030 than in the blue scenario. Reduction efforts seem to be more or less postponed, meaning that the cumulative emissions are even greater.

17. The postponed reduction scenario is thus the most dangerous path and the path which exhibits the least duty of care. Nevertheless, this is the scenario which the EU has chosen to follow and which the State is defending in these proceedings."

Based on these differences in cumulative emissions, among other things, the court has arrived at the conclusion that if emissions are not reduced by at least 25–40 per cent by 2020 as science prescribes, there is an increased risk of dangerous climate change. Lower emission reductions by 2020 are therefore not an option, even if they

do not make it impossible to achieve the 2°C target.

The court's conclusion regarding the first main question is therefore in short that climate change is a serious danger and that a global reduction of emissions is necessary in order to prevent the threat of a **J.P.L. 334* dangerous climate change of 2°C or more. From a scientific perspective, the Netherlands, as an industrialised nation, must realise a reduction of emissions of 25–40 per cent by 2020 compared to 1990.

The State's legal obligation to Urgenda

We then come to the second question, which addresses whether the State has a legal obligation to Urgenda. The court's answer to this question is based on the "open standard" of the Dutch Civil Code Book 6 s.162 (unlawful acts). In this respect, the court has kept in mind the discretionary power accorded to the State and its bodies in the determination and execution of government policy, including matters relating to the climate.

The court first of all recognised that the stipulations included in the UN Climate Treaty, the Kyoto Protocol and the "no harm" principle³² of international law do not have a binding force towards citizens (private individuals and legal persons). The parties had also already agreed to this. Urgenda could therefore not directly rely on this principle, the treaty and the protocol. However, the court argued:

"This does not affect the fact that a state can be supposed to want to meet its international-law obligations. From this it follows that a national-law³³ standard—a statutory provision or an unwritten legal standard—may not be explained or applied in a manner which would mean that the state in question violates³⁴ an international-law obligation, unless no other interpretation or application is possible."

This is a generally acknowledged rule in the legal system. This means that when applying and interpreting national-law open standards and concepts, including social propriety, reasonableness and propriety, the general interest or certain legal principles, the court takes account of such international-law obligations. This way, these obligations have a "reflex effect" in national law.³⁵

The court proceeded:

"The comments above regarding international-law obligations also apply, in broad outlines, to European law, including the TFEU stipulations, on which citizens cannot directly rely. The Netherlands is obliged to adjust its national legislation to the objectives stipulated in the directives, while it is also bound to decrees (in part) directed at the country. Urgenda may not derive a legal obligation of the State towards it from these legal rules. However, this fact also does not stand in the way of the fact that stipulations in an EU treaty or directive can have an impact through the open standards of national law described above." ³⁶

With this the court refers back to its earlier considerations with regard to TFEU art. 191, which amongst others states that Union policy on the environment shall aim at a high level of protection, as well as to the EU directives and decisions that are relevant to the topic of climate change, such as the [ETS Directive](#)³⁷ and the [Effort Sharing Decision](#).³⁸

As for ECHR arts 2 and 8 that Urgenda relied on, the court considered: **J.P.L. 335*

"that Urgenda itself cannot be designated as a direct or indirect victim within the meaning of Article 34 ECHR, of a violation of Articles 2 and 8 ECHR. After all, unlike with a natural person, a legal person's physical integrity cannot be violated nor can a legal person's privacy be interfered with." ³⁹

The court thus found that Urgenda could not rely on the ECHR to uphold its claims. However the court did hold that the jurisprudence of the European Court of Human Rights ("ECtHR") on arts 2 and 8 were relevant:

"[B]oth articles and their interpretation given by the ECtHR, particularly with respect to environmental right issues, can serve as a source of interpretation when detailing and implementing open private-law standards in the manner described above, such as the unwritten standard of care of Book 6, Section 162 of the Dutch Civil Code." ⁴⁰

The court then reflects on the environmental law principles and scope of protection of ECHR arts 2 and 8, such as those that can be derived from the ECtHR's rulings and also referred to the Manual on human rights and the environment, published by the Council of Europe.⁴¹

As already mentioned in the brief summarisation of Urgenda's position, Urgenda also relied on Dutch Constitution art.21 that imposes a duty of care on the State relating to the liveability of the country and the protection and improvement of the living environment. For the densely populated and low-lying Netherlands, this duty of care concerns important issues, such as the water defences, water management and the living environment. According to the court, this rule and its background do not provide certainty about the manner in which this duty of care should be exercised nor about the outcome of the consideration in case of conflicting stipulations. The court found that the manner in which this task should be carried out is covered by the government's own discretionary powers.⁴²

After these and other related considerations the court then concluded:

"The foregoing leads the court to conclude that a legal obligation of the State towards Urgenda cannot be derived from Article 21 of the Dutch Constitution, the 'no harm' principle, the UN Climate Change Convention, with associated protocols, and Article 191 TFEU with the [ETS Directive](#) and [Effort Sharing Decision](#) based on TFEU. Although Urgenda cannot directly derive rights from these rules and Articles 2 and 8 ECHR, these regulations still hold meaning, namely in the question discussed below whether the State has failed to meet its duty of care towards Urgenda. First of all, it can be derived from these rules what degree of discretionary power the State is

entitled to in how it exercises the tasks and authorities given to it. Secondly, the objectives laid down in these regulations are relevant in determining the minimum degree of care the State is expected to observe. In order to determine the scope of the State's duty of care and the discretionary power it is entitled to, the court will therefore also consider the objectives of international and European climate policy as well as the principles on which the policies are based."

For the court, the principles involved in this case include, among others, those in UN Climate Convention art.3. These are the fairness principle, the precautionary principle and the sustainability principle. The fairness principle signifies that extra effort is required from the developed countries that have been responsible for most emissions and have also profited most from these emissions. Moreover the court considered that it follows from the fairness principle that future generations must be borne in mind as art.2 para.1 of the Convention states that the parties to the convention should protect the climate system for the benefit of present and future generations of humankind. The court argued: ***J.P.L. 336**

"The principle of fairness means that the policy should not only start from what is most beneficial to the current generation at this moment, but also what this means for future generations, so that future generations are not exclusively and disproportionately burdened with the consequences of climate change." [43](#)

The court also established that TFEU art.191 para.2 also includes a number of principles relevant to this case, such as the principle of a high level of protection and —once again—the precautionary principle or the prevention principle (in short: prevention is better than cure).[44](#)

The court then went on reiterating that these objectives and principles constitute an important viewpoint in assessing whether or not the State acts wrongfully towards Urgenda and stated:

"With due regard for all the above, the answer to the question whether or not the State is exercising due care with its current climate policy depends on whether according to objective standards the reduction measures taken by the State to prevent hazardous climate change for man and the environment are sufficient, also in view of the State's discretionary power. In determining the scope of the duty of care of the State, the court will therefore take account of:

(i)the nature and extent of the damage ensuing from climate change;

(ii)the knowledge and foreseeability of this damage;

(iii)the chance that hazardous climate change will occur;

(iv) the nature of the acts (or omissions) of the State;

(v) the onerousness of taking precautionary measures;

(vi) the discretion of the State to execute its public duties—with due regard for the public-law principles, all this in light of:

- the latest scientific knowledge;
- the available (technical) option to take security measures, and
- the cost-benefit ratio of the security measures to be taken."

With regard to the first three factors the court was of the opinion that it is an established fact, based on the science that was put before it, that the current global emissions and reduction targets of the signatories to the UN Climate Change Convention are insufficient to realise the 2°C target and therefore the chances of dangerous climate change should be considered as very high—and this with serious consequences for man and the environment, both in the Netherlands and abroad. Therefore, the court took the view that the State is obliged to take measures in its own territory to prevent dangerous climate change (mitigation measures). The court also accepted it an established fact that without far reaching reduction measures, the concentration of global greenhouse gas emissions will have reached such a high level in the atmosphere at around 2030, that realising the 2°C target will have become all but impossible. Therefore mitigation measures should be taken expeditiously. The court argued that the faster the reduction of emissions can be initiated, the bigger the chance that the danger will subside. The court also took account of the fact that the State has known since 1992, and certainly since 2007, about global warming and the associated risks. These factors lead the court to the opinion that, given the high risk of hazardous climate change, the State has a serious duty of care to take measures to prevent it.⁴⁵

In relation to the fifth factor (the onerousness of taking measures) the court considered that the Netherlands had originally adopted a reduction target of 30 per cent for 2020 and that in 2009 the then cabinet argued that this was needed on the basis of science to stay on a plausible course to keep the 2°C target within reach. The State had not argued that the decision of the new cabinet in 2010 to let go of that target was driven by improved scientific insight or because it was allegedly not economically responsible **J.P.L. 337* to continue to maintain that 30 per cent target. Nor did the State argue that a reduction path of 25–40 per cent in 2020

would lead to disproportionately high costs, or would not be cost-effective in comparison with the slower reduction path for other reasons. The court also pointed out that neighbouring countries have adopted targets within the 25–40 per cent range such as Denmark (40 per cent) and the UK (35 per cent) and have therefore adopted stricter climate policies on top of the EU policies and that there is no indication that it hurts their economies and the competitiveness of their businesses. Based on this the court concluded that there is no serious obstacle from a cost consideration point of view to adhere to a stricter reduction target. Furthermore the court pointed out that taking immediate action, as argued by Urgenda, is more cost-effective, and that this also supported by reports of the IPCC and UNEP. In these reports it is also emphasised that later intervention increases the risks to dangerous climate change and also increases the need for new technologies that are now insufficiently available while the risks and options these technologies are still uncertain. The court was therefore of the opinion that the State has a duty of care to mitigate as quickly and as much as possible.[46](#)

With regard to the fourth and sixth factor (nature of the State's acts and omissions and the State's discretion), the court rejected the State's argument that it cannot be seen as one of the causers of climate change, as it does not emit greenhouse gases. The court did not find this a decisive argument. First, based on art.21 of the Constitution, the State's concern must be focused on the protection and improvement of the living environment; that means a duty of care. Secondly, the State also has the power to exercise effective control over emission levels in the Netherlands (and indeed controls it). Thirdly, when it became a signatory to the UN Climate Change Convention and the Kyoto Protocol, the State expressly accepted its responsibility for the national emission level and in this context accepted the obligation to reduce this emission level as much as needed to prevent dangerous climate change. The court found that for these and other reasons, the State plays a crucial role in the transition to a more sustainable society and therefore has to take on a high level of care for establishing an adequate and effective statutory and instrumental framework to reduce the greenhouse gas emissions in the Netherlands.[47](#)

According to the court it is also not decisive that a reduction in Dutch emissions would only have a minor effect on global emissions. The court held that it is a scientific fact that every emission contributes to the rising global concentration of CO₂, and therefore no single country, big or small, can hide behind the argument that the prevention of dangerous climate change does not depend on their individual efforts alone. According to the court emission reduction concerns both a joint and individual responsibility of the signatories to UN Climate Convention. The court also held that in view of the fact that the Dutch emission reduction is determined by the State, it may not reject possible liability by stating that its contribution is minor, as also adjudicated *mutatis mutandis* in the *Kalimijnen* ruling (the *Potash Mines* ruling) of the Dutch Supreme Court.[48](#) Furthermore the court argued that the Netherlands, as an Annex I country, is one of the countries that must assume a leading role. Moreover, it was beyond dispute that the Dutch per capita emissions are one of the

highest in the world.[49](#)

The court also carefully considered whether the obligations of the Netherlands with regard to the European Union, based on the [ETS Directive](#) and [Effort Sharing Decision](#) should give cause to a different judgment. However the court determined that these do not prevent farther-reaching reduction measures from being taken. Other EU countries bound by the Directive (such as the UK and Denmark) have accepted targets in their national climate policy that go over and above the percentages set at the EU level and EU legislation does not prevent setting higher national targets.[50](#) The court also did not follow the State's argument that other European countries will neutralise reduced emissions in the Netherlands, and that ***J.P.L. 338** greenhouse gas emissions in the European Union as a whole will therefore not decrease (so called carbon leakage). The court pointed to IPCC findings that in general only about 12 per cent of carbon losses occur and to an assessment document of the European Commission that concludes that "so far there have been no signs of carbon leakage". In view of this, the court argued, it cannot be maintained that extra reduction efforts of the State would be without substantial influence.[51](#)

Noteworthy is also that the court found that due to the principle of fairness, the State, in choosing measures, will also have to take account of the fact that the costs are to be distributed reasonably between the current and future generations. If according to the current insights it turns out to be cheaper on balance to act now, the State has a serious obligation, arising from due care, towards future generations to act accordingly.[52](#) The court also considered that the only effective remedy against hazardous climate change is to reduce the emission of greenhouse gases and that adaptation measures will not be sufficient to protect citizens in the long run.[53](#)

From all the above considerations it follows according to the court that a sufficient causal link can be assumed to exist between the Dutch greenhouse gas emissions, global climate change and the effects (now and in the future) on the Dutch living climate. The court argued that the fact that Dutch emissions are limited on a global scale does not alter the fact that these emissions do contribute to climate change. The court also took into consideration that the Dutch greenhouse emissions have already contributed to climate change and by their nature will also continue to contribute to climate change.[54](#)

All in all the court concluded that the severity and the scale of the climate problem make it necessary—in view of the fact that no other effective solutions to the problem as yet exist—to take mitigation measures and not to wait for measures that will only take effect at a later date. The court pointed out that the greater and more serious the danger becomes, the more the discretionary power and freedom of choice of the State will be diminished. However, the court did conclude that it is the State's freedom to make its own deliberations with respect to the reduction target to be chosen within the range of 25–40 per cent. In principle, the court considered a reduction in line with the lower limit to be appropriate. This therefore amounts to a reduction of emissions of at least 25 per cent by 2020 compared to 1990.[55](#)

The court therefore answered the second main question as follows: in principle—i.e. independent of the answer to the third main question with regard to the separation of powers—the State has a legal obligation to Urgenda to effectuate a reduction in emissions in the Netherlands of at least 25 per cent by 2020 in comparison with the year 1990. In other words, acquiescence in a lesser level of reduction constitutes unlawful conduct against Urgenda.

The separation of powers

The third main question addresses the distribution of power within the state authorities, also known as "trias politica". For many, the question will arise of whether it is appropriate for an unelected judge to rule on this matter. Indeed the State had asserted that climate policy is a political matter, which does not belong in a courtroom.

The court held that Dutch law has no complete separation of state authorities, in this case between the executive and judicial authorities. According to the court it is better to say that the distribution of authorities between these two bodies (and the legislative authority) is intended to achieve a balance between the state authorities. In this regard, no single authority has primacy over the others in a general sense or in all circumstances, said the court. The court's position is that each state authority does have its own mandate **J.P.L. 339* and responsibilities and the responsibility of the judge is to offer judicial protection and make decisions on legal disputes. They *must* do this if they are asked to, said the court. In this respect the court considered it worthwhile noting that judges, although not elected have democratic legitimacy in another but vital respect: their authority and ensuing "power" are based on democratically established legislation, whether national or international, which has assigned them the task of settling disputes, also in cases in which citizens have turned against government authorities. The court said that the task of providing legal protection from government authorities, such as the State, pre-eminently belongs to the domain of a judge and that this task is also enshrined in legislation. The court held that by performing its task it does not enter the political domain with the associated considerations and choices. Separate from any political agenda, the court has to limit itself to its *own* domain, which is the application of the law, the court ruled. The fact that a court ruling can have political consequences does not in itself make at a political issue:

"This does not mean that allowing one or more components of the claim can also have political consequences and in that respect can affect political decision-making. However, this is inherent in the role of the court with respect to government authorities in a state under the rule of law. The possibility—and in this case even certainty—that the issue is also and mainly the subject of political decision-making is no reason for curbing the judge in his task and authority to settle disputes. Whether or not there is a 'political support base' for the outcome is not relevant in the court's

decision-making process."

Finally, the court had to respond to the argument of the State that allowing the claim regarding the reduction order would damage the Netherlands' negotiation position at, for instance, the conference in Paris in late 2015. In the opinion of the court, this did not have independent significance in the sense that, if the court would rule that the law obliges the State towards Urgenda to realise a certain target, the government is not free to disregard that obligation in the context of international negotiations.

However, the court also considered with regard to all the above that it must be cautious if the order would lead to measures that would have consequences for third parties of which it does not have a good grasp. However, due to the severity of the danger, the greater the government's legal obligation, the less reason there is to issue a cautious judgment, the court argued. In any case, this cautiousness did provide an additional reason for the court to restrict the order to a minimum of a 25 per cent reduction in 2020 and to not award Urgenda the 40 per cent reduction it had primarily requested.

The court's answer to the third main question was therefore that the "trias politica" does not constitute a decisive counterargument.

The significance of the Dutch climate case

It always seems impossible until it's done, Nelson Mandela once said. And once it's done, it becomes easier to do it again, to replicate it. That's what makes the Dutch climate case significant: it is precedent setting. Up front many lawyers and legal scholars thought such a decision impossible but here it is and the 60-page decision seems well motivated. While the ruling is obviously not binding for any other country, it sets an example for the world that will hopefully be replicated many times.

It should be noted that, at the time of the writing of this article (July 2015), it was not yet clear whether the Dutch State would be appealing the ruling. The Government has promised to postpone its decision on whether to appeal until after a parliamentary debate on the content of the ruling has been held. Whether or not there is an appeal, as we have seen in asbestos and tobacco lawsuits, things always seem to gain momentum after an initial and thus historic ruling that sets a precedent. It is almost a rule that more judgments will follow. Subsequent condemnatory rulings will then begin to change the public perception of the problem. Twenty years ago, the idea of a ban on smoking in cafés or public buildings would have been unimaginable. After various court rulings, it is now generally accepted that smokers should not be **J.P.L. 340* permitted to pose a risk to the health of others. Hopefully, cases dealing with the climate problem will follow the same course. That is why this ruling, the first of its kind in the world, is so important. It will hopefully help change the public perception of the problem and bring it in line with what climate scientists have been trying to make clear to us for so many years: climate change poses a major threat to society and states, and companies and citizens will have to

do their share to stop it while the worst can still be avoided. States bear a special responsibility in this respect.

In the legal community, there has been an increasing conviction in recent years that the law and the judiciary may have a role to play in urging states and large fossil fuel companies to deal with the climate problem.⁵⁶ The general consensus is that politicians have put off dealing with the climate problem for far too long; as a result, the risk of a 2°C rise in global temperature has increased, and with it the risk of large-scale violation of human rights around the world. Prior to the ruling, the most conspicuous legal development in the field was the drafting of the Oslo Principles, a document that was put together by a group of lawyers and scientists, including supreme court judges from various countries.⁵⁷ In the Oslo Principles, this group points to the principles in existing law that are applicable to climate policy and argues that there are sufficient ways in which countries and large fossil fuel companies can be compelled to limit greenhouse gas emissions. They conclude that judges can draw on international law, human rights and liability law to order states to enact better climate policies so as to prevent the harmful effects of climate change. According to the group, the right to life and health, international peace and security, access to water and food supplies and economic progress, among other things, are at stake.

The principles in the Dutch climate case and the Oslo Principles are by and large the same, and offer good points of departure for climate proceedings in other countries, especially since both rely on the climate science of the IPCC, treaties such as the UN Climate Treaty and human rights treaties, the principles of international environmental law as laid down in the various treaties and other "soft law" such as unanimous statements that have been made and laid down in (or in response to) treaties. Hopefully, legal scholars from around the world and in various fields will further explore the potential of these developments for their jurisdictions and for bringing new national and international climate cases to court. In this way, the law—and, in particular, liability law, human rights law and international environmental law—will be able to play the bigger role it seems to deserve with respect to climate change. It is a role that is at least worth exploring given what is at stake for global communities if the Earth's temperature increases by more than 2°C. The law seems to provide us with the possibility of averting such disastrous global warming, thereby securing our safety and that of subsequent generations.

Belgium is the first country to follow the example of the Netherlands. In the spring of 2015, a Belgian NGO ("VZW Klimaatzaak") and nearly 9,000 Belgian citizens served a summons to the federal government and the country's three regions on the same grounds as in the Dutch case. The Belgian Government, too, is being legally blamed for not taking sufficient measures to keep climate change in check. The claimants are also demanding that the Belgian Government curb emissions by at least 25 per cent in 2020. The ruling of the district court in The Hague can serve as a basis for the Belgian judge in light of the many similarities between Dutch and Belgian law. This will give the claimants in Belgium good reason to hope that the same result can be

achieved as in the Netherlands.

There has also been a breakthrough in the US, in the state of Washington, involving a legal case in which eight youth petitioners submitted a petition for rulemaking to prevent dangerous climate change. The petition was rejected by the Washington State Department of Ecology and the youth petitioners started a lawsuit. In her 23 June 2015 order, Seattle-based Judge Hollis Hill ordered the state of Washington to ***J.P.L. 341** reconsider the petition in light of current climate science and inform the court whether it will agree to more stringent emission reduction rules.⁵⁸

The ruling of the Dutch court, the developments surrounding the climate case in Belgium, the ruling of the court in Seattle, Washington, and the Oslo Principles are an indication that countries and large fossil fuel companies have to pay more serious attention than in the past to the fact that liability law and human rights law will play a greater role in the climate debate and that they could be held liable in the long term if they fail to make sufficient contributions to solving the climate problem.

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1.	See Roger Cox, "The Liability of European States for Climate Change" [2014] J.P.L. 961.
2.	The English translation can be downloaded via the website of Urgenda and the website of the court at respectively http://www.urgenda.nl/documents/VerdictDistrictCourt-UrgendaVStaat-24.06.2015.pdf [Accessed 29 January 2016] and http://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2015:7196 [Accessed 29 January 2016].
3.	See <i>Native Village of Kivalina v ExxonMobil Corp</i> 696 F.3d 849, 2012 WL 4215921 (9th Cir. 2012). The village of Kivalina, Alaska, is coping with erosion of its coastal line due to climate change and has to be relocated. Wanting compensation for incurred damage, it filed suit against several energy companies, including ExxonMobil. The US Court of Appeals for the 9th Circuit held that Kivalina's federal common law claim of public nuisance for global warming by greenhouse gases was displaced by the Clean Air Act. "Our conclusion obviously does not aid Kivalina, which itself is being displaced by the rising sea", concluded Circuit Judge Sidney R. Thomas. "But the solution to Kivalina's dire circumstance must rest in the hands of the legislative and executive branches of our government, not the federal common law." See more at http://blogs.law.columbia.edu/climate-change/2012/09/26/9th-circuit-affirms-dismissal-in-kivalina-v-exxonmobil/ [Accessed 29 January 2016].

4.	<p>See US supreme Court in <i>American Electric Power Co v Connecticut</i> 564 U.S. 2011. Several states filed a lawsuit against AEP and 4 other owners of fossil-fuel-fired power plants, together operating in 20 states. The states sought to curb the defendants' greenhouse gas emissions under public nuisance law due to their contributions to climate change. As in <i>Native Village of Kivalina v ExxonMobil Corp</i> 696 F.3d 849, 2012 WL 4215921 (9th Cir. 2012), the court dismissed the lawsuit on displacement of federal common law by the Clean Air Act. The court found that Congress had entrusted the Environmental Protection Agency in the first instance to decide how greenhouse gases should be regulated, and that it's not for the federal courts to issue their own rules. See more at: http://blogs.law.columbia.edu/climatechange/2011/06/20/todays-supreme-court-decision-in-aep-v-connecticut/ [Accessed 29 January 2016].</p>
5.	<p><i>Gray v Minister for Planning</i> (2006) 152 LGERA 258; The summary on the website of the University of Melbourne, Centre for Resources, Energy and Environmental Law summarises the case as follows: "This case concerned the adequacy of an environmental impact assessment of a proposed new coal mine in the Hunter Valley. Pain J held that the EIA needed to address the indirect impacts of the greenhouse gas emissions from the mine. Moreover, while her Honour noted that climate change is a global problem with many contributing sources, Pain J held that this did not mean that the contribution from a single large source should be ignored in the EIA process. Pain J's decision was based on the principles of ecologically sustainable development ("ESD"), in particular, intergenerational equity and the precautionary principle."</p>
6.	<p><i>Massachusetts v EPA</i> 549 US 497 (2007), decision on the question whether the federal Environmental Protection Agency ("EPA") has the mandate to regulate greenhouse gas emissions. Initially EPA had taken the position that it did not have the authority to regulate these emissions. The US Supreme Court ruled to the contrary and found that on the basis of the Clean Air Act the EPA had an obligation to regulate these emissions or provide an explanation for not doing so. Soon after this judgment the EPA started the process of enacting regulations to control greenhouse gas emissions.</p>
7.	<p>"Dangerous climate change" is used here to refer to "dangerous anthropogenic interference with the climate system", as described in UN Climate Treaty art.2.</p>
8.	<p>Annex 1 countries include the industrialised countries that were members of the Organisation for Economic Co-operation and Development ("OECD") in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States.</p>
9.	<p>In Cancun the Annex 1 countries amongst others declared as signatories to the Kyoto protocol: "Also recognizing that the contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change 2007: Mitigation of Climate Change, indicates that achieving the lowest levels assessed by the Intergovernmental Panel on Climate Change to date and its corresponding potential damage limitation would require Annex I Parties as a group to reduce emissions in a range of 25–40 per cent below 1990 levels by 2020 ..."</p>
10.	<p>See the 20-page open letter from Shell dated 16 May 2014 in response to enquiries from shareholders regarding the "carbon bubble" or "stranded assets" issue, which refers to the notion that about 4/5 of all proven reserves of fossil fuels should stay in the ground and should not be burnt if we are to stay below a two degree warming of the planet. See pp.1 and 19 of this letter in particular. This letter can be downloaded via http://s02.static-shell.com/content/dam/shell-new/local/corporate/corporate/downloads/pdf/investor/presentations/2014/sri-web-response-climate-change-may14.pdf [Accessed 29 January 2016].</p>

11.	See, e.g. website of ExxonMobil at http://corporate.exxonmobil.com/en/environment/climate-change/managing-climate-change-risks/carbon-asset-risk [Accessed 29 January 2016] more particularly the link to the download of its report " <i>Energy and Carbon—Managing the Risks</i> ".
12.	See the website http://www.klimaatzaak.eu/en/ [Accessed 29 January 2016].
13.	See also sub.3.2 of the ruling; see for more extensive motivation of the claims Roger Cox, "The Liability of European States for Climate Change" [2014] J.P.L. 961 or see the translated versions of Urgenda's writ of summons and statement of reply which can be found on the website of Urgenda: http://www.urgenda.nl/en/climate-case/ [Accessed 29 January 2016]. The plea documents of Urgenda have not yet been translated from Dutch into English, they include amongst others the graphs that the court has incorporated in the decision and the clarifications of these graphs.
14.	See also sub.3.1 of the ruling.
15.	See Dutch Civil Code Book 3 s.305a.
16.	UN Climate Treaty art.2 states that the ultimate objective of the treaty is to prevent dangerous anthropogenic interference with the climate system.
17.	ECHR art.2: The right to life; ECHR art.8: the right to health and respect for private and family life.
18.	The issue of standing is dealt with sub.4.4–4.10 of the decision.
19.	See sub.4.109 of the ruling.
20.	See sub.4.89.
21.	see sub.4.1 of the ruling.
22.	See sub.4.14. The court there also acknowledges the restriction for a number of countries in the Pacific Ocean, such as Tuvalu and Fiji, for which dangerous climate change, with the associated risk of destruction of their territories, probably will already occur at a temperature rise of 1.5°C. "The signatories therefore decided in Cancun to 'maintain a view on' a 1.5°C target", the court says. See sub.4.25.
23.	See sub.4.15.
24.	Sub.4.16.
25.	Sub.4.17.
26.	Sub.4.29.
27.	On the basis of science and as accepted in international climate policy, in order to achieve the 2°C target the greenhouse gas concentrations in the atmosphere have to stabilise at 450ppm (ppm = parts per million, meaning that of every million molecules in the atmosphere only 450 can be greenhouse gases).
28.	On the basis of the EU effort sharing decision, the Netherlands has to achieve a reduction target of 16 per cent in 2020: Decision 406/2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 [2009] OJ L140/136 (the Effort Sharing Decision). The State's most current prognoses was that an actual reduction of 17 per cent at most was feasible on the basis of existing and anticipated policies and that the actual reduction would be no less than 14 per cent in 2020.
29.	Sub.4.31 under vi.
30.	Sub.4.85.
31.	Exhibit U96 refers to a printout from the UK's Committee on Climate Change regarding "Carbon Budgets and targets". See https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/ [Accessed 29 January 2016].

32.	The essence of the no-harm rule (<i>Trail Smelter Arbitration</i>) is that no state has the right to use its territory, or have it used, to cause significant damage to other states; see also sub.4.39 of the decision.
33.	The English translation of this section of the Dutch verdict mistakenly speaks about "an international-law obligation". The Dutch verdict however uses the word "een norm van national recht" and therefore the translation should be as shown on this page, reason why it was corrected for proper understanding.
34.	The English translation of this section of the Dutch verdict mistakenly uses the words "has violated" where the proper translation of the Dutch verdict should use the words "violates" (in Dutch "schendt"), reason why it was corrected for proper understanding.
35.	Sub.4.43.
36.	Sub.4.44.
37.	Directive 2003/87 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61 [2003] OJ L275/32.
38.	Sub.4.40 and 4.41.
39.	Sub.4.45.
40.	Sub.4.46.
41.	Sub.4.47–4.50.
42.	Sub.4.36.
43.	Sub.4.57.
44.	Sub.4.60.
45.	Sub.4.65.
46.	Sub.4.70–4.73 and 4.82.
47.	Sub.4.66 and 4.74.
48.	This ruling of the Dutch Supreme Court is discussed in Roger Cox, "The Liability of European States for Climate Change" [2014] J.P.L. 961.
49.	Sub.4.76, 4.78 and 4.79.
50.	Sub.4.80.
51.	Sub.4.81.
52.	Sub.4.76.
53.	Sub.4.75.
54.	Sub.4.90.
55.	Sub.4.86.
56.	See, e.g. <i>Jaap Spier, Ulrich Magnus, Climate Change Remedies—Injunctive Relief and Criminal Law Responses</i> (Eleven International Publishing, 2014); <i>Climate Change Liability—Transnational Law and Practice</i> (Cambridge University Press, 2012).
57.	<i>Oslo Principles on Global Climate Change Obligations</i> , issued on 1 March 2015, see www.osloprinciples.org [Accessed 29 January 2016].

58.

Zoe & Stella Foster v Washington Department of Ecology, Superior Court of the State of Washington for King County, No.14-2-25295-1 SEA, see also <http://www.westernlaw.org/article/washington-state-youth-win-unprecedented-decision-their-climate-change-lawsuit-press-release> [Accessed 29 January 2016].