Final Draft translation

(version of 21 May 2015)

Statement of Reply

in the case:

Urgenda Foundation

v.

Kingdom of the Netherlands

Regarding the failure of the Dutch State to take sufficient actions to prevent dangerous climate change

More information about the case can be found at:

www.urgenda.nl/en/climate-case

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District Court of The Hague
Session of 10 September 2014
Roll number HAZA C/09/00456689

STATEMENT OF REPLY AND AMENDMENT OF CLAIM

in the case of:

URGENDA FOUNDATION,
registered in Amsterdam,
and 886 other parties represented by Urgenda Foundation,
together referred to as 'Urgenda c.s.',
plaintiffs,
legally represented by: R.H.J. Cox and J.M. van den Berg

against:

THE KINGDOM OF THE NETHERLANDS
(Ministry of Infrastructure and Environment),
established in The Hague,
defendant,
legally represented by: G.J.H. Houtzagers

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PREAMBLE

1. Urgenda c.s. have attentively read the State's statement of defence.

2. Urgenda c.s. wish to begin by apologizing for the length of this statement of reply, which runs to an almost unseemly length of around 200 pages. A legal approach to the climate problem raises both legal and factual questions. Urgenda c.s. wish not only to attempt to discuss the (many) relevant questions and aspects, but in doing so to also give insight into their context and the larger picture. Furthermore, in their statement of defence, the State claims that Urgenda c.s. have provided insufficient support for many of their points. This may well be the case to some extent, but Urgenda c.s. have the impression that the State also at times has deliberately chosen not to be a good listener. Considering the great importance that this case has for Urgenda c.s., they wish to avoid any possibility that their claims might founder because they have provided an insufficient foundation for them. Urgenda c.s. have therefore felt the need to further develop and expand their argumentation, in both its constituent parts and its overall coherence. Urgenda c.s. hope that their plea has gained in strength and clarity as compensation for the evident loss of succinctness.

INTRODUCTION

3. The parties appear to be essentially in agreement concerning the facts. The State endorses the reports of the IPCC, and furthermore it explicitly acknowledges in its statement of defence the findings and conclusions set out in those reports. These hold that the earth is warming as the result of human activities, namely through the emission of greenhouse gases into the atmosphere, and that this warming leads to changes in the climate. The State also acknowledges that this change in the climate threatens to become a *dangerous* climate change if the (worldwide) emissions of greenhouse gases are not mitigated forcefully and quickly. Furthermore, the State appears to acknowledge that the international community of nations has determined and accepted, in response to the reports of the IPCC and based on the scientific insights set out in them, that a dangerous climate change will result from warming of 2ºC or more, and that this amount of warming must be prevented.[1] The State however also appears to deny that any legal significance derives from these facts. The State also acknowledges – or at least this would

[1] See for example par. 2.12 of the statement of defence.

appear to be the case in the State's own policy documents – that in order to help prevent such a dangerous change in the climate, it is desirable and necessary for the emissions of greenhouse gases by the Netherlands to be reduced, no later than 2050, by 80-95% relative to the Dutch emission level in 1990.[2] The State also acknowledges – or at least this is apparent in the State's own policy documents, nor does the State deny this – that in order to establish a realistic path toward achieving this emission reduction goal by 2050, it will be necessary to reduce the Netherlands' emission level by 25-40% before 2020.[3]

4. In these proceedings, Urgenda c.s. claim first and foremost that the State be ordered to reduce the Netherlands' emission level as of 2020 by 25-40% relative to the emission level of 1990.

5. When viewed in this way, Urgenda c.s. are claiming nothing of the State that the State itself does not already consider to be desirable and necessary. The parties are essentially in agreement.

6. Nevertheless, the State is refuting the claims of Urgenda c.s. The State's defence is almost entirely of a legal nature; the parties are after all to a great extent in agreement, in any case concerning the relevant parts.

7. The State appears above all else to want to oppose the fact that it will be compelled, via the legal authority, to (finally) actually implement that which the State itself also considers a necessary and urgent course of action. The State's defences may be summarized as follows:
   - Urgenda c.s. have insufficient interests to make such requests, and their claims are therefore not permissible;
   - The court also has no power to grant that which Urgenda c.s. are claiming, since it is up to the political order and not the courts to make decisions concerning reductions in Dutch emissions;
   - Furthermore, Dutch emissions are not unlawful, thus an action in tort filed by Urgenda c.s. is not permissible. In this regard, the State takes the position that a number of conditions must be met in order for a claim in tort to be

[2] See for example par. 6.30 of the statement of defence: *"Consequently, the basic assumption is still a cutback of the emission of greenhouse gases in the EU by 2050 of 80-95% relative to 1990."*
[3] See for example exhibit U27 (p.2), where the minister states, *"The total of emission reductions that the developed countries have offered thus far still remains insufficient to reach the reduction of 25-40% by 2020 that is necessary in order to remain on a credible path to achieving the 2 degree objective."*

granted, and that Urgenda c.s. have not been able to sufficiently demonstrate that these conditions have been satisfied in this case.

8. In addition to these basic and strictly legalistic defences, the State argues that it complies with the legally binding agreements that have been made in the context of international negotiations concerning obligations for quantified reductions. Furthermore, the State also argues that the Dutch government and political bodies are already doing very much, at both the national and international levels, to mitigate climate change and its serious consequences.

9. In this statement of reply, Urgenda c.s. will show that the defences of the State against the claims of Urgenda c.s. cannot be sustained. This statement of reply has the following structure.

10. First, Urgenda c.s. will address the State's defence that it already satisfies all the reduction obligations to which it has agreed internationally (**chapter 1**); then they will address the defence that the State already is doing very much to mitigate climate change and its consequences. In addition, Urgenda c.s. will address the complaint from the State that the plaintiffs have given no attention to what the State is doing in the area of climate adaptation and only focus on climate mitigation (**chapter 2**).

11. Whereas Urgenda c.s. address in chapters 1 and 2 defences by the State that in essence are irrelevant to their claims and thus require no substantial rebuttal, in the chapters thereafter they will address the legal defences made by the State.

12. First of all, Urgenda c.s. emphasize that they desire the protection of the law and do not seek to achieve political ends via the courts. Climate change may well be a subject that (also) appears on the political agenda, but the fact that a subject is a matter of political debate does not justify a violation of the rights and claims of citizens, or a threat of such. When such a violation threatens to take place, citizens can always ask the courts to protect their rights. Such legal protection may have political consequences, but it is and remains legal protection and not political activity (**chapter 3**).

13. Next, Urgenda c.s. will clarify what damage and infringement of (basic) rights they fear as a result of climate change, against which they seek protection from the courts. Urgenda c.s. will also build on that which they have already argued in the

summons and which has also not been disputed by the State, but this will be further and more specifically worked out for the territory of the Netherlands (**chapter 4**).

14. Next, Urgenda c.s. will address various aspects of the State's defence that Urgenda c.s. have not been able to sufficiently demonstrate that all requirements have been satisfied for the granting of an action in tort (**chapter 5**).

15. Urgenda c.s. open chapter 5 with a comprehensive argument that they are requesting preventative legal protection and not a damages settlement after the fact. They show that an action in tort in which a damages claim is sought is different in essence from an action in tort in which a preventative order or injunction is sought. The history of the development of such orders and the reasoning behind them show that the legal regime that applies to actions in tort in which an order or injunction is sought is substantially different from that applying to actions in tort in which a damages claim is sought. Urgenda c.s. will show that 'illegality' and 'damage' must be clearly distinguished. For the purpose of determining whether or not a certain behaviour must be found to be unlawful, it does not matter whether the behaviour has already led to the occurrence of concrete (individual) damage or to the acute threat of such concrete, individual damage. The point is whether or not the behaviour by and large, whether by its nature or 'generically', involves sufficient danger that such behaviour is unlawful 'according to rules of unwritten law pertaining to proper social conduct'. The fact that climate change brings such great widespread dangers has at this point already been thoroughly discussed in chapter 4, and has furthermore already been recognized by the State in paragraph 8.49 of its statement of defence. The conclusion is that the State sets requirements for the action by Urgenda c.s. that are only applicable to petitions for damages claims, and that the State's defence thus misses the point. This part is relatively detailed because it addresses an important and fundamental matter. Furthermore, we return to it at the end of this statement. (**chapter 5.1 - 5.6**)

16. Next, a brief outline is given of which legal criteria do in fact apply to an action in tort in which a preventative order is claimed.

17. The most important of the criteria applicable to a court order is that of 'illegality'. In this case, this means: Is the level of emissions by the Netherlands unlawful? Urgenda c.s. take the primary position that the current level of emissions of

greenhouse gases by the Netherlands is unlawful, for it is in conflict with the unwritten legal norms and unwritten legal obligations that bear on the State out of considerations of 'proper social conduct'. (**chapter 5.7**).

18. In order to establish the correct frame of reference for judging the legality or illegality of the Dutch level of emissions, it will be briefly explained that 'a rule of unwritten law pertaining to proper social conduct' is understood in the context of an 'open' legal norm with a strongly case-related character, in which the court judges the legality or illegality of a certain behaviour within the context in which that behaviour takes place. (**chapter 6.1 - 6.3**)

19. In order to answer the question of what 'a rule of unwritten law pertaining to proper social conduct' requires of the State in this context (the interpretation of proper social conduct in the case at hand), Urgenda c.s. make reference to three 'legal obligations' that are generally accepted.

20. First of all, in a general sense, Urgenda c.s. seek to establish a link with the legal obligation in situations of endangerment. The Cellar Hatch criteria have already been accepted for decades in case law as a number of viewpoints on the basis of which the court must decide whether the endangerment is unlawful or not in the case of endangerment under consideration. Urgenda c.s. elaborate how, proceeding from those criteria, the legality or illegality of the Dutch level of emissions must be decided. (**chapter 6.4**)

21. Next, Urgenda c.s. indicate the legal obligations that apply in a case in which someone produces cross-border emissions that result in danger or nuisance. This is a (somewhat) more specific legal obligation than the legal obligation of the 'ordinary' or common endangerment. This specific legal obligation applies specifically to the situation in which danger is caused by emissions with a cross-border character. This legal obligation turns out to be universal (the 'no-harm' principle of international customary law), but it is also a legal obligation that was already accepted a century ago in the Netherlands and was reiterated and confirmed in the Potash Mines decision. (**chapter 6.5**)

22. Next, Urgenda c.s. become even more specific: they discuss what the legal obligation is specifically for states when there is an issue of the threat of damage caused by cross-border emissions in the specific case of emissions of greenhouse gases. In that connection, they refer to the specific obligations that are applicable

based on the UNFCCC and in particular on the basis of article 2 of that treaty, that has furthermore been accepted by the State. Also discussed is the position that the two-degree objective of the Cancun Agreement, contrary to what the State argues, has not just political significance, but furthermore in a legal sense is a component of the UNFCCC and thus also has legal significance. (**chapter 6.6**)

23. Urgenda c.s. conclude that in all three of these approaches the conclusion must be that it is unlawful to emit cross-border greenhouse gases to such an excessive degree as is now taking place worldwide, because such an excessively high level of emissions leads in the short term to a dangerous climate change becoming unavoidable, which has great consequences for ecosystems and human communities. (**chapter 6.7**)

24. Urgenda c.s. recognize that only a (small) part of these excessive worldwide emissions can be attributed to the State, in particular only the emissions originating from Dutch soil. The State does in fact appear[4] to want to argue that the Dutch emissions when considered in isolation do not lead to dangerous climate change or (material) damage and thus are also not unlawful. Urgenda c.s. will show that this line of reasoning is incorrect, because Dutch emissions cannot be seen in this way ('in isolation') apart from their context. After all, as was already mentioned, the legality of certain behaviour must be judged within the context in which that behaviour takes place, apart from the question whether or not concrete individual damage is caused by that behaviour. Urgenda c.s. will explain that exactly in the kinds of cases in question here, namely bringing about considerable damage through cumulative, concurrent behaviours that can be attributed to various parties, both in doctrine and in case law (in particular the Potash Mines decision) partial accountability or pro-rata accountability is assumed. Thus partial accountability rests upon the State for its part in causing dangerous climate change. In addition, the Dutch emissions are relatively high and make a relatively large contribution to the high worldwide level of emissions, and they are certainly not negligible. All of this leads to the conclusion that the Dutch emission level is unlawful. (**chapter 6.8**)

25. In its statement of defence, the State has argued that the Dutch emissions do not originate from the State itself (and that therefore the comparisons with e.g. the Potash Mines decision are invalid because that case involved the actual polluters).

[4] Urgenda c.s. are not entirely certain whether the State does nor does not bring forward this defence. The defence can be found in paragraphs 8.27 and 8.35 of the statement of defence.

Urgenda c.s. will therefore (once again) explain why the totality of the Dutch emission level can be attributed to the State as though the State were the originator of the Dutch emissions, so that the State is responsible for them and the State can be held liable for them. (**chapter 7**)

26. Chapters 3 through 7 are thus concerned with the legal criteria that apply to the extent that the State is addressed by Urgenda c.s. in its capacity as a partial contributor to a (threat of a) dangerous climate change, or at least as an entity to which the Netherlands' share in originating a (threat of a) dangerous climate change can be attributed and that therefore is legally responsible for it.

27. Urgenda c.s. have in fact also addressed the State with respect to its role and task as protector against (the consequences of) a dangerous climate change. Urgenda c.s. have argued that a legal obligation to protect against (the consequences of) a dangerous climate change follows from articles 2 and 8 of the European Convention on Human Rights (ECHR). In response to the State's defence, Urgenda c.s. will further support their reliance on human rights law. (**chapter 8**)

28. In chapter 8 it will be shown: that the consequences of climate change for the Netherlands and Urgenda c.s. fall under the scope of article 2 and article 8 of the ECHR (**chapter 8.1**); that there are no facts and circumstances that justify an exception to these fundamental rights by the State (**chapter 8.2**); that the 'margin of appreciation' for the State on the basis of the case law of the European Court of Human Rights (ECtHR) is very limited in this case, and that therefore examination by national courts ought to be strict, according to the Court (**chapter 8.3**); what can be expected from the actions of the State on the basis of the case law of the Court (**chapter 8.4**); and which conclusions should be attached to the preceding considerations (**chapter 8.5**). Because the discussion of the case law of the ECtHR also involves the precautionary principle used by the Court, at the end of chapter 8 the precautionary principle will also be discussed in a broader context (**chapter 8.6**).

29. Urgenda c.s. will then examine the question why they have standing in the sense that they have sufficient statutory personal interest in their claim. Furthermore, the discussion will also include the argument that legal rules upon which Urgenda c.s base their claim in fact also have the aim of protecting them against the disadvantage that they are in danger of suffering. (**chapter 9**)

30. In the next chapter of this statement of reply, Urgenda c.s. will explain why it is necessary for the emission reduction of 25-40% that they desire to be realized as of 2020 and not later than that date. Urgenda c.s. themselves consider this to be the section supporting their most important claim (the reduction order). With this section they want to show that they not only have a *right* to a reduction, but that they have a right to *this* reduction of 25-40% as of 2020 and that further delay or a smaller reduction is irresponsible. It follows from this argument that the State is given no margin of discretion in policymaking to allow itself a lower reduction as of 2020, or to achieve this reduction only much later, for example by 2030. At the end of this chapter, supplementing that which will already have been discussed concerning adaptation in chapter 2, it will be shown on the basis of the IPCC reports why adaptation measures fail to provide protection of the rights that Urgenda c.s. are defending, and that adaptation is not a surrogate for mitigation. (**chapter 10**)

31. Next, Urgenda c.s. will also address their other legal claims. In response to the State's defence, they see cause to amend their claim, and they will further explain this amendment of their claim in this chapter. (**chapter 11**)

32. Finally, Urgenda c.s. return to the margin of discretion of the political bodies in policymaking, and also to the role of the court, now that the State has taken the position in its statement of defence that reduction of Dutch emissions is a matter that should be decided by the political process and not by the courts. (**chapter 12**)

LETTERS OF ATTORNEY

33. The written letters of power of attorney provided to the Urgenda Foundation by the co-plaintiffs will be filed with the court by Urgenda c.s. by means of a separate document.

CHAPTER 1: THE STATE IS ALREADY MEETING ITS INTERNATIONAL LEGALLY BINDING REDUCTION OBLIGATIONS

34. The State argues that it is already (most likely) meeting the terms of all international legally binding agreements concerning reductions of the Dutch

greenhouse emissions.

35. This defence by the State circumvents the matter at hand; it concerns something that Urgenda c.s. are not claiming. Urgenda c.s. does not request compliance with internationally agreed legally binding reduction obligations, because the reductions that have been agreed to are inadequate.

36. Furthermore, the inadequacy of the international agreements and the background of that inadequacy clearly show why Urgenda c.s. have felt the need to bring the procedure at hand before the court.

37. The fundamental problem with the current approach to the threat of climate change is that although there is agreement about what must happen at a worldwide scale, namely a reduction of emissions sufficient to prevent a dangerous climate change of 2ºC or more, there is no agreement about how the reductions that are needed should be divided among the countries.

38. The Kyoto Protocol is in fact the only worldwide instrument with quantifiable and legally binding reduction obligations. However, the Kyoto Protocol expired in 2012. The climate conference in Copenhagen at the end of 2009 that was generally seen as the last chance to reach agreements concerning an immediate successor to the Kyoto Protocol or a continuation of it, with new quantified and legally binding reduction obligations, was a total failure.

39. Meanwhile we are five years farther along, and in the context of international negotiations, not even the beginning of an agreement has been reached concerning new legally binding quantifiable reduction obligations, through an extension or expansion of the Kyoto Protocol or through other means.

40. A number of countries, including the Netherlands, are making attempts to keep the Kyoto Protocol alive.[5] An important motivation for this[6] is to be able to keep the instruments that the Kyoto Protocol introduced with which countries can satisfy reduction obligations without actually reducing their own emissions, namely by realizing reductions in other (for the greater part poorer) countries and by buying

[5] See statement of defence paragraphs 6.28, 6.34, and 6.35.
[6] See the government's news article of 10 December 2012 at www.rijksoverheid.nl/nieuws/2012/12/08/kyoto-protocol-verlengd.html

emission rights that those other countries have a surplus of.

41. Whether there will in fact be a successor to the Kyoto Protocol is at this moment entirely uncertain. Canada has meanwhile withdrawn from the Kyoto Protocol, probably because Canada expects to derive a considerable economic benefit from the intended extraction of oil from tar sands, that is accompanied by very high greenhouse gas emissions and would not be reconcilable with new reduction obligations for Canada.

42. In addition to this, even before Canada dropped out, the Kyoto Protocol only covered 14% of global emissions.[7] Furthermore, for the limited group of countries that were parties to the Kyoto Protocol, the reductions that were laid down in the treaty were insufficient on their own to achieve the two-degree objective that is considered necessary.

43. All of this puts in perspective the State's defence that it complies with all its international obligations concerning reductions, particularly in reference to the Kyoto Protocol.[8] The reductions that have been established in international agreements are absolutely insufficient to prevent a dangerous climate change.

44. That which is required of the Dutch State under the terms of those international agreements is furthermore (much) less than that which can be required as the Dutch contribution to preventing a dangerous climate change. After all, the Kyoto Protocol required only a reduction effort of 5.2%, while the State itself recognizes that in the long run a reduction effort of 80-95% is required and may be required of developed countries such as the Netherlands.

45. Where the international way of dealing with climate change through emission reductions is concerned, the status quo is that everyone is sitting on their hands and do not want to do that which – as everyone knows and everyone recognizes – has to happen if dangerous climate change is to be avoided. But no one is willing to take action unless everyone takes action, no one wants to be the first to take action, and everyone wants to take as little action as possible. That causes a

[7] According to the State itself as well; see statement of defence par. 6.36.

[8] In European context, legally binding quantified reduction obligations (detailed in the Shared Effort Decision) also apply. These too are in fact – according to the European parties themselves as well – insufficient to stay on course in preventing a dangerous change in the climate. See the summons, par. 26 and particularly par. 209, with reference to exhibits.

stalemate that has already lasted for years.

46. Governments and politicians are evidently not able to break through this stalemate. The State too appears decidedly unwilling to break through this stalemate but instead actually wants to reinforce it. After all, the State has been opposing with all its powers the order that Urgenda c.s. are claiming that would have the State at least begin now with the first and easiest[9] part of the longer-term Dutch reduction obligation, its most important argument being that by all means one must wait until international agreements are made in which everyone takes part.[10]

47. The question is whether such a position and such a policy on the part of the State is in fact legally tenable in the context of Dutch law. In other words, and somewhat anticipating what will be discussed further below: may a partial contributor to considerable severe damage take the position that it bears no responsibility whatsoever and that it need not respect any constraints, as long as all of the other partial contributors also do not recognize their responsibilities and live up to their obligations in a timely manner, equally and simultaneously?

48. In this procedure, Urgenda c.s. take the position that every party that causes part of the problem bears its own independent responsibility that does not depend on the question whether or to what degree other partial contributors to the problem are called to account. The UNFCCC to which Urgenda c.s. refers in this context also stipulates explicitly that limiting emissions of greenhouse gases involves national and thus individual responsibilities that all parties to the treaty have in common with each other. According to the UNFCCC, this is a matter not of a joint responsibility of the treaty parties but rather of jointly held individual responsibilities, in other words, individual responsibilities that the treaty parties have in common with each other,[11] and in which developed countries such as the Netherlands must individually take the lead.

[9] That which is referred to as the 'low-hanging fruit'.

[10] Conclusion of Defence, paragraphs 6.33 and 6.36.

[11] The 'common but differentiated responsibilities'; for more detail, see the summons, paragraphs 187–192 in which it is made clear that it is a matter of individual obligations of the countries (that the countries have the option of fulfilling in cooperative groups, for example via regional organizations such as the EU, which has the advantage for the countries that take part in those regional organizations that they can shift their reduction obligations internally).

49. With the present procedure, Urgenda c.s. call the State to account for its own individual responsibility, in which the State may not take refuge behind what other states may or may not do or behind the lack of agreement between all of the states. It has been shown in the last twenty years that this approach does not work. There is simply no time to continue to trust that political path any longer. However many policy choices there may possibly be in tackling climate change, further postponement of far-reaching reductions is no longer an option or a policy choice that the State may make; the threat of danger is too great and too urgent to allow this, and moreover the Netherlands has fallen too far behind its peers to be allowed to continue stalling any longer.

1.1 Conclusion

50. The State's own claim that it satisfies all its international legal agreements concerning reductions of greenhouse gases is not relevant because those agreements – as the State itself admits – are inadequate to avert a dangerous climate change. The State also acknowledges that with the reduction efforts now in effect the earth will warm by more than 2°C and probably by more than 4°C as of the year 2100, thus leading to a dangerous climate change.[12]

51. On the one hand, the State argues that it believes that the threat of a dangerous climate change must be addressed by making international agreements in which everyone participates, and that this is also its policy. On the other hand, its own positions lead to the conclusion that this approach has achieved (much) too little in the last twenty years and that there is no concrete outlook whatsoever that this situation will change substantially. A worldwide approach with agreements that are adequate and in which everyone participates is apparently not politically feasible. Because doing nothing is not an option, countries should take their responsibility individually, and the developed, wealthy countries such as the Netherlands should take the lead in this. The present procedure must be seen in that light.

52. If governments prove because of political reasons to be powerless and inert in their way of dealing with a problem that is called the greatest problem of our time by the scientific community, then Urgenda c.s. believe that protection against that

[12] This follows from evidence that includes the government's letter to the Parliament of 17 June 2014 (exhibit U78), to be discussed in more detail below in this statement (with the discussion of the Cellar Door criteria), in which the State indicates that without additional worldwide mitigation policies, the world average temperature (in addition to the warming of 0.85 degrees that has already taken place) will rise by 3 to 5 degrees Celsius in this century.

dangerous climate change should be offered by the judiciary, whose task it is to offer the protection of the law, independent of and unhindered by political motives and political impasses.

CHAPTER 2:
THE STATE IS ALREADY DOING MUCH AGAINST CLIMATE CHANGE

2.1 Introduction

53. The State devotes a substantial part of its statement of defence to summing up what it is already doing, and which policies it is carrying out, to counteract climate change. In that context, the State furthermore complains that Urgenda c.s. direct their attention only to the mitigation measures that they desire and pay no attention at all to the adaptation measures that the State is currently implementing.

54. In paragraphs 7.2–7.16 of its statement of defence, the State mentions its activities with respect to climate mitigation; in paragraphs 7.17–7.27, its activities concerning climate adaptation; and paragraphs 7.29–7.34 report that the State is making climate-related investments abroad.

55. The shortest and perhaps also the clearest answer to this defence is that in this procedure Urgenda c.s does not object to what the State (already) *is* doing against climate change; their objection concerns what the State is *not* yet doing against climate change but which is in fact necessary and also may be expected of it. Urgenda c.s. also do not claim that the State is doing nothing; they only claim that the State is doing too little.

56. In the interest of clarity: Urgenda c.s. do not claim that the State shall prevent dangerous climate change on its own; that would be an impossible claim without any basis in reality.

57. Urgenda c.s. do however claim that the State shall do that which can be expected of it in this context, and that is more than the State is now doing and also more than the State is (apparently) prepared to do. This procedure concerns what the State must do and is not doing, not what the State is already doing.

58. Thus strictly speaking Urgenda c.s. should not have to react to what the State has argued in this context. They will however do so, because the defence by the State could lead to misunderstandings on the part of the court.

2.2 Mitigation versus adaptation

59. The State complains that Urgenda c.s. pays no attention at all to climate adaptation and to what the State is doing in that area. In the interest of clarity: mitigation involves measures that aim to prevent or limit climate change; adaptation involves measures that aim to adjust to and protect against the (severe) consequences of climate change. Mitigation provides for limitation of the temperature rise and the attendant danger. Adaptation is nothing other than adjusting as much as possible to the danger without opposing the danger itself.

60. Applying a somewhat simplistic metaphor, one can say that 'adaptation' comes down to mopping the floor with the faucet wide open, and 'mitigation' means turning off the faucet. Or 'adaptation' is counteracting symptoms, while 'mitigation' is tackling the underlying problem.

61. Looked at in this way, it is evident that mitigation is a much more adequate reaction to the threat of a dangerous climate change than adaptation is. It is also the only way to do something about the 2-degree objective, because adaptation does not have the goal of limiting warming.

62. That mitigation is the proper approach is also the case from a legal perspective; see for example the quotation from Van Nispen that is also discussed in more detail below: *"The first and in fact also the most important task of enforcing the law is the battle against wrongdoing by those in power: prevention is better than cure."*[13] In a similar vein, Deurvorst states: *"A sentence that requires carrying out a legal obligation is of great significance in situations in which there is a threat of (further) unlawful acts and this can be prevented with an injunction or order. This significance is that much greater because experience has shown that imposing a damages claim is in various respects an imperfect sanction ...."*.[14]

[13] C.J.J.C. van Nispen, 'Het rechterlijk verbod en bevel' (Judicial Injunctions and Orders), dissertation, Kluwer, 1978, p.19.
[14] T.E. Deurvorst, Esq., *GS Onrechtmatige Daad* (GS Tort Law), II.2 note 44.

63. For this reason alone, Urgenda c.s. are justified in directing this procedure toward the mitigation that may be required of the State, and not at what the State already is doing or should still be able to do in terms of adaptation. This procedure concerns preventing a great danger, not adjusting as well as possible to a great danger.

64. Furthermore, according to the IPCC, the possibilities of adaptation are limited for many reasons that will be explained in detail in chapter 10.5 of this statement. If the State thus intends to propose that the two-degree objective can be set aside because it is quite able by means of adaptation measures to protect the Netherlands and Urgenda c.s. against the danger of an average of 3, 4, 5, or 6 degrees Celsius warming in this century, this will be contested by Urgenda c.s. on the basis of science.

65. Furthermore, the adaptation measures that the State proposes protect only the land area and the inhabitants of the Netherlands. The Delta Program, for example – the State's most extensive adaptation project that extends far into the future – is intended to protect the land area and inhabitants of the Netherlands against the dangers of the sea level rise that is underway as a result of ongoing climate change.

66. However, the State's liability for Dutch emissions extends also to the consequences that they have outside of the country's borders and is not limited to the consequences for the Dutch land area. Adaptation measures that only extend to protecting the inhabitants of the Dutch land area thus address only the 'Dutch' part of the consequences of Dutch emissions, and not the 'external' consequences of those emissions.

67. The interests for which the Urgenda Foundation is pleading[15] extend by their very nature beyond national boundaries. Although the Urgenda Foundation carries out its activities primarily within the Dutch land area in promoting and protecting those interests, the wording of its statutes shows that its activities and the interests that it seeks to defend are explicitly and deliberately not restricted to the land area of the Netherlands ('*beginning* in the Netherlands'). Because the Dutch emissions – by their nature a transboundary phenomenon – cause detriment (or at least contribute to detriment) not only in the Netherlands but also abroad to the kinds of interests that it seeks to defend, the Urgenda Foundation may therefore also take

[15] This point is discussed in more detail below in chapter 9.

those external interests seriously, call these interests its own, and resort to the court in defence of them.[16]

68. This means that the Urgenda Foundation, in protecting the interests for which it pleads, is justified in claiming mitigation of Dutch emissions, and that it does not have to be satisfied with the State's adaptation measures that only extend to protecting the Dutch part of the interests for which the Urgenda Foundation is pleading.

69. Article 2 of the UNFCCC, the central stipulation of that treaty, also shows that not national adaptation but rather worldwide mitigation is the appropriate measure to address the problem of worldwide dangerous transboundary climate change that is the result of transboundary emissions of greenhouse gases. This article establishes a legal obligation for the states that are party to the treaty to mitigate as a means of preventing a dangerous climate change. The treaty does not contain a similar legal obligation regarding adaptation.

70. By becoming a party to the UNFCCC, the State has assumed for itself this legal obligation of mitigation. In the present procedure, Urgenda c.s. also directly and specifically rely on this legal obligation of the State as support for their argument that the State is not doing in the area of mitigation that which may be required of it on the basis of criteria of unwritten law pertaining to proper social conduct, and that the State therefore is acting unlawfully. In other words: Urgenda c.s. claim mitigation, and they also find support and legal grounds for their claim of mitigation in the UNFCCC; if they were to claim adaptation, then the UNFCCC would offer them no support. It is also for that reason that Urgenda c.s. are concentrating on mitigation; that is where their rights and interests lie.

2.3 Dutch mitigation policy

71. Concerning climate mitigation, the State writes in paragraph 7.2 of its statement of defence that Dutch climate policy is on the one hand *"directed at making use of economic opportunities and on the other hand at creating financial incentives to*

[16] In addition, the Urgenda Foundation should even be allowed to take these external interests seriously if exclusively Dutch sustainability interests were to be promoted and defended. After all, the Netherlands cannot be sustainable if its emissions promote the unsustainability of other countries, since in a globalized community the unsustainability of one party contributes to the unsustainability of another. This connection is also acknowledged by the State, as will become clear in chapter 4.

achieve mitigation of the emission of greenhouse gases."

72. Urgenda c.s. do not wish to make too big a point of a single short sentence, but they find it striking that in terms of policy the State apparently approaches a threatening and dangerous climate change with potentially catastrophic consequences as a 'money-making model' that provides economic possibilities that the Netherlands ought to profit from. The order in which the phrases are presented, first *"economic possibilities"* and then *"creating financial incentives to achieve mitigation"*, suggests that the priorities also are similarly ordered: first earn money and then we can see what we perhaps can achieve in the way of mitigation with 'financial incentives'. There is no mention of quantified reduction targets or whether the 'financial incentives' are effective in reaching such a quantified target.

73. Urgenda c.s. wish to remind that in this context they have stated, explained, and supported with evidence in paragraph 5.2.4 of the summons that the State subsidizes the use of fossil fuels much more heavily than the generation of sustainable electricity that does not lead to emissions of greenhouse gases. That is admittedly a 'financial incentive', but an incentive that certainly does not lead to mitigation, but to the contrary stimulates the emission of greenhouse gases. That which Urgenda c.s. have stated in that paragraph has not been refuted at all by the State. Then it is also not odd that the State has had to buy supplemental external emissions rights in order even to meet the reduction obligations of the Kyoto Protocol, that are much less stringent than what is necessary.[17] This leads one to suspect that the Dutch mitigation policy is barely effective and offers insufficient incentives to achieve the reductions that are needed.

74. In addition, the strictly economic approach is conspicuous. Of course mitigation has an economic impact (just as does adaptation, and doing nothing has ultimately the greatest economic impact), but the climate problem is more than just an economic problem. The climate problem also concerns floods, droughts, collapse of ecosystems and loss of biodiversity, food shortages, inhabited areas becoming uninhabitable, loss of human lives, and great human suffering. With the present levels of emissions, these phenomena can be expected on a catastrophic scale. Any realization of this dimension of the climate change that threatens to occur appears to be lacking in Dutch climate policy, as is a sense of urgency to do what is

[17] Statement of Defence, paragraphs 6.7–6.8.

necessary to oppose it.

75. In its statement of defence (chapter 7), the State names important instruments through which the mitigation policy is carried out: the energy tax on fossil fuels, and the regulations for the stimulation of sustainable energy production (Dutch: Stimulering Duurzame Energie-productie or SDE+). In this context the State also mentions the Energy Accord of 7 September 2013, in which a decision to close five old coal-fired power plants is integrated. The State argues further that it also takes or promotes measures in its international policies that aim to mitigate emissions of greenhouse gases.

76. In this way, the State evokes the image that it is already firmly dedicated to mitigation and already is doing a lot about mitigation. Urgenda c.s. are of the opinion that the State is telling only half of the story, and because of this is sketching an incorrect picture. The next section explains this further.

2.4 About international policy, the Energy Accord, and coal-fired power stations

77. In its statement of defence, the State argues that it is also making international efforts to counteract climate change. That is correct when viewed in isolation.

78. For example, the Netherlands has joined in with attempts to forbid development banks to extend loans for the construction of coal-fired power plants in developing countries. Coal-fired power plants are in fact much worse for the climate than, for example, gas-fired power plants; the latter however produce more expensive power because gas is a much more expensive fuel than coal. See also **exhibit U52**, the March 2014 letter of Minister Ploumen of Foreign Trade and Development Cooperation to the Parliament, p. 6 under the heading "Coal-fired power plant initiative".

79. Minister Ploumen was quoted as follows in the media (**exhibit U53**):

"If you build a coal-fired power plant today, you are stuck with it for 40 years. That is disastrous for the climate. In the Netherlands we have agreed in the Energy Accord that we are going to close five coal-fired power plants for that reason."

80. What Minister Ploumen did not mention in this statement, and also is not mentioned by the State in its statement of defence, is that while it is true that the Energy Accord provides for closing five old coal-fired power plants, at the same time the Netherlands are building three new coal-fired power plants that have a much larger combined generating capacity than the five that have to be closed. We are in fact *"stuck ... for 40 years"* with those new coal-fired power plants that are truly *"disastrous for the climate"*.

82. Briefly stated: the State's policy means that poor countries (that hardly emit any greenhouse gases at all on a per capita basis) may no longer borrow or receive money to build coal-fired power plants with which they can provide for their energy needs at little expense, because this is damaging to the climate; but here in the Netherlands (where the per capita emission of greenhouse gases is among the highest) we are in fact going to add more of these coal-fired power plants at a large scale and are going to emit *more* greenhouse gases.

82. Furthermore, given the present excess of electricity generating capacity in the Netherlands, those new Dutch coal-fired power plants will partly displace the cleaner but more expensive Dutch gas-fired power plants from the market, a trend that is already underway.[18] This development will lead to a future in which the Netherlands, assuming that electricity use remains unchanged, will emit not less but rather more greenhouse gases into the atmosphere. With the large investments in these new coal-fired power plants, the Netherlands is consequently locking itself for 40 years into an energy supply that is disastrous for the climate. The new coal-fired power plants may be 'cleaner' than the old ones, but they are not as 'clean' as the gas-fired power plants that they will displace from the market.

83. Furthermore, these new investments in coal-fired power plants make future mitigation much more expensive. Considering the fact that the Netherlands must have reduced its emissions by 80-95% as of 2050, 35 years from now, it is necessary to take into account the closure of these new coal-fired power plants well before 2050, and thus long before these plants are written off.

[18] Concerning this displacement of gas-fired power plants, see the IEA NL-2014 Report, p.100 (**exhibit U58**) that will be discussed below, in which a comment is made concerning the intention to expand the inventory of coal-fired power plants in the Netherlands: *"Given current spark spreads, efficient and flexible gas-fired plants could become unprofitable, possibly resulting in mothballing and premature plant closures ...".*

84. In the report "Redrawing the Energy Climate Map" that the IEA published in 2013 and that has already been discussed in detail in the summons,[19] there is specific mention of this problem area. The Executive Summary of that Report (p. 9) establishes that the world is not on course to meet the two-degree objective and that the electrical power sector is essential to achieving that goal. The Executive Summary mentions four scenarios proposed in the report for achieving the two-degree objective *"that can help keep the door open to the 2°C target through to 2020 at no net economic cost."* One of those four policy proposals is (p. 10-11): *"Ensuring that new subcritical coal-fired plants are no longer built, and limiting the use of the least efficient existing ones, would reduce emissions by 640 Mt in 2020 and also help efforts to curb local air pollution. […] Of new fossil-fuelled plants, 8% are retired before the investment is fully recovered. […] Delaying further action, even to the end of the current decade, would therefore result in substantial additional costs in the energy sector and increase the risk that the use of energy assets is halted before the end of their economic life."* Thus the IEA gives a clear warning here against investing in fossil-fuel-based electrical generation because it will have to be written off prematurely, and that investing in decarbonization is already needed in this decade (that is, before 2020) in order to have the two-degree objective be achievable in a cost-effective manner.

85. Thus things are not going in the right direction with the emissions in the electricity sector in the Netherlands, and in that sector the emissions are almost entirely CO_2. The CO_2 emissions in the Netherlands have constantly increased, not decreased, since 1990. The scanty reduction in greenhouse gas emissions that the Netherlands has achieved since 1990 has been accomplished entirely in sectors other than the electricity sector, and it also involves greenhouse gases other than CO_2. Dutch emissions of those other greenhouse gases have meanwhile been so sharply cut back that it is difficult to see how very much further reduction can easily be achieved in the Netherlands.

86. The illustration that the State itself has included in paragraph 6.14 of its statement of defence shows clearly and convincingly that Dutch emissions of CO_2 have in fact constantly increased since 1990 and there have been reductions only in other Dutch greenhouse gases.

87. Furthermore, that illustration shows the relativity of the remark by the State (see statement of defence, paragraph 2.4) that although Urgenda c.s. claim a reduction

[19] See paragraphs 140–41 of the summons with a reference to exhibit U20.

in greenhouse gas emissions, they actually only discuss CO_2. That is correct as far as it goes: Urgenda c.s. address mainly CO_2 because it is by far the most important greenhouse gas – principally because it does not break down and thus continues to have an effect on the temperature of the atmosphere for centuries – and furthermore because by far the greatest part of Dutch greenhouse gases consist of CO_2. Despite the fact that the lion's share of Dutch emissions consists of CO_2, climate change is caused by all the different greenhouse gases together, and Urgenda c.s. therefore are claiming a reduction in the Dutch greenhouse gases and not only a reduction of Dutch CO_2. In this, Urgenda c.s. back without reservation the often-mentioned target of a 25-40% reduction as of 2020 that is intended by the State (and other states as well) to be a reduction in all greenhouse gases together and not just CO_2.

88. Before going into the agreement in the Energy Accord to shut down five old coal-fired power plants, first something about the status of the Energy Accord.

89. The State, and Minister Kamp in particular, have brought considerable pressure to bear on market parties and stakeholder organizations in order to establish the Energy Accord. The reason for this is that the State sees the Energy Accord as an alternative to passing legislation and wishes to use it as such. On the basis of the European Energy Efficiency Directive (EED: Directive 2012/27/EU), the State was supposed to have taken legal measures no later than 4 June 2014 to promote energy efficiency. However, the EED allows in a number of cases for legal measures to be dispensed with provided that voluntary agreements are made. See **exhibit U54**, letter of Minister Kamp to the Parliament, 20 December 2013, in which he writes that the Netherlands has chosen an "alternative interpretation" for the implementation of the EED. The letter shows thus that the choice of an "energy accord" instead of legal measures was made by the State as an alternative to legislation and was not a spontaneous initiative of market parties. The letter thus shows that even without legislation (and thus without a 'disguised' order to legislate) the State can carry out an energy policy that is effective, or at least is an effective substitute for legislation.

90. The Energy Accord also encompassed – likewise as an alternative to legal measures – achieving 20% renewable energy by 2020. Here too, the State appears to be quite capable, without setting down legislation, of effectively 'steering' the behaviour of market parties (with or without the threat of applying legal measures), thereby stimulating renewable energy as a substitute for fossil energy

that leads to emissions of greenhouse gases. Urgenda c.s. make this observation so emphatically because the State argues as a defence that the claims of Urgenda c.s. in effect amount to a disguised order to legislate. The Energy Accord, which the State itself turns to so forcefully, shows that even without enacting legislation, the State is very capable of 'steering' and managing the emissions landscape of the Netherlands. This will be further discussed below in this statement, in chapter 11.3.

91. As has been said, the Energy Accord provides for the closure of five old coal-fired power stations. What the State does not mention in its statement of defence is that, in exchange, an exemption from the coal tax will be put into effect for coal-fired power stations. The coal tax is intended – see also below – to set a price for using coal as a fuel and make it more expensive, and thereby to force back the use of coal as a fuel because of the effects it has on the environment. With such an exemption from the coal tax, the use of coal-fired power plants to generate electricity becomes less expensive and more attractive commercially. In other words, the State 'subsidizes' the use of coal-fired power plants. This exemption from the coal tax costs the State 189 million euros per year, as can be seen in Minister Kamp's letter to the Parliament and the accompanying budgetary overview (see **exhibit U55**).[20]

92. Shortly after the conclusion of the Energy Accord, the Netherlands Authority for Consumers and Markets (Dutch: Autoriteit Consument en Markt = ACM) let it be known that an agreement of the energy producers to close five old coal-fired power plants is not compatible with Competition Law. Because of this legal aspect concerning antitrust regulation, Minister Kamp has recently, in his letter of July 2014 (**exhibit U56**) and further 'clarified' on 3 July 2014 in a news item in *Energeia* about the 'hidden message' in that letter (**exhibit U57**), made it known that he – thus as a governmental action – now in fact intends to close these old coal-fired power plants by establishing higher and in fact unachievable requirements for efficiency. Minister Kamp's letter is also especially interesting because it contains an overview of the methods that the minister has at his disposal to close these old coal-fired power plants. Those mentioned include: removing CO_2 emission rights from the market, making agreements between the government and individual electrical companies, bringing together the power plants

[20] Letter of 6 September 2013 in which Minister Kamp mentions at the bottom of p. 2 a *"tax revenue loss of 189 million euros"* as a consequence of the introduction of the exemption from the coal tax for electrical generation, which can also be found in the accompanying overview of budgetary consequences of the Energy Accord for the State.

in one company (bad bank construct), and tightening environmental regulations. This overview too, coming from the minister himself, shows that the State has a multitude of instruments to influence the emissions landscape of the Netherlands without having to turn to the instrument of legislation.

94. In consideration of the points above, Urgenda c.s. can draw no other conclusion than that the State has made no or little use of the Energy Accord to achieve a reduction of the Dutch emissions. To the contrary, the fact that more additional coal-fired generation capacity is to be built than that which will be closed, and that an exemption from the coal tax will be granted for coal-fired generation (while this coal tax is in fact intended as a financial stimulus to discourage using coal as fuel), all indicate the opposite.

94. Urgenda c.s. support the critical observations set out above concerning Dutch mitigation policy with a recent report by the International Energy Agency (IEA) that also mentions the intended closure of the coal-fired power plants under discussion. The IEA regularly issues reports concerning the energy policies of its member countries. The previous IEA report about the Netherlands appeared in 2008. On 22 April 2014, a new report appeared: Energy Policies of IEA Countries: The Netherlands, 2014 review (referred to below as the EIA NL-2014 report, attached as **exhibit U58**). To a significant extent, the report is based on information originating from the State itself (according to pages 183 and 184 of the report).

95. In the "Executive Summary" of the IEA NL-2014 report, it is mentioned on p. 10 that the Netherlands has one of the most CO_2-intensive economies, that the share of fossil fuel energy in the Dutch energy mix is greater than 90%, and that the Dutch CO_2-related emissions are still increasing, in spite of reaching the targets of the Kyoto Protocol:

"Fourthly, the Dutch energy sector, accounting for 10.9% of GDP, strongly defines the national emission profile. Despite the significant progress in decoupling emissions from economic growth and industrial energy efficiency, The Netherlands remains one of the most fossil fuel- and CO_2-intensive economies among IEA member countries. The share of fossil fuels in the energy mix is above 90% […]. There is a trend in industry to use oil and oil products, thereby boosting CO_2 emissions. The Netherlands is on track to reach Kyoto targets; however, CO_2 and related emissions have been growing […]." (underlining added)

96. In chapter 3, Climate Change, of the IEA NL-2014 report, it is stated in the 'Overview' on p. 31 that the share of the entire energy sector in the Dutch emissions of greenhouse gases has risen from 72% in 1990 to 85% in 2011, and that in that period the CO_2 emissions from fuel combustion have grown by 11.5%, while the emissions of non-CO_2 greenhouse gases have decreased by 50%.

"The energy sector strongly defines the Dutch emission profile and makes the Dutch economy CO_2-intensive […] The sector makes up almost all GHG emissions. […] The share of the energy sector in total GHG was around 72% in 1990; in 2011 it reached 85%, and stems from heat and power generation, the petrochemical, transport, construction and the horticulture and agriculture sectors. Over the 1990-2011 period, CO_2 emissions from fuel combustion have grown (11,5%), while emissions of non-CO_2 greenhouse gases, such as methane (CH_4), nitrous oxide (N_2O) and fluorinated gases (F-gases), decreased by 50% versus base year emissions." (underlining added; GHG = greenhouse gases)

97. As mentioned above, the IEA NL-2014 also contains data about the intended (as provided in the Energy Accord) closure of five old coal-fired power plants and about the three new coal-fired power plants that are to take their place. On p. 166, there is a specification of which five old coal-fired power plants are to be closed, with their respective capacities. A total of 2693 megawatts (MW) of power capacity is to be shut down. A table on p. 165 mentions the three new coal-fired power plants that are planned; it shows that these have a combined capacity of 3510 MW, thus clearly more than the generating capacity that is to be shut down. On p. 165, the report comments concerning these developments:

"Three additional coal plants with combined capacity of 3.5 GW are being developed (see table 9.1). The new E.ON-owned plant at Maasvlakte has a design efficiency of 47%. This development contrasts with wider European Union trends, where investment in new coal fired power plants is scarce […] and most countries are reducing their coal fired capacity." (underlining added; 3.5 GW = 3500 megawatt)

98. The IEA NL-2014 report appears furthermore to imply that these five coal-fired power plants would be closed anyway, even without the Energy Accord, as a consequence of stricter European regulations based on the Industrial Emissions Directive and the Large Combustion Plant Directive. See the IEA NL-2014 report, p. 166:

"Since 2011, there are tighter requirements for pollution control in the European Union, notably those from the Large Combustion Plant Directive (LPCD) and Industrial Emissions Directive (IED), which in practice may lead to the closure of older plants, if these are unable to upgrade their emission control equipment."

99. The fact that in the Netherlands, in contrast to most other EU countries, so many new coal-fired power plants are being built, instead of the much cleaner gas-fired power plants, would furthermore appear to be strongly guided by the State[21] and by a conscious choice on the part of the State for coal-fired power plants. All of this is difficult to characterize as a forceful and effective mitigation policy or a strong focus in that direction.

2.5 Energy Tax

100. In paragraphs 7.2 and 7.3 of its statement of defence, the State names the Energy Tax as an important measure for the mitigation of greenhouse gas emissions. Here too there is room for argument.

101. Energy tax is levied on the end user proportional to the amount of gas or electricity that it uses. There is also a coal tax that is fashioned in a similar way. Both taxes are provided for in the Environmental Tax Law (Dutch: Wet belasting op milieugrondslag = Wbm)

102. Although nearly all taxes are primarily intended to generate more tax revenue for the general fund, this was not the case for the Energy Tax when it was introduced. The purpose of the Energy Tax was to reduce the emission of CO_2 and to stimulate energy efficiency and the introduction of market-oriented instruments based on the principle 'the polluter pays'. The goal was not the generation of tax revenue but rather a form of regulation[22] in which a shift in the tax burden is an instrument of regulation; this is apparent from the fact that the tax revenues are entirely

[21] See N. Körper, *Verslaafd aan energie* (Addicted to Energy), 2012, pp.100–102 (**exhibit U59**). According to a documentary produced by the EenVandaag television program, the State has for example provided a subsidy of 2 billion euros over a period of 10 years by means of a secret agreement for the construction of the new Maasvlakte coal-fired power plant; this subsidy compensates for 80% of this power plant's costs for obtaining CO_2 emission rights. See http://www.eenvandaag.nl/binnenland/36581/afgekochte_emissierechten_betaald_door_de_overheid

[22] The official name is therefore Regulating Energy Tax (Dutch: Regulerende Energie Belasting).

channelled back (thus given back) by reducing other direct taxes, including the income tax.[23]

103. Originally then, and in agreement with the goal of the law, energy tax did not have to be paid on electricity that was generated sustainably (null tariff). After all, no CO_2 is released in generating renewable electricity. However, after 2001 the State also began to levy energy tax on renewably-generated electricity. In other words, since 2001 one who does not pollute also has to pay, as though he were a polluter.

104. In addition, electric power plants that combust gas in order to produce electricity do not have to pay energy tax on the gas that they use for this purpose. Until 1 January 2013, an equivalent measure applied to coal-fired power plants, exempting them from the coal tax for the use of coal in generating electricity.

105. In figures: generating 1 kWh (kilowatt-hour) of electricity in a coal-fired power plant costs approximately 4 eurocents, and generating 1 kWh of electricity by using wind power or solar power costs approximately 9 eurocents. The energy tax on households amounts to nearly 12 eurocents per kWh. If that tax rate were not to be levied on renewably generated electricity but only on fossil-fuel-generated electricity (in fact internalizing the social costs in the cost price of fossil-fuelled electricity), then renewable electricity would be considerably cheaper than 'ordinary' electricity and would take over the market. The difference in the prices paid by the consumer is even greater, namely approximately 14 eurocents per kWh, because an additional 21% VAT must be paid on the energy tax. The conclusion has to be that the structure of the Energy Tax, with its exemption for gas-fired and coal-fired power plants, amount to a de facto stimulus and subsidy for the use of gas and coal to generate electricity. Because of this, solar power and wind power are pushed out of the market and these means of generating electricity require subsidies in order to be able to compete.

106. In addition to this, the Energy Tax contains a regressive tariff. In 2014, anyone who uses 0 to 10,000 kWh of electricity per year pays energy tax equal to € 0.1185 (nearly 12 eurocents) per kWh used. However, a commercial user that uses

[23] See *Handleiding Milieuwetgeving* (Environmental Legislation Manual), section 1.32, Wet Belasting op Milieugrondslag, Algemeen Commentaar (Law on Environmentally-Based Taxes, General Commentary), note 1 (**exhibit U60**). See also W.G.M. Visser, *Tekst en Toelichting Wet Belastingen op Milieugrondslag* (Text and Explanation of the Law on Environmentally-Based Taxes), pp.13–14, Sdu, 2009, also for its bearing on the following paragraphs of the present statement.

more than 10 million kWh pays only € 0.0005 per kWh on that increment.

107. The structure of the Energy Tax on electricity can therefore be characterized, with some bias but not incorrectly, as follows: one who does not pollute must pay as though he were a polluter, and the biggest polluter pays the least. Urgenda c.s. therefore dispute the claim that the Energy Tax is an important de facto means of mitigating the Dutch emissions of greenhouse gases.

108. In this light, it is not surprising that the percentage of renewably generated electricity in the Netherlands, 4.5%, is among the lowest in Europe, in spite of the fact that the Netherlands has a very great potential for wind power generation because of its location adjoining the North Sea. Denmark for example, with a geographical situation comparable to that of the Netherlands, achieves 23% renewable generation. In the IEA NO-2014 report (exhibit U58), the table on p. 109 in fact shows at a glance just how far behind the Netherlands have lagged. See also p. 144 of that report:

"In 2013, the share of renewable energies (RES) in final consumption stood at 4.5%. The Netherlands is impacted by the pace of renewables deployment in neighbouring EU member states. In 2013, it is behind its EU targets and faces challenges to meet them in the coming years if no major policy change is made."

109. Furthermore, the State's statement (statement of defence, paragraph 7.3) that the revenues from the Energy Tax are used for purposes 'including' financing emissions reduction projects is incorrect. Urgenda c.s. are of the opinion that these revenues in fact 'simply' flow into the general fund.[24]
Therefore, the costs of stimulating renewable energy (the SDE+ subsidy, see statement of defence, paragraph 7.4) are meanwhile borne by levying a separate tax, known as the 'Renewable Energy Surcharge' (Dutch: *Opslag duurzame energie*), that is levied on both natural gas use and electricity use.
See the website of the tax office concerning all tariffs of the environmental taxes: http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/overige_belastingen/belastingen_op_milieugrondslag/tarieven_milieubelastinge

[24] In conflict with the original intention and design of the Energy Tax and consequently in conflict with the truth, later finance ministers have meanwhile in fact contended that the Energy Tax is primarily and principally intended to collect tax income. See for example, in the discussion of the bill proposing an Amendment to the Environmental Tax Law, Memorandum in response to the Report of 6 July 2007, Second Chamber 2006–2007, 30 887, no. 7, p.2: *"The environmental taxes included in the Wbm are 'ordinary' taxes, thus primarily aimed at financing the general fund."*

n/tabellen_tarieven_milieubelastingen (in Dutch).

110. In conclusion, page 28 of the IEA NL-2014 report includes the following comment concerning Dutch environmental taxes:

"The share of revenues from environmental taxes in total tax revenues decreased in recent years. The industry sector, including manufacturing and utilities, pays on average 12% of the energy taxes; more than half is paid by households. Energy taxes for the stimulation of renewable energy were abolished in 2003. As of 2013, the subsidy on renewable energy (SDE+) is financed by households as a surcharge on the energy tax."

111. It thus appears that Dutch mitigation policy, to the extent that such exists in the form of taxes levied as a 'financial stimulus' to regulate environmentally damaging activities and the emissions of greenhouse gases, is chiefly being dismantled, or is being converted into 'ordinary' income procurement without ancillary 'regulatory' intentions. The money has to be provided primarily by households. The energy tax in fact spares industry by means of strongly regressive rates; the 'fossil' energy sector that accounts for the lion's share of the Dutch greenhouse gas emissions even enjoys an exemption from the energy tax, causing renewably generated electricity (which does not involve greenhouse gas emissions and all the social costs and dangers that they bring) to be priced out of the market.

2.6 Conclusion

112. With these arguments, Urgenda c.s. have mainly wished to show that the State may well claim that it is already making great efforts in the area of mitigation, but upon further examination of this claim, not much is left of it. Real, material reductions in the Dutch emissions have not yet been achieved, and the instruments mentioned by the State appear in a number of respects to further stimulate and subsidize the use of fossil-fuelled electricity and the emissions of greenhouse gases rather than reducing them.

113. In this way, Urgenda c.s. wish to show how large the gap is between the climate policy that the State says it wants to promote and the climate policy that it actually is carrying out.

114. This demonstrates the necessity of these proceedings in order to really start to do something about Dutch emissions.

CHAPTER 3:
URGENDA C.S. REQUEST *LEGAL* PROTECTION

115. The State's most fundamental defence is that the debate concerning reductions of Dutch emissions does not belong in the courtroom and that the court may not make a decision concerning it, because that debate must be carried out in the Parliament, and a decision concerning it requires political assessments and political decisions.

116. The *Nederlands Juristenblad* [a Dutch weekly periodical read mainly by legal professionals, transl.] devoted an important part of its 13 July 2014 issue (*NJB* 2014, no. 23) to the procedure at hand. Two articles included in the issue are apparently inspired by the procedure at hand, and in them the topics discussed in this procedure are placed in a broader context and broader perspective. The article "Regulering van onzekere risico's via Public Interest Litigation?" (Regulation of Uncertain Risks via Public Interest Litigation?) is by L. Enneking and E. de Jong, and the article "Democratie, rechtsstaat en de rechten van toekomstige generaties" (Democracy, the Constitutional State, and the Rights of Future Generations) is by F. Wijdekop. The two articles are entered in evidence as **exhibit U61** and **exhibit U62** respectively.

117. The article by Enneking and De Jong in particular opens up for discussion, in a comparative law context as well, the questions that arise in public interest procedures of this kind. They also discuss specifically the relative positions of the court and the lawmaker in public interest cases, as well as the advantages – but also the disadvantages – of action by the court, in particular when one considers risks that involve an uncertainty component. Topics they discuss include how and why government actions can fail to regulate certain risks adequately – for example (and all their examples are present to a greater or lesser degree in the procedure at hand) due to scientific uncertainties concerning the risks; or under pressure from (often commercial) lobbies; or through the short-term perspective that is often characteristic of the thinking of political bodies and politicians; or because it concerns a problem with an international dimension and no agreement can be reached in the international political context about how to solve the problem. The

article also discusses the view of influential jurists such as Jaap Spier, Coen Drion, and Ton Hartlief that civil law ought to play a role in matters such as these, and why.[25] Although Urgenda c.s. will refer to specific passages in the article by Enneking and De Jong later in this statement, and Urgenda c.s. will examine in more detail at the end of this statement (chapter 12) the defence of the State that the court ought to keep itself from becoming involved in climate issues, they consider it of great importance that the court examine the entire article, precisely because it sketches a general frame of reference that can lead to a better understanding of this procedure and the arguments of Urgenda c.s.

118. Having said that, Urgenda c.s. wish at the same time to firmly emphasize that they are not asking the court to engage in politics. Urgenda c.s. ask the court for legal protection. No more than that, but also certainly not less.

119. The fact that the subject of this procedure – climate change and its consequences – are discussed from time to time in the political arena does not mean that when this subject is involved, the courts must step back and may offer no legal protection whatsoever, not even when a violation of the rights and claims of citizens threatens to take place. The court may not take over the seat of the political order, but neither may it make its own seat smaller than it is. When a violation of rights is involved, one can always turn to the court for legal protection, and the court should also provide it.

CHAPTER 4:
URGENDA C.S. REQUEST LEGAL PROTECTION AGAINST (THREATENING CATASTROPHIC) DAMAGE

4.1 Introduction

120. Urgenda c.s. request legal protection against the damage and consequences of a dangerous climate change.

121. In discussing environmental damage, two forms of damage are distinguished: damage done *to* the environment, and damage that occurs *through* the

[25] The idea that civil law has a role to play here can also be seen in the previous issue of *NJB* with the theme "Crisis, rampen en recht" (Crisis, disasters, and law). See E. Tjong Tjin Thai, "Privaatrecht in nood" (Civil Law in Emergencies), *NJB* 2014, no. 22, pp.1474–75, especially §4.1.

environment or *through* damage to the environment.[26]

122. This case looks at both forms of damage. Damage to the environment is at issue because of the worldwide emissions of greenhouse gases. These are degrading the chemical composition of the atmosphere, which is retaining more heat because of this. This results in a change in climate (the State also acknowledges that climate change is already underway)[27] with consequences that include extremes in weather that will be more frequent and more intense.

123. Through these extremes in weather, more frequent and greater economic (material) damage will result; this is damage *through* the environment and *through* damage to the environment.[28] Examples of such extremes in weather include Hurricane Katrina that brought widespread destruction to New Orleans, and Hurricane Sandy that inflicted tens of billions of dollars of damage on New York City. This is not to say that there is certainty that these two recent hurricanes, however exceptional they may have been, were the result of the climate change that is already occurring, but there is certainty that hurricanes like this will occur more often and will become even more intense. The same can be said concerning the recent record high temperatures in America, Australia, and Russia, with accompanying crop failures and forest fires of historic magnitude.

124. Events and situations that were very exceptional until recently have now become the new 'normal' through climate change. From the website of the Dutch National Weather Service (KNMI) (**exhibit U63**): The year 2009 takes its place worldwide among the ten warmest years since the beginning of recorded measurements in 1850. Furthermore, warming is proceeding more and more quickly. Nine of the places in the top ten are held by years in the 21st century. According to the KNMI, the decennium 2000–2009 was the warmest decennium worldwide since the beginning of recorded measurements in 1850, at +0.44 degree above the long-

[26] See E. Bauw, *GS Onrechtmatige Daad* (GS Tort Law), VIII.6.3.1 and VIII.6, note 21 with jurisprudence.
[27] Statement of Defence, par. 5.1
[28] See E. Véronique Brugman, "De schadeloosstelling van slachtoffers van natuurrampen" (Compensation of Victims of Natural Disasters), *Overheid & Aansprakelijkheid* (Government & Liability), no. 2, June 2012, p.56, who writes, with reference to a study by reinsurance company Munich Re, that the number of climate-related natural disasters is increasing. *"The year 2010 saw more than a doubling of the number of natural disasters (960) compared to the year 1981, and the associated costs have increased by a factor of 10 (around $150 billion, of which $37 was insured). Disasters are claiming more and more victims and are causing ever increasing economic losses."*

term average over 1961–1990. That was warmer than the decennium 1990–1999 (an increment of +0.23 degree), that in turn was warmer than the decennium 1980–1989 (an increment of +0.08 degree). The following year, 2010, was the warmest year ever recorded worldwide. May 2014 was the warmest May ever measured worldwide; the previous record was May 2010.[29]

125. Such extreme weather conditions are not restricted to distant places.[30] On 26 June 2014, the beaches of the Wadden Islands had to be evacuated because numerous (dangerous) waterspouts were sighted. Waterspouts are normally very rare in the Netherlands. According to the KNMI, it was 'exceptional' that so many waterspouts were observed in a short time. On 10 July 2014, emergency dikes had to be placed in Limburg because a number of rivers had overflowed their banks because of extreme rainfall. In Heerlen, 120 mm of precipitation fell, an amount that falls there on average only once in 850 years, and other parts of South Limburg saw an amount of precipitation that occurs only once in 500 years. On 18 July 2014, the National Heat Plan was launched; because of the temperatures that are expected, measures are to be taken to protect vulnerable groups of citizens.

4.2 The two-degree limit

126. With this procedure, Urgenda c.s. are taking a stand against a threatening dangerous climate change with potentially catastrophic consequences. Such consequences are to be expected if the earth warms by more than 2°C as a result of human activities (emission of greenhouse gases). This two-degree limit was agreed to in the Cancun Agreements of 2010, based on the scientific findings of the IPCC reports, as the limit that may not be exceeded because of the serious dangers and consequences that that implies.

[29] The last month that was colder than normal was February 1985. This means that there have been 351 consecutive months in which the temperature was higher than normal. The last record cold temperature was in December 1916. May 2014 was 0.74 degrees warmer that the average May month in the 20th century. Source: http://www.nu.nl/wetenschap/3810137/warme-maand-mei-breekt-temperatuurrecords.html

[30] The examples that follow below in the main text are taken from www.nu.nl, and may be found on that website by using search keywords 'waterhozen' (waterspouts), 'nooddijken' (emergency dikes), and 'hitteplan' (heat plan). Another news item reports that in 2013 in Deelen near Arnhem the 35-degree Celsius mark was reached for the 14th time since 2000. In the period 1985-1999, that happened only once, as was also the case between 1970 and 1984. Source: http://www.nu.nl/algemeen/3540879/kwik-steeds-vaker-boven-35-graden.html (Dutch).

127. This two-degree limit threatens to be substantially exceeded. From the sources that Urgenda c.s. have already mentioned in the summons, it can be seen that if policies remain unchanged it will be necessary to allow for a temperature rise of 4°C or more by the end of this century, and the State acknowledges this too.[31] Such a temperature rise will lead to severe if not catastrophic consequences.[32]

4.3 What damage and consequences must we expect, specifically in the Netherlands?

128. Urgenda c.s. will now further examine the consequences of a rise of the average temperature on earth of 2 degrees or more, not only worldwide, but also specifically for the Dutch land area within which the plaintiffs reside. The severity and scope of those consequences are an important viewpoint (compare the Cellar Hatch Criteria that will be further discussed in chapter 6.4) with respect to the question of what measures can be required of the State in this context.

129. The fact that a rise of 2 degrees or more is serious may in the opinion of Urgenda c.s. already be deduced from the fact that the two-degree norm has been defined in order to prevent dangerous climate change, that above this limit the net effect of the warming is negative everywhere on earth, that all countries are in agreement concerning the norm (and if this norm should require adjustment at all, then the norm will have to be 1.5 degrees instead), that all countries consider it important to meet yearly to discuss how to tackle this problem (the 20th COP will take place in 2014), that all countries emphasize that with climate change human rights are at issue,[33] and that all countries are very concerned about the fact that the emission reductions that are needed as of 2020 are not going to be achieved and because of this a realistic chance of limiting warming to less than 2 degrees is in danger of being lost, as is evident in the joint declaration of the COP17 in Durban:

"noting with <u>grave concern</u> the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with having a likely chance of holding the increase in global average temperatures below 2°C or 1.5°C above

[31] See below, section 6.4.3.

[32] See for example the summons, par. 3.8, concerning the World Bank report 'Turn Down the Heat' about a world that is 4 degrees warmer.

[33] See Cancun Agreement with reference to exhibit U31, discussed in chapter 4.3.5 of the summons.

pre-industrial levels"[34] (underlining added)[35]

130. Urgenda c.s. are of the opinion that these facts in themselves are sufficient evidence to establish that the danger of (the consequences of) going beyond the two-degree limit is serious. After all, at issue here is a norm concerning endangerment and safeguarding against danger that the State itself has established and defended, and for which the State (together with the EU) has also taken a firm stand in the context of international negotiations.[36] Therefore, the premise that exceeding this norm will lead to serious danger ought to be accepted as established fact.

131. Jaap Spier, advocate-general to the Dutch Supreme Court and author of two books about law and climate issues as well as many other Dutch and international publications on this subject, writes the following about this (with reference to scientific sources):

"If this 2-degree threshold is passed, a series of adverse consequences will materialize. Inter alia, a significant sea level rise, in worst-case scenarios by several metres at the end of this century, an increase of extreme weather events (including hurricanes, excessive rainfall and droughts), increased forest fires that burn hotter and are more destructive, shoreline erosion, loss of genetic, species, and ecosystem diversity, adverse impact on biodiversity, acidification of oceans, strain on water and food supply, health risks such as all kinds of diseases, a range of anxieties, depressive disorders and premature death, environmental migration, not to speak of the more indirect impact on economy and security. The more temperatures will rise, the gloomier the picture will become. After all, damage will exponentially increase. New and even more fatal tipping points will be passed."[37]

132. The severity of the danger is also emphasized by the highest court of the United States, which, as has already been said in the summons, has concluded on the basis of the same scientific evidence that the risks for the American homeland can

[34] See further at paragraphs 213–14 of the summons.
[35] See Conference in Durban with reference to exhibit U32, discussed in chapter 4.3.6 of the summons.
[36] See the summons, and see also IPCC WGI AR5, ch. 12, p.1107: *"The 2°C target has been used first by the European Union as a policy target in 1996 but can be traced further back."* (**exhibit U64**).
[37] *Climate Change Remedies, Injunctive Relief and Criminal Law Responses*, Jaap Spier and Ulrich Magnus, 2014, p.9.

be catastrophic in the longer term. The outcome will not be any different for the Dutch homeland. There the severity of the danger is once again made evident. The US Supreme Court has already been cited in the summons:

"The harms associated with climate change are serious and well recognized […] [T]he risk of catastrophic harm, though remote, is nevertheless real." (exhibit U49, p.18 and p.23)

133. The IPCC too has expressed the severity of the danger in a variety of ways, including the statement:

"Human security will be progressively threatened as the climate changes (robust evidence, high agreement)."[38]

134. The most recent IPCC report states further that even with the present 0.8 degree of warming, the changed scale of the extremes is already making societies vulnerable:

"Impacts from recent climate related extremes, such as heat waves, droughts, floods, cyclones, and wildfires, reveal significant vulnerability and exposure of some ecosystems and many human systems to current climate variability (very high confidence). Impacts of such climate-related extremes include alteration of ecosystems, disruption of food production and water supply, damage to infrastructure and settlements, morbidity and mortality, and consequences for mental health and human well-being."[39]

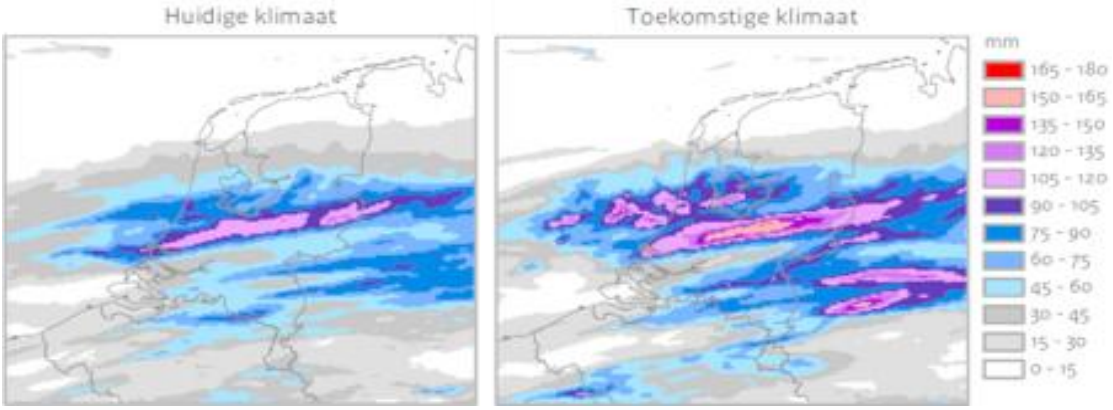
135. Consequences of climate change are thus already present in the world and will increase with every further rise of temperature above the present 0.8 degree. The summons has discussed in detail the reports of the IPCC, the Netherlands Environmental Assessment Agency (Planbureau voor de Leefomgeving, PBL), the EU, the US EPA, the Dutch Ministry of Public Health, Science, and Sports, the Dutch General Accounting Office, the Dutch Delta Commission, and others, from which the conclusion can clearly be drawn that further warming (above the present 0.8 degree) will result in a wide variety of dangers to life and health that will affect all Dutch citizens and thus also Urgenda c.s (as well as future Dutch generations) to a greater or lesser degree. Dutch society will also be impacted by dangers that

[38] IPCC WGII AR5, Technical Summary, p.25 (**exhibit U65**).
[39] IPCC WGII AR5, Summary for Policymakers, p.6 (**exhibit U67**).

include an increase in the intensity and prevalence of floods, torrential rainfall, storms, droughts, forest fires, heat waves, sea level rise, infectious diseases, loss of biodiversity, deterioration of ecosystems and of supplies of drinking water and food. These risks apply to Dutch society and to the plaintiffs both directly (these problems will become increasingly evident in the Netherlands) and indirectly (these problems will become increasingly evident in all other countries) with all the consequences that will be borne by the Netherlands in a globalized world.

136. As further evidence of the consequences for the Netherlands and the concreteness of the threat of damage and injury facing the plaintiffs and future generations of Dutch citizens as a result of the further warming of the earth, Urgenda c.s. bring the 2014 report of the Netherlands National Weather Service (KNMI) into evidence, in which that which Urgenda c.s. have stated in the summons is supported in greater detail and numerically. The report, "*KNMI '14, klimaatscenario's voor Nederland*" (KNMI '14, Climate Scenarios for the Netherlands), is published by the Ministry of Infrastructure and Environment and is brought into evidence as **exhibit U66**.

137. To give a concrete example, we refer to figure 18 on page 21 of the report, as reproduced here:



The KNMI says the following about figure 18:

"Figure 18 shows an example of two corresponding weather patterns, now and in the future. This example has to do with a situation in which there was heavy precipitation in the east of the Netherlands during two days in August 2010. With the detailed model, this situation has been transformed according to the Wh scenario to a climate that is 2°C warmer, resulting in a description of all climate indicators with spatial details up to 2.5 km.

When applied to the situation in August 2010, the high-resolution model gives a realistic representation of the extreme amount of precipitation, 130 mm, near the German border, as compared to weather radar observations. Transformation of this extreme situation to a future climate leads to a considerable increase in the calculated amount of precipitation. The maximum amount increases from 130 mm to 180 mm, and the area with more than 100mm of precipitation is nearly twice as large. The complete picture of future weather that is obtained in this way makes detailed study of the disruptive consequences of extreme weather possible."

138. From this example, it can be clearly seen that the prevalence and intensity of extreme weather phenomena will increase in the Netherlands (the present extremes will by that time have become the new normal) and that no one, including the plaintiffs, will have the possibility of escaping these consequences. Figure 18 shows what the intensity of precipitation in an extreme downpour will be – an intensity as yet unknown in the Netherlands. Squall lines with 180 mm of precipitation are extremes that have never been measured in the Netherlands. And keep in mind that here we are describing the consequences of climate change in which warming does not exceed 2°C.

139. The consequences of warming of more than 2°C, and certainly those of 4°C or more, being the course being followed at present, will bring changes in extreme weather in the Netherlands and (Western) Europe that are much greater still (more about this shortly), and it is against such consequences that Urgenda c.s. seek protection to prevent Urgenda c.s. and future generations from being subjected to the consequences of a rise of the average world temperature of more than 2°C (or 1.5°C).

140. This considerable change in extreme events thus applies not only to torrential rainfall but also to other types of weather such as long-lasting heat and drought, and no one will be able to escape from this, thus once again not Urgenda c.s. or future generations. The IPCC says this for example about the development of heat waves in Europe:

"The length, frequency and/or intensity of warm spells or heat waves are assessed to be very likely to increase throughout the whole region."[40]

[40] IPCC WGI AR5, ch. 14, p.1266. (**exhibit U69**).

141. Concerning the effects of heat waves, the IPCC says inter alia:

"Heat waves affect natural and human systems directly, often with severe losses of lives and assets as a result, and they may act as triggers for tipping points. Consequently, heat waves play an important role in several key risks [...] Morbidity and mortality due to heat stress is now common all over the world [...] High temperatures are also associated with an increase in air-borne allergens acting as triggers for respiratory illnesses such as asthma, allergic rhinitis, conjunctivitis and dermatitis."[41]

In the event of warming of more than 2°C, the consequences of heat waves and other extremes for the Netherlands will be considerable.

142. A report called the Climate Cost Project that has mapped out the consequences for the EU of warming of 3 to 4 degrees has been supported financially by the EU and is also significant for the Netherlands. This report (**exhibit U68**)[42] has also been taken up by the Netherlands National Audit Office (Algemene Rekenkamer) in its critical report on the adaptation policies of the Dutch government,[43] and the Dutch Environmental Assessment Agency (PBL) also refers to this report.[44] According to this report, without further mitigation and adaptation measures, the consequences for the EU of warming of 3 to 4 degrees[45] are *inter alia*:

- That by around 2050 approximately 88,000 people will die annually in the EU as a result of extreme heat; that by around 2080 approximately 126,000 annual deaths will result in the EU because of extreme heat; that the negative impact of these casualties on prosperity will be circa 102 billion euros around 2050 and circa 146 billion euros around 2080.[46]
- That in the coastal areas by around 2050 circa 55,000 people will be affected by floods each year, by around 2080 between 121,000 and 425,000 people will be affected by floods each year and another 438,000 people will have to

[41] IPCC WGII AR5, ch. 12, pp.27–28 (**exhibit U70**).
[42] The ClimateCostProject, Final Report, Volume 1: Europe, Summary of Results, 2011.
[43] Exhibit U12 accompanying the summons.
[44] This can be seen from the notes and glosses of the 'PBL-Notitie: De achtergrond van het klimaatprobleem' (PBL Memorandum: The Background of the Climate Problem), issued 14 January 2013 by the PBL.
[45] Of relevance here is the A1B scenario discussed in the report, that proceeds from the assumption of a temperature rise of 2.4°C to 3.4°C in the period 2071–2100 relative to the period 1961–1990, which is approximately 3 to 4 degrees relative to the pre-industrial level.
[46] ClimateCostProject, p.9.

be relocated;[47] that the annual costs of these disasters will amount to between 19 billion euros and 37 billion euros by around 2080;[48] that those costs could increase to 156 billion euros per year if the sea level rises more than 1 meter in this century;[49] that the number of fatalities due to flooding will be circa 650 per year around 2080, of which two-thirds will be in Western European countries.[50]

Further explanation is provided by the IPCC, which states that the number of persons potentially affected worldwide will run in the hundreds of millions by around 2100:

"Due to sea-level rise throughout the 21st century and beyond, coastal systems and low-lying areas will increasingly experience adverse impacts such as submergence, coastal flooding, and coastal erosion (very high confidence)... By 2100, due to climate change and development patterns and without adaption, hundreds of millions of people, will be affected by coastal flooding and displaced due to land loss (high confidence)."[51] (underlining added)

- That, in addition to the coastal areas, another circa 300,000 people on the rivers will be affected by flooding annually by around 2050, and circa 360,000 annually by around 2080 (thus coasts and rivers together accounting for 785,000 people affected annually, plus 438,000 people relocated); that the costs of these disasters will amount to circa 46 billion euros annually by around 2050 and circa 98 billion euros annually by around 2080; that the actual costs could be a factor 2 higher or lower; that in particular England, Ireland, Italy, the Netherlands, and Belgium could have higher costs.[52]
- That by around 2050 (as compared to a 2°C scenario) an additional 2800 people will die annually because of ozone pollution; that there will be an additional 36,000 cases of chronic bronchitis annually; that an additional 23,000 climate-related hospitalizations will take place annually; that for less serious symptoms of climate-related air pollution there will be an additional 150 million so-called 'minor symptom' days annually; that the extra annual

[47] ClimateCostProject, p.4.
[48] ClimateCostProject, p.4.
[49] ClimateCostProject, p.5.
[50] ClimateCostProject, p.9.
[51] IPCC WGII AR5, Technical Summary, p.21 (see exhibit U65).
[52] ClimateCostProject, p.6.

costs of this climate-related pollution will be between 44 billion euros and 98 billion euros by around 2050.[53]

- That the models used show that the benefits of restricting the rise of average world temperature to 2 degrees are greater than the costs of the aggressive mitigation that are needed to achieve it.[54]

143. The IPCC too indicates that the risks catalogued by the Climate Cost Project and described above are a danger to people, to the health of people, to family life, to property, to the economy, and to ecosystems:

"Rising sea levels and storm surges, heat stress, extreme precipitation, inland and coastal flooding, drought and water scarcity, and air pollution pose widespread negative risks for people, health, livelihoods, assets, local and national economies and ecosystems (very high confidence)."[55]

144. Present and future citizens of the Netherlands and other (Western) Europeans are exposed to all these dangers. In addition to the material damage that these dangers will cause, they also threaten the right to life, health, and an undisturbed family life as referred to in the ECHR. The extreme weather phenomena of the future that cause such damage and injury will not be natural phenomena but rather will be caused by humans themselves and will be of a magnitude that the Netherlands has never before experienced.

145. In addition to the consequences sketched above, family life will also be impacted in other ways. The land and our infrastructures (harbours, roads, waterways, railways, energy supply, real estate, hospitals, dikes, urban facilities, etc.) are not dimensioned to deal with extreme weather phenomena such as extreme heat and extreme precipitation, and the damage that will be inflicted as a result of this will be great, as will be the necessity of making modifications. According to the IPCC, this aspect too forms a potential violation of undisturbed family life:

"Climate change will have profound impacts on a broad spectrum of infrastructure systems (water and energy, supply, sanitation, drainage, transport and telecommunication), services (including health care and emergency services), the built environment and ecosystem services. These interact with other social,

[53] ClimateCostProject, pp.11–12.
[54] ClimateCostProject, p.14.
[55] IPCC WGII AR5, Technical Summary, p.23 (see exhibit U65).

economic and environmental stressors exacerbating and compounding risks to individual household well-being (medium confidence based on high agreement, medium evidence).”[56]

146. In addition to the infrastructures of human societies, nature and ecosystems too (both within and outside of the Netherlands) have insufficient resistance to cope with the quickly changing climate and the extremes that come with it, and that forms an additional danger. It has a negative influence on availability of food and water[57] as well as on the biodiversity of plant and animal species, because the changes will proceed at an unnatural tempo and nature is not able to adapt at that rate of change.

147. To explain this further: the concern about food security, the concern about the adaptation capability of nature, and the concern about sustainability of the economy are, according to the UNFCCC, also important parameters in defining what dangerous climate change is. In article 2 of the UN Treaty, which sets out the purpose of the treaty (see exhibit U22), the treaty states that dangerous climate change must be prevented *“within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”* This definition of warming of 2 degrees as dangerous climate change also indicates that warming of more than 2 degrees is seen as a threat to food security, to the adaptation possibilities of nature, and to the possibilities for sustainable development of the economy.

148. It is evident from the sources cited by Urgenda c.s. in the summons and above that citizens of the Netherlands, as well as other Western Europeans and world citizens, are exposed to injury and to (property) damage caused by a world that continues to warm, and definitely in the case of warming by more than 2 degrees. The threat of damage and injury to Urgenda c.s. and future generations caused by climate change is thus concrete enough, contrary to what the State claims. They will have to be subjected to these negative changes. These types of weather, such as extreme heat (see also the Heat Report), drought, precipitation, etc. will lead to

[56] IPCC WGII AR5, ch. 8, p.3 (**exhibit U71**).

[57] The present warming of 0.8 degree already has negative effects; see IPCC WGII AR5, Summary for Policymakers, p.4 (exhibit U67): *“Based on many studies covering a wide range of regions and crops, negative impacts of climate change on crop yields have been more common than positive impacts.”*; and on page 14: *“Freshwater-related risks of climate change increase significantly with increasing greenhouse gas concentrations.”*

fatalities, deterioration of health, damage, and nuisance, and everyone in the Netherlands will be faced with these consequences to a greater or lesser degree, structurally and from time to time. This holds for all the consequences of global warming as described by Urgenda c.s., and it holds both for the direct consequences within the Netherlands and for the indirect consequences that will impact the Netherlands because of climate change in other countries in Europe and elsewhere in the world. Urgenda c.s. and Dutch society require protection against these threats, and these developments are far from the sustainability desired.

149. It is also very important to take the following into consideration as well. On page 28 of its report, the KNMI states that in the report and in the models used to produce it (which have produced inter alia figure 18 discussed above), no allowance has been made for the most extreme scenarios for the Netherlands, that is, scenarios with a small likelihood but with great consequences for the Netherlands. In the light of the Cellar Hatch Criteria and (thus) a legal approach to the climate problem, it is however important to examine what the KNMI has to say about this (according to the description on page 28, the KNMI bases its findings on data of the IPCC).

150. In the text box on p.28 with the heading "*Extreme scenarios: small likelihood, large consequences*", the KNMI describes the following:

"In scientific circles there is support for the view that through a strong worldwide warming the chances of a drastic abrupt change in the climate system are increasing. However, good quantitative support for this is lacking at this moment. Development of scenarios for abrupt climate change therefore falls outside the scope of KNMI'14. We still give several examples below. A small number of climate models show that the warm Gulf Stream gradually comes to a standstill before 2100. Because of this, the warming of Europe decreases in these models, with the exception of one model in which the Gulf Stream comes to a standstill around 2050 and in which Europe even temporarily experiences a net cooling. Several models calculate an abrupt decrease of the sea ice area in the North Pole region, through which the temperature in this region strongly increases. This can possibly have an influence on storms in Europe. Another effect that some models predict is a very pronounced drying out of the soils in Southern Europe. This 'desertification' of the Mediterranean Sea area increases the likelihood of easterly winds in the Netherlands, with very dry and warm summers as a consequence.

Two other possible phenomena are not, or not very well, simulated in the present climate models. The first is the collapse of the West Antarctic ice sheet. This ice sheet is presently losing mass because ice is calving off it in increasing amounts. Should the ice sheet collapse (a development for which there are not yet any indications), then the loss of ice mass can be much greater than that allowed for in the KNMI'14 scenarios for the sea level.

A second phenomenon concerns the possibility that remnants of tropical hurricanes will reach Western Europe. In recent years, we see hurricanes form relatively often in the eastern part of the tropical Atlantic Ocean, and less often in the Caribbean region. Many eastern hurricanes move northwards and then veer off in the direction of Western Europe. The formation probability of eastern hurricanes is increasing due to global warming, and with it the likelihood that remnants of hurricanes will reach Western Europe. New simulations of future weather by the KNMI with a very high resolution model confirm this. Because of this, the storm season can begin earlier in the Netherlands, and the intensity of storms can increase."

151. The likelihood of these extreme tipping-point scenarios, i.e. scenarios with a small chance that they will materialize in this century but great consequences for society if they do, is reduced if the task of respecting the 2-degree limit is taken seriously – or better yet, a limit of 1.5 degrees or lower. According to the IPCC, certain tipping points are already (with medium confidence) in fact underway, such as the tipping point mentioned by the KNMI and described above of the melting of arctic sea ice; another is the irreversible deterioration of coral reefs. The IPCC says this about the risks of tipping points at temperature rises of less than 2°C:

"With increasing warming, some physical systems or ecosystems may be at risk of abrupt and irreversible changes. Risks associated with such tipping points become moderate between 0-1°C additional warming, due to <u>early warning signs that both warm-water coral reef and Arctic ecosystems are already experiencing irreversible regime shifts</u> (medium confidence). <u>Risks increase disproportionately at temperature increases between 1-2°C additional warming</u> and become high above 3°C, due to the potential for a large and irreversible sea level rise from ice sheet loss."[58] (underlining added)

[58] IPCC WGII AR5, Summary for Policymakers, p.12 (exhibit U67).

152. The 'early warning signs' mentioned here by the IPCC are among the large changes that with the present 0.8 degree warming are already taking place at the North Pole and that could indicate an approaching tipping point. In the period 1979–2012 the summer extent of sea ice decreased every decade by not less than 9.4% to 13.6%.[59]

153. As warming proceeds further, the probability of these extreme (tipping point) scenarios continuing or developing increases. Urgenda c.s. are of the opinion that they and future generations have the right of protection against these small-probability-but-large-consequences scenarios as well, because of the severity of the danger, and perhaps even more important, the fact that this is an irreversible and uncontrollable danger. This argument applies even more strongly because of the fact that the delay of 30 to 50 years between emissions and the warming of the earth[60] makes it difficult to avoid these tipping points once science has determined that they are actually underway. Indeed, as has already been explained in the summons, because of this delay the world will already be unavoidably committed to a further warming of 30 to 50 years at the (future) moment that these tipping points have been confirmed.[61] Slowing down climate change is thus much like slowing down an oil tanker that has to shut down its engines many miles from the coast in order not to ram into the wharf. If the engines are only cut back when the wharf is actually in sight, the wharf will unavoidably be rammed soon thereafter.

154. On the basis of the data discussed by Urgenda c.s. in this procedure, it is not possible to understand how and why climate change – and more specifically exceeding the 2-degree limit – should not be considered a serious danger and why this threat should be insufficiently concrete for Urgenda c.s. to be able to state that, on the basis of the best available science, they feel threatened and that this development is also a threat for the future generations of Dutch citizens. In that

[59] IPCC WGI AR5, Summary for Policymakers, p.9 (**exhibit U72**).

[60] See inter alia Prof. Pier Vellinga, co-author of various IPCC chapters, who explains this delay in his book *Hoezo Klimaatverandering* (What Climate Change?) on pp.51–52 and states that it takes 30 to 50 years before the average temperature on earth has adjusted to the higher concentrations of greenhouse gases. See also IPCC WGI AR5, ch. 10, p.920 (exhibit U74), where a delay of "many decades" is mentioned in this context; see also Prof. James Hansen, also the co-author of various IPCC chapters, who mentions a delay of 25 to 50 years on page 1 of his publication that can be found at http://meteora.ucsd.edu/cap/pdffiles/Hansen-04-29-05.pdf (exhibit U75).

[61] IPCC WGI AR5, ch. 12, p.1106 (exhibit U64): *"The climate system response to the greenhouse gases and aerosols forcing is characterized by an inertia, driven mainly by the oceans [...] The AR4 showed that if concentration of greenhouse gases were held constant at present day level, the Earth surface would still continue to warm by about 0.6°C over the 21st century relative to the year 2000."*

context, reference is made back to the verdict of the ECtHR in Okyay v. Turkey (judgement of 12 July 2005), discussed in section 252 of the summons, in which it is made clear that cases in which a general risk to public health arises, through which people in a (very) large area are affected to a greater or lesser degree, can also be said to involve a sufficiently individualizable interest. In that case, in which coal-fired power plants caused pollution in an area with a diameter of 2,350 kilometres, the threats to health were, to put it euphemistically, certainly not greater that the threats to health posed by a worldwide warming of more than 2 degrees. It is thus impossible to see why in the case of Urgenda c.s. the threat and the severity of the danger should be insufficiently concrete to be a matter of self-interest.

155. In relation to the severity of the danger, Urgenda c.s. want to also point out that the severity of the danger for Urgenda c.s. and future generations is magnified by two factors: first, through the discriminatory effect of the warming of the earth; and second, through the international dimension of the consequences of the warming of the earth. Both factors ought to be considered in relation to the assessment of the danger.

156. With respect to the discriminatory effect of the consequences of warming of the earth, the IPCC points out that the elderly in the population are additionally vulnerable to climate change, and that this also holds for the elderly in industrialized countries (a group to which many of the plaintiffs will belong around 2050):

"There is increasing evidence of greater vulnerability of specific groups such as the poor and elderly not only in developing but also in developed countries."[62]

157. This discriminatory effect of climate change, caused primarily by the limited adaptability of the weaker members of the population in a changed climate, is also acknowledged by the UN Human Rights Council,[63] the Dutch Ministry of Public Health, Science, and Sports[64] and the US Environmental Protection Agency that considered this discriminatory effect of climate change on US society in its decision that greenhouse gases are dangerous for society and therefore are to be considered an atmospheric pollutant:

[62] IPCC WGII AR5, ch. 1, p.13 (**exhibit U76**).
[63] See summons, par. 37.
[64] See summons, par. 38.

"Finally, the Administrator places weight on the fact that certain groups, including children, the elderly, and the poor, are most vulnerable to these climate-related health effects."[65]

158. The fact that the weaker members of society – which according to all of the reports cited include the children (present and future) as well – will have to bear the greatest climate-related burdens makes it even more important to characterize the danger to Dutch society as serious and to offer protection against it. Aspects of this will be further elucidated in the discussion of the limitations of the adaptation measures in chapter 10.5 of this statement.

159. With respect to the international dimension of the consequences of warming: The Netherlands is exposed not only to the dangers that arise within its own borders, but also to the dangers that arise outside of those borders. In a globalized world in which food supplies and raw materials are purchased from all over the world, crop failures and the impacts of extreme weather in regions elsewhere in the world will also lead to consequences for Dutch society. According to the IPCC:

"[E]xtreme weather events in one region may impact production of commodities that are traded internationally, contributing to shortages of supply and hence increased prices to consumers, influencing financial markets and disrupting food security worldwide, with social unrest a possible outcome of food shortages."[66]

160. Another example of effects outside the Netherlands that could impact the Netherlands is that according to the IPCC the world is becoming more prone to conflicts because of climate change:

"Climate change can indirectly increase risks of violent conflicts in the form of civil war and inter-group violence by amplifying well-documented drivers of these conflicts such as poverty and economic shocks (medium confidence)."[67]

The Netherlands too can experience the consequences of conflicts abroad.

[65] Endangerment finding, exhibit U14, p.66498.
[66] IPCC WGII AR5, ch. 21, p.37 (**exhibit U77**).
[67] IPCC WGII AR5, Summary for Policymakers, p.20 (exhibit U67).

161. The same holds for the prognosis of the IPCC that economic growth in the world will be suppressed by climate change. That too will affect the Netherlands:

"Throughout the 21st century, climate-change impacts are projected to slow down economic growth ...".[68]

162. In that context, reference is also made to the US EPA endangerment finding (exhibit U14, p.66514) in which the EPA elucidates why it has considered the consequences of climate change outside the borders of the US in its judgement that greenhouse gases form a danger to American society. The EPA explains this choice as follows:

"The Administrator also considered the effects of global climate change outside the borders of the United States and evaluated them to determine whether these international effects impact the U.S. population, and if so, whether it impacts the U.S. population in a manner that supports or does not support endangerment to the health and welfare of the U.S. public...It is fully reasonable and rational that events occurring outside our borders can affect the U.S. population."

163. Finally, reference is made to the 17 June 2014 letter from the Dutch undersecretary of Infrastructure and Environment (**exhibit U78**), to the Parliament, in which the undersecretary, on behalf of the cabinet, responds to the IPCC WGII AR5 report:

"This report illustrates how the world is changing as a result of climate change. The effect on food production is possibly turning out to be stronger than earlier thought, especially in Africa. It is true that there are many possibilities for improving this productivity, but it is not easy to put them into practice. Shortages of water and food are increasing in many parts of the world. Extreme weather is developing more often and causing greater damage, due also to the fact that people are more often going to live in vulnerable areas. This means risks for our trade and food security, as well as conflicts and possibly streams of migrants."[69]

And farther along in the letter, the effects on the Netherlands of climate change abroad are emphasized once again:

[68] IPCC WGII AR5, Summary for Policymakers, p.20 (exhibit U67).
[69] Pages 1 and 2 of the letter (exhibit U78).

"The climate problem is a worldwide problem, in which the effects in other parts of the world can also have consequences in the Netherlands. Climate change can have consequences for our food security and energy security and can lead to global instability and to streams of refugees."[70]

164. Urgenda c.s. are of the opinion that because of the points that have been put forward above, the consequences of climate change abroad must be considered in determining the seriousness and the scope of the consequences and dangers of climate change for the Netherlands, for Urgenda c.s., and for future generations. The Netherlands is not an island that can exclude itself from these international consequences. That is also one of the reasons why, as has been mentioned earlier, the statutory interests of the Urgenda Foundation address the consequences (of climate change) abroad.

4.4 Conclusion

165. Urgenda c.s. are of the opinion that with the arguments given above they have made it sufficiently clear that the present collective level (magnitude) of greenhouse gas emissions worldwide will lead to a dangerous change in the climate with very serious and even potentially catastrophic consequences, that those consequences will arise to a serious degree in the Netherlands, and that Urgenda c.s will thus be affected by them.

CHAPTER 5:
URGENDA C.S. DESIRE DAMAGE PREVENTION, NOT DAMAGE COMPENSATION

5.1 Preventive legal protection, not damage compensation after the fact

166. As a prelude to that which they wish to argue in this paragraph, Urgenda c.s. cite the following passage from the article by Enneking and De Jong[71] that has already been mentioned:

[70] Page 5 of the letter.

[71] L. Enneking and E. de Jong, "Regulering van onzekere risico's via Public Interest Litigation?" (Regulation of Uncertain Risks via Public Interest Litigation?), *NJB* 2014, no. 23, p.1546 (exhibit u61).

"In particular, with climate change there is scientific uncertainty with respect to the question about when, where, and in which exact *degree which* specific *effects will take place, as well as about the effectiveness and negative side effects of certain precautionary measures, such as geo-engineering. On the other hand, it is assumed with (considerable) scientific certainty that climate change is taking place and will continue to take place, that unless action is taken negative effects will occur at a catastrophic scale, and that human behaviour is an important cause of the problem. [...] The fact that action must be taken is beyond doubt from the point of view of the natural sciences. The most recent report of the IPCC sounds the alarm once again: in the near term the warming of the earth can become irreversible, with great consequences. It is also clear from a legal viewpoint that action must be taken. The likelihood that inaction will lead to serious consequences at a catastrophic scale is to be expected with a high degree of scientific certainty, there is little time to avert the danger, and the costs of taking precautionary measures now are considerably lower than taking action later or not taking action at all."*

167. With this, Enneking and De Jong (implicitly) bring up for discussion the problem that certain behaviours or certain situations sometimes lead with certainty to great dangers and risks and thus embody a great general danger, but that there is uncertainty about the questions when, where, how, and with respect to which individuals that damage will materialize and become concrete. The question then is whether legal protection is possible against that behaviour or situation, and if so, who can be asked to provide that legal protection. That is the subject of this chapter.

168. In chapter 3 of this statement, Urgenda c.s. established at the outset that they do not wish to engage in politics via the court, but rather that they only desire legal protection from the court. They have then explained more precisely in chapter 4 that they desire legal protection against the threat of very great and possibly even catastrophic damage as the result of a dangerous change in the climate. They have also described in detail the way in which that damage will or can manifest itself, including within the land area of the Netherlands. In doing this, they have made clear that not only damage to the environment is involved, but also pecuniary damage and physical injury that are the consequences of damage to the environment. Against both of these forms of damage, they desire legal protection in the form of a (preventive) order to reduce the Dutch emissions of greenhouse

gases.

169. In paragraph 8.4 of its statement of defence, the State takes the position that an action in tort must satisfy a number of criteria. From the further exposition of that statement, it is apparent that what the State means by this is that there must be an unlawful action or omission in the sense that there is an infringement of someone else's subjective right, that this is done in conflict with a legal obligation or with that which unwritten law considers proper social conduct, and which action can be attributed to the party who commits the unlawful act (Statement of Defence, paragraph 8.4); furthermore, that this must involve specific and individual damage (Statement of Defence, paragraphs 8.30 and 8.38) that furthermore must consist of a material loss or the loss of an advantage (Statement of Defence, paragraphs 8.44 an d 8.45); that there must be a causal relationship between this damage and the unlawful action (Statement of Defence, paragraph 8.47) and that the unlawful act furthermore must be attributable to the perpetrator (Statement of Defence, paragraph 8.51); that furthermore the relativity requirement must be met that holds that the norm that has been violated must extend to protection against the damage that has been suffered (Statement of Defence, paragraph 8.54). The State reproach Urgenda c.s. that they have provided insufficient support for their claims in all these respects and have (consistently) stated them with insufficient directness. In essence, the State posits that the claims by Urgenda c.s. are not supported or are insufficiently supported on all these points.

170. Urgenda c.s. are of the opinion that with its legal defences, the State appears to fail to appreciate that with this procedure Urgenda c.s do not seek compensation for damages but rather prevention of damages. The criteria mentioned by the State do in fact apply to damages claims deriving from an unlawful act. But in requests for court orders and injunctions that are based on an action in tort, other criteria apply that are different from the requirements that apply to damages claims that are based on an action in tort. The State appears not to see this distinction, or not to wish to see it. The consequence of this is that the State's defence misses the point in a number of respects. Urgenda c.s. will explain their position and will further clarify their statements.

5.2 The place in Dutch liability law of actions seeking court orders and injunctions

171. In his 1978 thesis 'Het rechterlijk verbod en bevel' (Court Orders and Injunctions), C.J.J.C. van Nispen writes (p.19): *"The first and in fact also the most important task of enforcing the law is the battle against wrongdoing by those in power: prevention is better than cure."*

172. With the codification of civil law in 1838, the legislator did not however include actions seeking court orders and injunctions in the body of the law. In the vision of the legislator of 1838, the court could only prescribe a monetary fulfilment, and the execution of a court verdict was (only) directed toward monetary compensation. Claims for compliance (whether in the form of an order or some other form) were thus also for many years rejected by the courts or declared impermissible (see Van Nispen, op.cit., no. 20). In the statement of responsibility of his thesis, Van Nispen therefore wrote (p.1):

"The great practical interest that has been shown in the subject area of tort law in the course of this century tends to be attributed to the acknowledgment of unwritten legal norms in HR 31 January 1919, NJ 1919, 161. Another key factor often goes unnoticed. I refer to the extension of protection against torts that has taken place outside the law as written. Although article 1401 of the Dutch Civil Code when taken literally only allows a damages payment to be claimed for an injustice that has already taken place, case law has allowed by degrees the consideration of claims that extend to taking "preventive measure in case there is a serious threat that an injustice is about to take place": actions seeking the imposition on the defendant of an injunction against carrying out a specified unlawful act in the future, or of an order to carry out an act the omission of which would be unlawful. The admission of these preventive actions has had ... a significance for the legal world in the last 50 years that should not be underestimated. One cannot say that this development in the literature has attracted much attention. Doctrine has considerably expanded and refined the conceptual frame of reference that has developed around article 1401 of the Legal Code, but judicial thinking has continued to associate the legal institution of the unlawful act with claims for payment of damages."[72]

173. Van Nispen describes in his thesis (nos. 20–32) how actions seeking court orders and injunctions were essentially turned away again and again before 1914, thereafter trickling into case law surreptitiously and via roundabout routes until

[72] In the same sense, concerning the great importance of actions seeking court orders and injunctions, see T.E. Deurvorst, *GS Onrechtmatige Daad* (GS Tort Law), II.1, note 46.

finally the Supreme Court ruled in 1944 (Supreme Court, 18 August 1944, *Nederlandse Jurisprudentie* 1944/45, 598) that the protection given by article 1401 of the Dutch Civil Code extends *"to measures of prevention in the case that there is a severe threat that something unlawful is about to take place"*.

174. Since then, the dominant opinion[73] is that an unwritten legal obligation or unwritten norm of lawfulness is contained in article 6:162 of the Civil Code; that an action seeking a court order or injunction has as its intention compliance with that legal obligation; and that because of this an action seeking such a judgement is permissible if the other party threatens to violate that legal obligation or norm of lawfulness in the future. In 1992 the possibility that had already been created in case law *outside the law as written*[74] of an action seeking a court order or injunction was codified by the legislature in article 3:296 of the Civil Code.

175. In line with this, Hartkamp and Sieburgh also state, concerning actions seeking court orders and injunctions: *"Court orders and injunctions have assumed an important place in legal practice. According to Dubbink ... this place is so great that one is more likely to consider the <u>prevention</u> of unlawful actions, rather than the compensation of damage, to be the main characteristic of our legal system. [...] One can connect this with the idea that even before the commission of an unlawful act a legal obligation already exists, i.e. the obligation to refrain from that act."*[75] (underlining added)

176. An important goal of liability law is thus to encourage socially desirable behaviour and to preventively oppose socially undesirable behaviour. It is evident that liability law does in fact have this function where preventive injunctions and orders are concerned. But the right to claim damages also has the same function of preventively opposing socially undesirable behaviour. The expectation that someone who displays socially undesirable behaviour leading to damage being suffered by others will have to compensate that damage is a strong stimulus to refrain from that socially undesirable behaviour in the first place.

177. The fact that liability law is intended and suited to encourage socially desirable behaviour can explain why liability law in particular, as well the enforcement of civil law, is being used more and more by the political order as an instrument of

[73] See Deurvorst, op.cit., note 46.
[74] Van Nispen, op. cit., p.1.
[75] Asser-Hartkamp&Sieburgh, 6-IV, 2011/153.

governmental policy. Citing Hartlief, reacting to the procedure at hand:

*"It is the final piece in a series of developments in liability law. Liability law became an instrument in the hands of policymakers and politicians. They are betting that citizens and companies will make use of the remedies provided by liability law in order to (*inter alia*) promote equal treatment and oppose discrimination ..."*[76]

178. Liability law is thus emphatically intended to 'guide' desirable social behaviour, and is even being used for this purpose to an increasing degree by the political order. Through this choice on the part of the political order[77] to make use of liability law for the regulation of societal activities, the courts are also being indirectly but intentionally engaged by the political order in policy matters and policy choices.[78]

5.3 Liability law and climate change: damages claims are excluded

179. After having determined thusly that liability law is intended to exhort desirable social behaviour, and that the threat of damages claims plays a part in the prevention of potential injustice, it is important to now state that one who causes climate change has nothing to fear from damages claims. According to most jurists worldwide, damages claims on account of climate change are not achievable.

180. It is scientifically certain what trend climate change will lead to. Climate change will lead to more frequent and more intense occurrences of weather extremes. There will be more frequent and more intense storms, periods of longer and greater drought, or a greater likelihood of flooding. The consequences can – and will – even be catastrophic. But these will still be natural disasters. Even without climate change, natural disasters will arise. Science can only tell us that the statistical likelihood of such weather extremes and of their intensity will become considerably greater, but science will never be able to determine with certainty that any particular storm, any particular drought, or any particular flood is the consequence of climate change[79] or simply the 'dumb misfortune' of a rare but 'natural' weather

[76] See T. Hartlief, Een rechtszaak uit liefde (A Lawsuit Out of Love, NJBlog.nl, 25 November 2013, entered in evidence as **exhibit U79**.

[77] Terms such as 'the receding government', 'giving the country back to the citizens', 'the participatory society', and 'the discipline of the market' are gaining ground in this context.

[78] See the concluding sentence of the article by Enneking and De Jong, op. cit., p.1551 (exhibit U61) in which the courts are called on to consider the changes that this is bringing about for the role of the court.

[79] This paraphrases in essence Dr Myles Allen (professor of Geosystem Science at Oxford and contributor to the IPCC), 'The scientific basis for climate change liability', in: Lord, Goldberg,

extreme. Statistics tell us only something about general trends, not about specific cases.

181. In other words, the causal connection between climate change on the one hand and a concrete, specific weather-related happening that has led to material damage or injury on the other hand will not be able to be proved. Someone who has suffered damage from such a weather-related event will thus not be able to prove that there is a causal connection between his damage and the change in the climate. Actions seeking damage compensation because of climate change are therefore already doomed to fail.

182. According to some authors, it is furthermore very undesirable to want to redress the risk of climate change with (the threat of) a damages claim after the fact, because such claims, if they are granted, will be of such a scale (in number and/or financial magnitude) that they will be disruptive to society. On this subject, see in particular Spier:

"Until a couple of years ago, I took the view that tort law might serve as a crowbar to stimulate government and enterprises to take a responsible stance toward climate change. The assumption was that the fear of being held liable in the future would create a change of mind-set. So far, this has not worked. That may be due to the fact that those involved assess as remote the chances of being held liable. […]. I still believe that a threat of litigation – the chance of being 'sued to hell' – may achieve positive results in the mid-long term. […]

Since I arrived at the conclusions described above, the financial crisis has set in. And since then, I have come to my senses. We have learned that a –

Rajamani, and Brunnée (eds.), *Climate Change Liability: Transnational Law and Practice*, Cambridge Univ. Press, 2012, par. 2.07–2.08, p.11 (**exhibit U80**). In this paper, Dr Allen suggests that on the basis of such statistical data, it may be possible via methods of probability calculation to establish legal liability for concrete natural disasters. This book is furthermore, as the subtitle indicates, primarily a sampler of what is possible and impossible worldwide and what is happening worldwide in the area of civil law (and public law) liability for climate change. The book illustrates at least that it would be a mistake to think that the lawsuit at hand is a globally unique event and that the Netherlands is a pioneer with this case. The concept of 'intergenerational justice', for example, is much more strongly developed in other countries. On this subject, see also the article by Wijdekop that has already been mentioned, op. cit., p.1555: *"In jurisprudence of the Supreme Court of India, known for its activist stance concerning environmental protection, the principle of intergenerational justice is used in balancing the interests of the present generation in economic development against the protection of the environment for the benefit of present and future generations."*

comparatively speaking – series of minor events can greatly affect the world economy for years. […] This must affect our thinking about the role the law could play in the realm of climate change.

It shows, I think, that a cascade of claims against (major) enterprises and governments cannot do any good. […] Claims for damages are not only a mistake seen from an economic angle. Judges will realise the tremendously negative effects. This means that the chances of victory on the plaintiff's side are remote. […]
I am not suggesting at all that the law cannot, or should not, play any role. It can, and it must. But we have to be realistic and have to think about the best and most promising legal avenues. […] According to the prevailing view, we are running out of time. It is high noon. Departing from the idea that something must happen right now*, our focus ought to be legal avenues that could have an effect in the very near future. Putting it differently, our goal must be prevention. Seen from that angle, injunctive relief springs to mind. If courts were running to urge (major) enterprises and (major) states to reduce* CO_2*-emissions to the bare minimum, that would be a major victory."*[80]

183. Whatever one may think concerning the desirability or undesirability of damages claims on account of climate change, it is quite clear that in nearly all legal literature that has appeared on this subject the conclusion has been drawn that the probability of damages claims on account of climate change succeeding after the fact is very small, and that the reason for this lies in the causality requirement.[81]

184. This means that everyone can go on emitting greenhouse gases without a care in the world. It is true that the risk in a general sense that this will cause a dangerous change in the climate is a scientific certainty; it is also generally known that excessive emissions of greenhouse gases are socially very undesirable, but the risk

[80] J. Spier, 'High Noon: Prevention of Climate Damage as the Primary Goal of Liability?', in: *Climate Change Liability*, ed. Michael Faure and Marjan Peeters, Edward Elgar Publishing Ltd., 2011.

[81] See for example the article by Chr. H. van Dijk that is cited approvingly by the State in its statement of defence, par. 8.49. See further M. Faure and M. Peeters in their concluding contribution to the volume mentioned in the previous footnote, p.267: *"Many contributors point to the fact that the most important hurdle to be taken in a climate change suit may be the causation issue."* In the same sense, see Brunnée, Goldberg, Lord, and Rajamani, 'Overview of Legal Issues Relevant to Climate Change', par. 3.20 on p.33 in: *Climate Change Liability: Transnational Law and Practice*, Lord, Goldberg, Rajamani, and Brunnée (eds.), Cambridge Univ. Press, 2012: *"Causation. This is often seen as the most serious obstacle to private law claims."*

of damages claims after the fact for damage due to that socially undesirable behaviour is nil because of the inability to satisfy the causality requirement that applies to damages claims. An important function of liability law, namely the threat of damages claims as a *preventive* stimulus opposing socially undesirable behaviour, is totally absent where causation of climate change is concerned.

5.4 Actions seeking court orders and injunctions as preventive instruments in liability law

185. This brings up the question whether liability law should be able to, or have to, play a role in matters like this, and if so, what role.

186. Franken too[82] has asked what the role of liability law might be if it is obvious that a certain act or behaviour brings certain risks with it but the causal connection between that action and concrete damage cannot be proved. He writes:

"Prevention instead of compensation. That puts the emphasis on a different perspective than the one that usually applies. First of all, a different function is involved. In the case of damages compensation, it is compensation that is most important, and as article 6:168 of the Civil Code illustrates, that function can very well be viewed apart from the question whether a certain behaviour is otherwise permitted. With prevention, the point is precisely to prevent a certain behaviour, without damage having to be plausible and any necessity to compensate playing a role. [...] Traditionally, liability law tends to fulfil more its compensatory function, thus with attention on the past and the focus on risk and compensation, rather than its preventive function, with attention on an uncertain future and the focus on behaviour and forbidding or demanding it."

187. Franken proposes, following the example set abroad, that a distinction be made between 'generic'[83] causality and 'individual' causality. According to Franken, *individual* causality concerns the cause of a concretely determined damage in an individual case. The central question is then to what extent the damage is the

[82] A.Ch.H. Franken, 'Het voorzorgsbeginsel in het aansprakelijkheidsrecht – een verkenning' (The Precautionary Principle in Liability Law – A Survey), in: *AV&S* 2010, p.25.

[83] In par. 280 of the summons, Urgenda c.s. have already, following Franken, spoken of 'generic' dangers and 'individual' damage, and this was discussed at that time also in the context of the impossibility of damages claims on account of climate change. The State's defence that for the claims of Urgenda c.s. to be awarded there must be individual, concrete damage to the plaintiffs, prompts them to now further develop the positions set out in the summons.

result of and can be attributed to a specific action – often with a view to obtaining a damages claim.
Generic causality, however, concerns the consequences of a specific act or omission in general. The central question is then what the consequences of a certain act or omission *could be*, in general.

188. Individual causality, according to Franken, is a requirement for requesting damages compensation in a specific case. Generic causality focuses more on the norm: what can be anticipated, and may an action or omission be expected in that context?

"Furthermore, in the case of a claim seeking an injunction or order, the threat is inherent in the act or the omission itself, not so much in the damage. An order or injunction is thus concerned pre-eminently with generic causality, not so much with individual causality."

189. In Franken's approach, the unlawfulness of the behaviour does not lie in the causing of damage, but rather in exhibiting behaviour or engaging in acts that carry in them the threat of causing (severe) damage, behaviour that is generically endangering. Such generically endangering behaviour is already in conflict with the legal obligation of the person involved, even before individual and concrete damage is caused to someone else by that behaviour.

190. In order for an injunction or order to be granted against a behaviour with generic dangers, it is according to Franken therefore not necessary that it be established beforehand that the plaintiff will suffer concrete and individual damage. It is not a matter of individual causality. In seeking an injunction or order, protection is requested against a threat that emanates from the act or omission itself, i.e. against the generic dangers. It is however required, according to Franken, that the plaintiff have sufficient interest in the provision requested by him.

191. Sieburgh too[84] is of the opinion that, in answering the question whether a behaviour is unlawful, the propriety of that behaviour as such must be judged, apart from the question whether concrete, individual damage has come about

[84] Sieburgh, 'Toerekening van een onrechtmatige daad' (Attribution of an Unlawful Act), dissertation, Kluwer, 2000, pp.57–58.

through that behaviour;[85] whether or not concrete, individual damage has come about is irrelevant to judging the lawfulness or unlawfulness of the behaviour.

"For a number of authors, the unlawfulness of a behaviour depends on the damage that was the consequence of the behaviour. If no damage has been suffered, then no obligation of damages compensation results, leading to the conclusion that the behaviour was not unlawful. This approach is incorrect. Unlawfulness and damage are independent requirements for accountability. The qualification of the act is a matter separate from the damage caused. [...] This means that an unlawful act can have consequences even when damage is absent. It is possible to request an injunction or an order when an interested party fears adverse consequences from an unlawful act. [...] The formulation of article 6:162 parts 1 and 2 of the Civil Code take this into account. The distinction between damage and unlawfulness, i.e. between the qualification of the act and the consequence of the act, is of essential importance (..)."

192. In the same sense, Asser-Hartkamp&Sieburgh, 6-IV, 2011/153, comment concerning preventive injunctions:

"As was already mentioned in no. 132, the relativity doctrine plays a role here as well, so that the claim can only be initiated by the party who is treated unlawfully or against whom an unlawful act threatens to take place. [...] Still, such an injunction can also be requested when the defendant has not yet committed an unlawful act, but an unlawful act threatens to take place. [...] One can draw a connection with the idea that a legal obligation already exists before the commission of an unlawful act, namely to refrain from that act. [...] The qualification to claim an injunction does not require that the plaintiff has already suffered damage through an unlawful act that has already been committed or <u>that he will suffer such damage through the unlawful act that threatens to take place</u>." (underlining added)

193. The conclusion must be that if behaviour is unlawful, that behaviour can be subject to an injunction or order issued in an action in tort. For such a claim to be granted, it is not required that the party claiming the order has suffered concrete damage,

[85] In Franken's terminology: in preventive actions seeking orders and injunctions, the unlawfulness of a behaviour is judged on the basis of the generic consequences and dangers of that behaviour, and not on the basis of the question whether that behaviour has led to concrete, individual damage.

and it is not even required that he will suffer individual damage through the unlawful behaviour. It is only required that he has sufficient interest in the order that would be awarded.

5.5 The State defends against the orders sought by Urgenda c.s. with arguments that apply only to damages claims

194. The points above have important consequences for the State's defence.

195. The State argues in paragraphs 8.44 and 8.45 of its statement of defence that the claim based on tort law sought by Urgenda c.s. can only be granted if there is a concrete (threat of) damage to an individual plaintiff, in which the damage furthermore according to the State would have to take the form of a pecuniary loss or the loss of an advantage. And somewhat further along, in paragraph 8.49 of its statement, the State argues that it does in fact recognize that greenhouse gases emitted by humans *generally* (State's own emphasis) can cause damage, but that

"the fact that there is damage of a general sort *says nothing to answer the question whether, as required by article 6:162 paragraph 1 of the Civil Code, specific damage in the sense of a pecuniary loss or loss of an advantage is caused by the State, and if so, what specific damage."*

196. Considering the points just discussed, both of these defences by the State would be correct if this procedure concerned damages claims on account of concrete (individual) damage. But these two defences do not apply in the situation at hand, namely in the case that an order or injunction is claimed against behaviour that is unlawful because it embodies generic, general dangers. Such generically endangering behaviour can be judged to be unlawful because of the generic endangerment that is in conflict with the rule of unwritten law pertaining to proper social conduct, and for that reason it may be forbidden before the fact, even if it is not certain that the plaintiff himself will suffer individual damage; the requirement is only that the plaintiff has sufficient interest in the injunction that is requested by him.

197. In the terminology of Franken: the State acknowledges (Statement of Defence, paragraph 8.49) the generic dangers of climate change. And Urgenda c.s. in turn request legal protection in the form of a reduction order against the generic dangers of climate change. An award of their claims does not require that they

prove that they themselves have individually suffered damage or will suffer damage through that dangerous climate change. The requirement is only that they have sufficient interest in the order being claimed.

198. Urgenda c.s. therefore also conclude that the defence by the State is incorrect in stating that their claims can only be awarded if it is certain that they have suffered or will suffer individual, concrete damage through (the consequences of) a dangerous climate change. Nevertheless, Urgenda c.s. have shown in chapter 4 that the danger of damage to them is sufficiently direct.

5.6 The State argues erroneously that legal protection can be requested only against pecuniary losses

199. To this must be added that the State argues erroneously in paragraphs 8.44 and 8.45 of its statement of defence that the claims sought by Urgenda c.s. can only be awarded if there is (a threat of) individual damage that at the same time is a pecuniary loss. That is however an overly restricted view of the breadth of the precautionary norm of article 6:162 of the Civil Code and the range of actions seeking injunctions and orders based on it. See Hartkamp and Sieburgh:

"Concerning the breadth of protection provided by precautionary norms, the Supreme Court has stated in its case law with respect to the State's ability to claim damages in cases of soil contamination that such norms – contrary to written rules of law – extend only to the protection of interests that the perpetrator must be aware of. [...] [C]autionary norms thus do not extend exclusively to preventing damage to someone's person or property, but also to protecting other interests when the perpetrator is aware of the harm to those interests. This connects with the fact that the protection of non-pecuniary interests has received support as is evident from the 'fundamental rights catalogues' in human rights treaties and in the constitution, which has to an increasing degree had consequences for civil law by way of the 'horizontal influence of these fundamental rights'. The illegality of an infringement of these rights can in certain cases rest directly on violation of a constitutional or behavioural rule .... However, the decisive factor is usually whether the infringement of the interest protected by the constitution is negligent, against the background of the concrete private law relationship, and placed in the context of the interests that are otherwise involved.[86]

[86] Asser-Hartkamp & Sieburg, 6-IV, 2011 / 74.

200. To this can be added that the legislature, in including article 3:305a in the Civil Code, has in fact expressly wanted to make it possible to initiate legal claims for the protection of general, idealistic interests that are not limited to pecuniary interests. One can think of a foundation that has as its goal the preservation of industrial heritage sites and can seek a court injunction against the proposed demolition of a factory built in 1850. The example is relevant because the Urgenda Foundation bases its own procedural authority and standing in this matter on article 3:305a of the Civil Code as well, seeking protection of such idealistic interests (damage *to* the environment) and – in parallel – the protection of collective interests (damage *through* 'damage to the environment').

201. The State's defences thus miss the point in several respects. The State misunderstands the specific characteristics of actions seeking a court order based on tort law.

5.7 The criteria for an action seeking a court order based on tort law

202. For the question of which requirements do in fact apply to an action seeking a court order based on tort law, Urgenda c.s. refer to Deurvorst:[87]

"As a rule, a claim based on tort law that seeks an injunction or order under article 3:296 paragraph 1 of the Civil Code may be granted provided that:

1. the claim involves unlawful behaviour by the defendant towards the plaintiff;
2. this behaviour threatens to take place, or the fear of recurrence exists; and
3. the plaintiff has sufficient interest in his claim.

No damage. For the imposition of an injunction or order under article 3:296 paragraph 1 of the Civil Code, it is not necessary that the damage has already been suffered. Nevertheless, the existence of damage, or even the possibility of it, can in fact be important in answering the question whether the plaintiff has sufficient interest in his claim. [...] At the same time, the existence and the possibility of damage can influence the judgement that unlawfulness has been at issue. [...]

No culpability. [...]

No unlawful act committed. Nor does a judgement requiring compliance with a

[87] T.E. Deurvorst, *GS Onrechtmatige Daad* (GS Tort Law), note 96.

legal duty require that an unlawful act has already taken place, a requirement that does in fact apply to the award of a damages claim."
(The underlined passages are italicized in Deurvorst's text.)

203. Thus there must be: a) a behaviour or a threat of it that b) is unlawful c) towards Urgenda c.s. and d) Urgenda c.s. must have sufficient interest in the order claimed.

5.8 Conclusion and summary

204. In the above, it has been made clear that preventive protection against the threat of unlawfulness is the highest priority of law enforcement.

205. A discussion followed concerning what role liability law plays in enforcement of the law. The discussion first looked in a general way at the fact that while it is true that the threat of damages claims after the fact has a preventive effect, the time came when this was considered to be inadequate, and that therefore the possibility of actions seeking court orders and injunctions developed in case law, and that these actions gradually have become more essential for the law and for the enforcement of the law than the damages claims after the fact.

206. Next it was determined that damages claims on account of (causing) climate change are excluded because of the causality issues that are involved with climate change. Liability law has thus far had no braking effect on the causation of a dangerous change in the climate.

207. For actions seeking preventive injunctions and orders, a different frame of reference for judicial examination applies than for damages claims. In particular, the requirement of concrete (threatening) individual damage and the requirement of a causal connection between the damage and the behaviour inflicted do not apply to actions seeking court orders and injunctions that are directed against the generic dangers of that behaviour.

208. Actions seeking court orders and injunctions are therefore the only remedy that civil law offers against the dangers and damage of dangerous climate change.

209. If the court were to rule that actions seeking injunctions or court orders against climate change are not in order, for example because political institutions must determine such matters, then the consequence of that ruling would be that there

would be no legal protection whatsoever in the Netherlands against climate change – not even if that climate change can have great and even catastrophic consequences in the absence of urgent intervention, the political channels are obstructed and there have been years of inertia and political incapacity on the part of the government through which the climate dossier has been at a standstill for years,[88] and there is no outlook whatever to a solution along political pathways.

210. With this procedure, Urgenda. c.s. desire preventive legal protection against climate change. The separation of powers (Trias Politica) does not merely provide that the court may not sit on the seat of the legislator, but also and to the same extent, that the court from which legal protection is requested must make itself deaf and blind to the political implications of its legal judgement. In other words: the court may not, because of political implications that its judgement otherwise may have for the legislator, make its seat smaller than it is.

211. The only question that the court has to answer but also ***must*** answer is: Does the plaintiff have the ***right*** to the provision that he requests? The following part of this statement of reply examines this question.

CHAPTER 6:
TORT ACTION: IN GENERAL

6.1 Introduction

212. The State is correct in thinking that Urgenda c.s. are taking action against it in the present proceedings on the basis of tort law.
In connection with this, it is in fact important to discern that Urgenda c.s. address the State in two different capacities.

213. First of all, Urgenda c.s. address the State in its capacity as a partial contributor to a (threatening) change in the climate, or at least as an entity to which this partial contribution can be attributed (in the sense of bearing responsibility for it). The total amount of the Dutch emissions (of greenhouse gases) is considered by Urgenda c.s. to be an act of partial contribution to that (threatening) dangerous

[88] See Hartlief, op. cit., concerning the present procedure by Urgenda c.s. against the State: *"This is a serious attempt to get a dossier into motion again that appears to be totally stalled."* (exhibit U79).

climate change.

214. Secondly, Urgenda c.s. address the State as the party that commits an infringement of their fundamental rights and that ought to protect them against (the consequences of) a dangerous climate change. For this form of legal protection, Urgenda c.s. call upon, with possibly an indirect reference to unlawful behaviour, articles 2 and 8 of the European Convention on Human Rights (ECHR). Urgenda c.s. maintain that under these two provisions the State has a legal duty to adjust its actions and to protect them against (the consequences of) a dangerous climate change. They are of the opinion that the State is neglecting that legal duty and therefore is acting unlawfully towards them. This will be discussed further in chapter 8.

215. In chapter 6, Urgenda c.s. will now first examine the role of the State as partial contributor to an unlawful dangerous climate change.

6.2 Unlawfulness = in conflict with a legal duty

216. For an action seeking an order directed against a specified behaviour, the requirement applies that it may only be awarded if that behaviour is 'unlawful', that is, in conflict with a legal duty of the party addressed.

217. Under the law, an action is 'unlawful' if that action is in conflict with the law, or if that action infringes on the subjective right of another party, or if that action is in conflict with the unwritten legal duty that results from proper social conduct. For the first two of these grounds, Urgenda c.s. base their argument on the violation by the State of articles 2 and 8 of the ECHR (see chapter 8). For the third ground, a rule of unwritten law pertaining to proper social conduct, Urgenda state their arguments here in chapter 6.

218. This 'rule of unwritten law pertaining to proper social conduct' is an 'open' legal norm with a strongly case-related character. According to Sieburgh, in testing a certain behaviour against the norm of proper social conduct, the court ought to determine in each concrete case brought before it what type and degree of care are called for in that concrete actual situation by the norm of proper social

conduct.[89]

219. The 'norm of proper social conduct' thus concerns the judgement of a behaviour. Stated more precisely, it concerns the judgement of a behaviour in the context in which this behaviour takes place. Citing Jansen: *"A characteristic of the unwritten norms of general duty of care is that they are context-bound and linked with the specifics of the case in question."*[90] And later in the same source: *"From the preceding discussion it is evident that in answering the question whether creating a dangerous situation or allowing it to persist is unlawful, the concrete circumstances of each individual case are determinative. The safety norms that are involved here are therefore also referred to as context-bound norms."*[91] Hartlief too[92],specifically when commenting on endangerment, writes that the judgement of the lawfulness of a way of acting is context bound.

220. Sieburgh remarks that it is true that the court must investigate what the legal norm is in light of the circumstances of the concrete case, but he emphasizes that this involves a legal norm of a general nature applicable to similar cases, and not a norm that is tailored so much to the individual case that one can no longer call it a norm, but rather an order. According to Sieburgh, in looking for and formulating such an unwritten legal norm, the court can make use of provisions of treaties and laws that apply to behaviours that show similarity to the behaviour that must be judged; general legal principles, legal practices, and customs that apply in certain sectors of social interaction can also be helpful in this regard.[93]

6.3 The legal duty in casu

221. Urgenda c.s. maintain that it is unlawful with respect to Dutch law to emit such quantities of greenhouse gases into the atmosphere that this causes or contributes to a dangerous climate change as described above. Because of this, it is unlawful to contribute to a warming of the earth of 2 degrees. The contribution

[89] C.H. Sieburgh, 'Toerekening van een onrechtmatige daad' (Attribution of an Unlawful Act), dissertation, 2000, Kluwer, pp.75–77.
[90] See K.J.O Jansen, *GS Onrechtmatige daad* (GS Tort Law), article 6:162 of the Civil Code, note 86.1.2, that mentions the well-known Caustic Soda decision (Dutch: Natronloog-arrest) as a very strong example of a context-bound judgement.
[91] Jansen, op. cit., article 6:162 of the Civil Code, note 87.2 with further references to literature and jurisprudence.
[92] See T. Hartlief, *Ars Aequi* 2004, p.870.
[93] In the same sense, see Asser 6-IV, 2011/76 (Asser/Hartkamp&Sieburgh).

to going beyond this limit is a contribution to violating a social norm.

222. The State has already argued the defence that Urgenda c.s. have insufficiently stated and made plausible their contention that the emission level of the Netherlands may be unlawful and why. Urgenda c.s. now examine that defence.

223. The question of the lawfulness or unlawfulness of the emission level of the Netherlands is probably the most difficult of all the unlawful-act criteria to answer, and that has to do with the fact that the Dutch emission level causes only a (small) part of the climate problem.

224. Urgenda c.s. will first discuss the question whether the worldwide emission level of greenhouse gases must be judged unlawful with respect to Dutch law.

225. After they have answered this question in the affirmative – and also in that context – they will then answer whether the Dutch emission level of greenhouse gases must also be judged to be unlawful. Urgenda c.s. are of the opinion that the Dutch emissions level cannot be viewed apart from the context in which those emissions take place, and it must therefore also be tested and judged as lawful or unlawful in the context of worldwide issues of emissions and climate.

226. This last argument is developed in chapter 6.8, where they examine the fact that the Dutch emissions make up only a small part of the worldwide emissions and discuss the question what consequences that has for the judgement concerning the lawfulness or unlawfulness of the Dutch emissions (as a combined, cumulative part of the worldwide emissions). They conclude that there is pro rata or partial liability.

227. To support their position that both the worldwide and the Dutch emission levels are unlawful, Urgenda c.s will seek to link their allegation of 'unlawfulness' to three unwritten legal duties that are generally accepted.

6.4 Endangerment: the Cellar Hatch criteria

228. For the judgement whether a certain behaviour is lawful or unlawful on account of endangerment that emanates from that behaviour, criteria known in case law as the Cellar Hatch criteria have been used for decades.
Relevant considerations are how great the likelihood is that danger will be caused

by the behaviour, how serious the consequences are, whether these dangers and consequences are known to the party being blamed, and the objections to the precautionary measures desired.

229. Urgenda c.s. have in their opinion already brought forward enough arguments in the summons to be able to answer those questions. However, in consideration of the State's defence that maintains that it has not become clear that the Cellar Hatch criteria have been met, Urgenda c.s. will review the criteria once again here. In doing this, they note beforehand that in applying the endangerment criteria the same rules apply to the government as apply to private individuals. This follows inter alia from the Bus Gate decision (Dutch: Bussluis-arrest) of the Supreme Court.[94] The fact that the endangerment is related to the execution of a public task in which other (public) interests are served thus does not mean that the actions of the State have to be judged differently than in the usual application of the Cellar Hatch criteria. Applying those criteria leads to the following analysis.

6.4.1 Severity of the danger

230. The summons has already examined in detail what serious consequences the threatening dangerous climate change will lead to, and this statement of reply has gone even further, with more focus on the land area of the Netherlands: these consequences threaten the ecosystems and the human communities of the planet, will inflict great damage, and will claim very many victims. The seriousness of the consequences has been substantiated by Urgenda c.s. with the scientific findings of the IPCC. The State too explicitly acknowledges the findings of the IPCC in its statement of defence, so that no debate can arise between the parties concerning the severity of the danger.

6.4.2 Is the danger apparent?

231. Based on all the sources cited by Urgenda c.s. in the summons and this reply, it is clear that the danger against which Urgenda c.s. desire legal provisions, i.e. the danger of warming of 2 degrees or more, is also recognizable for the State and that the State is also in fact aware of the danger. For example, the State itself says concerning the two-degree objective (in response to questions in the Parliament in 2013):

[94] Supreme Court, 20 March 1992, *Nederlandse Jurisprudentie* 1993, 547.

"Of all possible choices, the objective is set at 2 degrees because, according to the UN climate panel IPCC in its fourth report, above this limit the net effect of the warming is negative everywhere on earth. It is uncertain from which temperature and at which places uncontrollable situations will arise, but this can happen at specific places even with a global average temperature rise of less than 2 degrees."[95] (**exhibit U81**)

232. The State also acknowledges the two-degree objective in its statement of defence, referring to the scientific findings of the IPCC, to the international climate agreements made in Bali (2007), Copenhagen (2009), and Cancun (2010), to the communication between government and parliament concerning the necessity of the 2-degree objective, and to the necessity of arriving at international agreements to actually keep the temperature rise under 2 degrees.[96]

6.4.3 Quantifying the probability of the danger of 2 degrees or more

233. Urgenda c.s. have stated in their summons that the present concentration of greenhouse gases in the atmosphere is already high enough that, considering on the one hand the current annual total (worldwide) level of emissions of greenhouse gases and on the other hand the climate policy that is being carried out for the near future, the two-degree objective will be missed by a wide margin and that this will lead to a dangerous climate change (see for example the summons, paragraphs 3.8 and 3.9 concerning the reports of the World Bank and the IEA respectively, and in particular paragraph 7 of the summons). Furthermore, the State has acknowledged this in so many words in its letter of 11 December 2012 to Urgenda (see exhibit U3 and paragraph 70 of the summons):

"I share your concerns about the lack of sufficient international action as well as your concern that the magnitude of the problem and the urgency of a successful approach to it are not sufficiently perceptible in the social debate [...] It is a great problem that the collective, global efforts at the present moment do not suffice to allow us to limit the average worldwide temperature rise to 2 degrees."

[95] Reply to substantive questions posed to the government concerning the Dutch General Accounting Office report 'Aanpassing aan klimaatverandering: strategie en beleid' (Adaptation to Climate Change: Strategy and Policy) of 27 February 2013; answer by the undersecretary of Infrastructure and Environment to Parliament question 15.
[96] Paragraphs 2.10, 2.11, and 6.36 of the statement of defence.

234. Recently the undersecretary of Infrastructure and Environment has once again confirmed this position of the State, on behalf of the government in an official appraisal of the most recent[97] reports of the IPCC that had been requested by the Parliament. See the letter of the undersecretary of Infrastructure and Environment dated 17 June 2014 (submitted earlier as exhibit U78),[98] in which she reacts on behalf of the government to the IPCC WGI AR5 report 'The Physical Science Basis':

"This report shows that the climate has changed and without effective policy will continue to change. The worldwide average temperature is now 0.85ºC higher than in the first half of the 19th century. On land, this increase is greater, and in the Netherlands it is already 1.5ºC. Without additional global mitigation policies, the worldwide average temperature will continue to rise by 3–5ºC between 2020 and 2100, and with the most radical policies it will still rise by 0.5–2ºC. The worldwide average sea level will rise by 45 to 85 cm without policy changes, and by 25 to 55 cm with the most ambitious policies. Sea level rise will continue for centuries after 2100."[99]

235. Considering this acknowledgement by the State that by the end of this century we will have to allow for an additional warming (beyond the warming of 0.85ºC that has already taken place) of 3 to 5 degrees if no additional mitigation policies are enacted, there can be no debate between the parties concerning the reality of the danger of warming of 2 degrees or more.

6.4.4 The possibility of prevention

236. It is also known what measures can and must be taken against dangerous climate change: adaptation to the warming that can no longer be prevented even with the most radical policy changes, but above all mitigation in the form of deep and urgent reductions in greenhouse emissions in order to prevent further warming, all with the objective of not letting the total warming exceed 2 degrees.

[97] i.e. IPCC WGI AR5 of October 2013, IPCC WGII AR5 of March 2014, and IPCC WGIII AR5 of April 2014, all of which may be consulted at the IPCC website: www.ipcc.ch

[98] Letter dated 17 June 2014 (Second Chamber, session year 2013-2013, 31 793, no. 91).

[99] p. 1 of the letter.

237. The State has not stated that mitigation is a precautionary measure that, in the light of the danger, cannot be required of it, much less why not.

238. Such a defence would first of all fall through because of the fact that the State is a party to the UNFCCC and has in that treaty committed itself to mitigation of its emissions so that a dangerous climate change can be prevented.

239. The consequences of a dangerous climate change are furthermore so great that there is no question whether mitigation is necessary. Concerning this, see the previous discussion in the summons, in particular paragraph 421.

240. The costs of mitigation may be great; the costs of doing nothing and accepting a dangerous climate change will be considerably higher. See in this context inter alia the Stern Report that has been discussed in the summons (paragraph 35), the findings of the IEA (summons, paragraph 371), and the report by Meinhausen and Den Elzen (summons, paragraph 372). See in that context also the ClimateCost Project already discussed in this statement of reply (paragraph 142 above), and the findings of Enneking and De Jong (paragraph 166 above), as well as the 'Emission Gap' reports of the UNEP, yet to be discussed in chapter 10 of this statement of reply.

241. Concerning the economic consequences of inadequate climate policy, the undersecretary herself says in her letter of 17 June 2014 cited above (exhibit U78):

"In spite of the uncertainty concerning the precise effects, it is in fact clear that without adequate climate policy the climate change in the future will have substantial economic effects."[100]

242. In addition to these economic losses for the Netherlands as a consequence of climate change, there is furthermore the great social and human suffering. As the undersecretary commented in the same letter on behalf of the government:

"How do you assign a value to biodiversity, for example, or to human lives?"[101]

[100] p. 7 of the letter.
[101] p. 7 of the letter.

243. In this letter dated 17 June 2014, the undersecretary of Infrastructure and Environment also responds on behalf of the government to the third new IPCC report, i.e. IPCC WGIII AR5, 'Mitigation', and states (p.2):

"This report supports the premise that there are now still sufficient possibilities to limit climate change to 2°C at a calculable cost. The loss of economic growth is quantified by the IPCC at between 0.04 and 0.14% per year in the period up until 2100. This does not take into account the benefits of such measures, such as improved health and more energy security. Further delaying mitigation costs leads to higher costs in the longer term, considering that more investments will have to written off prematurely and we will be forced to make use of technologies that have not yet been proven in practice, such as the use of biomass to supply electricity in combination with underground storage of the CO_2 that is thereby produced."

244. With this statement, the government too acknowledges that mitigation (i.e. emission reduction) is necessary and can reasonably be required, and that the faster the needed mitigation can be commenced, the cheaper and safer it is.

245. Urgenda c.s. also note that a loss in economic growth of between 0.04 and 0.14% is a worldwide average. For some countries the costs will be lower, for other countries higher. The latter will apply primarily to countries with excessive CO_2 emissions, but that is also entirely appropriate in their case – the polluter pays.

246. A loss of economic growth of between 0.04 and 0.14%, and even twice or seven times this amount, does add up cumulatively (over the entire 21st century), but one must keep in mind that this is a loss of economic growth with respect to the growth in prosperity that is otherwise expected in the 21st century. Given a projected growth in prosperity in the 21st century of, say, 3 or 4% per year (in the most recent decade, the worldwide annual growth amounted to 3.5% per year), a loss of economic growth of between 0.04 and 0.14% per year as the result of enacting mitigation measures means that prosperity will still continue to increase, but only at a somewhat reduced tempo.

247. Urgenda c.s. are of the opinion that it cannot be maintained that this is too high an economic price for helping to prevent a dangerous climate change, nor can it be maintained that such reduction measures may not be required of the State.

Considering also the recognizability, severity, and scale of the danger that have been discussed, as well as the magnitude of the likelihood that the danger will come about, enacting sufficient reduction measures to (help) prevent dangerous climate change must be judged not to be objectionable.

6.4.5 Conclusion with reference to the Cellar Hatch criteria

248. The arguments above mean that according to Dutch law, by application of the endangerment or Cellar Hatch criteria, emission into the atmosphere of greenhouse gases at the present scale that leads with more than 95% certainty to a dangerous climate change with serious consequences for ecosystems and human communities, and not reducing (mitigating) that level of emission, qualifies beyond doubt as a behaviour that is unlawful and in conflict with the 'rule of unwritten law pertaining to proper social conduct'.

6.5 Endangerment by cross-border emissions: the no-harm principle and the Potash Mines decision

249. For interpretation of what the 'rule of unwritten law pertaining to proper social conduct' requires of the State, Urgenda c.s. have, in addition to the Cellar Hatch criteria, also looked further for a connection with the legal duties that have been developed in case law and have been accepted in international law as international customary law for the situation in which endangerment (or nuisance) is caused by cross-border emissions. Here a more specific form of endangerment is thus involved, that is relevant in casu because climate change too involves the causation of a dangerous climate change by cross-border emissions of greenhouse gases in the atmosphere, i.e. the environment.

250. This more specific legal duty holds that one may not emit substances into the environment to such an extent that others 'beyond the boundaries of one's own property or territory' experience severe detriment or damage because of it. For the existence of this legal duty, Urgenda c.s. have referred to (paragraphs 261 and 262 of the summons) the norm, i.e. legal duty, that is laid down in article 5:57 of the Civil Code. They have also referred to (paragraphs 259 and 260 of the summons) the Voorste Stroom decision of 1915, which judged that it was unlawful to pollute a small river to such an extent that others experienced excessive nuisance because of this.

251. Urgenda c.s. have also referred to (sections 4.5.2, 6.2, and 6.3 of the summons) the Potash Mines decision of 1989 in which that judgement was repeated for the case in which the consequences of the emissions in question occur in the territory of other states. In this decision, the existence of the legal duty alleged by Urgenda c.s. was affirmed by the Supreme Court (also in a case where national boundaries were crossed), and acting in conflict with that legal duty was qualified by the Supreme Court as acting in conflict with the rule of unwritten law pertaining to proper social conduct and was therefore unlawful. Urgenda c.s. are of the opinion that the same legal duty is also being violated in the case at hand.

252. In that context, Urgenda c.s. have also pointed out (paragraphs 160–61 of the summons) that the legal duty alleged by them, not to emit substances into the environment to such an (excessive) degree that others experience severe detriment or damage because of this, is not a legal norm applicable only in the Netherlands but to the contrary is seen as a universal principle of international customary law. That principle is known as the 'no-harm principle' and resulted from the Trail Smelter case of 1941, which furthermore involved specifically emissions of substances into the atmosphere. In the Stockholm declaration of 1972, damage to the environment itself (and thus not only financial damage to citizens) was also brought within the scope of the no-harm principle, and in that capacity the no-harm principle is also endorsed by the United Nations as a rule of state liability (see paragraphs 164–65 of the summons). As a principle of international customary law, the no-harm principle is part of the Dutch legal order.[102]

253. In connection with this, it is noted emphatically that the no-harm principle imposes a legal duty and liability on states with respect to cross-border emissions that the state in question does not itself produce. The fact that those emissions take place from its territory and that the state as a sovereign power can have control over, supervise, and regulate those emissions entail a presumption that those emissions can be attributed to the state as though it itself had produced

[102] See J.W.A. Fleuren, 'Een ieder verbindende bepalingen van verdragen' (Treaty Provisions Binding on Everyone), dissertation, 2004, Boom, p.18: *"The carry-over of international customary law into the legal order of the Kingdom is founded to the present day on constitutional customary law and jurisprudence. The Supreme Court already applied it, for example, in a decision of 1840. [...] The legislature confirmed this position when in 1963 they changed article 99 (now article 79) of the Environmental Planning Law (Dutch: Wet RO) and, in consideration of unwritten customary law, expanded the ground for cassation from 'violation of the law' to 'violation of the right'."*

them, and it is liable for them as though it itself had produced those emissions.

254. On the basis of these more specific criteria as well, the conclusion must be that the present emission level, involving emission into the atmosphere of greenhouse gases at a scale that leads to a dangerous climate change, and not reducing (mitigating) that level of emission, qualifies as unlawful and in conflict with the legal duty that rests upon the State as a consequence of the 'rule of unwritten law pertaining to proper social conduct'.

6.6 Article 2 of the UNFCCC

255. For the question concerning what the 'rule of unwritten law pertaining to proper social conduct' entails for the State in this case (what is the norm that the State's behaviour must comply with; what is the legal duty resting upon the State in this context), Urgenda c.s. have also looked for a link to the UNFCCC and have made reference specifically to article 2 of that treaty (section 4.3.1 of the summons.)

256. Urgenda c.s. are of the opinion that a legal norm is laid down in article 2 of the UNFCCC that is very specifically tailored to the circumstances of this case: article 2 of the UNFCCC can in fact be considered to be a 'lex specialis' of the 'no-harm principle' discussed above. In the summons, in paragraph 182, Urgenda c.s. have already explained that the treaty does in fact intend to build further on that principle.

257. Stated briefly, article 2 of the UNFCCC entails a legal duty for the signatory states to limit the level of concentration of greenhouse gases in the atmosphere to a level at which a dangerous climate change is avoided, and to do this within a period of time that is adequate to make it possible for ecosystems to adapt to climate change, to ensure that food production is not endangered, and to allow economic development to proceed in a sustainable way.

258. Urgenda c.s. point out that this too involves a legal duty that rests upon states; they are held responsible for the emissions of greenhouse gases from their territory, regardless of whether they themselves produce those emissions.

259. This legal duty applies specifically to emissions of greenhouse gases and is in that respect more specific than the 'no-harm principle'.

260. For the record and otherwise than the State seems to want to argue, Urgenda c.s. do not rely in this context directly on article 2 of the UNFCCC. They have also certainly not stated[103] that article 2 of the UNFCCC is a 'treaty provision binding on everyone' as intended in articles 93 and 94 of the Constitution, which citizens can rely on directly and which has priority above the Netherlands' own laws. They have however stated (paragraphs 149–50 of the summons), with reference to relevant case law, that treaties to which the Netherlands is a party, as well as unwritten international law, are an integral part of the Dutch legal order even when a 'treaty provision binding on everyone' is not involved[104] and as such are of (great) importance (see paragraph 151 of the summons concerning 'indicative effect') in the interpretation of open norms and concepts, such as the rule of unwritten law pertaining to proper social conduct, in the Netherlands' own laws.

261. In the same sense as well, according to Sieburgh: *"Furthermore, in looking for a norm of unwritten law, use can be made of provisions of treaties and laws that apply to behaviours that show similarities to the behaviours for which the duty of care must be judged."*[105]

262. Urgenda c.s. rely therefore on article 2 of the UNFCCC with a view to the determination (by the court) and interpretation of the unwritten legal duty that rests upon the State on account of article 6:162 of the Civil Code, where the Dutch emission level of greenhouse gases is involved. The same applies to their reliance on the no-harm principle, article 5:37 of the Civil Code, the Voorste Stroom decision, and the Potash Mines decision: it is intended to be a frame of reference for determination and interpretation of the unwritten legal duty that rests upon the State in the case at hand, according to Urgenda c.s.

263. The legal duty that is laid down in article 2 of the UNFCCC occupies a special place in the line of reasoning of Urgenda c.s. In the first place because this treaty, and with it that legal duty, is nearly universally accepted (nearly all states are parties to the treaty). In the second place, because the State has accepted

[103] As far as Urgenda c.s. know there has never before been a decision in the Netherlands on the question whether article 2 of the UNFCCC involves a 'treaty provision binding on everyone'. To be on the safe side, their positions are based on the assumption that this is not the case. If this should prove to be otherwise, then their arguments would only become more forceful; on this point they defer to the court's own judgement.

[104] Also according to J.W.A. Fleuren, op cit., in particular paragraphs 18–19.

[105] C.H. Sieburgh, 'Toerekening van een onrechtmatige daad' (Attribution of an Unlawful Act), Kluwer, 2000, p.75.

this legal duty explicitly for itself by becoming a party to that treaty, through which this legal duty (in which the State is designated as the responsible party for the Dutch emissions level) has become a part of the legal order of the Netherlands. But primarily because this legal duty that rests upon the State very specifically concerns the excessive emissions of greenhouse gases – exactly what is involved in these proceedings. This does not alter the fact that, as discussed, a legal duty can be established on the basis of the Cellar Hatch criteria, on the basis of the Potash Mines decision, and on the basis of the no-harm principle that leads to the same outcome. Urgenda c.s. support the 'unlawfulness' of the current emission level in different ways that can stand independently.

264. The legal duty established for signatory states in article 2 of the UNFCCC, that they must prevent a dangerous climate change as a consequence of excessive concentrations of greenhouse gases through anthropogenic emissions, brings up the question what is meant by a 'dangerous' climate change.

265. Urgenda c.s. have stated that in any case there is a 'dangerous' climate change if the physical properties of the atmosphere are changed to such a degree through worldwide emissions of greenhouse gases that the earth warms by 2°C or more. Urgenda c.s. base this (see section 4.3.5 of the summons) on the Cancun Agreement, or stated more precisely, on Decision 1/CP.16. This involves a decision agreed to by the parties to the UNFCCC at the COP16 (the 16th Conference of Parties) in December 2010. In this Decision 1/CP.16, the parties to the treaty agreed, with reference to the fourth Assessment Report of the IPCC, that the objective must be to limit warming to 2°C. See also paragraph 211 of the summons.

266. The State argues (Statement of Defence, paragraphs 2.13, 9.13–9.15, and 9.25–9.26) that the Cancun Agreement has no legally binding power. Apparently the State wants to use this argument to contend that the Cancun Agreement should have only political significance. Although in the opinion of Urgenda c.s. this does not involve a point of crucial importance (after all, a political commitment by the State by means of an international political agreement to a certain norm also adds weight when answering the question what duty of care with respect to Dutch law may be required of the State; and even before the Cancun Agreement the State committed itself as a party to the Copenhagen accord at least politically to the two-degree objective), they are of the opinion that the State's contention is

incorrect. This will now be explained further.

267. In article 31 paragraph 3 sub a of the Vienna Convention on the Law of Treaties, to which the Netherlands is a party (Trbl 1972,51) it is specified that in the interpretation of a treaty one must take into account 'any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions'.

268. This means that the Cancun Agreement has the status of a subsequent agreement between the parties to the UNFCCC concerning the question of how article 2 of the UNFCCC must be interpreted and applied, namely with respect to its provision that warming must be limited to 2°C in order to prevent a dangerous climate change. That goes much further than the State would want us to believe: the two-degree objective has become part of article 2 of the UNFCCC on the basis of the Cancun Agreement, and as such it fills in (indicative effect; see paragraph 151 of the summons) which legal duty rests upon the State on the basis of article 6:162 of the Civil Code where the Dutch emission level of greenhouse gases is concerned.

269. UNEP, the founder of the IPCC and the formulator of inter alia the Emission Gap reports, also sees the Cancun Agreement as a refinement of article 2 of the UNFCCC, and the IPCC sees it the same way as well:

270: First the UNEP:

"*Article 2 of the United Nations Framework Convention on Climate Change ('Climate Convention') declares that its ultimate objective is to '[stabilize] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.' The Parties to the Climate Convention have translated this objective into an important, concrete target for limiting the increase in global temperature to 2°C, compared to its pre-industrial levels.*"[106]

271. And then the IPCC:

"*The concept of stabilization is strongly linked to the ultimate objective of the*

[106] UNEP, The Emissions Gap Report 2013, a UNEP Synthesis Report, p.xi of the Executive Summary (**exhibit U82**).

United Nations Framework Convention on Climate Change (UNFCCC), which is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Recent policy discussions focused on limits to a global temperature increase, rather than to greenhouse gas (GHG) concentrations, as climate targets in the context of UNFCCC objectives. The most widely discussed is that of 2°C, that is, to limit global temperature increase relative to pre-industrial times to below 2°C, but targets other than 2°C have been proposed (e.g., returning warming to well below 1.5°C global warming relative to pre-industrial, or returning below an atmospheric carbon dioxide (CO_2) concentration of 350 ppm).[107]

[...] As such, the current UNFCCC negotiations have adopted +2°C or 1.5°C as the desirable target upper limit and equated this with 'dangerous' in Article 2."[108]

272. It cannot be made much clearer than this last statement: in the negotiations carried out under the UNFCCC, the two-degree limit is <u>equated</u> to a 'dangerous' climate change as referred to in article 2 of the UNFCCC. And furthermore, this is the 'upper limit', i.e. the maximum allowable temperature rise before there will be a 'dangerous' climate change. There is also reference to the limit of 1.5 degrees that the countries hold open.[109]

273. Thus with the Cancun Agreement, article 2 of the UNFCCC has been refined and made more precise by specifying just what article 2 means by the 'dangerous' climate change that must be avoided: what is known as the two-degree objective (leaving the door open for a downward adjustment to 1.5 degrees).

274. The UNFCCC itself therefore already holds a weighing of interests. Moreover, article 2 of the UNFCCC, via the Cancun Agreements, holds an objective and measurable boundary or limit that also has been established on the basis of a weighing of interests. With this decision, the limit between an acceptable and an unacceptable climate change has been drawn in the UNFCCC at a warming of at

[107] IPCC AR5 WGI, Technical Summary, p.102 (**exhibit U83**).
[108] IPCC AR5 WGII, ch. 20, p.5 (**exhibit U84**).
[109] Concerning those stricter objectives of 1.5 degrees and 350 ppm CO_2, Urgenda c.s. have argued in the summons (paragraphs 365, 376, and 377) that within the bandwidth of 25 to 40% reduction by 2020 the choice must be made in favour of 40%, both because this gives a greater chance (a probability of 87%) of staying below the 2°C limit and because with it a chance is also retained of staying under the 1.5°C limit named in the Cancun Agreement.

most 2°C, and the states that are parties to the treaty have taken upon themselves the legal duty to avoid such a warming. As a consequence of this, the two-degree norm can be considered to be a universally defined and accepted endangerment and safety norm.

275. Urgenda c.s. therefore conclude that an emission level of greenhouse gases that has as a consequence a warming of the earth by more than 2°C is (under all circumstances) unlawful because it is in conflict with the legal duty to prevent a dangerous climate change. This legal duty is universal because nearly all the countries of the world have committed themselves to it by becoming parties to the UNFCCC. The State too, by becoming a party to the UNFCCC, has accepted this legal duty specifically for itself, and because of this, this legal duty has become part of the Dutch legal order.[110]

6.7 An intermediate summary

276. Urgenda c.s. contend that with the points above they have adequately supported:

- that the current worldwide level of emissions of greenhouse gases leads to a (threatening) warming of the planet of more than 2°C and with this to a dangerous climate change;
- that an emission level of this magnitude with such consequences is in conflict with the duty of care that proper social conduct requires, and therefore according to the Cellar Hatch criteria qualifies as an unlawful form of endangerment and thus is unlawful;
- that an emission level this high is in conflict with the general legal duty resting upon states in international law (the no-harm principle) not to cause serious danger or detriment to others or to the environment by (allowing) emission of substances from their own territories;
- that an emission level this high is also in conflict with what is known as the two-degree objective, a legal duty incorporated in article 2 of the UNFCCC (a provision that must be understood and applied as has been decided in the Cancun Agreement) applying to states with specific reference to emissions of greenhouse gases – an objective to which the State has committed itself as a party to that treaty.

[110] See the footnotes above referring to Van Fleuren's dissertation: international customary law and treaty law are part of the Dutch legal order, even when 'provisions binding on everyone' are not involved, and the Supreme Court may test to this criterion.

277. The legal duties named in the previous paragraph are part of the Dutch legal order and impart (via the tenet of 'indicative effect' where legal duties under international law are concerned; see paragraph 151 of the summons) a strong direction to the interpretation of open national legal norms such as the rule of unwritten law pertaining to 'proper social conduct'.

278. The conclusion must be that according to Dutch law, the present total (worldwide) level of emission of greenhouse gases is excessive and in conflict with norms of proper social conduct. The present total (worldwide) level of emission can therefore only be judged as 'unlawful' with respect to Dutch law.

6.8 Partial causation and partial liability or pro-rata liability

279. The conclusion reached above is that a level of emission of greenhouse gases that leads to a dangerous climate change of 2°C or more, being the present worldwide level of emissions, is negligent and unlawful according to Dutch law (i.e. according to criteria of proper social conduct) because of the general (or 'generic') dangers that such climate change brings about.

280. An important point is that the State cannot be held exclusively and entirely legally responsible for this emission level. To the contrary: as has been said, this emission level is caused by emissions that take place worldwide, from the territories of all states. The worldwide unlawful emission level is a sum of all emissions worldwide; this is a cumulative causation of a dangerous climate change. The Dutch emissions are only a part of very, very many.[111] No single one of those worldwide emissions is large enough or serious enough on its own to reach or exceed the threshold of a 'dangerous' climate change. Even all of the emissions coming from the Chinese land area are insufficient to be able to cause the two-degree threshold of 'dangerous' climate change to be exceeded.

[111] The anthropogenic climate change that is the subject of these proceedings involves the greenhouse gas emissions that are released by all human activities worldwide. Thus millions or billions of emissions are involved that are released by the activities of 7.1 billion people. One can consider and categorize those millions of worldwide individual emissions by grouping them together, for example by country or by economic sector. Considered by country, for example, the Chinese emissions are the largest of them all, which comes as no surprise since China is also the country where the most people live. When looked at by economic sector, for example, the energy sector is the largest emitter of CO_2 in the EU. Such a group-oriented approach can be used to decide at which point of application (land, sector) it could be effective to tackle certain emissions.

281. If all those other emissions around the world were to be ignored, then the Dutch emissions on their own would in fact lead to some degradation of the chemical composition of the atmosphere and damage would be caused to the environment, but certainly not so much that the threshold of a 'dangerous' climate change would be exceeded or 'serious' detriment to the environment or to other parties would come about only because of Dutch emissions. Or, considered in mirror image: even if the Dutch emissions were to be ignored, the worldwide emission level will still result in exceeding the two-degree threshold that leads to a dangerous climate change, albeit more slowly (see for this last point the US Supreme Court under no. 394 of the summons: *"A reduction in domestic emissions would slow the pace of global emissions no matter what happens elsewhere"*). When seen in this way, the Dutch emissions are not ultimately decisive for causing or not causing a dangerous climate change, apart from the fact that they do influence the tempo with which the danger will present itself, in other words, the time still available to solve the problem (which is in fact relevant in its own right because the more time there is, the greater the possibility that the danger can still be avoided).

282. The discussion above may raise the question whether the Dutch emission level actually has to be judged to be 'unlawful', as Urgenda c.s. seek to claim in a declaratory judgement.

283. The State appears in fact to want to pursue the defence (the State is not entirely clear about this: the defence must perhaps be inferred in paragraphs 8.27, 8.28, and 8.35 of the Statement of Defence) that it is not clear on what grounds Urgenda c.s. think that the Dutch emission level may be unlawful. Urgenda c.s. understand this defence by the State to mean that the Dutch emission level, ignoring all other emissions worldwide, does not lead to a dangerous climate change or serious damage and therefore is not unlawful.

284. Urgenda c.s. are of the opinion that this defence does not hold.

285. In the first place, it would be fundamentally incorrect to judge the lawfulness or unlawfulness of the Dutch emission level exclusively in isolation, separate from the context within which that emission takes place. Above in this statement, it has already become clear that the legal test of the lawfulness or unlawfulness of a behaviour involves a judgement of that behaviour in the context within which that behaviour takes place. Furthermore, above in this statement it has already been

made clear that this legal test involves the application of norms to the behaviour, separate from the question whether damage has (already) come about through it. Unlawfulness and damage are after all independent criteria.

286. The Dutch greenhouse gas emissions take place in the context in which worldwide emissions of greenhouse gases take place. In that context, none of those emissions leads or can lead on its own to a dangerous climate change, but the cumulative effect of those emissions is in fact a dangerous climate change. In that context it must be determined (this has been discussed and supported in great detail in the summons, and has not been refuted by the State) that the Dutch emissions per capita rank among the very highest in the world; that the Netherlands is a very CO_2-intensive country (concerning this, see the IEA NL-2014 report already cited); and that as a consequence of this the Netherlands, despite the modest number of people in its territory in relation to the total world population, ranks high in absolute figures in the list of countries with the most CO_2 emission as a consequence of human activities. If every world citizen were to emit and continue to emit as much CO_2 as the present Dutch per-capita CO_2 emission, then the climate problem would not diminish but would rather worsen.

287. Assessed in that context, the Dutch emissions and the Dutch emission level must be judged to be unlawful. The fact that those emissions on their own, considered in isolation from the context, do not lead to a dangerous climate change is not decisive for a qualification as lawful or unlawful.[112]

288. This same issue was also under discussion in the Potash Mines decision that Urgenda c.s. have already examined in detail in the summons.

289. The Potash Mines dispute involved many releases of pollutants into the Rhine from the territories of several countries, through which the chemical composition of the water of the Rhine was progressively degraded in an insidious manner. The crop yields of the growers who used this water for irrigation declined because of this. Eventually the threshold was passed where the salt concentration was so high that the growers acquired desalination equipment in order to still be able to use the Rhine water, and claimed the costs of that equipment as damages[113]

[112] The extent to which context defines unlawfulness is shown very strongly in the Caustic Soda / Dorpshuis Kamerik decision.

[113] Here too there was first damage *to* the environment, and afterwards (financial) damages *because of* that environmental damage.

which they sought from the Potash Mines. The release of pollutants by the Potash Mines alone was however not so great that the threshold was already exceeded because of it, requiring desalination equipment.

290. Both the present proceedings and the Potash Mines case involve considerable damage (degradation of the atmosphere and degradation of the Rhine respectively) that is caused by a "*concurrence of different causes, each of which causes a part of the damage*",[114] in which through the cumulative effect of all those partial damages a certain damage threshold is eventually exceeded. In both situations, no single emission on its own is a *condicio sine qua non* for exceeding the relevant threshold.

291. The lack of a sufficient *condicio sine qua non* connection did not stand in the way of the Supreme Court finding the French Potash Mines liable. Not affirming liability in situations of this kind would even be unacceptable,[115] according to the Advocate-General in his opinion on the case (see summons, paragraph 322).

292. The liability that was affirmed by the Supreme Court in the Potash Mines decision therefore implied a partial liability, i.e. liability for only a part of the total damage, and in proportion to the degree in which the party in question had contributed to causing the total damage. This partial liability is also referred to as pro-rata liability.[116]

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[114] The italicized words in the text are taken from Boonekamp: see R.J.B. Boonekamp, *GS Schadevergoeding* (GS Damages Claims), article 6:98 of the Civil Code, note 16.2 with the heading "concurrence of different causes, each of which causes a part of the damage", which includes the Potash Mines decision as an example.

[115] In an example in which two 'extra' passengers stepping into a lift cause the maximum allowable weight (a threshold) to be exceeded, through which an accident results that would not have happened if 'the other person' had not also stepped in, Nieuwenhuis uses the same firm wording: "*The conclusion that neither of the two is liable is of course entirely impossible to defend.*" J.H. Nieuwenhuis, *Onrechtmatige daden* (GS Tort Law), 2008, Kluwer, p.42.

[116] In the summons, Urgenda c.s. have consistently used the term 'proportional liability' for this partial liability. That term appears in itself to be adequate, and it means in essence the same thing, but on further consideration it could in fact lead to misunderstandings. It so happens that the term 'proportional liability' is also used for the much more common situation where there is *uncertain* causality, in which a number of incidents *could have* caused the *entire* damage on its own, but it is unclear which of the incidents actually *has* caused the damage. In those situations, the Supreme Court (Nefalit decision) has accepted that the damage can be attributed for a certain share to each of the distinct incidents, proportional to the likelihood that the damage was caused by that incident. In the Potash Mines decision and in the proceedings at hand there is however a question of a different nature. In these proceedings it is *certain* what concurrence of incidents has

293. In order to place the tenet of partial liability somewhat in historical perspective: before the Potash Mines decision, one assumed – as also codified in article 6:102 of the Civil Code – that several liability applies to the partial contributor.[117] Particularly as a consequence of the Potash Mines decision, it was concluded by most writers that several liability would go too far in situations of this kind. The choice of pro-rata liability instead of several liability is thus defended dogmatically in this way; in situations of this kind not all the parties involved cause 'the same (total) damage' as is required by article 6:102 of the legal code, but rather each party causes only partial damage, so that each party is thus (only) liable for the share of the total damage that has been caused by him.

294. Such a pro-rata liability for partial causation has since been generally accepted in doctrine and case law. See Boonekamp, *GS Schadevergoeding* (Damages), article 6:102 of the Civil Code, note 6.2.3 with an extensive overview of the literature, and note 6.2.4 with case law. Concerning partial liability in cases of this kind, and equally detailed, see Akkermans,[118] who adds that one comes to the same conclusion in most of our neighbouring countries.

295. With this approach, the unlawfulness of an emission and the liability for it rests not so much in the damage that is caused by the emission *on its own*, ignoring all other emissions, but rather in the fact that this emission takes place in the context of many other emissions that all contribute additionally to damage arising and that cumulatively cause an unacceptably large (threshold-exceeding) and therefore unlawful amount of damage.

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caused the damage and there is thus no uncertainty concerning causality. Here the problem is that while it is true that every incident has caused some damage, on its own it has caused insufficient damage to exceed a relevant threshold, while that threshold has in fact been exceeded by all the incidents together. Partial liability for such a situation was also affirmed in the Potash Mines decision, however not proportional to the *likelihood* that one has caused the entire damage, but rather proportional to the *degree known with certainty* to which one has contributed to the causation of the entire damage, and this pro-rata liability has come to be called partial liability. For the partial liability for which they plead, Urgenda c.s. therefore from now on no longer use the term proportional liability, but rather pro-rata liability or partial liability.

[117] See for example Supreme Court, 4 November 1955, *Nederlandse Jurisprudentie* 1956, 1 (collision). The idea is based on the protection of victims. It suffices for the victim to address a single *laedens* for all his damage; the liable parties may fight it out among themselves which of them is liable for which share. The victim is not saddled with that burden.

[118] A.J. Akkermans, 'Veroorzaking van deelschade' (Causation of Partial Damage), *WPNR* (1992) 6043, pp.249–50.

296. In paragraph 8.29 of its Statement of Defence, the State argues, based on a decision of the Supreme Court, that one may not establish partial liability in cases where there is a very tiny *likelihood*[119] of damage. Perhaps the State wishes to suggest with this remark that the Dutch share in the total (worldwide) emission of greenhouse gases is so small that this share cannot be called unlawful, or at least that no proportional liability can be based upon it. However, the decision cited by the State concerns a totally different situation. The Supreme Court decision cited by the State concerned a matter[120] involving *likelihood*-based liability in a context of *uncertain* causality, and not *partial* liability in a context of *known* causality, and that is a substantially different situation; see the detailed discussion in footnote 116 concerning the difference between proportional liability and pro-rata or partial liability; see for the certainty of the causal connection the IPCC report that has been submitted as exhibit U72, p.15: "*Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system."*

297. It is inherently justifiable that a pro-rata liability should apply to partial causation. That standard leads to the conclusion, when applied to the case at hand, that one who emits little also has to reduce little, and one who emits a lot must reduce a lot.

298. When applied to the case at hand: if the Netherlands, in relation to other countries (e.g. China) and in absolute figures emits very few gigatonnes of greenhouse gases into the atmosphere, partial liability would lead to the conclusion that the Netherlands would have to reduce its emissions by considerably fewer gigatonnes than other countries (e.g. considerably less than

[119] In this connection, Urgenda c.s. point out that the State mentions an emission share at a global scale of 0.43% in 2010, but if Urgenda c.s. are not mistaken, the corresponding exhibit is missing. Urgenda c.s. maintain that the share of the State in the worldwide emissions in 2010 was at least 0.58% according to a report compiled by the United Nations. See http://en.wikipedia.org/wiki/List_of_countries_by_carbon_dioxide_emissions#List_of_countries_by_2012_emissions_estimates

[120] Specifically: damage as the *possible* (=likelihood) consequence of a specific short period of exposure to asbestos by the employer being charged, in addition to other *possible* causes of the damage. The asbestos issue is, for that matter, a striking (and very poignant) example of how the political order procrastinated in enacting the timely preventive measures that were needed against exposure to asbestos, a danger the risks of which were already well known. See L. Enneking and E. De Jong, Regulering van onzekere risico's via public interest litigation (Regulation of uncertain risks via public interest litigation), in JNB, 2014, no. 23, p.1542: "*Thus a ban on asbestos in 1965, instead of in 1993, could have saved 41 trillion guilders and 34,000 victims.*"

China). If the Dutch reduction obligation, albeit very small when expressed in gigatonnes, comes down to a very considerable reduction per capita (compared to other countries), that is because the Netherlands clearly has a very large per-capita emission compared to other countries. In the latter case, the average Dutch citizen contributes excessively to the causation of a dangerous climate change, and that fact justifies a sizable per-capita emission reduction. That is exactly what these proceedings are about.

299. The idea – to the extent that the State intends to argue it – that someone with a very small emission should not have to reduce at all, ignores the logic of pro-rata liability (everyone is completely liable for his own specific share of the total, not for more but also not for less than that) must therefore be rejected.

300. In the actual context of the case at hand, in which every emission on its own is negligible compared to the total of all emissions and the damage comes about because 'very many small parts make a large whole', the idea that there is no liability for small emissions would furthermore lead to there being no liability for any emission whatsoever and no emission whatsoever would have to be reduced. That consequence is – in the words of the advocate-general in the Potash Mines decision – unacceptable, and in the Potash Mines decision it was even the reason to attribute pro-rata liability in cases of this kind.

6.9 Summary and conclusion

301. The points made above may be summarized as follows:

- There exists a general legal duty (both according to national Dutch law and according to international law that is directly applicable in national Dutch law) that one may not emit such a quantity of substances into the atmosphere that serious damage to the environment or serious damage or detriment to other parties comes about as a result.
- That general legal duty is also established at the level of international law specifically for the emission of greenhouse gases in the UNFCCC, and holds that the states that are parties to that treaty must prevent the emission of greenhouse gases from warming the earth by more than 2°C, resulting in a dangerous climate change. This legal duty rests upon each individual country.[121] The Netherlands is a party to the treaty and has accepted this legal duty.

[121] See the summons, par. 191 and par. 389.

- The present total (worldwide) emission level is unlawful because at that emission level the composition of the atmosphere will be changed to such an extent that the limit (threshold) of 2°C for a 'dangerous' climate change will be exceeded. This factual conclusion is acknowledged by the State, or at least the State acknowledges[122] that very deep reductions are needed (worldwide 50% by 2050, and for the Netherlands and other industrialized countries 80 to 95% by 2050) in order to achieve the two-degree objective, which comes down to the same thing.
- The Dutch emissions provide an additional contribution to that (threatening) dangerous climate change. That too is acknowledged by the State.
- The fact that the Dutch emissions contribute additionally to a worldwide unlawful degradation of the atmosphere of such a magnitude that because of it a dangerous climate change is coming about makes the Dutch emission level unlawful. After all, since the Potash Mines decision it has been generally accepted that by contributing to unlawful (threshold-exceeding) damage that is the consequence of a concurrence of cumulative causes, pro rata liability exists proportional to the contribution to the causation of that damage.
- Although this is not a necessary condition for confirmation of partial liability, the partial liability of the Netherlands is all the more justified because the degree to which Dutch emissions contribute to the causation of a dangerous climate change is excessive. It is excessive because as a small country it ranks in the top 25 of all countries for the highest emissions in absolute figures.[123] Emissions are likewise excessive in a comparison of emissions per capita, the criterion named explicitly in the UNFCCC (and the most obvious criterion if one proceeds from the principle of legal equality of all people to be allowed to emit greenhouse gases). They are excessive in the context of the effort to achieve the two-degree objective. Urgenda c.s. have supported this with data from the Netherlands Environment Assessment Agency (PBL) and the World Bank, the correctness of which are not disputed by the State. By acknowledging that total worldwide emissions must be reduced by 50% by 2050, while for the Netherlands a reduction percentage of 80–95% – nearly double the amount – applies in that context, the State essentially

[122] See inter alia section 6.30 of the Statement of Defence and exhibit U50 of the summons, a letter from the undersecretary to the Parliament dated 19 September 2013 (p.2): "*The European governmental leaders in the European Council have established as an objective that the emission of greenhouse gases within the European Union must be 80 to 95% lower by 2050 than in 1990, in the context of the reductions that are necessary from the developed countries as a group in order to achieve the two-degree objective.*"

[123] See the summons, par. 345.

acknowledges that Dutch emissions are so excessively large that they also must be reduced by a much greater percentage than the worldwide average reduction percentage.[124]

302. Urgenda c.s. are of the opinion that with these arguments they have sufficiently and convincingly supported their position that the current Dutch emission level is unlawful.

CHAPTER 7:
LIABILITY AND RESPONSIBILITY OF THE STATE

303. In chapter 6, Urgenda c.s. have argued that the Dutch emission level (the total of all Dutch emissions) must be judged to be unlawful, and why this is so.

304. In its statement of defence, the State has argued that it is not the party that produces these Dutch emissions and thus is not the 'causer' or 'perpetrator' of this unlawful act. The State uses this argument in order to contend that the comparison that Urgenda c.s. have made with the Potash Mines decision is invalid.

305. In doing this, the State fails to appreciate that with respect to Dutch law it is not unusual for behaviour to be attributed to a party that has not itself carried out the behaviour.

306. It has already been pointed out that based on the no-harm principle and the UNFCCC, a legal duty rests upon states to take care that no unacceptable nuisance or danger to others arises through emissions from their territory. This legal duty rests upon them even when they themselves do not produce those emissions. Because of this, states are held responsible and liable as though they were the sources of those emissions; those emissions are attributed to them. The European Convention on Human Rights (ECHR) too assumes that same principle because it is

[124] The conclusion that the Dutch emissions are excessive can also be reached by another calculation. To do this, it is necessary to place the percentage of 0.43% named by the State in the correct context. The Dutch population of 17 million makes up approximately 0.23% of the 7.1 billion people who populate the world. If the Dutch population cause 0.43% of the worldwide emission of greenhouse gases, then that is nearly twice as much as the emission of the average world inhabitant. And the emission of the average world inhabitant must be halved (50% no later than 2050) in order to have a 60% chance of achieving the two-degree objective. Then the conclusion can only be that the present Dutch emissions are excessive.

the states that must be addressed concerning the (horizontal) violation between individuals.

307. The general duty of care or legal duty that Urgenda c.s. argue that the State has is tailored to the position of the State as a sovereign power that regulates its territory, regulates emissions, is responsible 'at a system level' for the emissions that take place from its territory, and also exercises an active influence on that 'system level' and intervenes within it.

308. See the detailed discussion already devoted to this in the summons, particularly section 5.2. Because the State nevertheless claims[125] that Urgenda c.s. have failed to mention the attributability criterion, Urgenda c.s. will now (further) discuss this.

309. In the first place: As sovereign power of the territory of the Netherlands, the State has the power to regulate all activities that take place within its territory. The State can determine whether and to which degree emissions of greenhouse gases may take place from its territory, and by doing so can 'steer' the collective emission level to the level that it desires. Every entity that itself emits greenhouse gases from the territory of the Netherlands (the 'actual' source) can only exert influence over its own emissions; as a sovereign power, the State is the only party that can exert control over all Dutch emissions and thus over the collective Dutch emission level. The State as a sovereign power is, so to speak, 'responsible at a system level' for the total Dutch emission level of greenhouse gases and for the policies carried out in that connection, and it is also addressed by Urgenda c.s. with respect to that system responsibility.

310. Secondly: In the summons, Urgenda c.s. have not only named a number of instruments that are available to the State to exert influence on the Dutch emission level, but also in a number of cases has mentioned how the State makes use of those instruments. Thus it has been shown that the State (see the summons, paragraphs 296–299) annually gives billions of euros more subsidy to the use of fossil fuel energy through which greenhouse gases are released than to renewable energy for which that is not the case. In its statement of defence, the State also acknowledges[126] for example that it has purchased emission rights abroad because its policies intended to reduce Dutch emissions in the category in question turned out not to be adequate (and furthermore the State does not dispute the further

[125] Statement of Defence, par. 8.51.

[126] Statement of Defence, paragraphs 6.11 and 6.13.

arguments by Urgenda c.s. concerning this in the summons, section 5.2). Chapter 7 of the State's statement of defence (pages 33/89 through 41/89) is in actuality one long list of policies that the State carries out with an eye to climate change, among them (see Statement of Defence, paragraph 7.5) mitigation policies that aim to drive back the Dutch emission of greenhouse gases. It follows from this that the State itself also (correctly) is of the opinion that it bears responsibility for those emissions. Chapter 2 of this statement of reply has again looked at the influence that the State exerts on the Dutch CO_2 emission level.

311. Thirdly: By becoming a party to the UNFCCC and the Kyoto Protocol, the State has explicitly accepted that it is responsible for the national Dutch (collective) emission level, and the State has specifically accepted the obligation in that context[127] to reduce this emission level as much as is necessary to prevent a dangerous climate change. The State has of course only accepted this responsibility if it in fact is of the opinion that it is responsible and also that it has at its disposal the instruments that are needed to be able to comply with its obligations.

312. Fourthly: In Article 21 of the Constitution as well, care for the inhabitability of the country and the protection and improvement of the environment is assigned to the State. According also to the highest law of the land, the State bears the responsibility of caring for the environment and the inhabitability of the country.

313. Fifthly: Where protection of the right to life and an undisturbed family life are concerned, the ECHR places an obligation upon the State to protect those rights if they are threatened by emissions or other environmental dangers (see the summons, section 4.4.1, and chapter 8 of this statement below).

314. In consideration of the points above, the State acknowledges its 'system responsibility' for the emission of Dutch greenhouse gases, it also has this responsibility, it also carries out policies that aim to drive down the Dutch emission level, and it enacts – mainly at 'system' level as well – concrete measures and provisions that actually intervene in the Dutch emission level and have effects on it. Under those circumstances, the (substantial) contribution of the Dutch emission level to the partial causation of a dangerous climate change can be attributed to

[127] For the record: the UNFCCC does not involve one collective obligation of the parties to the treaty as a group, but rather individual (i.e. national) obligations that the parties to the treaty have in common; see the summons, par. 191. Compare also the term 'common but differentiated responsibilities'. The Kyoto Protocol likewise has quantified reduction obligations for each individual country – thus also for the Netherlands.

the State, and that partial causation must be attributed to the State, and the State can be called to account for it.

CHAPTER 8:
HUMAN RIGHTS

315. The chapters above have examined the contention that the Dutch emission level is unlawful because it is in conflict with the norm of proper social conduct, and the State is responsible for it and can be held legally accountable.

316. This chapter discusses the contention that the fundamental rights and in particular the rights laid down in articles 2 and 8 of the European Convention on Human Rights (ECHR) likewise impose legal obligations on the State.

317. Under the ECHR, in the vertical relationship with its citizens, the State is first of all supposed to refrain from acts through which the State itself commits a violation of their fundamental rights. This duty to refrain is also called the negative obligation of the State. In addition to this negative obligation of the State to refrain from committing violations of fundamental rights, the State has the positive obligation in relationship to the horizontal relationships of citizens among themselves to behave actively and proactively in enacting measures to prevent citizens from violating each other's fundamental rights.

318. In the event that the State fosters the violation by citizens of each other's rights, then by doing so the State violates not only its positive obligation, but also its negative obligation. The ECHR considers behaviour that fosters violations of rights as an independent breach of the ECHR by the State.[128]

[128] See for example the case Young, James & Webster v. the United Kingdom, in which three employees of British Rail were fired because they refused to become members of one of the unions that had made a so-called "closed shop agreement" with British Rail. The employees based their claim on article 11 of the ECHR (freedom of association). Because it was a horizontal conflict, it was not obvious that one could claim that the State itself had violated the rights of those involved. Still, the finding of the ECtHR was that the State had in fact committed its own separate violation of the rights of the employees because the State had encouraged this kind of closed-shop arrangement in the time that Labour was in power. (ECtHR decision of 13 August 1981, nos. 7601/76 and 7806/77).

319. With the inadequate climate policies that the State carries out (including subsidizing fossil fuel energy),[129] the State commits a separate breach of articles 2 and 8 of the ECHR. In addition, the State makes possible and fosters a situation in which everyone in the community can continue to emit at a level that contributes to the violation of the fundamental rights of Urgenda c.s. and future generations. In doing this, the State violates both its negative obligation and its positive obligation under articles 2 and 8 of the ECHR.

320. Through the violation of articles 2 and 8 of the ECHR, the State acts unlawfully because in doing so it violates the fundamental rights of Urgenda c.s. and of future generations as well as acting in conflict with its legal obligation. On account of the concern about sustainability that the Urgenda Foundation has taken on, one of its goals is to stand up for the rights of future generations. Because of this – and contrary to the contention of the State – the Urgenda Foundation can base its claim on articles 2 and 8 of the ECHR, as can the co-plaintiffs whom it represents through power of attorney.

321. Below it will be shown: that the consequences of climate change for the Netherlands and for Urgenda c.s. fall within the scope of articles 2 and 8 of the ECHR (chapter 8.1); that there is no question of facts and circumstances that justify a limitation of these fundamental rights by or because of the State (chapter 8.2); that the margin of appreciation for the State on the basis of the case law of the ECtHR in this case is very limited, and the national judicial review is supposed to be correspondingly strict according to the Human Rights Court (chapter 8.3); what may be expected of the actions of the State on the basis of the case law of the Court (chapter 8.4); and which conclusions ought to be drawn from the above arguments (chapter 8.5).

8.1 The consequences of climate change fall within the scope of articles 2 and 8 of the ECHR

322. Protection against dangers resulting from environmental pollution is offered by both article 2 and article 8 of the ECHR. The difference between the two is concisely formulated by Barkhuysen and Diepenhorst:

"If the (environmental) protection under article 8 of the ECHR is compared with that under article 2 of the ECHR, it can be determined that the protection under

[129] See further discussion under par. 296 of the summons.

article 8 of the ECHR is applicable earlier, namely it already applies in the event of substantial nuisance or environmental dangers that are not directly life-threatening. Article 2 of the ECHR is only applicable when a life-threatening situation has come about."[130]

323. Urgenda believe that they have sufficiently stated and proved in chapter 4 that climate change of more than 2 degrees will result in substantial nuisance and that this degree of climate change will result in environmental dangers and even life-threatening environmental dangers for Urgenda c.s. and future generations. These environmental dangers threaten health and life in many ways, and this will affect hundreds of thousands of people annually in Western Europe if climate policies are inadequate. On a worldwide scale, according to the IPCC sea level rise alone will affect hundreds of millions of people annually at the end of this century, not even considering all other risk factors of warming (e.g. heat stress).

324. Flooding as a result of sea level rise and torrential rainfall; heat stress as a result of more intense and longer-lasting heat waves; deteriorating air quality and respiratory ailments as a result of droughts, forest fires, and ozone pollution; increased incidence of diseases as a result of the spread of infectious diseases; psychological and physical harm as a result of weather-related disasters; and the other consequences that have been sketched by Urgenda c.s. on the basis of the IPCC reports will, as more time has passed and the delayed warming begins to take effect, cause direct nuisance and danger to the private lives, health, and lives of Urgenda c.s. and future generations to an increasingly serious degree.

325. In addition, the IPCC reports point out that the well-being of individual households (see paragraph 145 of this statement of reply) will be further disturbed and brought into danger by the fact that the warming of the earth will lead to the degradation of a broad spectrum of social infrastructures such as the built environment, health care and emergency services, water and food supplies, transportation systems, drainage systems, etc. Because the consequences of the degradation of these infrastructures will be intensified by the pressure that will arise within the economic, social, and environmental spheres as a result of

[130] Barkhuysen and Diepenhorst, 'Overheidsaansprakelijkheid voor gebrekkige naleving van milieu- en veiligheidsvoorschriften op grond van national recht en het EVRM' (Governmental Liability for Inadequate Compliance with Environmental and Safety Regulations on the Basis of National Law and the ECHR), p.296, in the volume *Recht realiseren: Bijdragen rond het thema adequate naleving van rechtsregels* (Putting Law into Practice: Contributions concerning Adequate Compliance with Legal Guidelines), E.M. Meijers Institute, 2005.

warming, the disturbance and the danger for household well-being will be further intensified according to the IPCC (paragraph 145 of this statement of reply).

326. The nuisance and the (life-threatening) danger of a warming of the earth of more than 2 degrees fall as a consequence of all of these factors within the scope of articles 2 and 8 of the ECHR: the nuisance and the danger are sufficiently serious and directly impact the health and the household well-being of Urgenda c.s. and future generations of Dutch citizens. There will be no way of escaping these consequences.

327. The grounds discussed below in sections 8.1.1 through 8.1.6 underline the contention that Urgenda c.s. can rely on articles 2 and 8 of the ECHR.

8.1.1 The scope is determined by (inter alia) the 2-degree norm

328. In relation to the two-degree norm as established in the Cancun Agreements, it is important to clarify that under the ECHR this norm gains even more significance if it has to be considered a norm that is not legally binding. This follows from the fact that, with reference to Barkhuysen and Van Emmerik,[131] the ECtHR also uses soft law to provide an interpretation of the obligations of states. Thus the Court uses, inter alia, norms of the World Health Organization (WHO) that are not legally binding, such as the WHO's norms for noise, in order to provide interpretation of article 8 of the ECHR.[132] In addition to the fact that in their own right the consequences of climate change that have been sketched already justify placing them within the scope of articles 2 and 8 of the ECHR, the fact that the two-degree norm threatens to be exceeded means that there is an additional reason to accept the applicability of articles 2 and 8 of the ECHR. A (threatening) violation of the two-degree norm is therefore equivalent to a (threatening) violation of articles 2 and 8 of the ECHR.

8.1.2 The acknowledged relationship between climate change and the right to life and health

[131] Barkhuysen and Van Emmerik, *Het EVRM en het Nederlands bestuursrecht* (The ECHR and Administrative Law in the Netherlands), 2011, p.89.
[132] Barkhuysen and Van Emmerik then give several examples of this from the jurisprudence of the ECHR.

329. The ECtHR has already accepted the applicability of articles 2 and 8 of the ECHR in many cases of environmental nuisance and environmental danger. Although the ECtHR also acted on account of severe environmental nuisance and environmental danger in those cases, Urgenda c.s. are of the opinion that it is safe to state that dangerous climate change is an environmental danger that is to a substantial degree more serious and more comprehensive than the causes that have been handled by the ECtHR up to the present day. There should then also be no debate concerning the question whether the consequences of climate change fall within the scope of the ECHR. The severity of the danger also appears to be underscored by the creator of the ECHR and the founder of the ECtHR, the Council of Europe (COE). In any case, the Council makes it clear on its website that climate change is a direct threat to the right to life and health. The Council of Europe has a web page with the title 'Human Rights – Environment: Climate change, a threat to human rights'. On that web page, the Council of Europe states (inter alia):

"Climate change is the most serious environmental problem that the world faces today, having a major impact on the basic elements of human life. This will directly affect a range of fundamental rights: the right to life, suitable living conditions, safety, health, food and water [...] Climate change raises important questions about social justice, equity and human rights across countries and across generations."[133]

330. It is true that this is not a statement of the Court, but the fact that the Council as *auctor intellectualis* of the ECHR and founder of the ECtHR considers it appropriate to devote special attention on its website to the climate problem underscores the contention that it is realistic to assume that the consequences of climate change fall within the scope of article 2 and article 8 of the ECHR. In this way, the Council sends out the same signal that was already sent out earlier in the Cancun Agreements by the international community of nations, that was sent out by the UN Council on Human Rights in Resolution 10/4 in 2009 (see no. 29 in the summons), and that was sent out by the other European court, the European Court of Justice, in one of its decisions (see no. 31 in the summons).

8.1.3 Even delayed damage falls within the scope of the ECHR

[133] See the website of the Council of Europe (COE) at http://hub.coe.int/what-we-do/culture-and-nature/climate-change (**exhibit U85**).

331. The fact that because of the delays in the climate system the actions of the State will only lead to damage and injury in the second half of this century does not detract – contrary to what the State appears to state in paragraphs 10.13 and 10.14 of its statement of defence – from the fact that Urgenda c.s. can rely on articles 2 and 8 of the ECHR. One cannot see why actions that take place today and that because of the laws of physics, chemistry, and biology only lead to danger in the second half of this century do not fall within the scope of articles 2 and 8 of the ECHR.

332. If today Urgenda c.s. were to be subjected to a structural exposure to asbestos dust and the State were not to enact measures against this, should they then not be able to make a legally valid claim to articles 2 and 8 of the ECHR because from a medical point of view they can only develop the ailment mesothelioma 20 to 40 years after exposure to asbestos dust? That would be an unacceptable outcome, and with it an erroneous distinction would be made between acting with damage as an immediate consequence and acting with damage as a delayed consequence. That distinction cannot be justified and is inadmissible.[134]

333. The ECtHR has also considered the possibility of later damage or injury to be in fact sufficient to assume that there are immediate consequences that are disruptive to health and family life. This follows from the judgement in the case of Taskin v. Turkey already cited in the summons in paragraph 253, in which the Court decided that a generally acknowledged (and thus foreseeable) health risk that will appear only after a period of some decades (in that specific case only after 20 to 50 years) is sufficient to be able to call upon the protection of article 8 of the ECHR. For this reason, the defence by the Turkish State that there was no immediate danger was set aside by the Court.

    The Court stated the following in the summary of the defence by the Turkish state (paragraphs 107-110, underlining added):

[134] The ECtHR also does not allow such a distinction. With respect to the example just given of asbestos, this is evident inter alia in the verdict of the ECtHR of 11 March 2014 in the case Howald Moor and Others v. Switzerland, ECHR 069 (2014). In this judgement, the Court found Switzerland guilty on account of a violation of article 6 of the ECHR (right of access to a court) because Swiss law has a legal statute of limitations period of 10 years from the moment of damage, with the unacceptable (according to the Court) consequence that this legal regulation means that asbestos victims will never be able to have their damages compensated because the disease only appears after a period of much more than 10 years.

"The Government contested, firstly, the applicability of Article 8 to the present case. In their opinion, the risk referred to by the applicants was hypothetical, since it might materialise only in twenty to fifty years. This was not a serious and imminent risk. In addition, the applicants could not point to any specific fact concerning an incident directly caused by the gold mine in question.

Furthermore, given that no leak or concentrated build-up of sodium cyanide had occurred in the region and that there was no measurable risk related to the discharge of waste products containing sodium cyanide, the latter's use had had no effect on the applicants' rights. According to the Court's established case-law, Article 8 could only apply if the use of sodium cyanide had had a direct effect on the applicants' right to respect for their private and family life, which was not the case."

334. After this summary of the Turkish State's defence, which is comparable to the defence by the Dutch State, the Court then ruled that there had in fact been a violation of article 8 of the ECHR (paragraphs 111–12, underlining added):

"Several reports have highlighted the risks posed by the gold mine. [...] The Court points out that Article 8 applies to severe environmental pollution which may affect individuals' well-being [...] The same is true where the dangerous effects of an activity to which the individuals concerned are likely to be exposed have been determined as part of an environmental impact assessment procedure in such a way as to establish a sufficiently close link with private and family life for the purposes of Article 8 of the Convention. If this were not the case, the positive obligation on the State to take reasonable and appropriate measures to secure the applicant's rights under paragraph 1 of Article 8 would be set at naught [...] The Court concludes that Article 8 is applicable."

335. According to the Court, it is sufficient that it is evident from reports that there is a general danger to health, without the plaintiffs having to show that they themselves have experienced damage because of that danger. The fact that a danger can only materialize after 20 to 50 years does not stand in the way of the conclusion that there can be a 'sufficiently close link with private and family life'. Thus in that case too there is a 'serious and imminent risk'.

336. Because of inter alia this judgement, one cannot see why the delayed effect in the climate system through which the present excessive emissions will lead to danger

only in the future should stand in the way of basing their claim on article 8 of the ECHR. After all, life deserves an even greater measure of protection than health.

337. When there is a future danger that has its origin in the actions of today, it is thus sufficient according to the ECtHR that a 'sufficiently close link' is established with health and family life. The link referred to by the Court between the dangerous effects of climate change on life and health on the one hand and the fact that they will probably be exposed to them in the future and will experience nuisance and dangers because of them on the other hand has been made sufficiently clear by Urgenda c.s.

8.1.4 Even when those other than Urgenda c.s. are exposed to the same danger, there is a right to protection

338. It is true that in addition to Urgenda c.s., the rest of the Netherlands (and the world) are exposed to the nuisance and the danger of climate change. This does not however, in the opinion of Urgenda c.s., reduce the scope of articles 2 and 8 of the ECHR and the obligation of protection that proceeds from them. First of all, neither article offers a point of departure that might lead to the opposite conclusion. Secondly, in comparable cases the ECtHR has seen no impediment to a finding of a violation; see for example the cases Di Sarno and Okyay, paragraphs 251 and 252 of the summons. From those judgements it is apparent that the Court interprets the ECHR in such a way that effective protection may be derived from it when an environmental risk is involved to which all the people in a given area are exposed. The plaintiffs in Okyay even lived at a distance of 250 km from the polluting coal-fired power plants, in the metropolis of Izmir in western Turkey. The fact that millions of people were exposed to the same pollution did not detract from the fact that the plaintiffs deserved protection under the ECHR. This also seems logical to Urgenda c.s., for why should action be taken against an environmental danger to which only a few individuals are specifically exposed, but not in a case in which millions of people are confronted with that danger.

8.1.5 The ECHR as a 'living instrument'

339. Urgenda c.s. are of the opinion that the line that has been set down by the Court in the judgements cited must also be continued in the climate case at hand. Receiving preventive protection proactively is also the only remedy against the consequences of dangerous climate change. Claims awarded later, after the two-degree limit has

already been exceeded, are in fact pointless because the nuisance and the danger will remain thereafter for possibly as long as hundreds or thousands of years (see no. 378 of the summons). In the event that tipping points in the climate are reached, there can even be a danger that is irreversible (and furthermore uncontrollable) for even a much longer time. A coal-fired power plant can be shut down, but with the climate problem it is another matter.

340. There should therefore be attention given to the specific characteristics of the consequences of climate change. This is also possible because the ECHR is considered by the Court to be a 'living instrument'. The interpretation of concepts in the ECHR – what the Court for example sees as a direct danger – is context-dependent, and it changes as there are advances in scientific insights. The aim of this is always to (continue to) ensure effective protection. The Court itself says about this:

"[T]he Court has reiterated that the ECHR is a 'living instrument'. The rights enshrined in the Convention have to be interpreted in the light of present day conditions so as to be practical and effective. Sociological, technological and scientific changes, evolving standards in the field of human rights and altering views on morals and ethics have to be considered when applying the Convention. Therefore, the Court has on several occasions modified its views on certain subjects because of scientific developments or changing moral standards."[135]

341. The Court thus does not assume that the meaning of the provisions of the ECHR has been established once and for all. The Court advocates a dynamic interpretation of the provisions of the treaty as needed, and this to the extent that effective protection continues to be guaranteed in a changing social environment.[136]

342. Urgenda c.s. are of the opinion that climate change, as the greatest danger to human rights in modern times, and the scientific certainty that meanwhile exists concerning the consequences of climate change, justify the conclusion that there are scientific developments and changing insights that mean that the relatively open norms of the ECHR must be interpreted as needed in such a way that

[135] See the website of the Court under 'living instrument': http://echr-online.com/#Living instrument

[136] See also Nieuwenhuis and Hins, *Hoofdstukken Grondrechten* (Chapters on Fundamental Rights), 2011, p.103.

protection can be had against this new and unique danger to life and health.

343. The right to a private life is thus an open norm that the ECtHR grasps to be able to keep pace with new developments that could embody a danger to fundamental rights. For this reason, the Court has also always consciously avoided defining a fixed scope to the concept of private life:

"*The Court does not consider it possible or necessary to attempt an exhaustive definition of the notion of "private life"*.[137]

344. The essence is that Urgenda c.s. are of the opinion that the danger posed by dangerous climate change to life and health and to the right of an undisturbed family life is so great and comprehensive that an interpretation of the ECHR must be advocated that actually leads to protection of the fundamental rights of Urgenda c.s.

8.1.6 Conclusion with respect to the scope

345. With the arguments given above, the conclusion can be drawn that the consequences of climate change fall within the scope of articles 2 and 8 of the ECHR and that Urgenda c.s. can rely on these articles because a sufficiently direct relationship exists between the consequences of climate change on the one hand and their right to life, health, and an undisturbed family life on the other hand. In addition, the norm of 2 degrees also plays a role, even if it has no legally binding power. Because the actions of the State thus amount to a violation of articles 2 and 8 of the ECHR, Urgenda c.s. have, based on the ECHR and considering the case law of the ECtHR, a right to protection against these consequences of climate change and against acts of the State that are its fundamental causes.

8.2 The exceptions in article 8 paragraph 2 of the ECHR and fair balance

346. In the event that a limitation of article 8 (paragraph 1) of the ECHR has been established and this limitation can be traced back to actions by the State because it stands in conflict with a negative obligation, then the State has the possibility of relying on article 8 paragraph 2 of the ECHR, through which the State can justify

[137] ECtHR, 16 December 1992, 12710/88 (Niemietz v. Germany).

the limitation of paragraph 1 under the conditions given there.[138] In basing its argument on paragraph 2, the burden of proof rests explicitly with the State.

347. In its statement of defence, the State has made via 'fair balance' an argument based on article 8 paragraph 2 of the ECHR, but in doing so, it has provided insufficient support to be able to test this argument against the conditions of paragraph 2. The State's burden of proof in making a legally valid claim to paragraph 2 is explained below.

8.2.1 The three requirements of article 8 paragraph 2 of the ECHR

348: Article 8 paragraph 2 of the ECHR reads:

"There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic wellbeing of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others."

Once it has been determined that there has been a limitation of article 8 paragraph 1, the following three questions then have to be answered in accordance with paragraph 2:

- Is the limitation of the right determined by law?
- Does the exception serve a permissible purpose as stated restrictively in paragraph 2?
- Is the infringement necessary in a democratic society?

349. The first two tests may speak for themselves. The third test, the proportionality test, is equivalent – according to Nieuwenhuis and Hins,[139] based on the decisions of the ECtHR – to the question whether the limitation is proportional to the interest that is served by limiting the right established in paragraph 1. There must be a 'pressing social need', and the reasons stated by the State for the limitation must

[138] Article 2 of the ECHR does not provide this possibility, as will be further explained below in section 8.2 of this chapter.
[139] Nieuwenhuis and Hins, *Hoofdstukken Grondrechten* (Chapters on Fundamental Rights), 2011, pp.127–28.

be 'relevant and sufficient', according to Nieuwenhuis and Hins.

350. The burden of proof concerning compliance with these requirements rests with the State, so that the court can test whether the requirements of article 8 paragraph 2 have been satisfied. To cite further the explanation by Nieuwenhuis and Hins concerning the judicial proportionality test:

In applying this proportionality test, the interest served by the limitation must always be weighed against the severity of the limitation. In doing this, interests of a strongly divergent nature are often involved, but the ECtHR cannot escape making a comparison between those various interests. [...] The proportionality test implies that the Court must determine how far-reaching the limitation of the fundamental right is [...] The more drastic the interference is, the more weight the proportionality test must be given. The question arises whether some kinds of interference are not so drastic that they are not justifiable at all. Certain judgements of the ECtHR do in fact appear to indicate the existence of such a central scope. [...] The question whether the interference is proportional will nearly always have to be answered by investigating whether there are relevant and sufficient reasons for the interference. All sorts of circumstances can play a role in this. In other words, the Court tests in concrete terms whether a fair assessment has been made." (underlining added)

351. The State will thus have to present the arguments and evidence required on the basis of paragraph 2 if it wishes to justify the limitation of article 8 paragraph 1.

8.2.2 Fair balance and article 8 paragraph 2 of the ECHR

352. Article 8 paragraph 2 is, as has been said, applicable in the event that the State has violated its negative obligation because its acts have led to an infringement upon the undisturbed family life of paragraph 1. In the event however that the limitation of the right under article 8 paragraph 1 is the consequence of the actions of third parties (a horizontal conflict) and not the actions of the State, then the State has the positive obligation to take the measures needed to rectify the act of these third parties. However, in that case as well, the State can justify the alleged violation by third parties, for whose act(s) the State after all bears responsibility under the ECHR. Then the positive obligation is not tested against article 8 paragraph 2 (that applies to negative obligations) but against the 'fair balance test' developed by the ECtHR.

"In determining whether or not a positive obligation exists, regard must be had to the fair balance that has to be struck between the general interest of the community and the interests of the individual."[140]

353. In its statement of defence, the State refers exclusively to the 'fair balance test' (section 10.5 of the statement of defence). It appears however from the case law of the Court that in carrying out the fair balance test, a test must be made against the requirements of paragraph 2. That applies thus not only in cases in which negative obligations of the State play a role, but also in cases in which both negative and positive obligations of the State play a role, as well as in cases in which only positive obligations play a role. Thus also in applying the 'fair balance test', the burden of proof rests upon the State.

354. An example of a case in which both negative and positive obligations were involved is the case of Keegan v. Ireland.[141] Keegan's daughter was born after the relationship with his girlfriend had ended. The child was placed with adoptive parents without his knowing about this. Irish law offered Keegan practically no protection against this, and he based his claim on article 8 of the ECHR. The Court was of the opinion that both negative and positive obligations of the State were involved and considered as follows:

"49. The Court recalls that the essential object of Article 8 is to protect the individual against arbitrary action by the public authorities. There may in addition be positive obligations inherent in an effective "respect" for family life. However, the boundaries between the State's positive and negative obligations under this provision do not lend themselves to precise definition. The applicable principles are, none the less, similar.[...]
51. In the present case the obligations inherent in Article 8 are closely intertwined, bearing in mind the State's involvement in the adoption process. The fact that Irish law permitted the secret placement of the child for adoption without the applicant's knowledge or consent [...] amounted to an interference with his right to respect for family life. Such interference is permissible only if the conditions set out in paragraph 2 of Article 8 (art. 8-2) are satisfied.
52. In view of this finding, it is not necessary to examine whether Article 8 (art. 8)

[140] ECtHR, 17 October 1986, *Nederlandse Jurisprudentie* 1987, 945 (Rees v. United Kingdom), par. 37.
[141] ECtHR, 26 May 1994, no. 16969/90.

imposed a positive obligation on Ireland ..." (underlining added)

355. In this judgement, the Court emphasizes first of all that in practice positive and negative obligations overlap with each other and are often difficult to distinguish, even for the Court itself, and that equivalent principles are applicable in testing whether the positive and negative obligations have been complied with. Next the Court expresses a preference in a case such as this one for the test of paragraph 2 (par. 51); the fair balance test can be put aside (par. 52). That is also logical. In the event that it would be possible to describe the same situation as a limitation (justifiable under paragraph 2) and as a failure to act (subject to the fair balance test), it would be illogical to apply different test methods. Thus first it has to be considered whether (in addition to possible positive obligations) negative obligations have been violated. If that is the case, all obligations are tested against article 8 paragraph 2 of the ECHR.

356. However, the requirements of article 8 paragraph 2 also remain important in the event that one would assume that there is all in all no violation of a negative obligation of the State and that the State violates only positive obligations. All this is explained by the ECtHR in the case Gaskin v. United Kingdom.[142] The case has to do with access to private information in relation to article 8 of the ECHR. In this, Gaskin bases his claim on the positive obligation of the State to make this access possible for him. First the Court concludes that even in the case of a positive obligation, paragraph 2 remains important for the interpretation of the fair balance test (paragraph 42):

"In accordance with its established case-law, the Court, in determining whether or not such a positive obligation exists, will have regard to the fair balance that has to be struck between the general interest of the community and the interests of the individual ... In striking this balance the aims mentioned in the second paragraph of Article 8 may be of a certain relevance, although this provision refers in terms only to 'interferences' with the right protected by the first paragraph - in other words is concerned with the negative obligations flowing therefrom." (underlining added)

357. After these considerations, the Court also in fact tests the Gaskin case against the requirements of paragraph 2, and it turns out that the State has not fulfilled the requirement of proportionality (paragraph 49):

[142] ECtHR, 7 July 1989, no. 10454/83.

"The interests of the individual seeking access to records relating to his private and family life must be secured when a contributor to the records either is not available or improperly refuses consent. Such a system is only in conformity with the principle of proportionality if it provides that an independent authority finally decides whether access has to be granted in cases where a contributor fails to answer or withholds consent. No such procedure was available to the applicant in the present case. Accordingly, the procedures followed failed to secure respect for Mr Gaskin's private and family life as required by Article 8 of the Convention. There has therefore been a breach of that provision." (underlining added)

358. In conclusion, it can be determined as a result of the arguments above that, regardless of whether positive or negative obligations are involved, the test of article 8 paragraph 2 of the ECHR must be applied at the moment that a state is of the opinion that it has a justification for limiting the right to health and an undisturbed family life. In all those situations, the State is required to show that this limitation is justified and that the requirements of article 8 paragraph 2 have been fulfilled. In essence, the State has to show that the State's present (inadequate) reduction goal for 2020 (16% reduction by 2020 with respect to the level of 1990) is a necessary, proportional, and suitable measure that serves the public interest and that justifies the limitation of the rights of Urgenda c.s. and the limitation of the rights of future generations.

8.2.3 Article 2 of the ECHR has no exceptions

359. Whatever the State may bring up as a justification for the limitation of article 8 of the ECHR, there is nothing that the State can claim that can be a justification for the (threatening) limitation of the right to life. The grounds for an exception that is laid down in article 8 paragraph 2 of the ECHR are in fact not present in article 2 of the ECHR. The right to life is an absolutely formulated fundamental right without any possibilities of exceptions. The State cannot meddle with this in any way whatsoever, not even with the defence of fair balance. Urgenda c.s. have established that there is a (threat of a) violation of article 2, and the criterion to be applied in this situation has been formulated in the case Osman v. United Kingdom (point 106):

"For the Court, and having regard to the nature of the right protected by Article 2, a right fundamental in the scheme of the Convention, it is sufficient for an

applicant to show that the authorities did not do all that could be reasonably expected of them to avoid a real and immediate risk to life of which they have or ought to have knowledge. This is a question which can only be answered in the light of all the circumstances of any particular case."[143]

Urgenda c.s. have explained in detail these circumstances that are to be considered. The violation can be established based on them.

8.2.4 Conclusion with respect to the possibilities of exceptions

360. Based on the arguments above, it is evident that in the event that there is a violation of article 2 of the ECHR, the violation cannot be justified. In the event that there is a limitation of article 8 of the ECHR, there can be a justification, but only if the requirements of paragraph 2 are satisfied. It is up to the State to state and to prove that those requirements have been satisfied.

8.3 The margin of appreciation

361. Closely connected with the proportionality test that was discussed above is the margin of appreciation. Citing Nieuwenhuis and Hins:

"The intensity with which the ECtHR carries out the proportionality test is to an important degree determined by the margin of appreciation that the ECtHR accords to the national authorities."[144]

362. The margin of appreciation determines how acutely the ECtHR tests whether a state and its national courts have correctly weighed the relevant facts and circumstances in choosing the measures to correct the limitation. If the margin of appreciation is wide in a given case, then the ECtHR applies a marginal test. If the margin of appreciation is limited, then the ECtHR applies a strict test.

363. In section 10.10 of its statement of defence, the State bases its argument on the margin of appreciation and states in relation to it that in the event that it has an obligation towards Urgenda c.s. arising from articles 2 and/or 8 of the ECHR, it has

[143] ECtHR, 28 October 1998, no. 87/1997/871/1083.
[144] Nieuwenhuis and Hins, Hoofdstukken Grondrechten (Chapters on Fundamental Rights), 2011, p.131.

a freedom of choice to determine how that obligation will be carried out in practice.

364. Urgenda c.s. acknowledge that the ECtHR grants a certain margin of appreciation to states. Urgenda c.s. have therefore also made a deliberate choice not to pursue claims that have more a political than a judicial tint. This is the reason why, contrary to what the State has claimed or suggested in paragraph 1.2 of its statement of defence, Urgenda c.s. have not initiated any claims with respect to *the way in which* the emission reductions claimed would have to take place. For Urgenda c.s. as well it is purely a political question *"in which way"* (see 1.2 of the statement of defence) the emission reductions required by law will be brought about.

365. Emission reduction can take place by application of measures such as energy efficiency, through a variety of renewable energy sources (wind, sun, geothermal heat, biomass, hydropower, etc.), but also through application of nuclear power or by replacing coal-fired power plants with gas-fired power plants. Urgenda c.s. definitely have their own preferences about this, but those preferences have been consciously left out of these proceedings because Urgenda c.s. wish to let freedom concerning the manner of reducing emissions rest entirely within the State's margin of discretion in political policymaking. The freedom that the State retains in its (energy) policies if the claims of Urgenda c.s. are granted is also much greater than the State would have us believe. The State can thus continue to make choices in its (energy) policies as it itself sees fit, taking into account all the social interests that it considers to be relevant, provided it stays within the boundaries that it itself has claimed to be necessary. These boundaries are formed by the reduction objectives for 2020 and 2050 that have been mentioned repeatedly and that are necessary in order to keep a realistic chance of remaining below the 2-degree limit. In doing this, Urgenda c.s. are in fact claiming nothing different than what the State itself (together with the world community) has declared repeatedly and in complete freedom of political policymaking to be necessary in order to prevent dangerous climate change and that, to cite Spier, also manifestly has a legal component:

"I have little doubt that the law as it stands, requires that it must be avoided, to the extent possible, that the fatal tipping point of an increase in global temperature with more than 2°C is passed... Given that the stakes are tremendously high for society at large, it seems morally and legally imperative to arrive at the reductions needed to avoid that we pass the fatal tipping point, even if that would mean that

some enterprises cannot survive and that States will have to force people and enterprises in their jurisdictions to reduce GHG emissions to the extent legally needed; even if that would necessitate painful measures. This is not to say that judges can or have to prescribe States (and arguably even enterprises) how they should achieve the reductions needed. States may choose the means, as long as they achieve the result."[145] (underlined text was italicized in the source cited)

366. That is also what Urgenda c.s. claim: not in which way the emission reductions are achieved, but *that* they are achieved, in the degree and at the tempo that is necessary in order to remain under the 2-degree limit. See also the ECtHR in the Oneryildiz case:

"When faced with an issue such as that raised in the instant case, the authorities cannot legitimately rely on their margin of appreciation, which in no way dispenses them from their duty to act in good time, in an appropriate and, above all, consistent manner."[146]

367. Insofar as the State intends to argue, relying on the margin of appreciation and based on the ECHR and the case law of the ECtHR, that it also has the freedom in the case at hand to reduce emissions by less than the amount claimed by Urgenda c.s. and in doing so to maintain a different pace, then Urgenda c.s. contest that contention. Insofar as the State at the same time argues that it may reduce emissions to a lesser degree and at a slower pace than is necessary in connection with the two-degree objective, as long as it enacts sufficient adaptation measures, then Urgenda c.s. contest that as well. Urgenda c.s. will explain the reasoning behind this below.

8.3.1. A general explanation of the margin of appreciation

368. The background of the margin of appreciation is that the oversight of the ECtHR has a subsidiary character. The ECtHR contends that states themselves are primarily responsible for compliance with the ECHR. The states themselves – thus the national legislative, executive, and judicial powers – have to comply with the obligations of the ECHR. Not the ECtHR, but the national courts have the primary obligation of safeguarding compliance with the ECHR and where necessary of

[145] Jaap Spier and Ulrich Magnus, *Climate Change Remedies, Injunctive Relief and Criminal Law Responses*, 2014, pp.83 and 86.
[146] ECtHR, 18 June 2002, Oneryildiz v. Turkey, point 128.

imposing obligations on their state in the event that there is a violation or a threat of a violation of the ECHR. The ECtHR says the following about this in one of its judgements (in relation to a complaint concerning the violation of the freedom of expression as laid down in article 10 of the ECHR):

"… it is in no way the Court's task to take the place of the competent national courts but rather to review under Article 10 the decisions they delivered in the exercise of their power of appreciation."[147]

369. The Court also considered as follows concerning a complaint about violation of article 6 of the ECHR:

"… it is not normally in the province of the European Court to substitute its own assessment of the facts for that of the domestic courts, and, as a general rule, it is for these courts to assess the evidence before them. The Court's task is to ascertain whether the proceedings in their entirety, including the way in which evidence was taken, were fair …"[148]

370. The function of the Human Rights Court is therefore subsidiary to that of the national courts. The Court acts only as the 'supervisor' that oversees compliance with the ECHR. A certain margin of appreciation has a function in this because in many cases the national courts can judge the factual elements of a case within the national context better than the Court can.

371. The margin of appreciation is however not an absolute right of the states that are parties to the treaty. See also Barkhuysen and Van Emmerik:

"The 'margin of appreciation' is not a specific 'right' of treaty states because of this, but rather a testing policy in the context of which the Court also tries to give its reasons for its choice of a certain intensity of testing (from marginal to very strict)."[149]

In making that assessment, the ECtHR includes all the circumstances of the

[147] ECtHR, 7 December 1976, *Nederlandse Jurisprudentie* 1978, 236 par. 50 (Handyside v. United Kingdom). See also Barkhuysen and Van Emmerik p.27.
[148] ECtHR, 16 December 1992, *NJCM* 1993, par. 34 with note by E. Myjer (Edwards v. United Kingdom).
[149] Barkhuysen and Van Emmerik, *Het EVRM en het Nederlands bestuursrecht* (The ECHR and Dutch Administrative Law), 2011, p.24.

situation. Thus, for example, a larger margin of appreciation will be allowed a state in the event that the state must strike a balance between the protection of several different rights under the ECHR (which is not the situation in the case at hand). On the other hand, the Court applies a stricter test when the state must weigh the protection of an ECHR right on the one hand against a right not protected by the ECHR on the other hand.[150] In the event that the core of a certain right is at issue, the margin will usually be quite small, etc.[151]

372. Urgenda c.s. are of the opinion that the circumstances of this case indicate that the margin of appreciation of the State is limited and that the district court accordingly ought to test the defence of the State with respect to the justifiability of the limitation of the ECHR strictly as to its proportionality, necessity, and suitability. Before providing further support for this below, Urgenda c.s. however point out that even with a marginal test the conclusion would have to be that based on the scale of the danger compared to the fact that a reduction of 25–40% by 2020 has always been considered necessary by the Netherlands and Europe in order to remain on a credible protective path, the national authorities cannot reasonably make do with a less far-reaching level of protection in protecting fundamental rights than that which Urgenda c.s. are claiming.

373. Moreover, Urgenda c.s. already point out here that the State also cannot justify the limitation by stating that it can always enact adaptation measures in the future in order to avert the danger. That position is not tenable because, as Urgenda c.s. will explain in detail in chapter 10.5, adaptation measures taken in the future cannot prevent the violation of the ECHR because of the many limitations that are inherent in adaptation measures. The same holds for postponing reduction objectives from 2020 to 2030. That too will be explained by Urgenda c.s. in chapter 10, section 10.3.

8.3.2 The margin of appreciation of the State is very limited

374. Except for the margin of discretion in policymaking discussed above concerning the *way in which* the emission reductions claimed by Urgenda c.s. are implemented, the State can be granted little if any margin of appreciation with respect to the magnitude of the emission reduction and the pace to be maintained in achieving it. The State cannot be granted that margin of discretion in policymaking, or at least

[150] Barkhuysen and Van Emmerik, p.26.
[151] Nieuwenhuis and Hins, p.69.

not to the degree that it advocates, because (i) as long as the measures chosen are inadequate to offer the needed protection, an argument based on the margin of appreciation will not be honoured by the ECtHR; (ii) there is according to the ECtHR little if any margin of appreciation when a state contravenes its own norms, or (iii) when the essence of a certain right is at issue; while moreover it is so that the margin of appreciation is limited by (iv) the precautionary principle employed by the ECtHR.

Ad (i) No margin of appreciation if the State makes insufficient effort and enacts ineffective measures

375. The first reason why the State cannot be allowed to base its argument on the margin of appreciation as is evident from the judgements of the ECtHR is that the State is making insufficient effort and is not enacting the correct measures in order to make its contribution to solving the climate problem. In order to base its argument on the margin of appreciation, the measures chosen must in fact reflect sufficient effort on the part of the State, and the measures must be adequate. That is now clearly not the case.

376. An example in which it is apparent that the ECtHR is not satisfied with the mere fact that a state is making efforts to prevent a violation of fundamental rights is the judgement in the case Dees v. Hungary that has already been cited in the summons under no. 247. That case involved a situation in which a decision was made to charge tolls on a motorway, with the consequence that many lorries took a detour on a nearby road in order to avoid the toll and in doing so drove past the house of the plaintiff, through which the plaintiff experienced considerable nuisance and air pollution. He claimed that his rights under article 8 of the ECHR had been violated.

377. The decision to charge a toll was made by the private party that owned and operated the motorway. Thus a horizontal violation was involved here, so that the Hungarian state was sued for having neglected its positive obligations.

378. The Hungarian government had already enacted many nuisance-reducing measures in order to relieve the plaintiff, such as stimulating a toll reduction, enacting speed limits and placing traffic lights in order to make the detour unattractive to freight traffic, a measure excluding the heaviest lorries, and constructing three other roads in order to relieve the pressure on the detour, as

well as assigning more police to patrol the detour. However, these measures turned out to be insufficient to be able to guarantee undisturbed enjoyment of private life.

379. The Court ruled that, in spite of the fact that the situation was complex and many measures had already been enacted by the government, there was still a violation of article 8 of the ECHR, even though the Hungarian government had a margin of appreciation. The Court considered as follows:

"In the present case the State was called on to balance between the interests of road-users and those of the inhabitants of the surrounding areas. The Court recognises the complexity of the State's tasks in handling infrastructural issues, such as the present one, where measures requiring considerable time and resources may be necessary. It observes nevertheless that the measures which were taken by the authorities consistently proved to be insufficient, as a result of which the applicant was exposed to excessive noise disturbance over a substantial period of time […] [D]espite the State's efforts to slow down and reorganise traffic in the neighbourhood, a situation involving substantial traffic noise in the applicant's street prevailed at least until and including May 2003 when two measuring sessions established noise values respectively 15% and 12% above the statutory ones […] In these circumstances, the Court considers that there existed a direct and serious nuisance which affected the street in which the applicant lives and prevented him from enjoying his home in the material period. It finds that the respondent State has failed to discharge its positive obligation to guarantee the applicant's right to respect for his home and private life. Accordingly, there has been a violation of Article 8 of the Convention." (underlining added)

From this judgement it is evident that it is of paramount importance whether it can be determined that a state has made those efforts that are necessary to be able to protect fundamental rights. In the event that the state in question makes insufficient efforts or enacts the wrong measures, then there is a violation of the ECHR.

380. Urgenda c.s. take the position that the efforts that the Dutch State has made up to the present with respect to Dutch emission reduction are insufficient to be able to make an adequate contribution to preventing the violation of fundamental rights implicit in a dangerous climate change of 2 degrees. Urgenda c.s. have already

explained this in detail.

381. As long as the moment of sufficient effort with the correct measures has not been reached, the State can be granted no margin of appreciation. That moment will only be reached when the State adopts the emission reduction objectives requested by Urgenda c.s. The State then has a margin of discretion in policymaking to choose the measures with which these objectives are to be achieved. The condition does however apply that the measures chosen must in fact achieve the necessary emission reductions in a timely manner.

Ad (ii) No margin of appreciation if the State violates its own norms

382. The second reason why the State cannot be granted a margin of appreciation is that according to the ECtHR there is very little additional room if the State does not take its own norms into consideration. Barkhuysen and Diepenhorst have this to say:

"... that in the context of testing against article 8 of the ECHR, the ECtHR is especially critical when states do not take their own procedural and material (environmental) norms into consideration in a case [...] According to the judgement of the Court, treaty states have, in addition to the obligation to respect such norms themselves, the (positive) obligation to also enforce these norms in a sound manner with respect to third parties who infringe upon them. The Court bases this enforcement obligation partly on the principle recurring constantly in its case law that the ECHR must be explained and applied in such a way that the rights that it embodies are protected effectively."[152]

383. Farther along, Barkhuysen and Diepenhorst continue:

"The judgement in the Moreno Gomez case confirms that in the context of testing against article 8 of the ECHR, the ECtHR is especially critical when states do not take their own procedural and material environmental norms and other norms into consideration in a case (this was already evident earlier in Hatton I and II, in which

[152] Barkhuysen and Diepenhorst, 'Overheidsaansprakelijkheid voor gebrekkige naleving van milieu- en veiligheidsvoorschriften op basis van nationaal recht en het EVRM' (Government Liability for Inadequate Compliance with Environmental and Safety Regulations Based on National Laws and the ECHR), p.295, in the volume *Recht realiseren: Bijdragen rond het thema adequate naleving van rechtsregels* (Putting Law into Practice: Contributions on the Theme of Adequate Compliance with Rules of Law), E.M. Meijers Institute, 2005.

there was however no such violation of national norms). In such a situation – that also occurs in the case of Moreno Gomez in which violations of municipal noise norms were violated for years – the Court is not inclined to allow states a liberal margin of appreciation of their own with respect to a possible weighing of interests."[153]

384. In the case of Dees v. Hungary discussed above, the ECtHR referred likewise to the Moreno Gomez case, and in the discussion above of the Dees case it was also evident that the Court attributed considerable value to the fact that it had been determined that despite the many nuisance-reducing measures enacted by the government, the nuisance remained at a higher level than the legal norm: *"two measuring sessions established noise values respectively 15% and 12% above the statutory ones"*. Not satisfying a norm defined by the government itself means that little remains of the margin of appreciation.

385. Urgenda c.s. are of the opinion that the two-degree norm is a norm that aims to offer protection against an infringement of the right to health and life as intended in the ECHR. Even if it were not a legal norm (via the direct applicability of the UNFCCC into the Dutch legal system), then it is at least a norm of proper social conduct that the State has formulated and that it has to observe in the context of proper social conduct.

386. In that connection, reference is made back to the statement made by Urgenda c.s. earlier in this statement of reply in chapter 8.1.1, namely that the ECtHR also uses 'soft law' to give form to the obligations of states. Thus the Court makes use inter alia of non-legally-binding norms of the World Health Organization (WHO) in interpreting article 8 of the ECHR (for example the noise norms of the WHO). This must surely also apply to the 2-degree norm. Moreover, as has been further supported in the summons and in this statement of reply, the world is threatening to head for a warming of more than 4 degrees. That is not exceeding the norm by 15% or 12% (as with the noise norm in the Dees case), but rather it exceeds the national and international two-degree norm by more than 100%.

387. Besides, the two-degree norm also acquired a clear relationship with the protection of human rights when in Cancun the Netherlands, along with all other signatory states of the UNFCCC, decided that warming of more than 2 degrees is a dangerous climate change, considering in that decision the fact that climate change

[153] Ibid., p.296.

is a worldwide threat to human rights (see also chapter 8.1.2).

388. Since the actions of the State up to the present day do not satisfy the requirements of the Dutch contribution to emissions reduction needed to stay below the two-degree limit, the State is violating its own norm, and for that reason there is no room for a margin of appreciation to deviate from the two-degree norm, all the more considering the severity of the consequences in the event that this deviation from the two-degree norm is allowed.

389. With this, the State is also deprived of its freedom of policymaking, and not wrongly so, because deciding on the two-degree norm has already been a policy choice in which the risks, the scientific certainties and uncertainties, the possibilities of adaptation, and other such factors have already been considered. The State also can make no other assessment in this because the State has also committed itself to it in the context of international negotiations and there is no indication that the State would want to come to another assessment. Also in its statement of defence, the State correctly stands by the two-degree limit.

390. The two-degree norm can only be effectively satisfied through sufficiently reducing emissions and not with any adaptation measure whatsoever. Adaptation measures are unsuitable for preventing a temperature rise because they are directed at adapting to a temperature rise. Adaptation measures do not serve the two-degree norm in any way whatsoever.

391. The State therefore states erroneously in section 10.6 of its statement of defence that Urgenda c.s. have not accounted sufficiently for the possibilities of adaptation. In relationship to the violation of a norm, Urgenda c.s. also do not have to account for the possibility of these measures because the measures are not adequate to prevent the violation of the norm. If the State means to say with its reference to adaptation measures that the State can also protect the right to health and life in the event that the average warming in this century increases by three, four, five, or six degrees, Urgenda c.s. contest the State's right to violate the norm and refer furthermore once again to the many limitations that are inherent in adaptation and that stand in the way of effective protection against warming of three, four, five, or six degrees (see chapter 10.5).

Ad (iii) No margin of appreciation because the core of articles 2 and 8 of the ECHR is violated

392. The third reason why the margin of appreciation is limited is that, as a consequence of climate change, the core of article 2 and article 8 of the ECHR is affected because, due to the severity and comprehensive nature of the danger, the complete physical environment in which human life goes on and on which human health depends is changed and becomes more dangerous, while no one will be able to escape from this danger. Urgenda c.s. cite once again the words of the Council of Europe that climate change has a direct effect on the life and the health of all people and that climate change affects the basic elements, the foundation, of human life.

Ad (iv) No margin of appreciation in case of a violation of the precautionary principle

393. Finally, part of the obligation of the State to enact adequate measures against the (threat of a) violation is that, based on the case law of the ECtHR, the State has to consider the precautionary principle. Scientific uncertainties can therefore not simply be brought forward by the State as a reason to forgo enacting effective measures. Barkhuysen and Van Emmerik state the following concerning the precautionary principle employed by the ECtHR:

"In the case of Tatar v. Romania, the Court derives the so-called precautionary principle expressly from the right to a private life, as guaranteed by article 8 of the ECHR [...] An important question is what exactly the Court understands the precautionary principle to mean. From the verdict, only a global definition can be deduced that appears to be employed by the Court. From this it follows that based on the precautionary principle the absence of certainty concerning the occurrence of environmental damage in view of the scientific and technological knowledge of a given moment cannot justify a state's refraining from effective and proportional measures that are directed at preventing serious and irreversible environmental damage."[154] [155]

[154] Barkhuysen and Van Emmerik, *Het EVRM en het Nederlandse bestuursrecht* (The ECHR and Dutch Administrative Law), 2011, p.88.

[155] In applying the precautionary principle in the Tatar case, the Court referred inter alia to the application of the precautionary principle in the Rio de Janeiro declaration of 1992, cited the precautionary passage from a verdict of the International Court of Justice, and also refers to the codification of the precautionary principle in EU law and the use by the European Court of Justice

394. Thus according to the ECtHR the precautionary principle means that, in the case of severe environmental damage, the State must enact adequate measures even in those situations in which there is scientific uncertainty.

395. The State however appears to hold another opinion and states under section 5.1 of its statement of defence that it endorses the findings of the IPCC but also must take into account the uncertainties that the IPCC indicates. The State admits that this is not a reason to do nothing, but that those uncertainties do make it necessary for the State to limit itself to what it calls 'no regret' measures. With this, the State apparently bases its argument on the margin of appreciation and supports this by pleading the uncertainties that the IPCC indicates.

396. The State gives no further reasons for its position, and it also remains unclear which uncertainties the State alludes to; yet whatever they may be, there appears to be no legal point of departure whatsoever under the ECHR for the position that the State should be able to get by with enacting 'no regret' measures and by doing so should be allowed to deviate from the criterion maintained by the ECtHR that sufficient efforts and adequate measures may be expected of the State in order to protect fundamental rights.

397. Moreover, even in the event that one would in fact employ this 'no regret' criterion, it must hold that the emission reductions claimed by Urgenda c.s. for 2020 qualify as 'no regret' measures. The reductions claimed as of 2020 are after all only the first step toward arriving at the very far-reaching reductions of 80–95% considered necessary by the State. The reductions claimed by Urgenda c.s. will thus have to take place one way or the other, will not be superfluous, and thus count as a 'no regret' measure. But once again, 'no regret' is a standard or test that is not used by the ECtHR.

398. The acknowledgement by the State that a reduction of 80–95% by 2050 is needed follows naturally from the fact that the State too acknowledges that with respect to science, there is no relevant uncertainty concerning the question whether climate change is caused by greenhouse gases or whether an increasing concentration of greenhouse gases presents a danger. For that reason too, the State's defence of 'no regret' and the concomitant reliance on the margin of appreciation cannot hold:

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of the precautionary principle. See Barkhuysen and Onrust, *De betekenis van het voorzorgsbeginsel voor de Nederlandse (milieu)rechtspraktijk* (The Significance of the Precautionary Principle for the Practice of Dutch Environmental Law), 2010, p.62.

science is not uncertain but in fact very certain concerning the causal relationship between the warming of the earth and the human emission of greenhouse gases. Science is also correspondingly certain about the necessity of the reductions claimed by Urgenda c.s.

399. Thus a margin of appreciation with respect to scientific certainties is ruled out, while the scientific uncertainties are covered by the State's obligation to apply the precautionary principle. In addition to this, scientific uncertainty as to who will be subject to which climate risk, or when, is just as insignificant an obstacle to basing a claim on the ECHR as it is to basing it on tort law. Under the ECHR as well, it is sufficient to be able to show that there is a real threat of generic endangerment; under the ECHR as well there is in fact no requirement to show individual causality in order to rely on the ECHR. For that reason, with respect to the ECHR, just as with tort law, only the science that has to do with that generic danger has to be taken into consideration.[156] That also follows from the Tatar case discussed above.

400. In the Tatar case (just as in the Taskin case which has already been discussed above in this statement), the Court made a distinction between generic and individual causality. The Court determined on the one hand that there had been a violation of article 8 of the ECHR by Romania, as there was enough evidence that the precautionary principle had not been sufficiently taken into consideration by the national authorities. Because of this, there was a generic causal relationship between Tatar's complaints and the actions of Romania. On the other hand, it was true that scientific evidence for the existence of an individual causal relationship between Tatar's complaints and the actions of the authorities was not to be had. Thus in addition to the determination of the violation of the ECHR, the Court could not also proceed to awarding damages because the requirement of *condicio sine qua non* could not be established by Tatar. Stated briefly, precautionary measures on the part of the State are thus in fact mandatory and can be compelled via the ECHR, but if there is a violation by the State of that obligation, the individual affected does not automatically have the right to claim damages. In the same

[156] As has already been explained above in this statement, the claims of Urgenda c.s. involve generic causality and not individual causality. If there is scientific uncertainty concerning individual causality, that is not of interest for this case, thus a reason why that scientific uncertainty can be ignored.

sense, see also Barkhuysen and Onrust.[157]

401. In conclusion, on the point of precautionary measures to be taken versus the margin of appreciation advocated by the State and 'no regret' measures on account of supposed uncertainties, Urgenda c.s. state that this reliance by the State on the margin of appreciation does not hold for the reasons given above. The margin of appreciation does not have the scope to bring the State to a position in which it does not have to take adequate measures in the event that there is some degree of scientific uncertainty concerning a serious environmental danger. To the contrary, when there is scientific uncertainty about a serious environmental danger, the State ought to apply the precautionary principle and put it into practice in the measures taken. Furthermore, the scientific evidence is firmly established, or at least more than certain enough on the points that are relevant to the claims of Urgenda c.s., and for this reason as well the State is not entitled to rely on the margin of appreciation.

8.3.3 An example of how the Supreme Court handles the margin of appreciation

402. As has been explained above, it is the national courts that are supposed to safeguard compliance with the obligations of the ECHR. An example of national judicial review of the weighing of interests by the State is the Supreme Court decision of 14 December 2012,[158] in which the court ruled that the Dutch sanction regulation against Iranian students and scientists (arising from the UN knowledge embargo against Iran for prevention of nuclear proliferation) made an unnecessary distinction between Iranian and non-Iranian subjects and thus was in conflict with the ECHR's prohibition of discrimination. In that decision, the Supreme Court made it clear that the grounds argued by the State to justify a limitation of the ECHR – in that case the alleged violation of the prohibition of discrimination – must not be judged and weighed marginally with respect to their legal merits, but rather strictly, and if the State does not satisfy its burden of proof in this regard, the State ought to be found guilty. Citing the Supreme Court in this decision:

"3.8.1.
Finally it is necessary to judge whether it has been convincingly demonstrated that

[157] Barkhuysen and Onrust, *De betekenis van het voorzorgsbeginsel voor de Nederlandse (milieu)rechtspraktijk* (The Significance of the Precautionary Principle for the Practice of Dutch Environmental Law), 2010, p.63.
[158] ECLI:NL:HR:2012:BX8351.

the State has done everything possible to harmonize the conflicting obligations, in particular on the one hand the obligation to carry out Resolution 1737, and on the other hand the prohibition of discrimination (for this, see the final part of 3.6.4). The State argues in this context that the different ways in which the obligations are carried out in other countries [without violating the prohibition of discrimination, ed.] are not straightforwardly applicable in the Netherlands. After all, in carrying out a resolution, one must take the particulars of the national laws into account. Thus in the Netherlands the higher education law – and the right to education that is anchored in it – stands in the way of a general [i.e. not discriminatory, ed.] screening of students. Moreover the State points out that the approach chosen in the Netherlands is not necessarily less advantageous for persons with the Iranian nationality than the approach followed in other countries. Finally, the State argues that a general regulation would be nearly impossible to enforce (memorandum of oral pleading in appeal, no. 20, 20).” (underlining added)

After this summary of the State’s defence, the Supreme Court continues as follows:

3.8.2.
With this argument, the State has not sufficiently demonstrated that everything possible has been done to harmonize the international obligations resting upon it. This is also implausible in other ways. Thus there is insufficient insight into the motivations of the Dutch legislature to consider measures taken elsewhere that are not based on a distinction between Iranian and non-Iranian subjects, and inadequate to carrying out Resolution 1737 in the Netherlands, to be appropriate or inappropriate. The State has furthermore not made it plausible that, and why, a prohibition of specialized education and training given to persons of the Iranian nationality, as laid down in the Sanctions Regulation, is a necessary and proportional measure to prevent proliferation-sensitive activities by Iran and the development of systems for delivering nuclear weapons. Along with this, allowance is made for the fact that this prohibition affects all people with the Iranian nationality residing in the Netherlands.

It has not been made clear enough why in this context a choice has not been made for the possibility of a general screening of students who follow or wish to follow the training in question. There is no insight given into the possibilities and the limitations of such an approach, and in particular into the considerations underlying the choice to set aside the possibility of providing this with a legal basis, nor into the costs that would have been incurred in enforcing such a screening. Without

further explanation, the argument brought forward by the State that the measure chosen is not necessarily less advantageous than the alternative puts insufficient weight on the scales on the other side from the unmistakably stigmatizing effect of a discriminatory measure such as that in question." (underlining added)

403. From this Supreme Court decision, it is evident (once again) that the State needs to provide arguments and evidence in order to justify a limitation of the ECHR through reliance on the margin of appreciation. In this case the Supreme Court also values the fact that it is evident that other countries, unlike the Netherlands, were in fact able to comply with the UN resolution without violating the fundamental rights at issue. Urgenda c.s. consider this also to be important in the case at hand.

404. The fact is that it is not evident from the State's arguments in its statement of defence that the State has done everything possible to satisfy its obligations under the ECHR. With those obligations in mind, the State has put little if any effort into investigating ways available to it that *could* lead to a sufficient reduction of emissions by 2020, as for example Denmark and Germany have in fact done.

405. Both Denmark and Germany have set a reduction goal of 40% by 2020 for themselves. The Danish government gives some of the reasons for the goal of a 40% reduction by 2020 as follows in its report of August 2013 (**exhibit U86**, p.7):[159]

"Science recommends that developed countries reduce their total greenhouse gas emissions by 80-95% by 2050 […] Setting a good example shall be Denmark's way to encourage the rest of the world to join global efforts to combat climate change. Denmark is a wealthy country and therefore can afford to take the lead [...] The Danish government's strategy to put Denmark on track for the 2050 target includes an interim target of a 40% reduction by 2020 in all Danish greenhouse gas emissions. Opting for this target means that Denmark will live up to the scientist recommendations for wealthy countries with high emissions of greenhouse gases ...".

406. The government of Germany has also confirmed in its report of 2012 (**exhibit U87**, p.19)[160] that it applies a reduction goal of 40% by 2020:

[159] 'The Danish Climate Policy Plan: Towards a Low Carbon Society', August 2013, p.7.
[160] 'The National Sustainable Development Strategy: 2012 Progress Report', p.19.

"In line with its decisions for an accelerated implementation of the nation's Energy Concept, the Federal Government reaffirmed its commitment to reduce Germany's greenhouse gas emissions by 40% from 1990 levels by 2020, 55% by 2030, 70% by 2040 and 80-95% by 2050."[161]

407. These examples from our neighbouring countries bring up certain questions. Why are Denmark and Germany able to take on this task of a 40% reduction by 2020, and why should the Netherlands not be able to do the same? Why are these countries able to create sufficient public support among their citizens for reductions of this magnitude, and why does the Netherlands not work actively at creating such public support? Why does the Netherlands in the light of these examples limit itself to a reduction of 16% by 2020, and why is this a necessary, suitable, and proportional measure? Why can there not be a reduction of 25-40%, or 17%, or 19%? In other words, why can the Netherlands actually not reduce by more than 16% by 2020? This is the kind of insight that the State will have to provide in these proceedings in order to be able to satisfy its burden of proof. In this connection, see also Spier:

"If courts would come into the picture, they should require a very solid underpinning for the submission that a country is unable to realize more reductions than it is willing to achieve."[162]

8.3.4 Conclusion concerning the margin of appreciation

408. It follows from the arguments above that, based on multiple grounds, the State has no margin of appreciation when considering the question of what amount of emissions must be reduced and within what time interval. The fact is that this question has been answered through the two-degree norm and by the fact that those efforts ought to be made that may be expected in connection with that norm, because only then can there be an adequate contribution to the protection of fundamental rights. On the other hand, the State does have a margin of

[161] Also on p.19 of the report, the German government underlines the binding character of the two-degree norm: *"The two-degree objective was recognised by the international community as binding at the United Nations Climate Change Conference held in Cancún, Mexico, in 2010, and is therefore the guiding principle underlying both the international and the German approaches to climate policy."*

[162] Jaap Spier and Ulrich Magnus, *Climate Change Remedies, Injunctive Relief and Criminal Law Responses*, 2014, p.60.

appreciation concerning the question in which way the emission reductions that have to be accomplished must be achieved (sun, wind, nuclear, etc.)

409. Deviating from the path of emission reductions that are needed to stay below the two-degree limit is a violation of the law, and the margin of appreciation is not intended as a policy instrument with which the State can justify the limitation of the ECHR or contributing to a violation of it.

8.4 The consequences of the violation of articles 2 and 8 of the EHCR

410. Urgenda c.s. have shown in the arguments above that articles 2 and 8 have been violated, that there is no justification for this, and that the margin of appreciation cannot stand in the way of awarding the claims of Urgenda c.s. From the case law of the ECtHR one can infer what may be expected of a state that acts in accordance with the ECHR in the event of a violation of the ECHR as a result of environmental dangers.

411. In the Tatar case, the ECtHR indicates what may be expected of a government that is acting adequately in relation to article 8 of the ECHR (see **exhibit U88**):[163]

"The Court observed that pollution could interfere with a person's private and family life by harming his or her well-being, and that the State had a duty to ensure the protection of its citizens by regulating the authorising, setting-up, operating, safety and monitoring of industrial activities, especially activities that were dangerous for the environment and human health." (underlining added)

412. Here the ECtHR indicates that one may expect of the State that it would enact regulations in order to prevent industrial activities from threatening the enjoyment of rights protected by the ECHR.

413 The Court confirms this explicitly once again in the case Oneryildiz v. Turkey, in which article 2 of the ECHR was at issue. Citing the Court:

"The positive obligation to take all appropriate steps to safeguard life for the purposes of Article 2 entails above all a primary duty on the State to put in place a legislative and administrative framework designed to provide effective deterrence

[163] The verdict of the Court in the Tatar case is available only in French; for this reason, Urgenda c.s. have filed the Court's English press release as evidence and cite from it.

against threats to the right to life [...] This obligation indisputably applies in the particular context of dangerous activities, where, in addition, special emphasis must be placed on regulations geared to the special features of the activity in question, particularly with regard to the level of the potential risk to human lives. They must govern the licensing, setting up, operation, security and supervision of the activity and must make it compulsory for all those concerned to take practical measures to ensure the effective protection of citizens whose lives might be endangered by the inherent risks."[164] (underlining added)

414. Thus legal and regulatory initiatives, such as the application of permits, may be expected of a government that is acting adequately, all done as needed in a way that will achieve an effective protection of fundamental rights.

415. It has already been pointed out in the summons that the State also has this possibility of regulating emissions via the granting of permits and the revision of existing permits (see paragraphs 294 and 295 of the summons). The State however does not make use of that possibility, and this is a violation of its obligation under the ECHR because in this way it fails to offer effective protection against the violation.

416. Finally, on its website the ECtHR makes it once again explicitly clear that it sees as one of its instruments the fact that it can convict states on the basis of the ECHR for violating an obligation to create new legislation or modify existing legislation.

***"Adopting laws or amending legislation**. Despite of the margin of appreciation which contracting states have when deciding how to secure the convention rights (see above), the ECHR may entail a positive obligation to pass certain laws in order to ensure an effective protection of the rights enshrined in the Convention."*[165]

[164] ECtHR, 30 November 2004, no. 48939/99, points 89 and 90.

[165] http://echr-online.com/ On the website an example is given by the ECtHR immediately following this citation: *"In the case X and Y v. The Netherlands, the Court dealt with the effective protection of the right to private life under Art. 8. The applicant was a mentally disabled girl who lived in a residence for disabled persons. The son of the director of this privately run residence forced her to have sexual intercourse with him. According to Dutch law in force at the material time, taking advantage of a person's mental disability for sexual reasons did not constitute a punishable act. There was, however, a possibility to file a civil action and gain compensation. The European Court of Human Rights held that the effective protection of the right to private life required a criminal sanction in cases like the one at hand."*

417. In addition to these legislative and regulatory initiatives that may be expected of a state in case of a violation of the ECHR, the obligation also rests upon the state to adequately (continue to) inform and warn its citizens who are exposed to the threat of a violation because of a serious environmental danger, as needed to avert the danger. In the summons (paragraphs 246–47) there was already reference to various judgements of the ECtHR in which this obligation to inform and to warn is established; in these judgements it is evident that this obligation already arises at the moment that there is an increased risk of a violation of rights under the ECHR. In these proceedings Urgenda c.s. have already explained in detail that dangerous climate change brings an increased risk and that with this there is in fact and based on the case law of the ECtHR a sufficiently concrete and direct danger of a violation of the rights under the ECHR of Urgenda c.s. and future generations.

8.5 Conclusion with respect to human rights

418. In the explanation presented above by Urgenda c.s., inter alia the following has been shown:
    - The national courts have the primary task of safeguarding the compliance by a state with its obligations under the ECHR and of imposing additional obligations on the state as needed. Review by the ECtHR is subsidiary to this.
    - The nuisance and the (life-threatening) danger of warming of the earth by more than 2 degrees falls, based on the scientific facts discussed, within the scope of article 2 and article 8 of the ECHR. The nuisance and the danger are sufficiently severe, and they directly affect the lives, the health, and the family life of Urgenda c.s. and the future generations of Dutch citizens.
    - The two-degree norm is important in explaining the obligations of the State under articles 2 and 8 of the ECHR, even if this norm is only 'soft law'. Because of this, the (threat of) exceeding the two-degree norm is equivalent to a (threat of a) violation of articles 2 and 8 of the ECHR.
    - The Council of Europe, the international community of countries, the UN Human Rights Council, and the European Court of Justice have all assumed that climate change is a direct danger to the enjoyment of human rights worldwide.
    - The delays in the climate system do not negate the directness of the danger caused by present-day actions.
    - For the directness of the danger, it is sufficient that there is a general danger that has a sufficiently close connection with fundamental rights (see the Taskin and Tatar cases).

- The ECHR is a living instrument, and the danger posed by dangerous climate change to life and health and the right of an undisturbed family life is so great and comprehensive that an interpretation of the ECHR must be advocated that contributes to the protection of the fundamental rights of Urgenda c.s. and future generations.
- The State has neither stated nor shown that it has satisfied the requirements laid down in article 8 paragraph 2. It has not been made clear why the present reduction goal for 2020 is a necessary, proportional, and suitable measure that serves the general good and that justifies a limitation of the rights of Urgenda c.s. and a limitation of the rights of future generations.
- Because article 2 does not have grounds for an exception and because a 'fair balance' argument is therefore not relevant with respect to the right to life, the violation of this article must also stand.
- In choosing the measures to correct the violation of articles 2 and 8, the State lacks for multiple reasons the margin of appreciation that it assumes that it has. The margin of appreciation is not an absolute right, and its scope depends on many circumstances. The circumstances of this case all indicate that the State may not be granted a margin of appreciation except for the manner in which the State will give form to the emission reductions claimed by Urgenda c.s.
- Obligations to enact new legislation and regulations or to revise existing regulations and obligations with respect to warning and informing those who are exposed to great environmental danger can be imposed as needed by the courts in order to guarantee the protection of fundamental rights.

8.6 An additional remark concerning relying on the precautionary principle

419. Urgenda c.s. rely in a broader context on the precautionary principle and not only, as discussed above, in relationship to the limitation of the margin of appreciation. For this reason, Urgenda c.s. wish to supplement the summons with the following remark.

420. It is evident from the summons that Urgenda c.s. rely on the precautionary principle in a broader context.[166] They do this in order to strengthen their contention that the State is acting unlawfully against them and that the State bears an obligation to carry out the emission reductions that are claimed by Urgenda c.s.

[166] See inter alia paragraphs 188, 256, 257, 366, and 376.

and that Urgenda c.s. consider necessary to prevent great danger.

421. In that context, Urgenda c.s. have referred in the summons inter alia (paragraph 188) to the precautionary principle as it is included in the UNFCCC (article 3.3 of the treaty). It is evident from this that the treaty states have determined in relation to specifically the danger of greenhouse gases that the precautionary principle must be taken into consideration. Via the indicative effect of the UNFCCC into the Dutch legal order that has already been discussed in this statement of reply, the precautionary principle ought to be included in the interpretation of the open norm of proper social conduct. The precautionary principle is thus also applicable even in the event that a violation of article 8 of the ECHR would not be established.[167]

422. Also via the pathways of the EU treaties and the case law of the European Court of Justice, the precautionary principle that is established in article 168 and article 191 of the Treaty on the Functioning of the European Union (TFEU) finds its way into the Dutch legal order and the open norm of proper social conduct (see also paragraphs 256 and 257 of the summons).

423. After all, various guidelines and decisions of the EU are applicable to climate policy (see also paragraph 6.19 of the statement of defence), in which it has been established that the approach to climate change is a EU matter as well as a national matter. In that case the State has to take into consideration those obligations that apply to EU institutions as stated in the EU treaties, such as the precautionary principle that is to be employed, as being obligations of its own. That follows from article 4 paragraph 3 of the Treaty on European Union which, contrary to what is claimed by the State, is indeed directed at the State: *"The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union. The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives."* (underlining added)

[167] In the event that a violation of article 8 is in fact established, the precautionary principle will affect the Dutch legal order directly. After all, according to the ECtHR, the precautionary principle must be read into article 8 of the ECHR and this article has a direct effect via articles 93 and 94 of the Constitution.

424. One of the tasks and goals of the Union referred to in article 4 paragraph 3 of the Treaty on European Union is to act *"in order to meet this objective, [that] the overall global annual mean surface temperature increase should not exceed 2 °C above pre-industrial levels."* This follows from paragraphs 2 and 21 of the 'Effort Sharing Decision' of 23 April 2009, the decision also referred to by the State in paragraph 6.19 of its statement of defence and in which the target of 16% reduction by 2020 is established for the Netherlands (and 20% by 2020 for the entire EU collectively).

425. In implementing that decision, the State therefore ought to pay attention to the precautionary principle, and it is also able to do so. In the same decision it is in fact explicitly specified (paragraph 17) that the decision allows stricter national targets. Because of this, the responsibility for more emission reduction than is set down in the decision continues to rest upon the national states. In this case the State is addressed by Urgenda c.s. with respect to that responsibility, and the decision also explicitly offers room for this.

426. Contrary to what the State has contended in paragraph 11.3 of its statement of defence in connection with the reliance by Urgenda c.s. on the precautionary principle (at least as far as the foundation of this principle in EU law is concerned), there is no indication whatsoever that the European Commission itself has paid enough attention in its policymaking to the application of the precautionary principle. To the contrary, as Urgenda c.s. have stated in inter alia paragraph 209 of the summons, the Commission itself expressly elucidated in 2010 to the EU Parliament that the target of 20% by 2020 is too little to achieve the 2-degree objective. The EESC,[168] in their 2009 evaluation of the draft decision, also advised that 20% by 2020 is not proportional to the 2-degree objective and that the decision must therefore set down a higher reduction percentage for 2020 (see likewise paragraph 209 of the summons).

427. That is also why Urgenda c.s. have stated in the paragraph 257 of the summons that even by a marginal test it is evident that the TFEU fundamental rights mentioned there and the precautionary principle embodied in them have not been taken sufficiently into consideration. The Commission itself in fact states this. Whereas the TFEU mentions a high level of protection of the environment and health (articles 168 and 191 of the TFEU), the EU has ultimately not even taken

[168] The European Economic and Social Committee, the advisory body of the European Parliament and the Council (see further at paragraph 209 of the summons).

the minimal level of 25% by 2020 as a starting point, thereby ultimately also recognizing that it is not enough. The fact that it is not enough follows also from the Emission Gap reports of the UNEP to be discussed below in chapter 10. Also in chapter 10, it will be made clear that taking a target needed by 2020 and shifting it to 2030 is not a solution to the problem and that furthermore a possible target of 40% by 2030 is inadequate.

428. Without detracting from the reliance by Urgenda c.s. on the precautionary principle via (in this order) the ECHR, the UNFCCC, and finally the EU treaties, the plaintiffs are of the opinion that for most parts of its claim it is unnecessary to base their arguments on the precautionary principle and that it is sufficient to base them on the prevention principle (i.e. the Cellar Hatch criteria). To quote the words of Michael Faure in 'Climate Change as a Challenge for Jurists':

"While actions in the past to counteract climate change were still based on the precautionary principle, that appears nowadays to have been left behind. There appears to no longer be any 'scientific uncertainty' concerning the possible consequences (as a requirement for applying this principle). It is therefore rather the prevention principle that now compels action to oppose further climate change."[169]

429. Along with Faure, Urgenda c.s. are of the opinion that since the establishment in 1992 of the UNFCCC, science has developed so much further and gives so much more certainty concerning the causal relationship between the emission of greenhouse gases, the warming of the earth, and the dangers that then are the result, that reliance on the precautionary principle is as good as outdated for many areas of climate science. As the president of the US National Academy of Sciences summarized the scientific status quo in a statement before the US House of Representatives:

"... we understand the mechanisms of CO_2 and climate better than we do of what causes lung cancer [..] In fact, it is fair to say that global warming may be the most carefully and fully studied scientific topic in human history."[170]

[169] Michael Faure, 'Klimaatverandering als uitdaging voor juristen' (Climate Change as a Challenge for Jurists), *NJB* 2007, no. 45/46, p.2859.
[170] Quoted in Jaap Spier and Ulrich Magnus, *Climate Change Remedies, Injunctive Relief and Criminal Law Responses*, 2014, p.12.

430. Urgenda c.s. thus rely primarily on the prevention principle, but for those parts of the reasoning by Urgenda c.s. that are scientifically less certain, such as the question about the tipping points in the climate that could already be reached in this century, the precautionary principle is definitely important.

431. As regards the threat of tipping points, the catastrophic severity of such events justifies in every respect the possibility of basing arguments on the precautionary principle. In other words, if the threat of tipping points does not justify relying on the precautionary principle, what would?

432. In relation to that question, it can be pointed out that the European Court of Justice has already repeatedly tested the question concerning the precautionary principle[171] and has accepted the reliance on the precautionary principle in a large number of cases, and these were cases in which the threatening danger was definitely not more severe compared to the danger of tipping points in the climate, nor was the scientific evidence more certain.[172] The European Court of Justice has furthermore already explicitly ruled that measures enacted with respect to climate change justify an infringement of the regulations of the internal market because, according to the Court, the interests of life and health that are served by climate measures weigh more heavily than the financial interests of the market.[173]

433. Application of the precautionary principle thus also appears to be indicated, and it can also significantly reduce the likelihood of tipping points. This requires first of all that warming of the earth by 2 degrees would be prevented with a certainty not of 50% but would 'almost certainly' be prevented, and furthermore that a possibility of limiting warming to a maximum of 1.5 degrees could be kept open, a modified

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[171] Evaluation relative to the question whether reliance on the precautionary principle for protection of the environment and health justifies an infringement of the regulations of the internal EU market. While it is true that this test is not relevant in this case, Urgenda c.s. still wish to point out these verdicts because it is evident from them that more and more weight is being given to the precautionary principle and that it is not unusual for a court to judge that the interests of health and environment are more important than economic interests. See further the literature cited in the following note and the verdicts of the Court mentioned there.

[172] See Barkhuysen and Onrust, *De betekenis van het voorzorgsbeginsel voor de Nederlandse (milieu)rechtspraktijk* (The Significance of the Precautionary Principle for the Practice of Dutch Environmental Law), 2010, p.56–57, and for the limited scientific certainty see for example the Monsanto case in which the Court states that the State can even take precautionary measures in the event that (point 112) *"it proves impossible to carry out as full a risk assessment as possible in the particular circumstances of a given case because of the inadequate nature of the available scientific data."* See the judgement of the Court, 9 September 2003, case C-236/01, point 112.

[173] See European Court of Justice, case C-379/98 (PreussenElektra), 13 March 2001, points 72–73.

objective that has already been cautiously introduced in the UNFCCC.

434. The necessity of this precaution follows from the fact that, according to the IPCC, certain tipping points are already developing (medium confidence) at the present warming level of 0.8 degrees, such as the tipping point of the melting of Arctic sea ice. According to the IPCC, the risk of tipping points increases disproportionately with further warming of the earth. This was already evident in chapter 4:

"Risks associated with such tipping points become moderate between 0-1°C additional warming, due to early warning signs that both warm-water coral reef and Arctic ecosystems are already experiencing irreversible regime shifts (medium confidence). Risks increase disproportionately as temperature increases between 1-2°C additional warming and become high above 3°C, due to the potential for a large and irreversible sea level rise from ice sheet loss."[174]

435. This indicates that the risk of tipping points (the most catastrophic of all risks) is already disproportionately increased with 2 degrees of warming. For this reason, Urgenda c.s. are of the opinion that, based on the precautionary principle, a path must be chosen that ensures that warming actually remains below 2 degrees and with which the possibility of achieving a 1.5 degree objective – the objective for which the UNFCCC also leaves the door open – remains within reach as well.

436. For these reasons, the primary reduction claim of 40% by 2020 that has been formulated and argued by Urgenda c.s. in the summons, and that is also being applied by Germany and Denmark, not only corresponds to what states themselves have already formulated as being necessary, but it is also the only path that leaves open the possibility of limiting warming to 1.5 degrees. Furthermore, it is the only path that offers an 'almost certain' chance of remaining below 2 degrees of warming.

437. An additional reason to follow the reduction claim of Urgenda c.s. and to apply the precautionary principle is that, as will be further explained in chapter 10.4, higher emission reductions before 2020 are more cost effective than higher emission reductions after 2020. Because of this, the scenario of emission reductions of 25-40% by 2020 claimed by Urgenda c.s. is not only the safest scenario, but it is also the most cost-effective scenario. That is an unusual fact, because it is ordinarily so that enacting additional precautionary measures also costs additional money and

[174] IPCC WGII AR5, Summary for Policymakers, p.12 (exhibit U67).

thus imposes an additional burden on the public treasury. In relation to this, a certain degree of freedom of policymaking is claimed by the State because it decides how those funds are divided. That argument does not hold in this case because the State in fact is wasting public funds by not enacting the reduction measures claimed by Urgenda c.s. As has been said, this will be discussed further in chapter 10.4.

438. To the extent that the legal foundations already brought forward by Urgenda c.s. may be insufficient to motivate the reduction that Urgenda c.s. claim, Urgenda c.s. also rely on the precautionary principle, with consideration of the arguments above, as further support of the contention that their reduction claim must be granted.

CHAPTER 9:
STANDING

439. In its statement of defence, the State also pursues the defence that Urgenda c.s. do not have standing, or at least not to the extent that the Urgenda Foundation bases its claim on the contention that the State is acting unlawfully towards other states and towards the present and/or future inhabitants of these states (Statement of Defence, paragraph 3.9).

440. Concerning the citizens for whom the Urgenda Foundation is acting pursuant to the powers of attorney granted to it, the State likewise contests their standing: according to the State, they would not experience any individual personal damage or any other detriment with respect to their property as a result of the Dutch emissions, so that those emissions are not unlawful towards them and they have insufficient individual personal interest in the provisions that are claimed because of those emissions.

441. Urgenda c.s. will first examine the standing of the Urgenda Foundation.

442. The point of departure of Dutch law is that a party only has standing in the event that it defends something in which it has sufficient personal interest (see article 3:303 of the Civil Code). In other words, someone can only take legal action for his own personal interests, not for those of another party, and only if he himself

actually gains something as a result of his claims.

443. Article 3:305a of the Civil Code makes one exception to this principal guideline: a foundation or association may defend the common and/or collective interests of a diffuse, not clearly defined constituency, provided such a foundation or association actually promotes and protects those common or collective interests pursuant to its statutes (and also further complies with the formal requirements of article 3:305a of the Civil Code). It is true that those common and/or collective interests are not the foundation's or the association's 'own' interests in a strict sense, but the foundation or association may in fact legally defend those interests as though they were its own interests and may call them its own interests in this regard. Based on this article 3:305a of the Civil Code, Urgenda c.s. are of the opinion that the Urgenda Foundation has standing with regard to its claims.

444. If Urgenda c.s. understand the defence of the State correctly, the State in fact does not actually contest that the Urgenda Foundation, considering the interests that it promotes and protects pursuant to its statutes, has standing with regard to the Dutch emissions of greenhouse gases. In the event that Urgenda c.s. have a mistaken understanding of this and the State also contests the standing of the Urgenda Foundation with regard to this aspect of their claim, the following is brought forward.

445. The principal goal of the Urgenda Foundation is (see also the summons, paragraph 31) the stimulation and acceleration of a transition towards a more sustainable society, beginning in the Netherlands. A sustainable society is a society in which economic and societal interactions are organized in a sustainable way, that is, in a way that does not threaten to exhaust or pollute natural resources and that guarantees the availability of those natural resources for the (economic) development of others, including future generations.

446. The concept of a 'sustainable society' is therefore essentially anthropocentric in nature. The concept contains an acknowledgement that human beings and human society depend on the natural resources and ecosystems of the planet for their continued existence, and it draws the conclusion from this that those resources and ecosystems must be used and managed in such a way that the continued existence of human beings and human society also is ensured for the longer term and is not endangered. A society in which the economic activities are organized in such a way that they cause a 'dangerous' climate change that threatens the ecosystems and

with them the human communities is by definition and self-evidently not 'sustainable'.

447. The most specific legal norm on which Urgenda c.s. rely in these proceedings is article 2 of the UNFCCC. The concept of sustainability (in the sense described above) has a central place in that provision as well. After all, it is established in article 2 of the UNFCCC that the signatory states have the legal obligation to limit the concentration level of greenhouse gases in the atmosphere to a level at which a dangerous climate change is prevented, and to do this within a time frame that is adequate to allow ecosystems to adapt in a natural way to the change in climate, to ensure that food production is not endangered, and to allow economic development to continue in a sustainable manner. The interest of a sustainable society that the Urgenda Foundation promotes in pursuance of its statutes is thus mentioned in as many words in the legal norm on which the Urgenda Foundation relies in order to be protected against activities that are not 'sustainable' and threaten to lead to serious dangers for ecosystems and human societies.

448. Article 2 and article 8 of the ECHR as they are interpreted by the ECtHR are anthropocentric in the same sense; they do not serve to protect the environment, but rather to protect people against an unacceptable degradation of the environment in which their existence and their lives take place and that determines their health and the circumstances of their lives. Relying on these provisions thus also lies completely in the direction of the statutory goals of the Urgenda Foundation; these provisions serve to protect the interests that the foundation seeks to defend.

449. Urgenda c.s. are therefore of the opinion that the standing of the Urgenda Foundation cannot seriously be contested.

450. Furthermore, Urgenda c.s. do not see why the Urgenda Foundation may only seek to defend the interests of a sustainable society if and to the extent that Dutch society is involved. If that is what the State means, then a good rationale for that viewpoint is lacking.

451. The fault that the Urgenda Foundation finds with the State is that Dutch greenhouse gas emissions contribute (disproportionately) to a worldwide cumulative causation of a dangerous climate change. Those emissions take place within the Dutch territory, but they spread out beyond the Dutch national borders,

and they thus also have an effect outside of the Dutch territory. When it is accepted that the Urgenda Foundation has standing in their claim against those Dutch emissions because of their contribution to a worldwide unlawful 'endangerment', one cannot see why the Urgenda Foundation should not be allowed to base its claims upon the worldwide consequences of those Dutch emissions, or why the Urgenda Foundation would have standing only as regards the consequences of those emissions for the Netherlands.

452. In any case, it cannot be deduced in any way whatsoever from the statutes of the Urgenda Foundation that the foundation will limit itself *exclusively* to striving for a sustainable society in the Netherlands. To the contrary, its statutes do not state that the Urgenda Foundation pursues the interest of a sustainable Dutch society, but rather the interest of a sustainable society, beginning in the Netherlands.

453. One must after all begin somewhere, and the Urgenda Foundation has chosen to begin in the Netherlands. This is a matter of prioritization, not of limiting itself to the territory of the Netherlands. It is in line with this prioritization that the foundation at this time is suing the Dutch State concerning Dutch emissions.[175]

454. Needless to say, it would be impossible to bring about a "sustainable Dutch society" that stops at the country's borders. In the globalized society of our time with a nearly worldwide economy in which food, energy, and other products are transported across the entire world, in which a failure of a grain crop in Russia or America has immediate consequences for food prices in the Netherlands and in which a war in Iraq influences energy prices in the Netherlands, the concept 'sustainable society' is by its very nature a concept with a global dimension. The State also acknowledges this (see paragraph 163 of the statement of reply and exhibit U78 discussed there). When the Urgenda Foundation promotes and defends a 'sustainable society' in pursuance of its statues, it promotes and defends an interest that by its very nature extends beyond the national borders. The Urgenda

[175] The Urgenda Foundation has no plans to sue other states as well. It is in fact having key documents of these proceedings translated into English, as it is evident that these proceedings are being followed with interest elsewhere as well. From the literature cited by Urgenda c.s., it is already evident that the failure of the (national and international) political process to tackle the climate problem leads more and more strongly to the call for a legal approach and to investigation of the possibilities of such a legal approach. By having its case documents translated, the Urgenda Foundation wants to contribute to this debate and hopefully to promote getting to work on the climate problem. This is completely in line with its goal: get to work first and foremost in the Netherlands, but with an eye to interests elsewhere. The Netherlands is a priority, but it does not stop there.

Foundation can therefore base its claims directed against those emissions on the fact that the Dutch emissions also have consequences outside of the Dutch national borders, and 'foreign' interests therefore also carry weight.

455. Urgenda c.s. conclude that the Urgenda Foundation has standing in its claims. Which (sufficient and case-related) interest the foundation has in each of its claims separately will be explained in the discussion of those claims.

456. Concerning the standing of the individual citizens for whom the Urgenda Foundation is acting pursuant to the powers of attorney in this case, Urgenda c.s. wish to bring forward the following:

457. Above in this statement of reply it has already been pointed out that in actions such as the one at hand that seek a preventive order or injunction against an endangering activity, the plaintiff has standing if he has sufficient interest in his claim. In that context it has been pointed out that it is not necessary that the plaintiff has already suffered individual, concrete pecuniary damage or that it is certain that he will suffer such damage; it is sufficient that he runs a serious risk of suffering (serious) damage or disadvantage. In that context it has also already been pointed out that an action seeking an order or injunction can be used not only to protect pecuniary interests, but also to protect fundamental rights, such as those laid down for example in article 2 and article 8 of the ECHR, on which Urgenda c.s. also expressly base their arguments.

458. For the standing of the plaintiffs whom the Urgenda Foundation represents, the relevant question is therefore: Are they threatened with a sufficiently certain and sufficiently great danger to cause them to have an interest in the claims requested?

459. To answer this question, Urgenda c.s. refer back to chapter 4.3 of this statement of reply and the conclusion in paragraph 154. Urgenda c.s. furthermore point out the following:

460. In the IEA NL-2014 report already mentioned, there is a passage that shows how deeply climate change concerns and threatens all inhabitants of the Netherlands:

"With 24% of its surface located under the sea level, around 60% of the surface of The Netherlands is vulnerable to flooding from the sea and the three large rivers

Rhine, IJssel and Meuse. Next to floods, water scarcity and droughts have been identified as potential risks in some parts of the country as a result of climate change, in particular rising temperature fluctuations and reduced precipitation."

461. The most important adaptation project that the State mentions in its statement of defence, the Delta Program, seeks to protect the entire land area of the Netherlands and not just one or several low-lying polders. This is understandable: nearly the entire Dutch land area is low-lying and because of its situation is vulnerable to climate change. Furthermore, the greater part of our economic activity is carried out in the provinces of the urban agglomeration of Western Holland that are most vulnerable to flooding. In fact, compared with most other countries, the entire Dutch society is exceptionally vulnerable to a dangerous climate change, as is each individual Dutch citizen.

462. In paragraph 8.59 of its statement of defence, the State argues in so many words that the legal obligation or legal norm upon which Urgenda c.s. rely does not extend to protection of any individual interest, but rather to protection of all those who populate the earth.

By its defence that Urgenda c.s. can only defend concrete individual pecuniary interests, the State unintentionally makes it clear that the plaintiffs whom the Urgenda Foundation seeks to defend rely upon a legal norm and legal obligation that have the purpose of protecting all those who populate the earth. Why then should the plaintiffs whom the Urgenda Foundation represents not be granted standing if they wish to base their case in the courts on that legal norm in order to avert a danger that threatens them directly and to which they are exceptionally vulnerable, to more than an average degree? The State has not brought up any argument whatsoever, much less a sound one.

463. Urgenda c.s. realize that the consequence of their position and argumentation is that every Dutch citizen who would want to claim a reduction order would in principle have standing, and they realize that the court might have reservations towards such consequences.

In practice, of course, no single citizen will want to take on the costs and difficulty of such a case as an individual; it is mainly a theoretical objection without any practical interest. But the core of the matter is this: a dangerous climate change will affect nearly all human communities and is a threat to hundreds of millions of

people, according to the IPCC.[176] The Dutch land area, which lies to a large extent below sea level, is furthermore exceptionally vulnerable to such a dangerous climate change.

464. Dutch citizens are thus exceptionally vulnerable to a dangerous climate change. In addition, with their (economic) activities the population of the Netherlands contribute in proportion to their numbers to an excessive degree to the causation of a dangerous climate change. After all, if the global per capita emission level was to be or should become as high as the present Dutch per capita emissions, that would lead to climate change that would be even greater and much more severe than the present worst-case scenarios. In that light, it is not inconsistent to draw the conclusion that the plaintiffs in the name of whom Urgenda c.s. litigate do in fact have standing if they, as persons who are extra vulnerable to a dangerous climate change, claim from their own government that the Netherlands contribute less to the causation of such a dangerous climate change.

Urgenda c.s. therefore conclude that they – both the Urgenda Foundation as a public interest organization in the sense of article 3:305a of the Civil Code as well as the individual plaintiffs for whom the Urgenda Foundation is acting pursuant to the powers of attorney granted to it – have standing, because they have sufficient interest in the provisions requested by them and because the legal norms and legal obligations with respect to the State upon which they rely do in fact have the purpose of protecting the interests for which they claim legal protection.

CHAPTER 10:
THE REDUCTION CLAIMED: AMOUNT AND PACING

10.1 Introduction

465. Urgenda c.s. ask for a reduction of Dutch emissions by 25-40% relative to the emission level of 1990.

466. That is a much smaller reduction than that which is necessary according to the State and that which may be required of it. After all, the State acknowledges and endorses mitigation policies in which a reduction of 80-85% is desired from the developed countries, a group to which the Netherlands belongs, as their national

[176] See the IPCC citation in paragraph 142 of the statement of reply.

contributions to a globally accepted legal obligation to prevent a dangerous climate change of 2°C or more.

467. Urgenda c.s. therefore ask the State for a reduction that is (considerably) lower – less than half of the reduction that the State has already accepted for itself and also considers to be necessary. Seen in this way, the State cannot reasonably object to the reductions requested by Urgenda c.s.

468. The State's opposition to the claims of Urgenda c.s. is prompted by the fact that Urgenda c.s. desire that the reduction of 25-40% claimed by them shall be realized by the year 2020, while the much greater reduction of 80-95% that the State has accepted for itself only has to be realized by the year 2050.

469. Urgenda c.s. have the impression that letting go of ambitious goals for 2020 has entirely to do with the fact that 2020 is uncomfortably close. Such goals are uncomfortable because more ambitious goals for 2020 mean that a lot of work has to be done right away. By leading the debate away from the year 2020 and moving it to ambitious goals for 2030 and 2050, the hot potato can be passed off to future governments. In this way politicians can continue for the moment to tell themselves and their electorate that they do not have to do anything drastic yet and they cannot be blamed for this because there is still plenty of time to realize those goals at a later time.

470. In the last two years there has also been a shift: in 2020 a new kind of Kyoto Protocol should go into effect with reduction goals for the year 2030. A reduction goal of 'at least' 40% would then come to apply to countries such as the Netherlands. Whether such a treaty will be finalized, and whether a reduction goal of 40% by 2030 will actually be agreed to and will in fact be realized is, however, entirely unclear at this time. The State strives for this, makes efforts for this, makes a case for this, will promote this, etc. but the State is evidently not doing much more than that. Furthermore, a reduction of 40% by 2030 is too little to stay below 2 degrees of warming, as will be shown in chapter 10.3.

471. This political procrastination, inertia, and powerlessness to actually tackle a problem that according to the body of scientific evidence threatens to become catastrophic unless action is taken *urgently* can no longer be accepted in the view of Urgenda c.s. A solution to the problem is needed too urgently to allow further

delay.

472. Urgenda c.s. do not ask the State to reduce emissions by the entire 80-95% that is needed and that also is accepted by the State. They do however desire that a substantial start should in fact be made now toward that reduction, instead of going on talking about how and when the reduction that is ultimately needed will be realized. The fact that the Netherlands has fallen behind in driving back its greenhouse gas emissions in comparison to other similar countries, and can only compensate for this by 'buying' its way out of the problem, is an additional reason to desire that the Netherlands now actually begin making serious efforts.

473. Contrary to what the State suggests, the goal for 2050 cannot be considered separately from that for 2020, and the achievement of both goals is important to remain below 2 degrees of warming. This has already been explained in the summons, and there will be further discussion below.

474. If new insights should come about after 2020 (or after 2030) concerning the desirability of or the opportunity for further reductions than those that Urgenda c.s. desire at present, then a new assessment can be made at that time concerning whether or not to reduce emissions even further. It absolutely cannot be assumed that the Netherlands ultimately will have to reduce emissions by less than the 25-40% presently claimed by Urgenda, and the State does not contend this either. Urgenda c.s. therefore do not desire anything that the State does not already have to do. Urgenda c.s. only desire that the State will now actually begin to do what must be done.

10.2 The necessity of a 25-40% reduction by 2020

475. The reduction to be achieved by 2020 has already been explained in detail in the summons: if one wants to have a 50% chance of actually remaining below 2 degrees of warming, then the level of greenhouse gases[177] will have to stabilize at 450 ppm CO_2-eq, and this requires that industrialized countries achieve emission reductions of 25-40% by 2020 and then 80-95% by 2050 (see the IPCC table 13.7

[177] To answer the State's 'question' in paragraph 2.3 of its statement of defence, Urgenda c.s can confirm that its reduction claim of 25-40% in fact applies to all greenhouse gases and not only to CO_2. This is also stated in the summons in the grounds for the claim, but it has been worded incorrectly in paragraph 45 of the summons.

on page 776 of chapter 13 of WGIII, AR4, submitted as exhibit U42).[178]

476. The State too discusses table 13.7 in paragraph 9.18, but it creates a mistaken impression with the quotation that it has chosen. This creates the impression that the objective of limiting warming to 2 degrees could also be achieved if a reduction in the range of 10 to 40% were to be attained by 2020 and a reduction in the range of 40 to 95% by 2050. This is not the case, and that can also be seen from the complete quotation in which it is evident that the IPCC here is describing two scenarios at the same time: the scenario of 450 ppm CO_2-eq (low stabilization) and that of 550 ppm CO_2-eq (medium stabilization).[179] The different ranges belonging to the two scenarios are then added together by the IPCC. The range that covers both scenarios is of course greater than the range that belongs exclusively to the 450 ppm scenario. According to the table, the 550 ppm scenario requires lower reductions by 2020 and 2050 than those that are necessary in the 450 ppm scenario.[180]

477. However, the countries that are signatories to the UNFCCC have not chosen the 550 ppm scenario; this is because according to the best scientific estimates it will lead to warming of 2.8 to 3.2 degrees in this century (for this, see IPCC table 3.10 on page 229 of exhibit U43). The countries have therefore chosen the 450 ppm scenario because this provides the only real chance of actually remaining below 2 degrees of warming. The State itself therefore also uses the percentages of 80-95% by 2050, which belong to the 450 ppm scenario, in its statement of defence.

478. As the State contends in paragraph 9.18 of its statement of defence, it is correct that the IPCC does not indicate which reduction goal *must* be realized. After all, one can only know which reduction goal must be realized once it has been determined which rise in temperature must be avoided, and that is a choice that

[178] See paragraphs 201-206, 209, 360, 363, 364, and 367.

[179] The complete quotation on page 775 of exhibit U42, right-hand column, reads: *"Under regime designs for low and medium concentration stabilization levels (i.e. 450 and 550 ppm CO_2-eq, category A and B; see Chapter 3, table 3.10) GHG emissions from developed countries would need to be reduced substantially during this century. For low and medium stabilization levels, developed countries as a group would need to reduce their emissions to below 1990 levels in 2020 (on the order of 10% to 40% below 1990 levels for most of the considered regimes) and still lower levels by 2050 (40% to 95% below 1990 levels) even if developing countries make substantial reductions."*

[180] If the scenario of 550 ppm CO_2-eq were to be followed (instead of 450 ppm CO_2-eq), then it follows from the table mentioned above that industrialized countries would be able to get by with reduction percentages of 10-30% by 2020 and 40–90% by 2050. According to the table, in the 450 ppm scenario the percentages 25-40% by 2020 and 80-95% by 2050 apply.

has been left to the countries in the division of roles between the IPCC and the countries in the UNFCCC. The IPCC provides the countries with 'state of the art' scientific information and thereby indicates which concentration levels of greenhouse gases in the atmosphere can lead to which range of temperature rise (see the IPCC table mentioned above, page 229 of exhibit U43). It is then up to the countries whether or not they will make a choice to determine the temperature rise that must be avoided. This division of roles is made because choosing the maximum allowable temperature rise bears a relationship to the UNFCCC (thus involving the countries) and furthermore is not possible without making a value judgement about the risks, costs and benefits that will be the consequence of that temperature rise according to the best scientific insights, as well as about the feasibility of the emission reductions that are needed in order to avoid such a temperature rise. As Urgenda c.s. have already explained in detail in the summons, the IPCC is required by its statutes to refrain from such value judgements, and the IPCC will thus never say which temperature rise must be avoided or which reduction goal corresponding to it must be realized.

479. However, if and when the political process has produced a choice, and thus the risks, costs and benefits and the possibilities of emission reduction and adaptation have been considered in political and policy terms, then that choice has consequences concerning how to act, based on the best available scientific knowledge. After all, in order to reach the objective that has been chosen, one must know: (i) what the maximum concentration level in the atmosphere may be, (ii) what maximum amount of greenhouse gases (because of the cumulative effect) may be added to the already existing concentration in the atmosphere before this point of maximum concentration is reached, and (iii) which reductions within which period of time are needed in order not to exceed the maximum available emission quota. Thus, once the political choice is made, the judgement of what actually must be done can only be made on the basis of scientific knowledge.

480. Urgenda c.s. thus base their claim on the one hand on the limit of 2 degrees as maximum allowable warming, as determined by the international political process concerning climate (the norm of safety and proper social conduct) and on the other hand on the best available scientific evidence in determining what is needed in order to prevent more than 2 degrees of warming. It is on the basis of that scientific evidence that Urgenda c.s. have established the foundations of their claim that the State is acting unlawfully toward them by not doing that which science prescribes as being necessary to avoid violating the safety norm of 2 degrees that

has been defined by the State itself.[181]

481. In addition to this, Urgenda c.s have provided insight into the fact that even before the specification of the two-degree norm, the State already knew quite well what would be needed, on the basis of scientific insights, to avoid 2 degrees of warming. As one indication of this, Urgenda c.s. have shown that even before the two-degree objective was specified in 2009 in Copenhagen, the Dutch government had already informed the Parliament that in order to achieve that objective, and in view of scientific knowledge, a reduction of 25-40% by 2020 and 80-95% by 2050 is necessary *"in order to remain on a credible path to keep the 2-degree objective within reach"*.[182] In other words, any variation from those reduction ranges is not credible.

482. The State correctly comments (paragraph 9.19 of the statement of defence) that the wide ranges indicated by the IPCC serve to allow for margins of scientific uncertainty. Urgenda c.s. themselves have also stated this in their summons. This does however still mean that the absolute minimum limit in all scenarios for 2020 lies at 25%, and thus not below this level. This minimum percentage also says nothing further about a possible legal obligation that, based on the prevention principle and/or the precautionary principle, higher reduction percentages will have to be realized before 2020 and 2050.

483. Being aware of the reductions that scientific knowledge considers necessary, the State has successfully advocated the two-degree objective in the international discussions in Copenhagen and Cancun and has conformed to it, together with the other countries. With that decision, the Netherlands has made a political and policy-based assessment concerning what must be considered to be dangerous climate change, considering the risks, costs and benefits. With it the Netherlands has also given notice that the reduction percentages required by 2020 and 2050 are realistic and practical and financially achievable, or in any case that those assumptions must hold at least for the minimum percentage of 25% by 2020 and 80% by 2050 (it would after all make no sense to advocate and set a goal that one knows from the start cannot be achieved).

[181] In addition to this, Urgenda c.s. also rely on the 1.5 degree limit mentioned in the Cancun Agreements.
[182] Exhibit U27.

484. The adoption of the necessary reductions for 2020 and 2050 is apparent not only from the numerous documents mentioned in the summons, in which the Netherlands and the EU continue to present the percentages that are repeatedly mentioned as being necessary, but it is also apparent from an additional joint declaration of the industrialized countries during the Cancun conference in 2010, in which they declared as signatories to the Kyoto protocol (**exhibit U89**):[183]

"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, through means that may be available to these Parties to reach their emission reduction targets"

485. As a further explanation of this declaration, it can be added that during the period in which the climate summits (COPs)[184] are held annually, the industrialized countries also meet to discuss the Kyoto protocol (the CMPs).[185] The non-industrialized countries may also be present at the CMPs, but only the industrialized countries have the right to vote in these meetings and to determine the content of the decisions made (see the explanation by the UNFCCC, **exhibit U90**).[186] The quotation given above comes from the decision of the industrialized countries at Cancun.

486. Contrary to the statement of the State in section 9.20 of its statement of defence, the recognition by the industrialized countries of the scientific view that reductions of 25-40% by 2020 and of 80-95% by 2050 are necessary for stabilization at 450 ppm CO_2-eq is evident not only from a footnote in the Bali Action Plan, but it can also be found in the decision of the CMP in Cancun. After the Bali Action Plan and after the Cancun Agreements, these reduction percentages have also been

[183] The declaration may also be downloaded from the UNFCCC website at http://unfccc.int/files/meetings/cop_16/application/pdf/cop16_kp.pdf
[184] Conferences of the Parties.
[185] Conferences of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol.
[186] This may also be downloaded from the UNFCCC website at http://unfccc.int/bodies/body/6397.php

repeatedly adopted by the Netherlands and the EU as being necessary,[187] and this is also the position of the IPCC.

487. The State has not challenged the correctness of the scientific arguments presented by Urgenda c.s. in the summons to support their primary reduction claim of 40% by 2020. This reduction of 40% by 2020 is necessary in order to have a good chance (87%) of not exceeding the limit of 2 degrees. It is also the only scenario that maintains the prospect of limiting warming to 1.5 degrees, this being the reduced limit mentioned in the Cancun Agreements and the limit that Urgenda c.s. consider necessary to have a reasonable chance that the world will avoid climate tipping points and the catastrophic risks that they entail. The scientific necessity of such a deep reduction by 2020 has thus been established as a point of agreement between the parties, or at least there is no need to develop this point any further, given that the State has not challenged it.

10.3 The goal for 2020 cannot be replaced by a goal for 2030

488. It has been stated in the summons that as long as the industrialized countries do not take up the needed emission reductions collectively (in which a different division of the burden could possibly be agreed to, as long as the reductions collectively fall within the range of 25-40%), an individual obligation rests upon each individual industrialized country to implement these necessary reductions within its own territory, based on the legal principles invoked by Urgenda c.s. In addition, Urgenda c.s. have stated that this individual obligation also follows from the UNFCCC itself,[188] a contention that the State has not challenged. This individual responsibility should be kept in mind while reading through the following sections of this statement of reply.

489. According to the IPCC, with current policies, the level of 450 ppm CO_2-eq will probably already be reached by 2030, thus 16 years from now. Quoting the IPCC:

"*Baseline scenarios (scenarios without explicit additional efforts to constrain emissions) exceed 450 parts per million (ppm) CO_2-eq by 2030 and reach CO_2-eq*

[187] See inter alia paragraphs 203-206 and 209 of the summons and paragraph 481 of this statement of reply with reference to exhibit U27.
[188] See inter alia paragraph 192 of the summons.

concentration levels between 750 and more than 1300 ppm CO_2-eq by 2100."[189]

490. In their summons, Urgenda c.s. have assumed that this level would be reached in 20 years.[190] The urgency is in any case evident. This means in fact that, if present policies are continued, practically no emissions at all will be possible after 2030. If emissions continue after that date, the cumulative concentration level in the atmosphere will not stabilize at 450 ppm CO_2-eq but rather will increase even further, and then the temperature will increase further as well, for the relationship between the increase in greenhouse gases and the increase in the temperature is nearly linear.[191]

491. That would mean that the world economy around 2030 would have to be as good as emission-free (0 emissions), which is realistically impossible within this time frame. For these reasons, stronger reductions must take place specifically in the years just ahead, so that these 'extra savings' can be applied after 2030 to allow further emissions. Simply shifting a goal from 2020 to 2030 is therefore impossible because it does not take this important fact into account. It means in fact that the industrialized countries are allowing themselves a luxury that no longer exists, namely continuing to shift paper goals forward so that in the short term (again and again with each election) the necessary and drastic action does not have to be taken.

492. Shifting goals forward from 2020 to 2030, without holding the State (legally) responsible for meeting an interim goal by 2020, is unacceptable in the light of this need for sharp reductions in the short term in order to still be able to meet the 2-degree objective at all. The increasing threat and the consequences of having the danger of exceeding the 2-degree limit materialize are simply too great to allow this.

493. It has already been explained in the summons that large reductions before 2020 are not only necessary but they also lead to the lowest costs: in other words, it is the least expensive way of carrying out good climate policy, and the safest way by far. This is also confirmed in the Emission Gap Report of UNEP in 2013 (**exhibit**

[189] IPCC WGIII AR5, Summary for Policymakers, page 9 (**exhibit U91**).
[190] See inter alia sections 23 and 144 of the summons.
[191] IPCC WGI AR5, H.12, p.1033: *"The principal driver of long-term warming is total emissions of CO_2 and the two quantities are approximately linearly related";* p.1113: *"the near linear relationship between cumulative CO_2 emissions and peak global mean temperature is well established in the literature ..."*

U82).[192] Under point 6 on page xiii the answer is given to the question *"What are the implications of later action scenarios that still meet the 1.5°C and 2°C targets?"* The answer to this question is:

"Based on a much larger number of studies than in 2012, this update concludes that so-called later-action scenarios have several implications compared to least cost scenarios, including: (i) much higher rates of global emission reductions in the medium term; (ii) greater lock-in of carbon-intensive infrastructure;[193] *(iii) greater dependence on certain technologies in the medium-term; (iv) greater costs of mitigation in the medium- and long term, and greater risks of economic disruption; and (v) greater risks of failing to meet the 2°C target. For these reasons later-action scenarios may not be feasible in practice and, as a result, temperature targets could be missed."*[194]

494. In explaining why shifting reduction goals to later dates entails great risks, the UNEP states (p.xiii):

"[A]lthough later-action scenarios might reach the same temperature targets as their least-cost counterparts, later action scenarios pose greater risks of climate impacts for four reasons. First, delaying action allows more greenhouse gases to build up in the atmosphere in the near term, thereby increasing the risk that later emission reductions will be unable to compensate for this build up. Second, the risk of overshooting climate targets for both atmospheric concentrations of greenhouse gases and global temperature increase is higher with later-action scenarios. Third, the near-term rate of temperature is higher, which implies greater near-term climate impacts. Lastly, when action is delayed, options to achieve stringent levels of climate protection are increasingly lost."

495. The status of the Emission Gap reports of the UNEP is uncontested, and the State also refers to these UNEP reports in its letter to Urgenda (exhibit U3).[195] These

[192] 'The Emissions Gap Report 2013: A UNEP Synthesis Report', UNEP.

[193] With 'lock-in' the UNEP means *"Carbon lock-in - the continued construction of high-emission fossil-fuel infrastructure unconstrained by climate policies. Because technological infrastructure can have life-times of up to several decades, later action scenarios effectively lock-in these high-emission alternatives for a long period of time."* (see exhibit U82, p.xiii).

[194] Emission Gap Report 2013 (exhibit U82), p.xiii.

[195] At the bottom of page two of the letter, the State says, supplementary to its position that it is a great problem that efforts to achieve the two-degree objective are falling short: *"This is the so-called mitigation gap, that will amount to between 8 and 13 GT CO_2-eq according to the most recent calculations of the UNEP."* (exhibit U3).

conclusions of the UNEP, the founding organization of the IPCC that also serves as the secretariat of the IPCC, are thus to be taken very seriously.

496. The ease with which the State suggests under section 12.18 that there is no problem if the 40% reduction by 2020 claimed by Urgenda is achieved by the State by 2030 thus fails to appreciate the great risks and dangers that will be the result of shifting the task forward. This is therefore a very simplistic position taken by the State.

497. In addition, the PBL [Netherlands Environmental Assessment Agency] has made calculations at the request of the State concerning the reduction goal of 40% by 2030 and comes to the conclusion that this reduction goal is inadequate and would have to be raised to 45-47%. See in this regard the 'main findings' on p. 6 of the report that has already been entered into evidence as exhibit U46 and to which the State refers in sections 2.16 and 2.17 of its statement of defence, where the PBL concludes:

"To arrive at a global emission level that is consistent with the 2°C climate target, with equal costs as share of GDP for all countries by 2030, the EU would need to reduce emissions by 45 to 47% relative to the 1990 level."

and

"[A] 40% reduction target would result in a global emission level that is higher than the range consistent with achieving the 2°C climate target."

498. Also of interest is the fact that the PBL states that it has written the report based on a certain assumption, namely that later in this century technologies known as BECCS will be available with which CO_2 can be taken out of the atmosphere.

499. According to p.20 of the report (exhibit U46), BECCS stands for "bio-energy combined with carbon capture and storage". This would involve planting forests as sources of bioenergy and biomass. Those forests remove CO_2 from the atmosphere. If those forests are then used (burned as biomass fuel) to produce energy, the greenhouse gases released would have to be captured, transported, and stored (carbon capture and storage or CCS) by means of newly developed infrastructure so that they do not come back into the atmosphere. The assumption is that if such a technology could be successfully developed in the future, and if it is

safe and can be scaled up affordably, part of the mitigation task could take place in this way while at the same time energy can still be used. But because this is 'unproven technology', no one knows yet whether this will work, and at a large scale. The State too realizes that this is a matter of 'unproven technology' (see paragraph 243 of its statement of defence): *"Further delaying the costs of mitigation leads to higher costs in the long term, since more investments have to be written off prematurely and we will be forced to use technologies that have not yet been proven in practice, such as the use of biomass to supply energy with underground storage of the CO_2 that results from this."* (underlining added)

500. In its report, the PBL has nevertheless stated that it has made the assumption that this technology will become available later in this century and will then be applied on a large scale; there will otherwise be a large problem. PBL says the following about this (p.20 of the report):

"In this study, we have assumed that BECCS will become available and will be widely applied later in the century. Without BECCS, it would become very difficult in our model to maintain a reasonable chance of limiting global warming to 2°C, especially taking into account the greenhouse gas emission reduction pledges for 2020."

501. In explanation: The pledges referred to (as the PBL explains further on in the report on p.20 and p.21) are the unconditional pledges such as those made by the countries in Cancun, e.g. the unconditional pledge of the EU to achieve a reduction of 20% by 2020. For those countries that have only made conditional pledges, such as the US and Canada, the PBL model assumes that these conditional pledges will in fact be fulfilled.

502. The PBL does not comment on the feasibility of BECCS, but the IPCC is sceptical about the possibilities of net negative emissions and warns about being dependent on these as yet nonexistent technologies for achieving the 2°C objective, as well as about the detrimental consequences of these technologies:

"A continuation of current trends of technological change in the absence of explicit climate change mitigation policies is not sufficient to bring about stabilization of greenhouse gases. Scenarios which are more likely than not to limit temperature increase to 2°C are becoming increasingly challenging, and most of these include a temporary overshoot of this concentration goal requiring net negative CO_2

emissions after 2050 and thus large-scale application of carbon dioxide removal technologies (CDR) [WGIII-6]. CDR methods are not mature and have biogeochemical and technological limitations to their potential on a global scale and carry side effects and long-term consequences on a global scale [WGI-SPM, WGIII g]. The increasing dependence of pathways on CDR options reduces the ability of policymakers to hedge risks freely across the mitigation technology portfolio."[196]

503. In the event that the PBL's assumption that BECCS will become available on a large scale later in this century is erroneous (for example because it turns out not to be technologically feasible to put large amounts of greenhouse gases under the ground and to keep them there, or because the technology and associated infrastructure is not safe or is too expensive), then because of objectives that are now too low (such as the EU objective of 20% by 2020), achieving the 2°C objective will be impossible, even in the event that there is a reduction of 45-47% by 2030.

504. The PBL thus in fact emphasizes here once again that the EU objective of 20% by 2020 and the norm derived from it of a 16% emission reduction by 2020 in the Netherlands are too low to keep the achievement of the 2°C scenario within reach. The PBL has already informed the government of this earlier in more explicit language in the report that Urgenda c.s. now submit as **exhibit U92**, in which the PBL states (p.10):

"According to the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment report (AR4), Annex 1 emission reduction targets of 25 to 40% below 1990 levels in 2020 would be consistent with stabilising long-term levels of greenhouse gas concentration levels at 450 ppm CO_2 equivalent. This concentration level has a reasonable chance (50%) of avoiding an increase in global average temperature of more than 2°C. Even in the high pledge scenario (assuming all high reduction pledges are implemented …), this range will not be met."[197]

505. Thus no debate whatsoever is possible on the question of whether the Netherlands will in fact have reduced its emissions sufficiently by 2020 to remain on a credible path to a warming of 2 degrees or less. The unequivocal answer to that question is a straightforward 'no'. The State also does not claim in its statement of defence that what the State intends to do now and before 2020 will in fact be enough to

[196] IPCC WGII AR5, ch. 1, p.191 (exhibit U76).
[197] PBL, 'Evaluation of the Copenhagen Accord: Chances and risks for the 2°C climate goal', p.10.

stay on the 2 degree path.

506. What the State says in essence is that it is correct that in 2020 the Netherlands will not have done what is necessary in order to respect the 2-degree norm, but that the State will make a catch-up effort between 2020 and 2030 so that with a 40% reduction by 2030 the Netherlands will in fact satisfy the requirement of respecting the norm. Urgenda c.s. are of the opinion that for many reasons the court cannot go along with that line of reasoning, some of them being:

- Because according to the IPCC, with the present reduction policies the level of 450 ppm CO_2-eq will probably already be reached by 2030, and thus more ambitious objectives must be implemented with the greatest possible urgency.
- Because by postponing the emission reductions that are needed, an unnecessary excess of greenhouse gases will continue to be added to the atmosphere in the coming years, through which the great risk is knowingly taken that the emission reductions that will take place after 2020 will be insufficient to compensate for this.
- Because the risk of warming of more than 2 degrees is already great and will only become greater with further delay.
- Because the costs of climate policies will increase considerably (see inter alia the summons in section 3.9) in the event that more ambitious measures are delayed until after 2020. Because of this, the risk of not achieving the objective is increased on financial grounds as well, for example because the necessary policies become unaffordable, or because it becomes more difficult to get sufficient societal support for the policies needed due to the high costs.
- Because every year that the level of ambition is not raised means that the planning and the dependence on future technologies in order to be able to achieve the 2 degree objective will become so tight and critical that setbacks in the implementation of policy or setbacks in the development of new technologies will mean de facto that achieving the 2 degree objective will become impossible. In other words, there is now already hardly any 'margin of error' or allowance for 'learning by doing' (see also the summons, paragraph 372).
- Because a 40% emission reduction by 2030 is not enough according to the PBL, not even in the scenario in which it is assumed that later in the century technologies will become available that do not yet exist or cannot yet be implemented.

- Because there is no good reason why a task that must in fact be carried out should be allowed to be delayed, and certainly not when one considers the severity and scale of the risks that will be the consequence of that delay.
- Because the fact that an objective can be determined for 2030, provided it were also to be sufficiently high and legally compulsory (otherwise these are only paper promises), does not mean that an adequate target would not also have to apply for 2020.

- Because one cannot see why the objective claimed by Urgenda c.s. for 2020 and the objective for 2030 that builds further on that basis should not be able to coexist, just as the goals for 2020 and 2050 coexist – and even have to coexist – without excluding each other. After all, achieving the first objective (2020) is necessary in order to achieve the second objective (2050). Interim objectives for 2030 and 2040 may certainly be added to these, as Germany has done, and this can even be strongly encouraged,[198] but that does not alter the fact that the objective for 2020 must be achieved in order to stay on the right path to avoid 2 degrees of warming.
- Because an adjustment of policies by the State is possible effective immediately, and with it the objective of a reduction of at least 25% by 2020 is still within reach. The State has after all an objective of a 16% reduction by 2020 (although Urgenda c.s. contest that even this will be met with the present approach), and raising this objective to at least 25% (an increment of 9%) is possible.
- Because the State has to provide evidence to the contrary, that an increment of at least 9% by 2020 is not possible. The PBL has after all indicated that an objective of 45-47% by 2030 is required. The State will thus (relative to the 16% reduction by 2020) have to make a jump between 2020 and 2030 of 29-31% in additional emission reductions within 10 years. Proceeding from these figures of the PBL, it cannot be seen why the State would be unable to make a jump of at least 9% before 2020, but then would in fact be able to make a jump of 29-31% within a span of 10 years.
- Because based on the fact that the State considers such great reductions to be realistic within a short time, it can be deduced that a jump from 16% to 40% by 2020 (a jump of 24% in 6 years) does not have to be excluded provided a maximum effort were to be made.

[198] As is evident from exhibit U87 which has already been entered in evidence, Germany has set objectives of 40% for 2020, 55% for 2030, 70% for 2040, and 80-95% for 2050.

- Because all of the measures mentioned here are no-regret measures (to use the State's terminology) since every reduction that one accomplishes before 2020 does not have to be achieved after 2020. A 25-40% reduction by 2020 is a no-regret measure because it has been determined, as the State also acknowledges (see section 6.30 of the statement of defence) that after 2020 in one way or another further deep reductions will have to be made (up to 80-95% by 2050). If the State were to be found guilty, there is no possibility of a situation in which the court imposes something on the State that later turns out to be unnecessary.
- Because in the light of all these circumstances it cannot be seen why the single suggestion by the State that it has resolved to take a firm position within the EU for a 40% reduction by 2030 should deprive Urgenda c.s. of the right to claim an objective for 2020 that is consistent with what is necessary in order to respect the norm of 2 degrees that has been defined by the State itself and is universally endorsed.

507. In short, there are many reasons why, in the interest of averting the danger, the necessary reductions by 2020 of at least 25% relative to 1990 must be achieved. Now that this is not going to happen without judicial coercion, it must be possible for Urgenda c.s. to impose this reduction objective through the courts so that the plaintiffs and their interests will be protected from the danger that the actions and inactions of the State threaten to bring about. Urgenda c.s. are of the opinion that the court need not show the State much clemency in this matter because the State has been told every year since 2009 via the UNEP reports that the emission objectives are inadequate and that the risks and costs are increasing because of this. See the most recent Emission Gap Report 2013 of the UNEP (exhibit U82, p.xi):

"This report confirms and strengthens the conclusions of the three previous analyses that current pledges and commitments fall short of that [2°C] goal. It further says that, as emissions of greenhouse gases continue to rise rather than decline, it becomes less and less likely that emissions will be low enough by 2020 to be on a least-cost pathway towards meeting the 2°C target. As a result, after 2020, the world will have to rely on more difficult, costlier and riskier means of meeting the target – the further from the least-cost level in 2020, the higher these costs and the greater the risks will be." (underlining added)

10.4 The most cost-effective scenario is higher reductions before 2020.

508. From the quotation above, it follows once again that greater reductions before 2020 are the most cost-effective path. Urgenda c.s. refer furthermore in this regard to inter alia the statements of the International Energy Agency discussed in the summons[199] as well as that which has been discussed above in this statement of reply[200] from which it is evident that higher emission reductions before 2020 are more cost effective than higher emission reductions after 2020. This comparison considers only the costs of the transition and not the damage that is avoided with more ambitious reduction objectives. The scenario of emission reductions of 25-40% by 2020 claimed by Urgenda is not only the safest scenario that prevents material damage and damage to health and lives, but it is also the most cost-effective scenario.

509. That fact is very exceptional, as has already been stated in the discussion of the precautionary principle, because it is normally the case that enacting additional safety measures costs additional money and thus places an additional burden on the public treasury. With regard to this, a certain amount of discretion in policymaking is claimed by the State because it determines how those resources are apportioned. In this case that argument does not hold from the very start because the State in fact causes a loss to the public treasury by not enacting the reduction measures claimed by Urgenda c.s. The State fails to enact the preventive and precautionary measures that are needed, and in doing so it also misses the chance to do this in the most cost-effective way.

510. In the light of the Cellar Hatch Criteria, one can also simply establish that the measures claimed are also proportional as measures to be enacted.[201] This leaves

[199] Section 3.9 of the summons.

[200] See inter alia paragraph 84 of this statement of reply: *"Delaying further action, even to the end of the current decade, would therefore result in substantial additional costs in the energy sector."*

[201] See also in this connection inter alia the ClimateCost report (exhibit U68, p.14), in which it is evident that the models used show that the returns of limiting world temperature rise to 2 degrees are greater than the costs of the aggressive mitigation that is needed to accomplish it. See also the IPCC (exhibit U67, p.20): *"Throughout the 21st century, climate-change impacts are projected to slow down economic growth."* Also the undersecretary of Infrastructure and Environment (exhibit U78, p.7): *"... it is in fact clear that without adequate climate policies, climate change will have substantial economic consequences in the future."* See also Enneking and De Jong (exhibit 61, p.1546): *"... the costs of implementing precautionary measures now are considerably lower than acting later or not acting at all."* And the UNEP explains (exhibit U82, p.xiii): *"so-called later-*

untouched the opinion of Urgenda c.s. that even if implementing additional safety measures before 2020 were to be less cost effective than implementing measures after 2020 – which is not the case – then their claims would still be proportional considering the substantial risks to human health and lives and of damage to property that would be avoided by doing so. But once again, additional safety beyond the illusion of safety that the State now offers costs less in this case, not more.

10.5 Adaptation is not a surrogate for mitigation.

511. Because of the delay of 30 to 50 years between the release of greenhouse gases and the warming that is the consequence of it, adaptation is important. After all, in the decades to come we will be faced with much more warming that we have already caused and that cannot be prevented.

512. Because of this delay, the IPCC states that even with the most stringent mitigation scenarios, climate change will unavoidably have more impact on society, and adaptation is necessary in any case because of this:

"Even the most stringent mitigation efforts cannot avoid further impacts of climate change in the next few decades, which makes adaptation unavoidable."[202]

513. But that does not mean that adaptation is a surrogate for mitigation, nor does it mean that adaptation is the (final) solution for the climate problem, as the State appears to claim in its defence (specifically in relation to the 'margin of appreciation'). There are in fact many limits and restrictions to what is possible in the area of adaptation.

514. First of all, there are limits to the adaptive possibilities of society and of nature and ecosystems to the changed climate. Concerning this, the National Audit Office says: (exhibit U12, p.5):

"If the emission of greenhouse gases is not sufficiently reduced, the temperature on earth will rise further and the need for adaptation will become greater. However, the possibilities of adaptation are in fact limited. Most of the organisms

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action scenarios have … greater costs of mitigation in the medium- and long term, and greater risks of economic disruption."

[202] IPCC WGII AR5, ch. 1, p.14 (exhibit U76).

and ecosystems have little ability to adapt themselves to a changed climate. Thus mitigation continues to be needed."

In that connection, reference is made once again to article 2 of the UNFCCC, in which it is evident that the two-degree limit is also intended to limit this risk of the inability of organisms and ecosystems to adapt.

515. The IPCC as well emphasizes that there are limits to adaptation:

"Synthesis of evidence across sectors and sub-regions confirms that there are limits to adaptation from physical, social, economic and technological factors (high confidence)"[203]

"Responding to climate-related risks involves decision-making in a changing world, with continuing uncertainty about the severity and timing of climate change impacts and with limits to the effectiveness of adaptation (high confidence)."[204]

Furthermore, it is true according to the IPCC that the more the temperature rises, the more limited the possibilities of adaptation become:

"Greater rates and magnitude of climate change increase the likelihood of exceeding adaptation limits that emerge from the interaction among climate change and biophysical and socioeconomic constraints (high confidence)."[205]

516. An example of a circumstance that leads to limited adaptation possibilities as the temperature rises is the distribution and amount of fresh water that is still available after further warming. In places where the limits of sustainable use of surface water and groundwater in a region have been reached, there will be a limit to adaptation with further warming according to the IPCC. Companies that depend on fresh water for their production processes will then not easily be able to adapt any further if there is a reduced availability of water or a longer-term scarcity of water because of drought. The adaptation potential of agriculture will also be degraded by a reduced quantity of water or a degradation in water quality because of climate change.[206] In this way, situations can arise in which companies, people, and

[203] IPCC WGII AR5, ch. 23, p.3 (**exhibit U93**).
[204] IPCC WGII AR5, Summary for Policymakers, p.9 (exhibit U67).
[205] IPCC WGII AR5, Technical Summary, p.33 (exhibit U65) and Summary for Policymakers, p.28 (exhibit U67).
[206] IPCC WGII AR5, ch. 16, p.15 (**exhibit U94**).

agriculture all become dependent on a critically limited amount of water while the ability to adjust to the shortage is limited. The IPCC gives examples of this, including this one:

"For example, projected climate change impacts in Europe indicate that increasing irrigation needs will be constrained by reduced runoff, demand from other sectors, and economic costs. As a consequence, by the 2050s farmers will be limited by their inability to use irrigation to prevent damage from heat waves to crops."[207]

517. Thus there are limits to what is possible in the way of adaptation, and that definitely applies to hard limits such as tipping points. A characteristic of a tipping point is that it is in fact irreversible and therefore unmanageable.[208] At the moment that for example an irreversible melting process begins affecting the ice caps of Greenland and Antarctica, sea level rise will accelerate and advance until at some point the adaptation measures of low-lying areas of the world such as the Netherlands will reach their limits of affordability, feasibility, insurability, etc. Even wealthy countries with a high measure of adaptation continue to be vulnerable.

IPCC: *"... even societies with high adaptive capacity can be vulnerable to climate change, variability, and extremes."*[209]

518. For these reasons, mitigation is fundamentally necessary according to the IPCC:

"*Prospects for climate-resilient pathways for sustainable development are related fundamentally to what the world accomplishes with climate-mitigation (high confidence)."*[210]

519. To this the IPCC adds that mitigation is essential in order to keep open as many possibilities for adaptation as possible, thus avoiding as much as possible the limits and restrictions of adaptation:

"Since mitigation reduces the rate as well as the magnitude of warming, it also increases the time available for adaptation to a particular level of climate change, potentially by several decades. Delaying mitigation actions may reduce options for

[207] IPCC WGII AR5, ch. 16, p.23 (exhibit U94).
[208] IPCC WGII WR5, Technical Summary p.35 (exhibit U65).
[209] IPCC WGII AR5, ch. 1, p.14 (exhibit U76).
[210] IPCC WGII AR5, Summary for Policymakers, p.28 (exhibit U67).

climate-resilient pathways in the future."[211]

520. The EU white paper about adaptation to climate change that was already cited in the summons (exhibit U16) also indicates that the mitigation strategy is to take the lead and the adaptation strategy serves to take care of whatever can no longer be prevented:

"Addressing climate change requires two types of response. Firstly, and importantly, we must reduce our greenhouse gas emissions (GHG) (i.e . take mitigation action) and secondly we must take adaptation action to deal with the unavoidable impacts."[212]

521. The fact that the two-degree limit has been set also indicates that the countries that are signatories to the UNFCCC realize that the primary task is to prevent excessive warming, and that is therefore the central objective of the UNFCCC. Climate adaptation is given much less attention in this regard, and it cannot now suddenly be pushed forward by the State as the central solution offered against the danger brought about by warming of more than 2 degrees.

522. In the light of the Cellar Hatch Criteria, it is also not a solution for many other reasons, because if mitigation is not effective and is not applied to the degree that is necessary (and as a result the Dutch society, the plaintiffs, and future generations are exposed to great danger), then it is not in any way whatsoever certain that effective protection against that danger is possible through adaptation. This is true not only because of the limits and restrictions to adaptation discussed above, but also because it is not at all certain whether the government (in case public adaptation measures are needed) or the citizens (in those cases in which individuals and companies are expected to implement adaptation measures themselves, for example to their homes or places of business) will in fact have access to sufficient financial and material means to make possible the adaptation measures that are needed.

523. The IPCC too warns about the economic and financial limitations that can arise over time and that can limit the adaptation possibilities available to governments and individuals in industrialized countries:

[211] IPCC WGII AR5, Summary for Policymakers, p.28 (exhibit U67).
[212] EU white paper 'Adapting to Climate Change', p.4 (exhibit U16).

"Institutions in developed nations face constraints in funding adaptation options despite their comparatively high adaptive capacity. For example, Jantarasami et al (2010) report that staff from U.S. federal land management agencies identified resource constraints as a key barrier to adaptation. Similarly, surveys and interviews with state and local government representatives in Australia indicate that the costs of investigating and responding to climate change are perceived to be significant constraints on adaptation at these levels of governments."[213]

524. And even if the State were to have the means, that does not say that it would in fact apply them to adaptation measures when the time comes, or that they would do this in sufficient measure or in time. According to the IPCC there are in fact many institutional reasons why it is very questionable whether governments will be able to act effectively and will actually do so when the time comes – including a lack of information, knowledge, and insight on the part of many governments concerning the dangers to be contended with; poor coordination between the different departments within governments in tackling this new governmental task; insufficiently adapted regulations, etc.[214] Please note that in this respect the National Audit Office has already commented critically concerning the Dutch adaptation policies (see exhibit U12).

525. The State can thus very well say that it can offer protection by means of adaptation measures, but for many reasons it is clear that the possibility of protection via adaptation is limited, and furthermore it depends on so many circumstances that actually carrying out adaptation cannot be guaranteed, nor is there any assurance of its effectiveness. In addition, the State itself will not want to nor be able to carry out many adaptation measures. Will the State pay for the irrigation work of farmers that is needed to cope with droughts, or for their lost profits that result from failed harvests due to the increase in extreme weather conditions? Will the State provide the elderly with air conditioning, sun shades, and other facilities in their homes so that they can better defend themselves against heat stress? Will the State offer them compensation for the discomfort and the health burdens that come along with extended periods of hot weather? The answer to all of these questions is of course 'no'. Many adaptation possibilities are entirely beyond the ability of the State to provide, and thus the State shifts a considerable burden onto the shoulders of individuals and businesses. Are those individuals and businesses able to implement and/or to pay for the necessary adaptation

[213] IPCC WGII AR5, ch. 16, p.17 (exhibit U94).
[214] IPCC WGII AR5, ch. 16, p.10 (exhibit U94).

measures, for example to implement irrigation facilities, etc.? Some of them are, but some of them also are not. And if people do have the possibilities and the means to protect themselves, will they in fact also implement these protective measures? According to the IPCC that is highly questionable, because according to research most people underestimate the dangers and think that they are better able to protect themselves than actually is the case.[215]

526. That is exactly what the IPCC, the UN Human Rights Council, and others mean when they point out that the weakest and the poorest members of society will have to bear the heaviest burdens of climate change. They will have to be left by the State to contend with their own fate, since the State will not have the possibility of providing everyone with an adaptation strategy and paying for this. Examples of this can already be seen in industrialized countries, such as the farmers in Australia, many of whom lack the means to adapt to the extended periods of drought because of the economic crisis, according to the IPCC.[216] The time will come when the Netherlands too will have to face similar conditions. What justification is there for this, when the worst consequences of climate change can simply be prevented by carrying out adequate climate policies, and by also using all means available to the State to call other countries to account about the necessity of stringent emission reduction?[217]

527. Adaptation also means that the costs of present-day negligence are being passed on to future generations. Because the present generation is not willing to participate in mitigation to the extent that is manifestly necessary, future generations will be saddled with the high costs involved in adaptation as well as with the considerable risks that those adaptation measures will be insufficient to actually avert the danger. How just is that, and how does that fit into the concept of sustainable development that has been promoted by the State and has been anchored by the State in the UNFCCC, the Treaty on the Functioning of the European Union (TFEU), and other legal instruments? The IPCC as well asks this

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[215] IPCC WGII AR5, ch. 16, p.18 (exhibit U94).

[216] IPCC WGII AR5, ch. 16, p.16: *"... that prevailing economic conditions have an important influence on the capacity of Australian farmers to cope with drought."*

[217] In that connection, see also the ECtHR case Ilaşcu v. Moldova and Russia, yet to be cited in the final section of this statement of reply, in which the Court ruled that Moldova was obliged "*to take the diplomatic, economic, judicial or other measures that it is in its power to take and are in accordance with international law, to secure to the applicants the rights guaranteed by the convention."* This implies that the State has the duty to call other countries to account diplomatically, economically, and judicially if this is necessary for the protection of the fundamental rights of its citizens.

appropriate question in relation to adaptation strategies:

"Climate change, and the need for adaptation, unfairly shifts burdens onto future generations, contradicting the principle of intergenerational equity. This raises ethical and justice questions since benefits are extracted from the global environment by those who do not bear the burden of that extraction (UNEP, 2007)"[218]

10.6 Conclusion concerning mitigation and adaptation

528. It should be clear from the discussions in chapter 10:
- that the emission reductions claimed by Urgenda c.s. for 2020 are necessary in order to keep the 2-degree objective within reach;
- that these reduction claims are feasible, and are furthermore the most cost effective and thus impose the least burden on the public treasury;
- that the possibility of an objective for 2030 does not detract from the necessity of the reductions claimed for 2020;
- that a reduction of 40% by 2030 is not sufficient to stay on the path to the 2-degree objective, while the assumptions upon which that objective is based are considered highly doubtful by the IPCC;
- that adaptation is not a surrogate for the reduction objectives claimed.

CHAPTER 11:
THE CLAIMS OF URGENDA C.S.

11.1 Concerning the claims

529. The State's rebuttal in its statement of defence gives Urgenda c.s. cause to modify their claims as stated in the petitum of the summons. In this chapter they will explain their (new) claims as they have now come to be formulated, and they will respond to the defence of the State against their claims. The modified claim is stated in the petitum at the end of this statement of reply.

11.2 The (new) declaratory judgements being requested

[218] IPCC WGII AR5, ch. 16, p.30 (exhibit U94).

530. Urgenda c.s. are of the opinion that there are good and convincing arguments why the reduction order that they request should be granted. They nevertheless realize that this is an ambitious request. Rather than placing all their bets on a single horse, they will instead request multiple claims. This involves specifically several declaratory judgements that bring up for discussion a number of subsidiary questions that the court in fact already needs to answer as preliminary steps to the reduction order requested by Urgenda c.s.

531. There is therefore a certain structure in the declaratory judgements claimed, leading to a declaratory judgement that the State is acting unlawfully if it does not achieve a reduction of 25% by 2020, or in any case 40% by 2030. This last subsidiary claim is requested by Urgenda c.s. with considerable reservation and a definite sense of *contre coeur*. Such a limited reduction by the Netherlands of 40% by 2030 is in their opinion, and according to the scientific literature upon which they base their case, insufficient to ensure that the Netherlands will continue to follow a credible path toward reaching the two-degree objective.

532. But perhaps even more important: with this claim, Urgenda c.s. would appear to undermine their own position that a reduction of 25-40% by 2020 is necessary and they appear to admit that a reduction of 40% by 2030 is also just as good. In doing this, do they not themselves undermine the claim that is most important to them?

533. The situation is that in these proceedings the State will not admit to any reduction obligation whatsoever above and beyond its international obligations, even though it is already generally recognized and accepted that there is a wide gap between that which is necessary according to science and that which can be agreed to in the international political arena. The State appears to consider it entirely irrelevant that Dutch per capita emissions are among the highest in the world and that similar neighbouring countries pursue reductions that lie within the bandwidth of 25-40% by 2020. Considering the situation, Urgenda c.s. are of the opinion that *any* judicial reduction order addressed to the State must be considered a gain, even a reduction order that is inadequate. The reduction gain that is obtained in this way may then be considered inadequate in its own right, but such a judgement does in fact put an end to the impasse in which the climate dossier finds itself, particularly in the Netherlands but also elsewhere. Such a judgement would also be a signal from the judicial authority to the political powers of the State that they must

accept their responsibility or have it imposed on them by the court.

534. In support of their subsidiary reduction percentage of 40% by 2030, Urgenda c.s. refer to that which the State itself sketches as the reduction policy that it pursues. See the statement of defence, paragraphs 2.17, 6.27, and 6.29, and in particular also 6.32, 6.34, and 6.37. In these paragraphs it is apparent that the State itself judges that a reduction of at least 40% must be achieved by 2030, without making use of emission rights obtained from other countries. Urgenda c.s. are of the opinion that the State then can have no legally convincing objection to having the court rescind the noncommittal character of this policy resolution and impose a corresponding reduction order on the State.

535. The central question in these proceedings is whether the total volume of the greenhouse gas emissions of the Netherlands is illegal. The question that follows is whether the State bears responsibility for those emissions, in the sense that the total volume can be attributed to the State.

536. Urgenda c.s. take the position that the total level of greenhouse gas emissions of the Netherlands is in fact illegal because it is excessively high, considering that Dutch per capita emissions are among the highest in the world and that the Netherlands therefore on a per capita basis contributes disproportionately and excessively to the worldwide collective causation of a dangerous climate change with serious and possibly even catastrophic consequences. The fact that the Dutch government thinks that Dutch emissions must be reduced by 80-95% no later than 2050 as the Dutch contribution to a worldwide effort to prevent a dangerous climate change that threatens us implies a recognition by the State that the present level of Dutch emissions is in fact illegal because of the serious risks and endangerment that this emission level, viewed in its context, causes or at least contributes to. The State can be held legally responsible for this total level of Dutch greenhouse gas emissions according to principles that apply to proper social conduct. In other words, this illegal level of emissions is a matter for the State to take care of, and the State bears responsibility for it (for more detail on this point, see chapter 7 of this statement of reply).

537. This wrongful Dutch emission level that is attributable to the State is more particularly also wrongful with respect to Urgenda c.s., and they therefore have interest in the declaratory judgments that they are claiming.

538. Where the position of the Urgenda Foundation is concerned, it can be repeated in this connection that the Urgenda Foundation, pursuant to its statutes, strives for the transition to a sustainable society. Striving for and bringing about a sustainable society and the transition to it can therefore be considered – and the State does not contest this – an interest that the Urgenda Foundation may call its own and in defence of which it may turn to the court.

539. An emissions level that contributes to a dangerous climate change that threatens ecosystems and human communities causes serious detriment to the aspirations of the Urgenda Foundation to bring about a sustainable society, and it even makes the foundation's efforts and aspirations in this area illusory. Such an emissions level therefore causes serious detriment to the interests of the Urgenda Foundation. Such an emissions level is therefore particularly unlawful *towards* the Urgenda Foundation,[219] and the Urgenda Foundation therefore has sufficient interest to resort to the court against that level of emissions.

540. Concerning the position of the Dutch citizens for whom the Urgenda Foundation acts as legal representative, it may be repeated in this connection that they are – for the many reasons given in chapter 4.3 and furthermore because of the low-lying position of the Netherlands partly below sea level and at the mouths of several large European rivers – exceptionally vulnerable to a dangerous climate change. A Dutch emissions level that contributes excessively to the causation of a dangerous climate change is therefore especially unlawful *towards them*. They too have sufficient interest to resort to the court against these emissions. This applies all the more because the Dutch government is responsible for that emissions level and that same Dutch government has an exceptional duty of care based on article 2 and article 8 of the ECHR specifically with respect to these Dutch inhabitants to protect them from a degradation of their environment.

541. Urgenda c.s. conclude that the declaratory judgement that they request, that the Dutch emissions level is unlawful and that the State is responsible for it and liable for it, ought to be granted.

542. Against the declaratory judgement that Urgenda c.s. have requested in the summons, the State has argued that Urgenda c.s. do not have standing in requesting a declaratory judgement because they – in the event that their other

[219] See also chapter 9 of this statement of reply concerning the question of why the Urgenda Foundation has standing because its interests are at issue.

requests should be denied – have insufficient additional independent interest in this request (Statement of Defence, paragraphs 12.25–12.27). This defence does not hold.

543. The Urgenda Foundation has a substantial and independent interest in having the court determine that the Dutch emissions level is unlawfully high and that the State is responsible for it. Such a determination by the court of the unlawfulness of the Dutch emissions level and the responsibility of the State for it can and will be used by the Urgenda Foundation to inform the public about the severity, urgency, and dangers of the climate change that threatens to occur. The increase in the number of declaratory judgements has this purpose in mind. These questions are a prelude to the new request by Urgenda c.s. that the court shall order the State to adequately inform the Dutch citizens about the reality, extent, severity, and urgency of the climate problem, and to warn them about these things. Using this information and these warnings, they want to create public understanding and political support for the reduction measures that need to be implemented, as one of the contributions to promoting the transition to a sustainable society for which the foundation strives. The Urgenda Foundation sees the creation of such support as an important means of reaching its goals: there is a reason why the foundation's motto is 'Sustainable *Together* and Faster'.[220] There is also a reason why its statutes declare that the foundation wants to establish a sustainability platform *"as a motivating and inviting perspective for everyone"*.[221]

544. Furthermore, it is significant that the Supreme Court has ruled in a more general sense that a declaratory judgement can extend to restitution and compensation (Supreme Court, 19 March 2010, 172, point 3.6, Chipshol v. State). For this reason as well, Urgenda c.s. have sufficient interest in the declaratory judgement that they request.

545. The interest of Urgenda c.s. in the declaratory judgements that they request is furthermore based on the fact that a declaratory judgement will compel the State (even in the absence of an order to carry out reduction measures) to implement measures that are appropriate to removing that unlawfulness. The Supreme Court has explicitly determined in several judgements that even in cases in which the court is not allowed to sentence the State to enact legislation, the mere determination that the State is acting unlawfully will in fact lead to the

[220] See also par. 56 of the summons.
[221] See also par. 53 of the summons.

implementation by the State of measures to eliminate that unlawfulness.

546. See the Supreme Court judgement of 12 May 1999 (standard professional expenses allowance):[222]

"It follows from what has been considered previously that it is not clear in this situation how the court ought to respond to the legal deficiency caused by the discriminatory regulation, but that various solutions are imaginable that would put an end to the discrimination, and that the choice among them depends on factors including general considerations of government policymaking. This implies that the court itself ought not to take measures that would provide direct relief from the legal deficiency, but ought to leave this to the legislator for the moment. The appeal at this point is therefore well-founded. We refer however to the possibility indicated in point 3.15 of this judgement that the outcome of the deliberation in this case could be otherwise in the future. However the Supreme Court assumes that the government will submit in a timely manner a bill to Parliament that would resolve the legal obligations of the Dutch State under the treaty on this point."
(underlining added)

547. See also the case Clara Wichmann v. the State,[223] in which an order to legislate was denied by the Supreme Court, but the Supreme Court nevertheless considered that the State in fact should enact such legislation in order to put an end to the unlawful situation.

548. The Court's consideration in this judgement was as follows:

"Contrary to what Clara Wichmann c.s. argue, article 13 of the ECHR and article 2 paragraph 3 of the ICCPR do not require the court to exceed its constitutional and legal task and authority by compelling the government and the Provincial Council to enact legislation in order to achieve the results prescribed by these treaties. This is in any case already the situation because the civil court does in fact have the authority to issue a declaratory judgement – the court has also done this and the court of appeals has affirmed this judgement – and it may be expected that the State, which tends to comply with judicial decisions, will come to the correct conclusions as a result of this, without being compelled to such action by coercive means or sanctions, and will enact the necessary legislation. The current

[222] Supreme Court, 12 May 1999, *Nederlandse Jurisprudentie* 2000, 170.
[223] Supreme Court, 9 April 2010, *Nederlandse Jurisprudentie* 2010, 399.

proceedings also provide for an effective legal means in the sense of article 2 paragraph 3 of the ICCPR (and an 'effective remedy' in the sense of article 13 of the ECHR).” (underlining added)

549. The Supreme Court upheld this judgement of the appeals court and with it the declaratory judgement, reasoning as follows (point 4.6.1):

“The court of appeals has therefore in paragraph 6.19 of its judgement correctly come to the verdict <u>that the State is obliged to enact measures that will in fact lead to the granting of passive suffrage to women by the SGP and that the State in doing this must apply a measure that is effective and at the same time causes the least infringement of the fundamental rights of the (members of the) SGP.</u>” (underlining added)

550. From this case law it follows that even when the court may not issue an order requiring the enactment of legislation or the implementation of measures, a declaratory judgement stating that a given situation for which the State is responsible is unlawful compels the State to take appropriate measures. In all cases in which the Supreme Court ruled that the State was acting unlawfully and indicated that the unlawful behaviour should cease, the State did in fact – even though not formally required to do so – modify the necessary measures (and even the legislation).[224] [225] From this as well, it follows that Urgenda c.s. have a real interest in the declaratory judgement that they claim.

551. In conclusion: the State's defence has as a consequence that even if the court were to determine that there has been a violation of articles 2 and 8 of the ECHR, no legal protection whatsoever would be offered to the plaintiffs, not even in the very limited form of a declaratory judgement. Urgenda c.s. are of the opinion that such an outcome is in conflict with article 13 of the ECHR that requires effective legal protection of fundamental rights.

[224] G. Boogaard, 'Het wetgevingsbevel, over constitutionele verhoudingen en manieren om een wetgever tot regelgeving aan te zetten' (The order to legislate: Concerning constitutional relationships and ways of prompting a legislature to enact regulations), dissertation, Wolf Legal Publishers, Oisterwijk, 2013, p. 129.

[225] Apart from that, the conclusion may not be drawn that such a claim of declaratory judgement is in essence a disguised claim of an order to legislate. This follows from Supreme Court, 7 March 2014, AB 2014/230 State v. Norma, point 4.6.2.

552. For all these reasons, Urgenda c.s. are of the opinion that they have sufficient interest in the declaratory judgement that they claim.

11.3 The reduction order that is claimed

553. Urgenda c.s. have formulated their reduction order somewhat differently. Their intention is to make their claim more precise rather than simply to change it. Subsidiary to their claim, a smaller reduction is being claimed, a reduction percentage of 40% by 2030. For an explanation of this, Urgenda c.s. refer to paragraphs 531–534 above (concerning the declaratory judgement that it is unlawful to reduce emissions by less than 40% by 2030); that explanation applies *mutatis mutandis* here as well.

554. In the event that the Dutch emission level is in fact, as Urgenda c.s. state, unlawful because it leads to and/or contributes to serious unlawful endangerment and more particularly is unlawful against Urgenda c.s., then it follows from article 3:296 of the Civil Code that an order claimed by Urgenda c.s. that has the intention of limiting these unlawful emissions and thus of lessening the danger must in principle be granted. The reduction order claimed by Urgenda c.s. does in fact have that intent.

555. There is however an exception to the general rule of article 3:296 of the Civil Code: such an order or injunction[226] does not have to be granted if this follows from the law, the nature of the obligation, or the nature of the juridical act. In a number of decisions, the Supreme Court has ruled that a claim that has the intention of ordering the State to enact legislation falls under this exception. The Supreme Court's reasoning was based on the Trias Politica: according to the Supreme Court, an order to legislate is not compatible with the constitutional relationship between the legislature and the courts. On the basis of this case law,[227] the State attempts to fend off the reduction order claimed by Urgenda c.s.

[226] The main rule of article 3:296 of the Civil Code as well as the exception to that main rule apply exclusively to claims that involve an order or an injunction. The exception thus cannot be used to object to the declaratory judgement that Urgenda c.s. claim in the petitum sub 1. That claim can be awarded anyway if Urgenda c.s. have sufficient interest in it, and the Trias Politica defence is not under discussion.

[227] This jurisprudence is actually not undisputed, but it is not brought up by Urgenda c.s. for discussion in these proceedings.

556. This defence is inadequate. First and foremost, the State fails to understand that Urgenda c.s. do not claim that the State must enact legislation. They only claim that the State shall lead the country to a total level of Dutch greenhouse gas emissions by 2020 that is a reduction of 25-40% from the emissions level of 1990.

557. The State however takes the position (Statement of Defence, paragraphs 12.4 and 12.5) that the reduction order that is claimed contains a disguised claim of an order to legislate. The State maintains that Urgenda c.s. cannot claim the reduction objectives because the existing legal framework does not provide for such a claim.

558. To the extent that the State wishes to argue that the present-day legal framework sets an upper limit to that which the State may reduce, that is incorrect. The legal framework involves only minimum obligations, and it leaves states free to reduce more than the minimum.

559. With this the State perhaps wishes to suggest that the reductions desired by Urgenda c.s. are not possible without enacting legislation. The State however does not further elaborate this position, nor does it explain it further. This position is also untenable.

560. In the first place: in chapters 5.2.3–5.2.5 of their summons, Urgenda c.s. have explained that there are numerous ways in which the State exercises great influence over the landscape of Dutch emissions. The measures mentioned in this respect include the free distribution of Dutch emission rights by the State and the purchase by the State of foreign emission rights as needed to compensate Dutch emissions. If the State were to no longer distribute these emission rights for free but rather were to set a price on them, or if it were to stop buying emission rights or even were to hold back emission rights (‘backloading’, whether of its own emission rights or of those bought in), then the State would influence the Dutch emissions level without having to enact legislation. The summons furthermore points out the fact that the State provides much more subsidy to fossil energy than to renewable energy that produces no CO_2 emissions. Subsidy policy is another way that the State can strongly influence the Dutch emission level without enacting legislation. It is also pointed out in the summons (chapter 5.2.3) that the State can tighten up permit requirements on the basis of already existing legal authority. The State could establish policies that allow for tightening of relevant permit requirements and thus be able to affect the Dutch emission level without having to

enact legislation. None of this has been disputed by the State.

561. In the second place: in its statement of defence, the State itself has furthermore indicated that the Energy Accord is an important instrument of its energy policies. With the Energy Accord, the State provides inter alia for the closure of old coal-fired power plants because of their CO_2 emissions. The Energy Accord has already been discussed in detail in this statement of reply, and it has been determined that this is in fact an instrument that is being consciously applied by the State as an alternative to enacting legislation (see chapter 2 of this statement of reply). It therefore follows from the State's own positions that even without enacting legislation, the State can exert great influence on the Dutch emission level (and in fact already does so).

562. In the third place: construction of the new coal-fired power plants that are now being built was possible mainly because in the past the State (the ministers at that time), under great pressure from a lobby of the industry, made political concessions that the State later no longer could – or no longer wished to – go back on, even though the State (the ministers at a later time) actually no longer wanted those coal-fired power plants. See the passages already submitted as exhibit U59 from the book by N. Korper, *Verslaafd aan energie* (Addicted to Energy), in which bureaucrats (present and former), politicians, and cabinet members (present and former) who were directly involved state this unanimously.

563. It is apparent that the State also has exercised great de facto influence on the present and future total level of Dutch greenhouse gas emissions by making commitments, and without the necessity for new legislation in order to make those commitments. Of course Urgenda c.s. realize that making commitments is not one of the 'normal' instruments of the government. But if the de facto construction of three new coal-fired power plants in the Netherlands that 'are disastrous for the climate' and that we 'are stuck with for at least 40 years' has its origin in commitments that the State made to an industry lobby, then a defence by the State that the reductions claimed by Urgenda c.s. can only be achieved by enacting legislation ought no longer to be taken seriously. The Energy Accord too came about in a certain sense through a commitment – the commitment made by the State that by realization of the Energy Accord desired by the State, the coal-fired power stations would be exempted from the coal tax. This, added to the threat that the State otherwise would enact legal measures in implementing the Energy Efficiency Directive, has led to the Energy Accord. It shows that even without

having to enact legislation the State appears to have a great influence and grip on the emission landscape of the Netherlands.

564. In the fourth place: the letter that Minister Kamp sent to the Parliament in July 2014 (see exhibit U56 already submitted) has already been mentioned in this statement of reply.[228] In that letter, the State itself mentions various instruments with which it would be able to put an end to the CO_2 emissions of the old coal-fired power stations. These included the tightening up of permit requirements already mentioned by Urgenda c.s.[229] as well as withholding CO_2 emission rights and a number of other instruments (for example, the 'bad bank' construct; a variant of this could be to have the State buy coal-fired power stations and then shut them down), none of which require the enactment of legislation.

565. The State's defence that the reduction order claimed by Urgenda c.s is a disguised order to legislate because those reductions can only be achieved through enactment of legislation must be dismissed on the basis of these arguments.

11.4 The claim to have a reduction plan submitted to the Parliament

566. In their alternative claim under sub 2 of the petitum in the summons, Urgenda c.s. have claimed that the State, briefly stated, shall submit within a short time an action plan to the Parliament describing how the reductions desired by Urgenda c.s are to be achieved. Urgenda c.s. withdraw this claim. The greater number of declaratory judgements that Urgenda c.s. claim better meet their interests and goals. They explain this, partly in order to support the declaratory judgements that they claim, but also as support for their new claim that the court shall order the State to specifically and adequately inform and warn its inhabitants about the climate problem.

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[228] See chapter 2, specifically paragraphs 90 and 91.

[229] The minister also ultimately chose this instrument. Tightening of the permit requirements having to do with CO_2 emission is for that matter not allowed for companies that fall under the ETS (it is for other companies); because the old coal-fired power stations fall under the ETS, a choice was therefore made to tighten the regulations that have to do with efficiency requirements. This is in fact a subtle tactic to use stricter and unachievable efficiency requirements for coal-fired power plants to put an end to the CO_2 emissions of old and inefficient coal-fired power plants. Tightening the emission requirements for permits is for that matter possible without enacting legislation because that authority is already present in the law (see the summons, chapter 5.2.3); this is different for CO_2 emission norms that are based on legal requirements and from which no variance is allowed.

567. The idea that Urgenda c.s. had that such a judicial order to submit a reduction plan to the Parliament was possible and could be granted was suggested by the case Heesch/Reijs (*Nederlandse Jurisprudentie* 1981, 456). In that case, the Municipal Executive of Heesch had not submitted a certain proposal in which Reijs had a specific interest to the city council which had decision-making authority, and this was considered to be an unlawful act on the part of the municipality. From this it follows that in certain circumstances the court may possibly rule that the executive authority has a legal obligation to submit a proposal to the representative body with decision-making authority. Urgenda c.s. were furthermore of the opinion that an order to the State to submit a reduction plan to the Parliament, without any accompanying obligation to actually accept this plan or cause it to be accepted or recommend it, would in no way interfere with the political process, and certainly not in an unacceptable manner.

568. With their alternative claim under sub 2 of the petitum in the summons, Urgenda c.s. mainly wished to (at last) bring about a principled, thorough, and public debate in the Parliament, if the reduction order claimed were not to be granted – in any case, about the reduction order and the climate problem. They thought that such a debate would be able to impress the Dutch public with the scope, the severity, and the urgency of the climate problem and create political support for the reductions that are actually needed, according to the government as well.

569. The State however is of the opinion (Statement of Defence, paragraph 12.19) that this claim of Urgenda c.s. is in fact at odds with the primacy of the executive authority. In essence, this defence is a variant of the Trias Politica defence that has already been mentioned briefly in the discussion of the reduction order.

570. Urgenda c.s. will withdraw this claim, not because they think that the Trias Politica defence is valid, but because they no longer have confidence that they will reach their goal with this claim. Instead they will claim additional declaratory judgements, as has been said, as well as an order to the State to inform the Dutch public adequately about the climate problem.

11.5 The new claim to order the State to adequately inform the Dutch public

571. Urgenda c.s. will file a new claim in the petitum under sub 3, stating that the State shall be ordered to inform and warn Dutch citizens and voters about:

- the severity, scope, and urgency of the worldwide climate problem;
- the (great) responsibility for this that is shared by the Dutch citizens and voters because their per capita emissions are among the highest in the world and higher than those of neighbouring countries;
- the necessity of reducing Dutch emissions steeply and within a short time.

572. Urgenda c.s. will claim that this warning is to be given in the form of a text, which is included in the petitum, that is to be distributed by the State in full-page notices placed in at most six national daily newspapers specified by the Urgenda Foundation, on a date determined by the Urgenda Foundation.

11.6 The legal foundation of an order to inform and warn

573. The legal foundation for such a court order to the State to adequately inform and warn its inhabitants about a situation or activities that are associated with exceptional danger and for which the State bears responsibility[230] can be found according to Urgenda c.s. in case law that is part of the standard body of case law concerning endangerment.

574. In the Jet Blast decision the Supreme Court determined that in case of a dangerous situation, there is a legal duty for the party under whose supervision and responsibility that dangerous situation falls to warn the public in a way that is sufficient and adequate to cause the danger to be avoided. See Supreme Court, 28 May 2004, *Nederlandse Jurisprudentie* 2005, 105 (Hartmann v. Princess Juliana IA, Jetblast decision), paragraph 3.4.3. In the Veenbroei decision, the Supreme Court came to the same verdict: the State ought to have warned the public about the hidden dangers of an area that fell under the supervision and responsibility of the State, and that a warning ought to have been suitable and adequate to effectively protect against those dangers. See Supreme Court, 27 May 1988, *Nederlandse Jurisprudentie* 1989, 29 (State v. Daalder, Veenbroei decision), paragraph 3.2.

[230] The fact that the magnitude of the total level of Dutch emissions can be attributed to the State on the basis of social norms and that the State bears responsibility for this situation has already been discussed in this statement of reply, as has the fact that, based on articles 2 and 8 of the ECHR, the State has an exceptional duty of care to protect its citizens against a serious degradation of their living environment.

575. In the situation in which a legal duty to inform and warn (a legal obligation to 'act´) rests upon a person or entity, it follows from article 3:296 of the Dutch Civil Code that a claim by an interested party can be awarded to order that person or entity to inform and warn.

576. It is also evident from the case law of the ECtHR that has been discussed previously in the summons and in this statement of reply that a legal duty for states arises from articles 2 and 8 of the ECHR to warn their citizens adequately about a situation that exposes them to exceptional dangers, and that this warning must be such that it is adequate and suitable to avert the danger (see inter alia paragraph 417 of this statement of reply).

11.7 The interest of Urgenda c.s. in the order to inform and warn that they claim

577. The State has an exceptional responsibility to inform and warn its inhabitants when developments are involved that are of great importance for them and that affect all or many of them. That responsibility to inform and warn its inhabitants is inseparably connected with the government's task of safeguarding the general public interest and of paying attention to everything that is important in that respect or that could become important. In order to be able to carry out its task properly, the citizens provide the State with resources[231] (tax revenue, regulatory authority, etc.) that single individual citizens do not have at their disposal.

578. As a result of this exceptional task and the resources put at its disposal for this purpose,[232] the State (and in particular the governmental administration) has a very great advantage over its citizens where knowledge is concerned. Furthermore, it is expected of the State (the administration) that it shall act in the general

[231] Dutch: *middelen*.

[232] On the subject of these proceedings, examples of such resources that come to mind are advisory bodies such as the Environmental Assessment Agency and the Royal Netherlands Meteorological Institute, or the Scientific Council for Governmental Policy (Dutch: Wetenschappelijke Raad voor het Regeringsbeleid = WRR), whose legally specified task is: *"The Council's task is to support governmental policymaking by providing scientifically verifiable information concerning developments that can influence society over the longer term, and in doing so to indicate in a timely manner contradictions and obstacles that can be expected, to formulate descriptions of problems with respect to major policy questions, and to indicate policy alternatives."* On 4 November 2013, the WRR published the report 'Naar een lerende economie' (Toward a Learning Economy), in which it looks at the consequences of the climate change and resource depletion that lie ahead of us. This report was never presented to the Parliament.

interest of everyone. These two circumstances together entail that very great authority and trust[233] tend to be attributed to factual information provided by the government about societal developments to which it draws attention and about measures that are necessary in connection with them.

579. Thanks to the authority and trust that are attributed to information provided by the government, the State with its information apparatus determines more than any other entity the content of the public and social agenda, as well as the tone and content of the societal debate about the structure of Dutch society.[234] With its information apparatus, the State creates social and political support for necessary measures.

580. Urgenda c.s. are of the opinion that until now the State has been severely deficient in adequately informing and warning the Dutch public about the threat of a dangerous climate change, and in doing this in a way and with a tone that does justice to the scope, the severity, and the urgency of this problem. Because of the silence of the government, the citizen can think that things will not be so serious or will not go so quickly. While the IMF and the World Bank are calling climate change 'the defining challenge of our era', there is no sign of this in Dutch politics.

581. In this matter, the State cannot hide (see the statement of defence, paragraphs 10.25–10.28) behind the fact that in the mainstream media much is already being written about climate change. This applies to an even greater extent when the climate debate in the mainstream media presents not just a lot of facts but also a lot of nonsense, while most citizens are not able to distinguish between them. Thus in the mainstream media the existence of anthropogenic climate change or the severity of it are still regularly disputed, while 97% of climate scientists who are able to know about such things are scientifically certain of these facts. With the authority that accompanies its announcements, the State would be able to play an important role in this societal debate. In its official policy documents that the average member of the public does not read, the State follows and accepts, correctly, the scientific insights, but in the societal debate the State does not actively disseminate these insights, and it allows uncertainty to persist about the actual severity and scope of the climate problem. In this way, the State neglects its

[233] It is considered a major political failing when the government provides incorrect or misleading information.

[234] This is called 'agenda building' in public administration.

duty to inform and to warn.

582. Neither can the State hide behind the fact that a lot of information about climate change is already available on government websites, including those of governmental advisory bodies. That attitude is too passive; the websites mentioned by the State offer an overkill of data (on many other subjects besides climate change as well) that is not further specified, weighed, or put in context. Such an unorganized catchall of information is only informative to someone who is actively and specifically searching for information and already has sufficient prior knowledge. That is however not an adequate way to warn the general public. It is not specifically and proactively applying the authority of the government to inform citizens about future developments that can have large consequences for them and Dutch society.

583. The defence of the State thus comes down to: whatever the citizen wants to know about the dangers of climate change is surely to be found somewhere in the mainstream media or on the internet; since everything can be found on the internet, just go look for it yourself. This is an incorrect understanding of the duty to inform and to warn that the State has with respect to its inhabitants – a duty to inform that also rests upon the State as one of the causers of the endangerment, or at least as one who bears responsibility for it.

584. The inadequate provision of information by the State also has consequences that cannot be underestimated with respect to the political support for adequate Dutch energy and climate policies and for far-reaching emission reductions.

585. In 2013, the Netherlands Environmental Assessment Agency (Dutch: Planbureau voor de Leefomgeving = PBL) published a report[235] (**exhibit U95**) that is very relevant in this context. Denmark has a reduction goal of 40% by 2020, Germany has a reduction goal of 40% by 2020, and the United Kingdom has a reduction goal of 35% by 2020.[236] Thus all of these countries are working toward reduction percentages by 2020 that Urgenda c.s. also desire from the State in these proceedings, but which the State will have nothing to do with and which the State

[235] PBL (2013), 'Vergroenen en verdienen. Op zoek naar kansen voor de Nederlandse economie' (Greening and Earning: Looking for Opportunities for the Dutch Economy), The Hague: PBL. See www.pbl.nl/sites/default/files/cms/publicaties/PBL-2013-Vergroenen-en-verdienen-1061.pdf

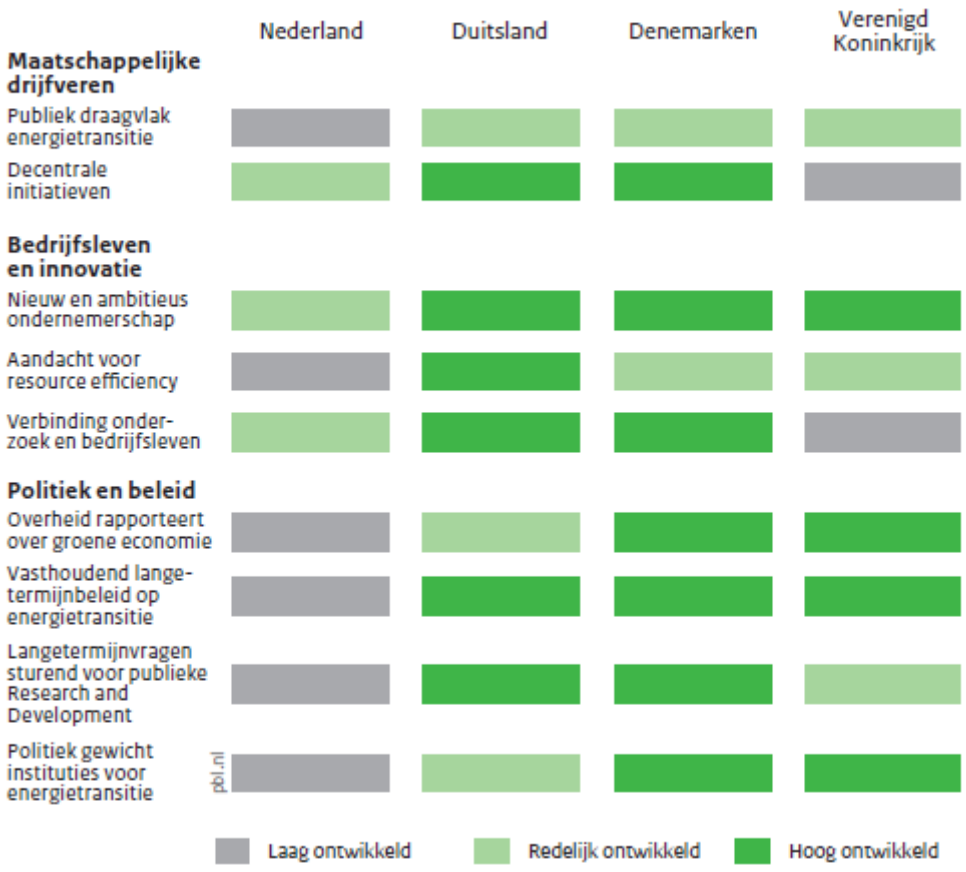
[236] For Denmark and Germany, see paragraphs 405–406, and for the United Kingdom, see the brief explanation by the regulatory authority responsible for the UK's emission reduction goals of inter alia 35% by 2020 (**exhibit U96**).

also says the court may not concern itself with. In the report, the PBL looks into inter alia how it came about that these countries are much more ambitious than the Netherlands where reductions are concerned and are also much more effective in achieving them.

586. Figure 16 on page 58 of the PBL report contains a table in which the four countries are compared concerning the conditions for green transition in those countries. In essence, this figure 16 tells the whole story in a single glance. Urgenda c.s. therefore are including this figure in this statement of reply:

Figuur 16

Condities voor vergroening van de economie



Bron: PBL, 2013

In de omringende landen zijn veel condities voor vergroening beter.

587. From the table, it is evident that the Netherlands scores low on nearly all aspects. Furthermore, it is striking that four of the eight relevant 'success' factors belong to the domain and are the responsibility of the national government and that the Netherlands scores low on all four of these factors while the other three countries

do not score low on even one of those four factors. At the same time, the Netherlands is the only country of the four in which public support for a sustainable energy transition scores low. The latter fact would appear to be the consequence of the first.

588. That is evident from pages 68–74 of the report, in which the PBL draws conclusions from the comparison that has been made:

"What becomes obvious is that Germany, Denmark, and the United Kingdom have stable long-term objectives, primarily directed toward an energy transition. Their ultimate goals are firm in terms of their direction and their order of magnitude, and the public support for this direction and ambition is of such a nature that it does not pay politically to attack the goals or to want to adjust them downwards."(p.68)

*"**Public support for a green transition requires ongoing political attention.** It is striking that the public support for green transition (and then in particular for an energy transition) in the three reference countries appears to be greater among the population than in the Netherlands. [...] In all three of the countries, energy and climate policies are politically important subjects. It is, as the Germans say,* Chefsache." (p.69)

"Broad public support in the society is a precondition for stable long-term goals. In Denmark, an ongoing dialogue between the government and the parliament is necessary in order to maintain broad political support for the implementation of energy and climate policies. The trendsetting position that Denmark has meanwhile taken in a number of green technologies clearly contributes to this political support for green transition." (p.70)

589. In the Netherlands there is no fundamental debate or ongoing dialogue between the government and the parliament concerning energy and climate, as there is in Germany, Denmark, and the United Kingdom, while there certainly is reason enough: the Netherlands is the 'dirtiest' kid in the class, and Dutch energy and climate policies have fallen far behind those of its European peers.[237]

590. It is illustrative (see also the statement of defence, paragraph 2.19) that a motion was submitted by the Partij voor de Dieren (Party for the Animals) that had the

[237] This has already been discussed in detail in the summons, supported with numerical data that have not been disputed by the State.

intention of realizing the reductions desired by Urgenda c.s.,[238] and that this motion was rejected without any discussion (with only six members of the Parliament voting in favour of the motion). The subject of climate change and the deep concerns about it that are brought up in the summons, as well as the fact that 886 citizens felt it necessary to take a case on this subject to court ('a lawsuit out of love') against their own government, were not found worthy of a single word of discussion in the Parliament.

591. In this connection, the Neppérus motion (already mentioned in the summons, paragraph 427) is also relevant.[239] In this motion, which was accepted by the Parliament, the government was (to state it briefly) called upon to take a more critical stance against the IPCC, and in particular to listen more closely to the opinions of climate sceptics.

592. In implementing the Neppérus motion, the State has meanwhile (see **exhibit U97**: letter of 23 February 2012 from undersecretary of infrastructure and environment Joop Atsma to the Parliament concerning the implementation of the Neppérus motion) given a science journalist with no scientific background and no scientific publications to his name the assignment of advising it concerning the IPCC reports. A complaint by climate sceptics that is often heard is that no one listens to them because they are not able to support their positions scientifically and therefore do not have their opinions published in peer-reviewed scientific journals.[240] For the implementation of the Neppérus motion, the State has therefore given the KNMI (Royal Netherlands Meteorological Institute) and the PBL (Netherlands Environmental Assessment Agency) – scientific institutions that fall under the State's authority and provide important contributions to the work of the IPCC – the task of providing the arguments of climate sceptics with scientific support in an article that will have to be published in a peer-reviewed scientific journal. The KNMI has also – still according to the same letter from the undersecretary – been given

[238] The Urgenda Foundation had sent copies of the summons to all political parties represented in the Parliament, for their information.

[239] The Neppérus motion was a reaction to the 'Climategate' scandal and was submitted on 13 October 2010, thus after the WRR [scientific advisory council for governmental policy matters] had already determined on 30 August 2010 that it was a tempest in a teapot and that there was no reason whatsoever to doubt the integrity and accuracy of the findings of the (English) scientists involved.

[240] Urgenda c.s. would be of the opinion that sceptics have little right to complain when scientific journals refuse to publish unscientific articles. This does not change the fact that for that reason little or no authority is being attributed to the opinions of sceptics, nor can such unfounded opinions serve as a sound basis for policy decisions.

the assignment by the State of holding an international conference about the weaknesses of climate models.

593. All of these measures that have been taken by the State in implementing the Neppérus motion are exceptionally suited – and also appear to be intended by the State – to undermine in the eyes of the general public the credibility of the findings and conclusions that 97% of the climate scientists agree on. This is anything but adequately informing and warming the Dutch public about the climate problem as the 'defining challenge of our era'. With this course of action, the State undermines public support for the reductions and the energy transition that are needed because of the climate problem.

594. In the light of all the above, Urgenda c.s are of the opinion that they have both the right to and (considerable) interest in the awarding of their new claims as expressed in the (new) petitum under sub 8 and 9, that the State shall be ordered (in the manner presented there) to inform the Dutch public adequately about the climate problem.

CHAPTER 12: TRIAS POLITICA

595. At the end of this statement of reply, Urgenda c.s. return to the subject that seems to be at the heart of the State's defence: the defence that the court may not decide concerning this case because the decisions (emission reductions) that Urgenda c.s. desire ask for a political determination and therefore are reserved to the political process and not to the courts – the Trias Politica defence.

596. In their summons, Urgenda c.s. have gone into considerable detail concerning the question whether their claims can in principle be awarded by the civil court, or whether to the contrary their claims raise a political question the answer to which is reserved to the government and concerning which the court may not give a ruling. They came to the conclusion that what is involved here is a legal question on which the court may rule, even though that decision can have far-reaching consequences for the political process, and that what is involved here is not a political question on which the court may not give a ruling.

597. Urgenda c.s. are of the opinion that the distinction that they make between a political case and a political question is based on argumentation that is legally very

precise and clear and for that matter is also legally very convincing. They can say this with all due deference because they have not come up with that argumentation themselves but – as can be seen in the summons – have derived it from the decision of the US Court of Appeals for the Second Circuit in the case Connecticut v. AEP.

598. In its statement of defence, the State has not disputed that a distinction must be made between a political case and a political question. The State does comment (Statement of Defence, paragraph 12.17) that the Dutch court is not bound to American case law, but that's a cliché and not an intrinsic rebuttal of the distinction argued by Urgenda c.s. as such.

599. Although the Dutch court is not bound to American case law, this does not otherwise dispel the fact that this case law can be instructive from a viewpoint of comparative law. This is especially the case in the proceedings at hand because the American courts are in the habit of strictly refraining from decisions that are reserved to the political process on the basis of the 'political question' doctrine (our 'Trias Politica doctrine'), and because of this, the doctrine is much better thought out and further developed in American law than in the Netherlands.

600. Urgenda c.s. realize that these proceedings can have consequences for the State's emission and energy policies, and the case is thus to that extent a political matter. But in the past, political consequences did not stand in the way of judicial decisions concerning – to list just a few issues – naming and visitation rights, the right to strike, and abortion and euthanasia. What is relevant is not whether the case involves a political matter, but rather whether it involves a political question.

601. The State explains its position that this case involves a political question that requires political consideration mainly by pointing out (Statement of Defence, paragraphs 12.14 and 12.15) that Dutch politicians are planning and considering other reduction percentages than those claimed by Urgenda c.s. That argument is not conclusive, and it tends toward circular logic: because Dutch politicians have different ideas than Urgenda c.s., it is a political question. Following that line of reasoning, the courts would never be able to declare the actions of the government to be unlawful.

602. Urgenda c.s. are of the opinion that a decision can be made on their claims without having to answer questions and having to make assessments that are reserved to

the political powers. They will now explain this.

603. The initial and central question of the case is whether it is unlawful, by means of (relatively) large and even excessive emissions of greenhouse gases, to contribute to the present excessive worldwide emission of greenhouse gases, when this global emission at the present excessive scale (thus in the event that the emission is not reduced very quickly and very steeply) almost certainly will lead to climate change of 4°C or more that will have catastrophic consequences. This is a purely legal question in the well-known 'endangerment' category, unencumbered with any political aspect whatsoever.

604. The subsidiary questions contained in this main question (for example: Are Dutch emissions in fact excessive? Does the emission of greenhouse gases in fact lead to warming? Does the present worldwide emission in fact lead to such serious and even catastrophic consequences that it is unacceptable with respect to norms of proper social conduct?) are all also questions of a legal nature that fall within the realm of the everyday legal tasks and concerns of the court.

605. If the court reaches a verdict that the Dutch emission level of greenhouse gases is in fact unlawful, then that is a legal judgement and not a political one. If the court reaches a verdict that the State bears responsibility for the magnitude of that emission level, then that too is a legal judgement and not a political one.

606. The next question then – also a strictly legal one – is whether the State can be compelled by the court to reduce that excessive and therefore unlawful emission level, and if so, how great that reduction must be.

607. Urgenda c.s. are of the opinion that if it was not the State but rather, for example, Shell or Akzo that was responsible for that emission level, no one would have any doubt that the court would be able to (and even have to) order the responsible party to reduce that emission level.

608. Urgenda c.s. cannot see why it would suddenly be so very different if not Shell or Akzo is responsible for that emission level, but rather the State. Is it a prerogative of the political powers *not* to be bound by the law? Not even in a constitutional democracy that is organized according to the Trias Politica? Is it exclusively a political matter of the State, in which the court may not involve itself, to decide whether it will continue with unlawfully excessive emissions with serious

consequences – even in defiance of the fact that the political process has decided to commit the State to the UNFCCC with which the State has committed itself to reduce emissions sufficiently so that the serious consequences of a dangerous climate change can be prevented? The State will not want to defend that position, nor does Dutch law provide any support for that position.

609. Urgenda c.s. conclude that the State can be given a reduction order by the court without the court involving itself in political questions in doing so.

610. The next question is how large that reduction must be.

611. Urgenda c.s. realize that, unlike with the previous questions, this question initially appears to leave room for deliberations of a policy and political nature. But here too it holds that the political space is much smaller than the State claims for itself.

612. The State cannot, for example, lawfully decide that it will reduce only 0.1%. Such a scanty reduction is after all entirely insufficient to remove the excessive and therefore unlawful character of the present emission level. The margin of discretion available to the State in political policymaking exists only within the limits of legal legitimacy.

613. The State has acknowledged that, in order to successfully help prevent a dangerous climate change, a Dutch reduction of 80-90% is necessary. Urgenda c.s. are of the opinion that the political margin of discretion available to the State where the magnitude of Dutch reductions is concerned is limited to this bandwidth.

614. In that light, Urgenda c.s. are of the opinion that the State does not have the political space to decide that it wants to reduce less than the 25-40% claimed by Urgenda c.s.; a reduction of even less than the 25% claimed by Urgenda c.s is after all – even according to the State itself – obviously too little to remove the excessive and unlawful character of the present Dutch emission level. The conclusion is that the State cannot lawfully decide to reduce less than the 25-40% that Urgenda c.s. claim. That too is a legal judgement and not a political one.

615. The question that remains is whether the political powers reserve the right to decide *as of when* the State will achieve a reduction of 25-40% so that the court may not decide that this reduction must be achieved by 2020. This question will

now be discussed.

616. The State has acknowledged and endorsed the fact that has been concluded in the IPCC reports, namely that a reduction of 25-40% by 2020 is *necessary* in order to remain on a credible path with which there is *a reasonable chance* that a dangerous climate change can still be prevented.

617. The State has furthermore not contested the conclusions cited by Urgenda c.s. of inter alia the IPCC, the Stern Review, the IEA, the UNEP, and the PBL that postponing reductions will only make reducing more expensive. Reducing less than the reductions by 2020 that Urgenda c.s. claim therefore leads to greater climate risks and other risks as well as to higher costs.

618. Our neighbouring countries such as Germany, Denmark, and the United Kingdom also have reduction goals of 25-40% by 2020. Granting the reductions claimed by Urgenda c.s. therefore does not lead to unequal competitive positions or disruption of a 'level playing field'.

619. Furthermore, the Netherlands ranks in relative terms among the largest emitters in the world, and thus it may be desired of the State that it shall reduce Dutch emissions expeditiously (in the words of the UNFCCC 'take the lead') and substantially.

620. To the contrary, the State has not put anything forward from which it is shown that it could – and thus may – lawfully decide to achieve a reduction of 25-40% later than 2020. Specifically, the State has not stated, much less supported or sufficiently demonstrated, that a reduction of 25-40% later than by 2020 is still consistent with the legal duty resting upon it to help to prevent a dangerous climate change.

621. In this connection, the State has notably neglected to state in concrete terms when it does in fact want to achieve that reduction, nor has it presented plans in which it is evident that it will actually achieve that reduction (for example, a concrete action plan with measures and with approved budgets) with accompanying supporting arguments that such a postponed reduction is compatible with its legal duty to help prevent a dangerous climate change. The State has indeed asserted that it will make efforts in the context of international negotiations to have a reduction obligation of 40% by 2030 established that must apply to everyone, but that in

itself is clearly not enough to satisfy its own individual legal duty to reduce emissions.

622. In the light of all the above, the State has not sufficiently demonstrated that it can still lawfully make the decision to achieve an emission reduction of 25-40% later than by 2020. In other words, the State's political space into which the court may not enter is not so large that the court may not order it to achieve a reduction of 25-40% by 2020. Consequently, such a reduction order is founded on a legal judgement and legal considerations, and not on a political determination that is reserved to the political powers.

623. Urgenda c.s. thus conclude that the Dutch court may rule on the questions that have been presented to it by Urgenda c.s. and that by doing so the court does not infringe on the political powers or process. The defence of the State with respect to this is invalid.

624. Urgenda c.s. take the liberty of adding one more comment in this regard.

625. The State appears to be of the opinion that it is sufficient to invoke Trias Politica in order to silence all debate before the court. That opinion is not correct. The decision in the Srebrenica case (Supreme Court, 6 September 2012, ECLI:NL:HR:2013:BZ9225) illustrates this. In that case as well, the State argued that the action in question (sending soldiers on peace-keeping missions) was a pre-eminently political matter that is strongly intertwined with the government's policies in the area of foreign and international politics and that a verdict of liability could potentially have large (international) political consequences. This however did not stop the court from testing the actions that were carried out in that context against (legal) norms of lawfulness.

626. In the Srebrenica case, a violation of human rights was under discussion; in the case at hand, that is also the situation. When there is a violation of human rights or a threat of such a violation, the ECtHR too appears to apply an intrusive test to governmental policies and to presume that states have legal duties that intervene deeply in what ordinarily is pre-eminently the prerogative of the political order. This has already been discussed in detail in chapter 8.

627. In the case Ilaşcu v. Moldova and Russia, the ECtHR ruled that the obligations of Moldova meant (even though part of the country had declared itself independent,

with the support of Russia, and thus the government could no longer effectively exercise its authority in that area) that Moldova still had a positive obligation under article 1 of the ECHR "*to take the diplomatic, economic, judicial or other measures that it is in its power to take and are in accordance with international law to secure to the applicants the rights guaranteed by the Convention.*"[241] This decision too illustrates – certainly where a threatened violation of fundamental rights is concerned – that the State's margin of discretion in political policymaking only exists within the limits of legal legitimacy.

628. Urgenda c.s. conclude once again that the State's Trias Politica defence is invalid.

629. Urgenda c.s. wish to conclude this statement by quoting several passages from the book *Climate Change Liability: Transnational Law and Practice*, ed. Brunnée, Goldberg, Lord, and Rajamani that has already been mentioned in footnote 81. They wish to quote from the 'Introduction' contributed by the four editors with which the book begins, because in the opinion of Urgenda c.s. the authors of this introduction go to the heart of these proceedings and at the same time sketch the broader perspective within which the court ought to see this case (**exhibit U98**):

"1.01 Climate change presents to society as a whole a wide range of threats, and a narrower range of opportunities, on the political, economic and social levels. It also poses questions and challenges for the law. […]

1.02 Climate change itself is multifaceted in many respects; it raises physical, scientific, economic, social, political and cultural issues along with legal ones. The web connecting the various causes and effects of climate change is complex. Possible legal solutions to climate change problems are likewise complex and difficult to classify. […] The law exists to serve society, and has accordingly evolved to meet the changing needs and challenges of society. With climate change, this evolution involves – and will, we believe, increasingly involve – both the application of existing legal concepts, including some ancient doctrines generally seen as dormant if not extinct, to new factual issues, and the development of new legal concepts.

1.03 The attempts to address climate change through international regulation are well known and ongoing. As frustration mounts in some quarters at the

[241] Extracted from Nieuwenhuis and Hins, *Hoofdstukken grondrechte*n (Chapters on Fundamental Rights), 2011, p. 161.

perceived inadequacy or speed of this process and as the likelihood of significant climate change impacts grows, focus turns increasingly to what might be termed 'liability' for climate change. By 'liability' we mean the concept that the law may provide redress or remedy to those who are or may be adversely affected by climate change, and control (or provide compensation for) the behaviour of those public or private actors who may be directly or indirectly responsible for it.
[…]

1.07 We want to emphasise that, while international law is part of the background against which climate change liability develops, the focus of this volume is firmly on national law. […]
[…]

1.09 The debate about climate change itself remains as vigorous as ever. The overwhelming scientific consensus is that it is occurring, that it is potentially very damaging, and that its cause is largely anthropocentric in nature. […]

1.10 […] Regardless of one's belief in or doubt about climate change, this book shows that liability arising related to climate change is developing apace and, in some jurisdictions, on a large scale. As Chapter 20 (on the USA) illustrates, the substantial recent increase in litigation about climate change has occurred not despite but because of the highly polarised opinions on the issue. […]

1.12 […] As is well known, the current international regime reflects what is politically possible and not what is considered scientifically essential or even desirable. The gap between these different indicia is immense, and it is not clear even whether it is currently closing or opening wider (but see Chapter 4 for a discussion of the policy contexts). […] If the central premise is accepted that the purposes of the law include serving society, reflecting its attitudes and providing redress for injustices, the prospect of a marked increase in climate change liability is a very real one. Furthermore, the class of 'victims' extends well beyond residents of Alaskan villages, Pacific Islands, and the Bangladeshi coastline (to name but a few obvious ones). The economic, social and cultural consequences of climate change are very wide-ranging."
(underlining added)

630. These passages illustrate that the realization is gaining ground worldwide that the national courts have out of sheer necessity an important role to play in tackling the

global climate problem. Out of sheer necessity, because despite the fact that governmental and political institutions would appear to be more appropriate in that role, they have turned out to be powerless in carrying it out, and addressing the climate problem can bear no further delay.

631. Urgenda c.s. are of the opinion, along with the authors quoted, that the law exists to serve society. In this, the court has an exceptional responsibility. It is the court's responsibility and task to ensure that the law is applied, if necessary by correcting that which the government does – or neglects to do – that is in conflict with the law. Such corrective legal intervention in government is not in conflict with the Trias Politica; it is in fact the essence of it.

632. Urgenda c.s. request the court to deliver justice and to do what is right.

THEREFORE (PETITUM):

This court is requested to come to a decision, provisionally enforceable to the extent possible:

1. To declare:
   Because of the large worldwide emission of greenhouse gases into the atmosphere, the earth is warming, and according to the best scientific insights, a dangerous climate change will take place if that emission is not reduced forcefully and quickly.

2. To declare:
   The dangerous climate change that comes about with a warming of the earth of 2 degrees Celsius or more with respect to the pre-industrial era, or at least the dangerous climate change that comes about with a warming of the earth of approximately 4 degrees Celsius with respect to the pre-industrial era that is expected according to the best scientific insights with present trends of emissions, threatens large groups of people and human rights worldwide.

3. To declare:
   Of all the countries that emit significant amounts of greenhouse gases into the atmosphere, the per capita emissions in the Netherlands are among the highest in the world.

4. To declare:
   The combined volume of the present annual emissions of greenhouse gases by the Netherlands is unlawful.

5. To declare:
   The State is responsible for the combined volume of the emissions of greenhouse gases by the Netherlands.

6. To declare:
   Primary:
   The State is acting unlawfully in the event that it has not, by the end of 2020 at the latest, reduced or caused to be reduced the combined volume of the annual emissions of greenhouse gases by the Netherlands by 40% or at least by 25% with respect to the year 1990;
   Subsidiary:
   The State is acting unlawfully in the event that it has not, by the end of 2030 at the latest, reduced or caused to be reduced the combined volume of the annual emissions of greenhouse gases by the Netherlands by at least 40% with respect to the year 1990.

7. *Primary*:
   To order the State to limit or cause to be limited the combined volume of the annual emissions of greenhouse gases by the Netherlands to such an extent that by the end of 2020 the combined volume of those emissions will be reduced by 40% or at least by 25% with respect to the year 1990;
   Subsidiary:
   To order the State to limit or cause to be limited the combined volume of the annual emissions of greenhouse gases by the Netherlands to such an extent that by the end of 2030 the combined volume of those emissions will be reduced by at least 40% with respect to the year 1990.

8. To order the State that when first requested by the Urgenda Foundation, on a date determined by the Urgenda Foundation and disclosed to the State at least 2 weeks before said date, it shall publish or have published in at most six national newspapers as indicated by the Urgenda Foundation, a full-page notice clearly indicating by means of directly recognizable logos or other symbols that it originates from the State and the government, the following text or one

determined and adjudicated by the court:

"IMPORTANT INFORMATION FROM THE NATIONAL GOVERNMENT

In its decision of [date of ruling], the court in The Hague has ordered the government of the Netherlands to publish the following information and general warning.

Our planet is warming. It has been determined that this warming is caused for the greatest part by us humans. Humans emit huge quantities of greenhouse gases into the atmosphere – particularly through the burning of coal, oil, and gas. These gases are responsible for global warming because they have the property of trapping warmth in the atmosphere. As a consequence, the climate is changing everywhere.

Scientists tell us that the climate has changed from time to time in the long history of the earth. But this time climate change is caused by human beings. And according to scientists it is proceeding more quickly than any previous climate change known to them.

Governments and scientists all over the world are becoming more and more concerned that this climate change is proceeding faster than the pace at which plants and animals are able to adapt to new environments. They are also concerned that this climate change will have tremendous economic and social consequences.

With the present level of worldwide greenhouse gas emissions, we are headed for an average temperature rise that will amount to 4 degrees Celsius (or more) at the end of this century. This is a source of great concern because it is generally accepted that the average worldwide temperature may rise no more than 2 degrees Celsius in this century to prevent a dangerous level of climate change.

A warming of 4 degrees in 2100 will confront our children and grandchildren with serious consequences. The number of extreme weather events and disasters will sharply increase and this will cause more and more casualties and steadily increasing economic damage. Harvest failures will occur more often and on a larger scale because of heat, drought, and water scarcity, or because of flooding. As a consequence, food prices will rise. Plant and animal species will go extinct, and

vulnerable ecosystems may totally collapse. This may result in large-scale migrations of humans and conflicts.

In order to prevent a dangerous level of climate change, a forceful and quick worldwide reduction of emissions is needed. The Netherlands – and especially the Netherlands – will have to make a significantly greater contribution to this effort than is now the case. On a per capita basis, Dutch emissions are at present among the highest in the world.

This means that the Dutch government can legitimately be asked by the citizens of the Netherlands to do what is necessary. Plans and measures must rapidly be put in place. Concrete steps must be taken towards a marked and faster reduction of the Dutch emissions of greenhouse gases.

This publication and the ruling of the court at The Hague are to be found for the next two weeks on the home page of the website of the national government, www.rijksoverheid.nl."

9. To order the State to publish on the home page of the website www.rijsoverheid.nl, and to keep published there, the text mentioned under sub 8 of the petitum, beginning on the date mentioned in sub 8 of the petitum and continuing for two uninterrupted weeks, and to do this in such a way that without any clicking on the home page, this text appears in a clearly legible form to every visitor to the home page and must be clicked away before other pages of the website may be visited.

Such including an order to pay the costs of the plaintiffs in this procedure, including the costs of legal advice and representation, all within 14 days after the judgement, with provision that the legally specified interest shall be paid in addition to the said costs in the event that payment has not been made within 14 days of the decision of this case; or otherwise to the extent that this court finds justified.