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Uitspraak

SUPREME COURT OF THE NETHERLANDS

CIVIL DIVISION

Number 19/00135

Date 20 December 2019

JUDGMENT

In the matter between:

THE STATE OF THE NETHERLANDS (MINISTRY OF ECONOMIC AFFAIRS AND CLIMATE POLICY),
seated in The Hague,
CLAIMANT in cassation,
referred to hereinafter as: ‘the State’,
counsel: attorneys K. Teuben, M.W. Scheltema and J.W.H. van Wijk,

and

STICHTING URGENDA,
having its office in Amsterdam,
RESPONDENT in cassation,
referred to hereinafter as: 'Urgenda',
counsel: attorney F.E. Vermeulen.

Summary of the Decision

The issue in this case is whether the Dutch State is obliged to reduce, by the end of 2020, the emission of greenhouse gases originating from Dutch soil by at least 25% compared to 1990, and whether the courts can order the State to do so.

Urgenda's claim and the opinions of the District Court and the Court of Appeal

Urgenda sought a court order directing the State to reduce the emission of greenhouse gases so that, by the end of 2020, those emissions will have been reduced by 40%, or in any case at by at least 25%, compared to 1990.

In 2015, the District Court allowed Urgenda's claim, in the sense that the State was ordered to reduce emissions by the end of 2020 by at least 25% compared to 1990.

In 2018, the Court of Appeal confirmed the District Court's judgment.

Appeal in cassation

The State instituted an appeal in cassation in respect of the Court of Appeal's decision, asserting a large number of objections to that decision.

The deputy Procurator General and the Advocate General advised the Supreme Court to reject the State's appeal and thus to allow the Court of Appeal's decision to stand.

Opinion of the Supreme Court

The Supreme Court concludes that the State's appeal in cassation must be rejected. That means that the order which the District Court issued to the State and which was confirmed by the Court of Appeal, directing the State to reduce greenhouse gases by the end of 2020 by at least 25% compared to

1990, will stand as a final order.

The Supreme Court's opinion rests on the facts and assumptions which were established by the Court of Appeal and which were not disputed by the State or Urgenda in cassation. In cassation, the Supreme Court determines whether the Court of Appeal properly applied the law and whether, based on the facts that may be taken into consideration, the Court of Appeal's opinion is comprehensible and adequately substantiated.

The grounds for the Supreme Court's judgment are laid down below in sections 4-8 of the judgment. These grounds will be summarised below. This summary does not supersede the grounds for this judgment and does not fully reflect the Supreme Court's opinion.

Dangerous climate change

(see paras. 4.1-4.8, below)

Urgenda and the State both endorse the view of climate science that a genuine threat exists that the climate will undergo a dangerous change in the coming decades. There is a great deal of agreement on the presence of that threat in climate science and the international community. In that respect and briefly put, this comes down to the following.

The emission of greenhouse gases, including CO2, is leading to a higher concentration of those gases in the atmosphere. These greenhouse gases retain the heat radiated by the earth. Because over the last century and a half since the start of the industrial revolution, an ever-increasing volume of greenhouse gases is being emitted, the earth is becoming warmer and warmer. In that period, the earth has warmed by approximately 1.1oC, the largest part of which (0.7oC) has occurred in the last forty years. Climate science and the international community largely agree on the premise that the warming of the earth must be limited to no more than 2oC, and according to more recent insights to no more than 1.5oC. The warming of the earth beyond that temperature limit may have extremely dire consequences, such as extreme heat, extreme drought, extreme precipitation, a disruption of ecosystems that could jeopardise the food supply, among other things, and a rise in the sea level resulting from the melting of glaciers and the polar ice caps. That warming may also result in tipping points, as a result of which the climate on earth or in particular regions of earth changes abruptly and comprehensively. All of this will jeopardise the lives, welfare and living environment of many people all over the world, including in the Netherlands. Some of these consequences are already happening right now.

Protection of human rights based on the ECHR

(see paras. 5.2.1-5.5.3, below)

The European Convention on the Protection of Human Rights and Fundamental Freedoms (ECHR) requires the states which are parties to the convention to protect the rights and freedoms established in the convention for their inhabitants. Article 2 ECHR protects the right to life, and Article 8 ECHR protects the right to respect for private and family life. According to the case law of the European Court of Human Rights (ECtHR), a contracting state is obliged by these provisions to take suitable measures if a real and immediate risk to people's lives or welfare exists and the state is aware of that risk.

The obligation to take suitable measures also applies when it comes to environmental hazards that threaten large groups or the population as a whole, even if the hazards will only materialise over the long term. While Articles 2 and 8 ECHR are not permitted to result in an impossible or disproportionate burden being imposed on a state, those provisions do oblige the state to take measures that are actually suitable to avert the imminent hazard as much as reasonably possible. Pursuant to Article 13 ECHR, national law must offer an effective legal remedy against a violation or imminent violation of the rights that are safeguarded by the ECHR. This means that the national courts must be able to provide effective legal protection.

Global problem and national responsibility

(see paras. 5.6.1-5.8, below)

The risk of dangerous climate change is global in nature: greenhouse gases are emitted not just from Dutch territory, but around the world. The consequences of those emissions are also experienced around the world.

The Netherlands is a party to the United Nations Framework Convention on Climate Change (UNFCCC). The objective of that convention is to keep the concentration of greenhouse gases in the atmosphere to a level at which a disruption of the climate system through human action can be prevented. The UNFCCC is based on the premise that all member countries must take measures to prevent climate change, in accordance with their specific responsibilities and options.

Each country is thus responsible for its own share. That means that a country cannot escape its own share of the responsibility to take measures by arguing that compared to the rest of the world, its own emissions are relatively limited in scope and that a reduction of its own emissions would have very little impact on a global scale. The State is therefore obliged to reduce greenhouse gas emissions from its territory in proportion to its share of the responsibility. This obligation of the State to do 'its part' is based on Articles 2 and 8 ECHR, because there is a grave risk that dangerous climate change will occur that will endanger the lives and welfare of many people in the Netherlands.

What, specifically, does the State's obligation to do 'its part' entail?

(see paras. 6.1-7.3.6, below)

When giving substance to the positive obligations imposed on the State pursuant to Articles 2 and 8 ECHR, one must take into account broadly supported scientific insights and internationally accepted standards. Important in this respect are, among other things, the reports from the IPCC. The IPCC is a scientific body and intergovernmental organisation that was set up in the context of the United Nations to handle climatological studies and developments. The IPCC's 2007 report contained a scenario in which the warming of the earth could reasonably be expected to be limited to a maximum of 2oC. In order to achieve this target, the Annex I countries (these being the developed countries, including the Netherlands) would have to reduce their emissions in 2020 by 25-40%, and in 2050 by 80-95%, compared to 1990.

At the annual climate conferences held in the context of the UNFCCC since 2007, virtually every country has regularly pointed out the necessity of acting in accordance with the scenario of the IPCC and achieving a 25-40% reduction of greenhouse gas emissions in 2020. The scientifically supported necessity of reducing emissions by 30% in 2020 compared to 1990 has been expressed on multiple occasions by and in the EU.

Furthermore, since 2007, a broadly supported insight has arisen that, to be safe, the warming of the earth must remain limited to 1.5oC, rather than 2oC. The Paris Agreement of 2015 therefore expressly states that the states must strive to limit warming to 1.5oC. That will require an even greater emissions reduction than was previously assumed.

All in all, there is a great degree of consensus on the urgent necessity for the Annex I countries to reduce greenhouse gas emissions by at least 25-40% in 2020. The consensus on this target must be taken into consideration when interpreting and applying Articles 2 and 8 ECHR. The urgent necessity for a reduction of 25-40% in 2020 also applies to the Netherlands on an individual basis.

The policy of the State

(see paras. 7.4.1-7.5.3, below)

The State and Urgenda are both of the opinion that it is necessary to limit the concentration of greenhouse gases in the atmosphere in order to in order to achieve either the 2oC target or the 1.5oC target. Their views differ, however, with regard to the speed at which greenhouse gas emissions must be reduced.

Until 2011, the State's policy was aimed at achieving an emissions reduction in 2020 of 30% compared to 1990. According to the State, that was necessary to stay on a credible pathway to keep the 2oC target within reach.

After 2011, however, the State's reduction target for 2020 was lowered from a 30% reduction by the Netherlands to a 20% reduction in an EU context. After the reduction in 2020, the State intends to accelerate the reduction to 49% in 2030 and 95% in 2050. Those targets for 2030 and 2050 have since been laid down in the Dutch Climate Act. The State has not explained, however, that – and why – a reduction of just 20% in 2020 is considered responsible in an EU context, in contrast to the 25-40% reduction in 2020, which is internationally broadly supported and is considered necessary.

There is a broad consensus within climate science and the international community that the longer reduction measures to achieve the envisaged final target are postponed, the more comprehensive and more expensive they will become. Postponement also creates a greater risk of an abrupt climate change occurring as the result of a tipping point being reached. In light of that generally endorsed insight, it was up to the State to explain that the proposed acceleration of the reduction after 2020 would be feasible and sufficiently effective to meet the targets for 2030 and 2050, and thus to keep the 2oC target and the 1.5oC target within reach. The State did not do this, however.

The Court of Appeal was thus entitled to rule that the State must comply with the target, considered necessary by the international community, of a reduction by at least 25% in 2020.

The courts and the political domain

(see paras. 8.1-8.3.5, below)

The State has asserted that it is not for the courts to undertake the political considerations necessary for a decision on the reduction of greenhouse gas emissions.

In the Dutch system of government, the decision-making on greenhouse gas emissions belongs to the government and parliament. They have a large degree of discretion to make the political considerations that are necessary in this regard. It is up to the courts to decide whether, in taking their decisions, the government and parliament have remained within the limits of the law by which they are bound. Those limits ensue from the ECHR, among other things. The Dutch Constitution requires the Dutch courts to apply the provisions of this convention, and they must do so in accordance with the ECtHR's interpretation of these provisions. This mandate to the courts to offer legal protection, even against the government, is an essential component of a democratic state under the rule of law.

The Court of Appeal's judgment is consistent with the foregoing, as the Court of Appeal held that the State's policy regarding greenhouse gas reduction is obviously not meeting the requirements pursuant to Articles 2 and 8 ECHR to take suitable measures to protect the residents of the Netherlands from dangerous climate change. Furthermore, the order which the Court of Appeal issued to the State was limited to the lower limit (25%) of the internationally endorsed, minimum necessary reduction of 25-40% in 2020.

The order that was issued leaves it up to the State to determine which specific measures it will take to comply with that order. If legislative measures are required to achieve such compliance, it is up to the State to determine which specific legislation is desirable and necessary.

Conclusion

In short, the essence of the Supreme Court's judgment is that the order which the District Court issued to the State and which was confirmed by the Court of Appeal, directing the State to reduce

greenhouse gases by the end of 2020 by at least 25% compared to 1990, will be allowed to stand. Pursuant to Articles 2 and 8 ECHR, the Court of Appeal can and may conclude that the State is obliged to achieve that reduction, due to the risk of dangerous climate change that could have a severe impact on the lives and welfare of the residents of the Netherlands.

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9. Decision

Appendix: list of abbreviations used

1 Course of the proceedings

For the course of the proceedings in the fact-finding instances, the Supreme Court refers to:

a. the judgment in case C/09/456689/HA ZA 13-1396 rendered by The Hague District Court on 24 June 2015, ECLI:NL:RBDHA:2015:7145;
b. the judgment in case 200.178.245/01 rendered by The Hague Court of Appeal on 9 October 2018, ECLI:NL:GHDHA:2018:2591.

The State has instituted an appeal in cassation against the judgment of the Court of Appeal. Urgenda has submitted a statement of defence seeking dismissal of the appeal in cassation.

The case for the State was argued orally and in writing by its counsel, with the oral arguments being handled in part by attorney E.H.P. Brans, who practises law in The Hague. The case for Urgenda was argued orally by its counsel, with the oral arguments being handled in part by attorney J.M. van den Berg, who practises law in Amsterdam. The State's counsel submitted a reply, and Urgenda's counsel submitted a rejoinder.

The State objected to the size of Urgenda's rejoinder. The Supreme Court sees no reason in this case to set the rejoinder aside. The rejoinder does not contain any elements that are new to the debate between the parties, and largely comprises the partial repetition and elaboration of the arguments Urgenda made previously in its statement of defence in cassation. In that statement of defence, and prior to the oral and written arguments, Urgenda extensively discussed the complaints in cassation, which the cassation procedural rules do not require it to do in a case that originates with a claim. The written arguments and the State's memorandum of oral arguments provide a partial response to that statement of defence. Given all of this, adequate justice has been done to the parties' right to be heard and the scope of the rejoinder does not cause an imbalance in the debate.

The Opinion of deputy Procurator General F.F. Langemeijer and Advocate General M.H. Wissink is that the appeal in cassation must be rejected.

The State's counsel submitted a written response to that Opinion.

2 Assumptions and facts

(a) Facts

2.1 In this case, according to para. 2 of the Court of Appeal's judgment, the facts established by the District Court's in paras. 2.1-2.78 of its judgment,[1] as well as the facts established by the Court of Appeal in paras. 3.1-3.26 and 44 of its judgment can be taken as a starting point.[2] The parties do not dispute these facts in cassation. The Supreme Court will therefore base its judgment on those facts (Article 419(3) DCCP). The most relevant of these are the following.

Climate change and its consequences

- Since the beginning of the industrial revolution, mankind has consumed energy on a large scale. This energy has predominantly been generated by the combustion of fossil fuels (coal, oil and natural gas). This releases carbon dioxide. This compound of carbon and oxygen is referred to by its chemical formula: CO2. Part of the CO2 that is released is emitted into the atmosphere, where it remains for hundreds of years or more and is partly absorbed by the ecosystems in forests and oceans. This absorption capacity is dropping continuously due to deforestation and the warming of the sea water.

- CO_2 is the most significant greenhouse gas and, in tandem with other greenhouse gases, it retains the heat radiated by our planet in the atmosphere. This is called the 'greenhouse effect'. The greenhouse effect increases as more CO_2 is emitted into the atmosphere, which in turn exacerbates global warming. The climate is slow to respond to the emission of greenhouse gases: the full warming effect of the greenhouse gases being emitted today will not be felt for another thirty to forty years. Other greenhouse gases include methane, nitrous oxide and fluorinated gases.
- Concentrations of greenhouse gases in the atmosphere are expressed in parts per million (hereinafter: ppm). The term 'ppm CO_2 equivalent' is used to express the total concentration of all greenhouse gases, in which respect the concentration of all of the other, non-CO_2 greenhouse gases is converted into CO_2 equivalents based on the warming effect.
- There is a direct, linear connection between the greenhouse gas emissions caused by humans, which are partly caused by the burning of fossil fuels, and the warming of the planet. The planet is already approximately 1.1°C warmer than it was at the start of the industrial revolution. The Court of Appeal assumed that the concentration of greenhouse gases in the atmosphere stood at 401 ppm at the time it rendered its judgment. In recent decades, worldwide emissions of CO_2 have increased by 2% annually.
- The rise in the planet's temperature can be prevented or reduced by ensuring that fewer greenhouse gases are emitted into the atmosphere. This is referred to as 'mitigation'. Measures can also be taken to anticipate the effects of climate change, such as raising dikes in low-lying areas. The taking of such measures is referred to as 'adaptation'.
- There has long been a consensus in climate science – the science that studies climate and climate change – and in the international community that the average temperature on earth may not rise by more than 2°C compared to the average temperature in the pre-industrial era. According to climate scientists, if the concentration of greenhouse gases in the atmosphere has not risen above 450 ppm by the year 2100, there is a reasonable chance that this objective (hereinafter: "the two-degree target") will be achieved. In recent years, new insights have shown that the temperature can only safely rise by no more than 1.5°C, which translates into a greenhouse gas concentration level of no more than 430 ppm in the year 2100.
- When viewed in light of the maximum concentration level of 430 or 450 ppm in the year 2100 and the current concentration level of greenhouse gases (401 ppm), it is clear that the world has very little leeway left when it comes to the emission of greenhouse gases. The total worldwide leeway that now remains for emitting greenhouse gases is referred to as the 'carbon budget'. In the meantime, the chance that the warming of the earth can be limited to a maximum temperature increase of 1.5oC has become extremely slim.
- If the earth warms by substantially more than 2°C compared to the pre-industrial era, this would cause, *inter alia*: flooding as a result of sea level rise; heat stress as a result of more intense and longer-lasting heat waves, increases in respiratory ailments associated with deteriorating air quality resulting from periods of drought (with severe forest fires), increased spread of infectious diseases, severe flooding as a result of torrential rainfall, and disruptions of the production of food and the supply of drinking water. Ecosystems, flora and fauna will be eroded and there will be a loss of biodiversity. An inadequate climate policy will, in the second half of this century, result in hundreds of thousands of victims in Western Europe alone.
- It is not just the consequences that become more severe as global warming progresses. The accumulation of CO_2 in the atmosphere may cause the climate change process to reach a tipping point, which may result in abrupt climate change, for which neither mankind nor nature can properly prepare. The risk of reaching such a tipping point increases at a steepening rate upon a rise in temperature of between 1°C and 2°C.

The IPCC reports

- The Intergovernmental Panel on Climate Change (IPCC) was created in 1988 under the auspices of the United Nations by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). The IPCC's objective is to obtain insight into all aspects of climate change through scientific research. The IPCC does not conduct research itself, but studies and assesses, *inter alia*, the most recent scientific and technological information that becomes available

around the world. The IPCC is not just a scientific organisation, but an intergovernmental organisation as well. It has 195 members, including the Netherlands. Since its inception, the IPCC has published five Assessment Reports and accompanying sub-reports about the state of climate science and climatological developments. Particularly relevant to these proceedings are the fourth report from 2007 and the fifth report from 2013-2014.

- The Fourth IPCC Assessment Report (hereinafter: AR4) from 2004 indicates that a temperature increase of 2°C above the level of the pre-industrial era entails the risk of a dangerous, irreversible change in the climate. After an analysis of various reduction scenarios, this report states that to be able to achieve a maximum volume of 450 ppm in the year 2100, the emissions of greenhouse gases by the countries listed in Annex I to the UNFCCC (including the Netherlands) must be 25% to 40% lower in the year 2020 than they were in the year 1990.
- The IPCC published its Fifth Assessment Report in 2013-2014 (hereinafter: AR5). This report established, *inter alia*, that the planet is warming as a result of the increase in the concentration of CO2 in the atmosphere since the beginning of the industrial revolution, and that this is being caused by human activities, in particular by the burning of oil, gas and coal and by deforestation. In AR5, the IPCC concluded that if the concentration of greenhouse gases in the atmosphere stabilises at around 450 ppm in the year 2100, the chance that the global temperature increase would remain under 2°C was "likely", that is, higher than 66%. In 87% of the scenarios for achieving this target detailed in AR5, assumptions are made regarding 'negative emissions': in other words, the extraction of CO2 from the atmosphere.

The UNFCCC and the climate conferences

(13) The United Nations Framework Convention on Climate Change (UNFCCC) was ratified in 1992.[3] The purpose of this convention is to promote the stabilisation of the concentration of greenhouse gases in the atmosphere at a level at which would prevent dangerous anthropogenic interference (i.e.: interference caused by humans) with the climate system. The parties to the UNFCCC are referred to as Annex I countries and non-Annex I countries. The Annex I countries are the developed countries, including the Netherlands. According to Article 4(2) of the convention, the Annex I countries must take the lead, in an international context, in counteracting climate change and its negative consequences. They have committed themselves to reducing greenhouse gas emissions. They must periodically report on the measures they have taken. The objective is to return the level of emissions to the level in 1990.

- Article 7 UNFCCC provides for the Conference of the Parties (hereinafter: "COP"). The COP is the highest decision-making body within the UNFCCC. Resolutions passed by the COP are generally not legally binding. The COP meets annually at climate conferences.
- At the climate conference in Kyoto in 1997 (COP-3), the Kyoto Protocol was agreed upon between a number of Annex I countries, including the Netherlands. This protocol records the reduction targets for the period 2008-2012. According this protocol, the then-Member States of the EU were obliged to achieve a reduction target of 8% compared to 1990.
- The Bali Action Plan was adopted at the climate conference in Bali in 2007 (COP-13). The Bali Action Plan, citing the AR4 referred to in (11), above, acknowledged the need for drastic emissions reductions. This reference regards, *inter alia*, the part of AR4 which states that if the Annex I countries wish to achieve the 450 ppm scenario by the year 2100, they would have to reduce their emissions of greenhouse gases by 2020 by 25-40% compared to 1990.
- No agreement could be reached at the climate conference in Copenhagen in 2009 (COP-15) regarding a successor to, or an extension of, the Kyoto Protocol.
- At the next climate conference in Cancún in 2010 (COP-16), the parties involved acknowledged in the Cancún Agreements the long-term target of maximising the rise in temperature at 2°C compared to the average temperature in the pre-industrial era – along with the possibility of a more stringent target of a maximum of 1.5°C. In the preamble they refer to the urgency of a major reduction in admissions.
- In Cancún, the parties to the Kyoto Protocol stated that the Annex I countries had to continue to take the lead in counteracting climate change and that, given AR4, this "would require Annex I Parties as a group to reduce emissions in a range of 25-40 per cent below 1990 levels by 2020". The parties to the Kyoto Protocol have urged the Annex I countries to raise their level of ambition

in relation to the commitments they already made, with a view to the 25-40% range referred to in AR4. In the 'Cancun Pledges', the EU countries as a group declared themselves prepared to achieve a 20% reduction by 2020 compared to 1990, and offered to achieve a 30% reduction on the condition that other countries were to undertake the achievement of similar reduction targets.
- At the climate conference in Doha in 2012 (COP-18), all Annex I countries were called on to raise their reduction targets to at least 25-40% in 2020. An amendment to the Kyoto Protocol was adopted, in which the EU committed to a reduction of 20% in 2020 compared to 1990, and offered to reduce emissions by 30% if other countries were to undertake the achievement of similar reduction targets. This condition was not met. The Doha Amendment did not enter into force.

The Paris Agreement

(21) The Paris Agreement was concluded at the climate conference in Paris in 2015 (COP-21).[4] This convention calls on each contracting state to account for its own responsibilities. The convention stipulates that global warming must be kept "well below 2°C" as compared to the average pre-industrial levels, striving to limit the temperature increase to 1.5°C. The parties must prepare ambitious national climate plans and of which the level of ambition must increase with each new plan.

The UNEP reports of 2013 and 2017

- Since 2010, UNEP (referred to in (10), above) has been reporting annually on the difference between the desired emissions level and the reduction targets to which the parties have committed: this is referred to as the 'emissions gap'. In the 2013 annual report, UNEP noted, for the third time running, that the contracting states' commitments were falling short and greenhouse gases emissions were increasing rather than decreasing. UNEP also notes that the Annex I countries fail to meet their joint emissions targets to achieve a 25-40% reduction in 2020, as laid down in the AR4 referred to above in (11). UNEP concludes that it is becoming increasingly improbable that emissions will be low enough in 2020 to achieve the 2°C target at the lowest possible cost. Although later reduction actions could ultimately lead to the same temperature targets, according to UNEP these would be more difficult, costlier and riskier.
- UNEP's 2017 annual report states that, in light of the Paris Agreement, an enhanced pre-2020 mitigation action is more urgent than ever. UNEP notes that if the emissions gap that has been observed is not bridged by 2030, then it will be extremely improbable that the 2°C target can still be achieved. This was why, according to UNEP, the targets for 2020 need to be more ambitious.

European climate policy

- Article 191 TFEU sets out the EU's environmental targets. The EU formulated directives to implement its environmental policy. The ETS Directive is one of these. 'ETS' stands for 'Emissions Trading System'. This system entails that companies in the ETS sector may only emit greenhouse gases in exchange for the surrender of emissions rights. These emissions rights may be bought, sold or retained. The total volume of greenhouse gases which ETS companies may emit in the period 2013-2020 decreases by 1.74% annually until, in 2020, a 21% reduction is achieved compared to the year 2005.
- The Council determined that the EU must reduce greenhouse gas emissions by at least 20% in 2020, 40% in 2030, and 80%-95% in 2050, measured in each case compared to emissions in 1990. Based on the Effort Sharing Decision[5], it has been determined within the EU that the reduction target of 20% in 2020 for the non-ETS sector means that the Netherlands will have to achieve an emissions reduction of 16% compared to emissions in 2005.

(26) According to the expectations that existed when the Court of Appeal's judgment was rendered, the EU as a whole would achieve an actual emissions reduction in 2020 of 26-27% compared to 1990.

Dutch climate policy and the results of that policy

(27) Based on a 2007 programme entitled *'Schoon en zuinig'* [English approximation: 'Clean and economical'], the Netherlands was working from the premise of a 30% reduction target in 2020

compared to 1990. In a letter of 12 October 2009, the then-Minister of Housing, Spatial Planning and the Environment (*Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer* - "VROM") informed the Dutch House of Representatives about the Netherlands' negotiation objective in the context of the climate conference in Copenhagen in 2009 (COP-15). This letter stated, *inter alia*:

"The total of emission reductions proposed by the developed countries so far is insufficient to achieve the 25%-40% reduction in 2020, which is necessary to stay on a credible track to keep the 2-degree target within reach."

- After 2011, the Dutch reduction target was adjusted to the EU-level reduction of 20% in 2020; in other words, for the Netherlands (a) a reduction of 16% in the non-ETS sector and 21% in the ETS sector, each time in comparison to emissions in 2005, and (b) a reduction of at least 40% in 2030, and 80-95% in 2050, in each case compared to 1990.
- In the Government Agreement from 2017, the government announced that it would strive to achieve an emissions reduction of at least 49% in 2030 compared to 1990. According to the Government Agreement, the EU reduction target of 40% in 2030 was not sufficient to achieve the two-degree target, let alone the 1.5°C ambition laid down in the Paris Agreement.
- Dutch CO2 emissions per capita of the population are relatively high compared to other industrialised countries. In terms of emissions, the Netherlands was ranked 34th out of 208 countries when the Court of Appeal rendered its judgment. Of the 33 countries with even higher emissions, only 9 had higher per capita emissions, none of which were EU Member States. Of the total volume of Dutch greenhouse gas emissions, 85% consists of CO2. Dutch CO2 emissions have barely decreased since 1990 and have even risen in recent years (up until the Court of Appeal's judgment). In the 2008-2012 period, the Netherlands achieved a 6.4% reduction in CO2-equivalent emissions. The reduction is attributable to greenhouse gases other than CO2. In that same period, the fifteen largest EU Member States achieved an emissions reduction of 11.8%, and the EU as a whole achieved a reduction of 19.2%. Moreover, 30-50% of the reduction in the 2008-2012 period was due to the economic crisis. Had this crisis not occurred, emissions for this period would have been substantially higher (and the reduction substantially lower).
- When the Court of Appeal rendered its judgment, it was expected that the Netherlands would achieve a reduction of 23% in 2020, and taking into account a margin for uncertainty, of 19-27%. The District Court refers to a substantially lower expectation in its judgment. The difference is largely attributable to a new calculation method (which is more consistent with that used by the IPCC, but) as a result of which the theoretical reduction percentage is achieved earlier even though the situation is actually more serious. The difference can largely be explained by the fact that the emissions calculation in the base year of 1990 was retrospectively adjusted upwards.

(b) Urgenda's claim and the State's defence

2.2.1 Urgenda ('Urgent Agenda') is engaged in developing plans and measures to prevent climate change. Urgenda's legal form is that of a foundation under Dutch law (*stichting*). Its object according to its Articles is to stimulate and accelerate transition processes towards a more sustainable society, starting in the Netherlands.

Urgenda's view is that the State is doing too little to prevent dangerous climate change. In these proceedings, to the extent relevant in cassation, it is requesting an order instructing the State to limit the volume of greenhouse gas emissions in the Netherlands such that this volume would be reduced by 40% at the end of the year 2020, or at least by a minimum of 25%, compared to the volume in the year 1990. It institutes its claim pursuant to Article 3:305a DCC, which enables interest organisations to bring class action suits. It is pursuing its claim, to the extent relevant in cassation, on behalf of the interests of the current residents of the Netherlands (the inhabitants of the Netherlands) who are being threatened with dangerous climate change.

2.2.2 Urgenda has, briefly put, asserted the following grounds for its claims. The greenhouse gas emissions from the Netherlands are contributing to a dangerous change in the climate. The Netherlands' share of worldwide emissions is excessive, speaking both absolutely and

relatively (per capita of the population). This means that Dutch emissions, for which the State as a sovereign power has systemic responsibility, are unlawful, since they violate the due care which is part of the State's duty of care to those whose interests Urgenda represents (Article 6:162(2) DCC), as well as Articles 2 and 8 ECHR. Under both national and international law, the State is obliged, in order to prevent dangerous climate change, to ensure the reduction of the Dutch emissions level. This duty of care entails that, in 2020, the Netherlands must achieve a reduction in greenhouse gas emissions of 25-40% compared to emissions in 1990, in accordance with the target referred to in AR4 (see para. 2.1(11), above). A reduction of this magnitude is necessary in order to maintain the prospect of achieving the 2°C target. This is also the most cost-effective option.

2.2.3 The defences asserted by the State include the following. The requirements of neither Article 3:296 DCC (court order) nor Article 6:162 DCC (unlawful act) have been met. There is no basis in either national or international law for a duty that legally requires the State to take measures in order to achieve the reduction target as sought. The target laid down in AR4 is not a legally binding standard. Articles 2 and 8 ECHR do not imply an obligation for State to take mitigating or other measures to counter climate change. Granting the reduction order being sought would also essentially come down to an impermissible order to create legislation and would contravene the political freedom accruing to the government and parliament and, thus, the system of separation of powers.

(c) Judgment of the District Court

2.3.1 The District Court ordered the State to limit the combined volume of Dutch annual greenhouse gas emissions, or cause them to be limited, so that this will have been reduced by at least 25% at the end of 2020 compared to the level of the year 1990. The District Court's findings on this point included the following.

The legal obligation of the State towards Urgenda cannot be derived from Article 21 of the Dutch Constitution, the 'no harm' principle, the UNFCCC with associated protocols, Article 191 TFEU, or the ETS Directive and Effort Sharing Decision based on Article 191 TFEU. (paras. 4.36-4.44 and 4.52)

Urgenda cannot be considered a direct or indirect victim as meant in Article 34 ECHR. Therefore, Urgenda cannot directly rely on Articles 2 and 8 ECHR. (para. 4.45)

The State may act unlawfully by violating its duty of care to prevent dangerous climate change. (paras. 4.52-4.53) The criteria laid down in the *Kelderluik* judgment[6] are relevant to interpreting that duty of care, as are the provisions, principles and rules previously referred to by the District Court. (paras. 4.54 -4.63)

Given the severity of the impact from climate change and the significant chance that – unless mitigating measures are taken – dangerous climate change will occur, the State has a duty of care to take mitigating measures. This duty is not diminished by the fact that the Dutch contribution to the present global greenhouse gas emissions is currently quite minor. Given that at least the 450 ppm scenario is required to prevent hazardous climate change, the Netherlands should take measures to ensure that this scenario can be achieved. (paras. 4.64-4.83)

Postponing the mitigation as advocated by the State – a less stringent reduction between now and 2030 and a sharp reduction starting in 2030 – will in fact significantly contribute to the risk of dangerous climate change and therefore cannot be deemed a sufficient and acceptable alternative to the scientifically proven and acknowledged higher reduction path of 25-40% in 2020. (para. 4.85)

The State did not argue that a reduction order of 25-40% would result in an undue burden for the Netherlands. On the contrary: the State also argues that a higher reduction target is one of the possibilities. If the reduction is less than 25-40%, the State is failing to fulfil its duty of care and is therefore acting unlawfully. Imposing an obligation of higher than 25% is

not allowable due to the State's discretionary power. (para. 4.86)

The reduction order sought by Urgenda does not constitute an order to the State to take certain legislative or policy-making measures. If the claim is allowed, the State will retain full discretion, which is pre-eminently vested in it, to determine how to comply with that order. (para. 4.101)

In a general sense, the aspects that relate to the *trias politica* do not preclude allowing the order being sought. The restraint which the court should exercise does not result in a further limitation than that ensuing from the State's aforementioned discretionary power. (para. 4.102)

(d) Judgment of the Court of Appeal

2.3.2 The Court of Appeal confirmed the District Court's judgment. In so doing, the Court of Appeal held as follows.

Urgenda's standing

Dutch law determines who is permitted access to the Dutch courts, including, in the case of Urgenda in these proceedings, Article 3:305a DCC, which provides for class actions brought by interest groups. Since individuals who fall under the State's jurisdiction may rely on Articles 2 and 8 ECHR, which have direct effect in the Netherlands, Urgenda may also do so on behalf of these individuals, pursuant to Article 3:305a DCC. (para. 36)

The parties do not dispute that Urgenda has standing to pursue its claim to the extent it is acting on behalf of the current generation of Dutch nationals against the emission of greenhouse gases in Dutch territory. It is entirely plausible that the current generation of Dutch nationals, in particular but not limited to the younger individuals in this group, will have to deal with the adverse effects of climate change in their lifetime if global emissions of greenhouse gases are not adequately reduced. (para. 37) Their interests lend themselves to consolidation as is required for instituting a claim pursuant to Article 3:305a DCC. (para. 38)

Articles 2 and 8 ECHR

The State has a positive obligation pursuant to Article 2 ECHR to protect the lives of citizens within its jurisdiction, while Article 8 ECHR obliges the State to protect their right to their home life and private life. This obligation applies to all activities, public and non-public, which could jeopardise the rights protected in these articles, and certainly in the face of industrial activities which by their very nature are dangerous. If the government knows that there is a real and imminent threat, the State must take precautionary measures to prevent infringement as far as possible. (paras. 39-43)

Genuine threat of dangerous climate change

The established facts and circumstances imply that there is a real threat of dangerous climate change, resulting in the serious risk that the current generation of Dutch inhabitants will be confronted with losing their lives or having their family lives disrupted. Articles 2 and 8 ECHR imply that the State has a duty to protect against this genuine threat. (paras. 44-45)

Is the State acting unlawfully by not reducing by at least 25% by the end of 2020?

The end goal is clear and is not disputed between the parties. By the year 2100, global greenhouse gas emissions must have ceased entirely. Nor do the parties hold differing opinions as to the required interim target of 80-95% reduction relative to 1990 by 2050, and Urgenda endorses the reduction target of 49% relative to 1990 by 2030, as established by the government. The dispute between the parties specifically concerns the question of whether the State can be required to achieve a reduction of at least 25% relative to 1990 by the end of 2020. (para. 46)

A significant effort will have to be made between now and 2030 to reach the 49% target in

2030; more efforts than the limited efforts the Netherlands has undertaken so far. It has also been established that it would be advisable to start the reduction efforts at as early a stage as possible to limit the total emissions in this period. Delaying the reduction will lead to greater risks for the climate. A delay would, after all, allow greenhouse gas emissions to continue in the meantime; greenhouse gases which would linger in the atmosphere for a very long time and further contribute to global warming. An even distribution of reduction efforts over the period up to 2030 would mean that the State should achieve a substantially higher reduction in 2020 than 20%. An even distribution is also the starting point of the State for its reduction target of 49% by 2030, which has been derived in a linear fashion from the 95% target for 2050. If extrapolated to the present, this would result in a 28% reduction by 2020, as confirmed by the State in answering the Court of Appeal's questions." (para. 47)

In AR4, the IPCC concluded that a concentration level not exceeding 450 ppm in 2100 is permissible to keep the two-degree target within reach. Following an analysis of the various reduction scenarios, the IPCC concluded that in order to reach this concentration level, the total greenhouse gas emissions in 2020 of Annex I countries, of which the Netherlands is one, must be 25-40% lower than 1990 levels. In AR5, the IPCC also assumed that a concentration level of 450 ppm may not be exceeded in order to achieve the two-degree target. (para. 48)

It is highly uncertain whether it will be possible – as AR5 assumes – to use certain technologies to extract CO_2 from the atmosphere. Given the current state of affairs, climate scenarios based on such technologies bear little resemblance to reality. AR5 might thus have painted too rosy a picture, and it cannot be assumed outright, as the State does, that the 'multiple mitigation pathways' listed by the IPCC in AR5 could, as a practical matter, lead to the achievement of the two-degree target. Furthermore, it is plausible that no reduction percentages as of 2020 were included in AR5, because, in 2014, the IPCC's focus was on targets for 2030. Therefore, the AR5 report does not give cause to assume that the reduction scenario laid down in AR4 has been superseded and that a reduction of less than 25-40% by 2020 would now be sufficient to achieve the two-degree target. In order to assess whether the State has met its duty of care, the Court of Appeal will take as a starting point that an emission reduction of 25-40% in 2020 is required to achieve the two-degree target. (para. 49)

The 450 ppm scenario and the related necessity to reduce CO2 emissions by 25-40% by 2020 are absolutely not overly pessimistic starting points to use as a basis for determining the State's duty of care. It is not certain whether the two-degree target can be achieved with this scenario. Furthermore, climate science has now acknowledged that a temperature rise of 1.5oC is much more likely to be safe than a rise of 2oC. (para. 50)

The IPCC report which states that a reduction of 25-45% by the end of 2020 is needed to achieve the two-degree target (AR4) dates all the way back to 2007. Since that time, virtually all COPs (in Bali, Cancún, Durban, Doha and Warsaw) have referred to this 25-40% standard and Annex I countries have been urged to align their reduction targets accordingly. This may not have established a legal standard with a direct effect, but it does confirm the fact that a reduction of at least 25-40% in CO2 emissions is needed to prevent dangerous climate change. (para. 51)

Until 2011, the Netherlands assumed its own reduction target to be 30% in 2020. A letter dated 12 October 2009 from the Minister of VROM shows that the State itself was convinced that a scenario with a reduction of less than 25%-40% in 2020 would lack credibility to keep the two-degree target within reach. The Dutch reduction target for 2020 was subsequently adjusted downwards. But a substantiation based on climate science was never given, while it is an established fact that postponing reductions in the meantime will cause continued emissions of CO2, which in turn will contribute to further global warming. More specifically, the State failed to give reasons why a reduction of only 20% by 2020 (at the EU level) should currently be regarded as credible, for instance by presenting a scenario which proves how – in concert with the efforts of other countries – the currently proposed postponed reduction

could still lead to achieving the two-degree target. The EU itself also deemed a reduction of 30% for 2030 necessary to prevent dangerous climate change. (para. 52)

The State's Defences

The State asserts that a 'waterbed effect' would result if the Netherlands takes measures to reduce greenhouse gas emissions that fall within the scope of the ETS. Specifically, those measures would create leeway for other EU countries to emit more greenhouse gases. Therefore, according to the State, national measures to reduce greenhouse gas emissions within the framework of the ETS are pointless. This argument does not hold. Just like the Netherlands, other EU countries bear their own responsibility for reducing CO_2 emissions as much as possible. It cannot automatically be assumed that the other Member States will take less far-reaching measures than the Netherlands. On the contrary, compared to Member States such as Germany, the United Kingdom, Denmark, Sweden and France, Dutch reduction efforts are lagging far behind. (paras. 55 and 56)

The State also pointed out the risk of 'carbon leakage', which the State understands to be the risk that companies will move their production to other countries with less strict greenhouse gas reduction obligations. The State has failed to substantiate that this risk will actually occur if the Netherlands were to increase its efforts to reduce greenhouse gas emissions before the end of 2020. (para. 57)

The State has also argued that adaptation and mitigation are complementary strategies to limit the risks of climate change and that Urgenda has failed to appreciate the adaptation measures that the State has taken or will take. This argument also fails. Although it is true that the consequences of climate change can be cushioned by adaptation, it has not been made clear or plausible that the potentially disastrous consequences of excessive global warming can be adequately prevented with adaptation. So while it is certainly logical for the State also to take adaptation measures, this does not diminish its obligation to reduce CO2 emissions quicker than it has planned. (para. 59)

The State has furthermore argued that the emission reduction percentage of 25-40% in 2020 is intended for the Annex I countries as a whole, and that this percentage can therefore not be taken as a starting point for the emission reduction an individual Annex I country, such as the Netherlands, should achieve. The State has failed to provide substantiation for why a lower emission reduction percentage should apply to the Netherlands than to the Annex I countries as a whole. That is not obvious, considering a distribution in proportion to the per capita GDP, which *inter alia* has been taken as a starting point in the EU's Effort Sharing Decision for distributing the EU emission reductions among the Member States. It can be assumed that the Netherlands has one of the highest per capita GDPs of the Annex I countries and the per capita GDP in any case is far above the average of those countries. That is also evident from Appendix II of the Effort Sharing Decision, in which the Netherlands is allocated a reduction percentage (16% relative to 2005) that is among the highest of the EU Member States. It is therefore reasonable to assume that what applies to the Annex I countries as a whole should at least also apply to the Netherlands. (para. 60)

The State has also asserted that Dutch greenhouse gas emissions, in absolute terms and compared with global emissions, are minimal, that the State cannot solve the problem on its own, that the worldwide community must cooperate. These arguments are not such that they warrant the absence of more ambitious, genuine action. The Court of Appeal, too, acknowledges that this is a global problem and that the State cannot solve this problem on its own. However, this does not release the State from its obligation to take measures in/on its territory, within its capabilities, which in concert with the efforts of other states provide protection from the hazards of dangerous climate change. (paras. 61 and 62)

The fact that full scientific certainty regarding the efficacy of the ordered reduction scenario is lacking does not mean, given the due observance of the precautionary principle, that the State is entitled to refrain from taking measures. The high degree of plausibility of that efficacy is sufficient. (para. 63)

The existence of a real risk of the danger for which measures have to be taken is sufficient to issue an order. It has been established that this is the case. Moreover, if the opinion of the State were to be followed, an effective legal remedy for a global problem as complex as this one would be lacking. After all, each state held accountable would then be able to argue that it does not have to take measures if other states do not do so either. That is a consequence that cannot be accepted, also because Urgenda does not have the option to summon all eligible states to appear in a Dutch court. (para. 64)

Regarding the plea of a lack of the required relativity as meant in Article 6:163 DCC, the Court of Appeal notes at the outset that these proceedings constitute an action for an order and not an action for damages. The standards that have been violated (Articles 2 and 8 ECHR) do seek to protect Urgenda (or those it represents). (para. 65)

The State argues that the system of the separation of powers should not be interfered with because it is not the courts, but the democratically legitimised government, that is the appropriate body to make the attendant policy choices. This argument is rejected in this case, also because the State violates human rights, which calls for the provision of measures, while at the same time the order to reduce emissions gives the State sufficient room to decide how it can comply with the order. (para. 67)

The District Court correctly held that Urgenda's claim is not intended to create legislation, either by parliament or by lower government bodies, and that the State retains complete freedom to determine how it will comply with the order. The order also will in no way prescribe the substance which this legislation must have. For this reason alone, the order is not an 'order to enact legislation'. Moreover, the State has failed to substantiate why compliance with the order can only be achieved through creating legislation by parliament or by lower government bodies. (para. 68)

Conclusion of the Court of Appeal

The foregoing implies that, up to now, the State has done too little to prevent dangerous climate change and is doing too little to catch up, at least in the short term (up to the end of 2020). Targets for 2030 and beyond do not diminish the fact that a dangerous situation is imminent which requires intervention right now. In addition to the risks in that context, the social costs also come into play. The later reduction actions are taken, the sooner the available carbon budget will be depleted, which in turn would require considerably more ambitious measures to be taken at a later stage, as is acknowledged by the State, to ultimately achieve the desired level of 95% reduction by 2050. (para. 71)

The State cannot hide behind the reduction target of 20% by 2020 at EU level. First of all, also the EU deems a greater reduction in 2020 necessary from a climate science perspective. In addition, the EU as a whole is expected to achieve a reduction of 26-27% in 2020; much higher than the agreed 20%. Also taken into consideration is the fact that, in the past, the Netherlands, as an Annex I country, acknowledged the severity of the climate situation time and again and, mainly based on climate scientific arguments, for years premised its policy on a reduction of 25-40% by 2020, with a concrete policy target of 30% by then. After 2011, this policy objective was adjusted downwards to 20% by 2020 at EU level, without any scientific substantiation and despite the fact that more and more was becoming known about the serious consequences of greenhouse gas emissions for global warming. (para. 72)

Based on this, the Court of Appeal held that the State was failing to fulfil its duty of care pursuant to Articles 2 and 8 ECHR by not wanting to reduce emissions by at least 25% by the end of 2020. A reduction of 25% should be considered a minimum, in connection with which recent insights about an even more ambitious reduction in connection with the 1.5°C target have not even been taken into consideration. There is a genuine chance that the reduction by 2020 will prove to be (substantially) lower than 25%. Such a margin of uncertainty is unacceptable. Since there also are clear indications that the current measures will be insufficient to prevent dangerous climate change, even leaving aside the question of whether the current policy will actually be implemented, measures have to be chosen, also in view of

the precautionary principle, that are safe, or at least as safe as possible. The very serious dangers, not contested by the State, associated with a temperature rise of 2°C or 1.5°C – let alone higher – also preclude such a margin of uncertainty. (para. 73)

3. The State's complaints in cassation; the manner of addressing those complaints

3.1 The State has put forward nine grounds for cassation, each of which contains multiple complaints in cassation. Briefly put, the complaints assert the following.

3.2 Grounds for cassation 1 and 2 are aimed at the Court of Appeal's interpretation of Articles 2 and 8 ECHR. According to the State, there are various reasons why no protection can be derived from these provisions in this case, or at any rate the Court of Appeal failed to provide adequate grounds for its holding that such protection can indeed be derived. According to ground for cassation 1, the Court of Appeal also failed to recognise that the ECtHR leaves the national states a margin of appreciation in the application of these provisions.

3.3 Ground for cassation 3 asserts that the rights under Articles 2 and 8 ECHR do not lend themselves to being combined as is required in order to be able to institute a claim pursuant to Article 3:305a DCC. The Court of Appeal should therefore have dismissed Urgenda's claim for lack of standing to the extent it was based on Articles 2 and 8 ECHR. According to this ground for cassation, those provisions only guarantee individual rights and do not protect society as a whole.

3.4 Grounds for cassation 4-8 assert the following. The State is not legally bound to a reduction target of 25% in 2020. The State did not agree to this reduction target, nor is it an internationally accepted standard. The State is, however, bound in both an international and European context to a target of 20% in 2020 by the EU as a whole. The EU will easily surpass this percentage (specifically, by a reduction of between 26% and 27%).

The reduction target of 25% in 2020 is, moreover, not actually necessary to meeting the two-degree target. That necessity is not implied by the IPCC reports. The recommended extra reduction for the Netherlands in 2020 will have no measurable effect on the global rise in temperature.

Furthermore, the reduction target of 25% in 2020 was once proposed as an overall target for a group of wealthy countries as a whole (the Annex I countries, of which the Netherlands is one) and not as a target for an individual country like the Netherlands. The Netherlands cannot solve the global climate problem on its own. In addition, the 25% reduction target in 2020 has been superseded by AR5, as well as the distinction between Annex I countries and other countries.

The Court of Appeal either failed to recognise this or neglected to take it into proper account. Moreover, the Court of Appeal failed to appreciate that it is up to the State to determine which reduction pathway it follows. The Court of Appeal wrongfully impinged on the discretionary leeway to which the State is entitled.

3.5 In conclusion, ground for cassation 9 raises two issues. First, the State complains that the District Court order that was confirmed by the Court of Appeal was tantamount to an order to create legislation, which is impermissible under Supreme Court case law. This ground for cassation also asserts that the Court of Appeal failed to recognise that it is not for the courts to make the political considerations necessary for a decision on the reduction of greenhouse gas emissions.

3.6 The substance of the aforementioned ground raises various issues. Those issues will be dealt with below, as follows. First, by way of an introduction, the danger and consequences of climate change established by the Court of Appeal will be discussed in more detail (see 4.1-4.8). Subsequently, an answer is provided to the question of whether, as the Court of Appeal held, Articles 2 and 8 ECHR oblige the State to take measures to counter that threat (see 5.1-5.8). Next is discussed which specific obligations on the part of the State that this may imply (see 6.1-6.6). Afterwards, it is discussed whether the State is bound by the 25-40% target stated in AR4, as the Court of Appeal

found (see 7.1-7.5.3). Finally, the permissibility of the District Court order confirmed by the Court of Appeal will be discussed (see 8.1-8.35).

4 Assumptions regarding the danger and consequences of climate change

4.1 Given the widely accepted, on climate science derived insights established by the Court of Appeal which the parties do not dispute, the findings of fact regarding the danger and consequences of climate change are, briefly and in essence, the following.

4.2 The emission of greenhouse gases, which are the partial result of burning of fossil fuels and the resultant release of the greenhouse gas CO2, is leading to an ever-higher concentration of those gases in the atmosphere. This is warming the planet, which is resulting in a variety of hazardous consequences. This may result in local areas of extreme heat, extreme drought, extreme precipitation, or other extreme weather. It is also causing both glacial ice and the ice in and near the polar regions to melt, which is raising the sea level. Some of these consequences are already happening right now. That warming may also result in tipping points, as a result of which the climate on earth or in particular regions of earth changes abruptly and comprehensively. This will result in, among other things, the significant erosion of ecosystems which will, example, jeopardise the food supply, result in the loss of territory and habitable areas, endanger health, and cost human lives.

4.3 Climate science long ago reached a high degree of consensus that the warming of the earth must be limited to no more than 2°C and that this means that the concentration of greenhouse gases in the atmosphere must remain limited to a maximum of 450 ppm. Climate science has since arrived at the insight that a safe warming of the earth must not exceed 1.5°C and that this means that the concentration of greenhouse gases in the atmosphere must remain limited to a maximum of 430 ppm. Exceeding these concentrations would involve a serious degree of danger that the consequences referred to in 4.2 will materialise on a large scale. Below, for brevity's sake, the materialisation of this danger will be referred to below as 'dangerous climate change', as it was in the Court of Appeal's judgment.

4.4 If the emission of greenhouse gases is not sufficiently reduced, the possibility that dangerous climate change will materialise in the foreseeable future cannot be excluded. According to the AR5 "Synthesis Report" AR5, which the IPCC published in 2014 as part of the AR5 report referred to above in para. 2.1(12), there is a danger that the tipping points referred to above in para. 4.2 will occur at a steepening rate once there is a warming between 1°C and 2°C.

4.5 As is clear from the facts stated above in para. 2.1 in (13) *et seq.*, this has been recognised at international level. The UNFCCC, which was concluded in 1992, states that its objective is to reduce the emission of greenhouse gases. Since then, annual climate conferences have been held by the COP, the highest body under that convention, which comprises representatives of the contracting states. At each of those conferences, the point is emphasised that reducing greenhouse gas emissions is urgent and the contracting states are called on to make that reduction a reality. At several conferences, specific agreements have also been made about that reduction. The insight referred to above in para. 4.3 – that the warming of the earth must remain limited to a maximum of 2°C and that the concentration of greenhouse gases in the atmosphere must be limited to a maximum of 450 ppm in order to prevent dangerous climate change – has been endorsed by the IPCC and the COP. The insight that a safe warming is limited to a maximum of 1.5°C, and that this means that the concentration of greenhouse gases in the atmosphere must be limited to a maximum of 430 ppm, was included in the Paris Agreement of 2015, which was based on the UNFCCC and which was signed by more than 190 countries, including the Netherlands.

4.6 The need to reduce greenhouse gas emissions is becoming ever more urgent. Every emission of greenhouse gases leads to an increase in the concentration of greenhouse gases in the atmosphere, and thus contributes to reaching the critical limits of 450 ppm and 430 ppm. In any case, the limited remaining carbon budget (see above in para. 2.1(7)) means that each postponement of a reduction in greenhouse gas emissions will require a future reduction to be more stringent in order to stay within the confines of the remaining carbon budget.

In its annual reports, the UNEP reports on the emissions gap, which is the difference between emissions based on the emissions-reduction target which countries reported to the UN – in which respect the assumption is that these targets have been achieved – and the desired emissions (see above in para. 2.1(22)). The 2017 UNEP report states that, in light of the Paris Agreement, the reduction of greenhouse gas emissions is more urgent than ever. The UNEP also remarks that if the emissions gap is not bridged by 2030, achieving the target of a maximum warming of 2°C is extremely unlikely.

4.7 Based on the aforementioned facts, the Court of Appeal concluded, quite understandably, in para. 45 that there was "a real threat of dangerous climate change, resulting in the serious risk that the current generation of citizens will be confronted with loss of life and/or a disruption of family life". The Court of Appeal also held, in para. 37, that it was "clearly plausible that the current generation of Dutch nationals, in particular but not limited to the younger individuals in this group, will have to deal with the adverse effects of climate change in their lifetime if global emissions of greenhouse gases are not adequately reduced."

4.8 The Netherlands is a party to the UNFCCC and to the Paris Agreement, and the State acknowledges the facts stated above. The State does not challenge the Court of Appeal's conclusion, as referred to above in para. 4.7, and acknowledges the urgent need to take measures to reduce greenhouse gas emissions. The State also does not dispute that it is required to contribute to that emissions reduction. What the State does challenge is that Articles 2 and 8 ECHR oblige it to take these measures, as the Court of Appeal held, and that it is obliged based on those provisions to ensure that the volume of greenhouse gases being emitted at the end of 2020 is 25% less than it was in 1990.

5 Do Articles 2 and 8 ECHR oblige the State to take measures?

5.1 According to the State, Articles 2 and 8 ECHR do not oblige it to offer protection from the genuine threat of dangerous climate change. The State asserts that this danger is not specific enough to fall within the scope of protection afforded by Articles 1, 2 and 8 ECHR. To that end, the State asserts that the threat is global in nature; in other words, that it is global in both cause and scope, and that it relates to the environment, which the State argues is not protected as such by the ECHR.

(a) The meaning of Articles 1, 2 and 8 ECHR; positive treaty obligations

5.2.1 Article 1 ECHR provides that the contracting parties must secure to everyone within their jurisdiction the rights and freedoms defined in Section I of the ECHR. In other words, ECHR protection is afforded to the persons who fall within the states' jurisdiction. In the Netherlands this regards, primarily and to the extent relevant in this case, the residents of the Netherlands.

5.2.2 Article 2 ECHR protects the right to life. According to established ECtHR case law, this provision also encompasses a contracting state's positive obligation to take appropriate steps to safeguard the lives of those within its jurisdiction.[7] According to that case law, this obligation applies, *inter alia*, if the situation in question entails hazardous industrial activities,

regardless of whether these are conducted by the government itself or by others, and also in situations involving natural disasters. The ECtHR has on multiple occasions found that Article 2 ECHR was violated with regard to a state's acts or omissions in relation to a natural or environmental disaster.[8] It is obliged to take appropriate steps if there is a real and immediate risk to persons and the state in question is aware of that risk. In this context, the term 'real and immediate risk' must be understood to refer to a risk that is both genuine and imminent. The term 'immediate' does not refer to imminence in the sense that the risk must materialise within a short period of time, but rather that the risk in question is directly threatening the persons involved. The protection of Article 2 ECHR also regards risks that may only materialise in the longer term.[9]

5.2.3 Article 8 ECHR protects the right to respect for private and family life. This provision also relates to environmental issues. The ECHR may not entail a right to protection of the living environment, but according to established ECtHR case law, protection may be derived from Article 8 ECHR in cases in which the materialisation of environmental hazards may have direct consequences for a person's private lives and are sufficiently serious, even if that person's health is not in jeopardy. According to that case law, when it comes to environmental issues, Article 8 ECHR encompasses the positive obligation to take reasonable and appropriate measures to protect individuals against possible serious damage to their environment. The ECtHR has found that Article 8 ECHR was violated in various cases involving environmental harm.[10] The obligation to take measures exists if there is a risk that serious environmental contamination may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely. That risk need not exist in the short term.[11]

5.2.4 According to the ECtHR, when it comes to activities that are hazardous to the environment, the positive obligation implied by Article 8 ECHR largely overlaps with the obligation implied by Article 2 ECHR. The case law regarding the former obligation therefore applies to the latter obligation.[12] In the case of environmentally hazardous activities, the state is expected to take the same measures pursuant to Article 8 ECHR that it would have to take pursuant to Article 2 ECHR.[13] Therefore, the obligations pursuant to Articles 2 and 8 ECHR will be referred to collectively below.

5.3.1 The protection afforded by Articles 2 and 8 ECHR is not limited to specific persons, but to society or the population as a whole.[14] The latter is for instance the case with environmental hazards.[15] In the case of environmental hazards that endanger an entire region, Articles 2 and 8 ECHR offer protection to the residents of that region.

5.3.2 The obligation to take appropriate steps pursuant to Articles 2 and 8 ECHR also encompasses the duty of the state to take preventive measures to counter the danger, even if the materialisation of that danger is uncertain.[16] This is consistent with the precautionary principle.[17] If it is clear that the real and immediate risk referred to above in paras. 5.2.2 and 5.2.3 exists, states are obliged to take appropriates steps without having a margin of appreciation. The states do have discretion in choosing the steps to be taken, although these must actually be reasonable and suitable.[18]

The obligation pursuant to Articles 2 and 8 ECHR to take appropriate steps to counter an imminent threat may encompass both mitigation measures (measures to prevent the threat from materialising) or adaptation measures (measures to lessen or soften the impact of that materialisation). According to ECtHR case law, which measures are suitable in a given case depends on the circumstances of that case.[19]

5.3.3 The court may determine whether the measures taken by a state are reasonable and suitable. The policy a state implements when taking measures must be consistent and the state must take measures in good time. A state must take due diligence into account in its

policy.[20] The court can determine whether the policy implemented satisfies these requirements. In many instances found in ECtHR case law, a state's policy has been found to be inadequate, or a state has failed to provide sufficient substantiation that its policy is not inadequate.[21] In its judgment in *Jugheli et al./Georgia*[22], for example, the ECtHR held as follows:

"76. The Court reiterates that it is not its task to determine what exactly should have been done in the present situation to reduce the impact of the plant's activities upon the applicants in a more efficient way. However, it is within the Court's jurisdiction to assess whether the Government approached the problem with due diligence and gave consideration to all the competing interests. In this respect the Court reiterates that the onus is on the State to justify, using detailed and rigorous data, a situation in which certain individuals bear a heavy burden on behalf of the rest of the community (see Fadeyeva, cited above, § 128). Looking at the present case from this perspective, the Court notes that the Government did not present to the Court any relevant environmental studies or documents informative of their policy towards the plant and the air pollution emanating therefrom that had been affecting the applicants during the period concerned."

5.3.4 Articles 2 and 8 ECHR must not result in an impossible or under the given circumstances disproportionate burden being imposed on a state.[23] If a state has taken reasonable and suitable measures, the mere fact that those measures were unable to deter the hazard does not mean that the state failed to meet the obligation that had been imposed on it. The obligations ensuing from Articles 2 and 8 ECHR regard measures to be taken by a state, not the achievement, or guarantee of the achievement, of the envisaged result.[24]

(b) Interpretation standards for the ECHR; 'common ground'

5.4.1 According to established ECtHR case law, the provisions of the ECHR must be interpreted and applied so as to make its safeguards practical and effective. According to the ECtHR, this 'effectiveness principle' ensues from "the object and purpose of the Convention as an instrument for the protection of individual human beings".[25] This also regards the application of Article 31(1) of the Vienna Convention on the Law of Treaties,[26] which stipulates that a treaty must be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in the light of its object and purpose.

5.4.2 According to ECtHR case law, an interpretation of the ECHR must also take into account the relevant rules of international law referred to in Article 31(3)(c) of the Vienna Convention on the Law of Treaties. For example, in its judgment in *Nada/Switzerland*, the ECtHR held as follows:[27]

"169. Moreover, the Court reiterates that the Convention cannot be interpreted in a vacuum but must be interpreted in harmony with the general principles of international law. Account should be taken, as indicated in Article 31 § 3 (c) of the 1969 Vienna Convention on the Law of Treaties, of "any relevant rules of international law applicable in the relations between the parties", and in particular the rules concerning the international protection of human rights (…)."

Furthermore, in accordance with Article 31(3), opening words and paragraph (b), of the Vienna Convention on the Law of Treaties, an interpretation of treaty provisions must take the Member States' application practice into account.

The ECtHR's holding in the *Demir and Baykara/Turkey*[28] judgment was consistent with the foregoing:

"85. The Court, in defining the meaning of terms and notions in the text of the Convention,

can and must take into account elements of international law other than the Convention, the interpretation of such elements by competent organs, and the practice of European States reflecting their common values. The consensus emerging from specialised international instruments and from the practice of contracting States may constitute a relevant consideration for the Court when it interprets the provisions of the Convention in specific cases.

86. In this context, it is not necessary for the respondent State to have ratified the entire collection of instruments that are applicable in respect of the precise subject matter of the case concerned. It will be sufficient for the Court that the relevant international instruments denote a continuous evolution in the norms and principles applied in international law or in the domestic law of the majority of member States of the Council of Europe and show, in a precise area, that there is common ground in modern societies (…)."

In this context, is spoken of the common-ground method of interpreting the ECHR, in accordance with the last section of the findings cited above.

5.4.3 According to ECtHR case law, an interpretation and application of the ECHR must also take scientific insights and generally accepted standards into account.[29]

(c) Article 13 ECHR

5.5.1 Article 13 ECHR is also relevant to the interpretation of Articles 2 and 8 ECHR; Article 13 provides that if the rights and freedoms under the ECHR are violated, there exists the right to an effective remedy before a national authority. According to ECtHR case law, this provision guarantees the existence of a remedy at national level to compel the observance of these rights and freedoms. In cases involving an arguable complaint regarding the violation of those rights and freedoms, national law must therefore offer a remedy that leads to obtaining appropriate relief. The scope of this obligation depends on the nature of the violation. The remedy must be both practically and legally effective.[30]

5.5.2 A remedy is considered effective as meant in Article 13 ECHR if it will prevent or end the violation or if the remedy offers adequate redress for a violation that has already occurred. In the case of more serious violations, the available remedies must provide for both: the prevention or end of the violation as well as redress.[31] National states are thus required to provide remedies that can effectively prevent more serious violations.

5.5.3 The remedy must ensure that a national court determines whether the rights and freedoms ensuing from the ECHR have been violated and that this court does so in accordance with the rules of the ECHR and the interpretation of those rules by the ECtHR.[32] In short: the remedy must offer effective legal protection from possible violations of the rights and freedoms ensuing from the ECHR.

(d) Do Articles 2 and 8 ECHR apply to the global problem of the danger of climate change?

5.6.1 Pursuant to Articles 93 and 94 of the Dutch Constitution, Dutch courts must apply every provision of the ECHR that is binding on all persons. Because the ECHR also subjects the Netherlands to the jurisdiction of the ECtHR (Article 32 ECHR), Dutch courts must interpret those provisions as the ECtHR has, or interpret them premised on the same interpretation standards used by the ECtHR.[33] This means that the findings above in paras. 5.2.1-5.5.3 must also be used as a premise by the Dutch courts.

5.6.2 Pursuant to the findings above in paras. 5.2.1-5.3.4, no other conclusion can be drawn but that the State is required pursuant to Articles 2 and 8 ECHR to take measures to counter the genuine threat of dangerous climate change if this were merely a national problem. Given the

findings above in paras. 4.2-4.7, after all, this constitutes a 'real and immediate risk' as referred to above in para. 5.2.2 and it entails the risk that the lives and welfare of Dutch residents could be seriously jeopardised. The same applies to, *inter alia*, the possible sharp rise in the sea level, which could render part of the Netherlands uninhabitable. The fact that this risk will only be able to materialise a few decades from now and that it will not impact specific persons or a specific group of persons but large parts of the population does not mean – contrary to the State's assertions – that Articles 2 and 8 ECHR offer no protection from this threat (see above in para. 5.3.1 and the conclusion of paras. 5.2.2 and 5.2.3). This is consistent with the precautionary principle (see para. 5.3.2, above). The mere existence of a sufficiently genuine possibility that this risk will materialise means that suitable measures must be taken.

5.6.3 As the State has asserted, the ECtHR has not yet issued any judgments regarding climate change or decided any cases that bear the hallmarks that are particular to issues of climate change. Those hallmarks are, briefly put, the dangers presented by a globally occurring activity – the emission of greenhouse gases all over the world, and not just from Dutch territory – whose consequences will have a worldwide impact, including in the Netherlands. The question is whether the global nature of the emissions and the consequences thereof entail that no protection can be derived from Articles 2 and 8 ECHR, such that those provisions impose no obligation on the State in this case.

5.6.4 The Supreme Court considers the answer to this question to be sufficiently clear. It will therefore give the answer to this question itself and will not submit it to the ECtHR for an advisory opinion, as is possible but not compulsory under Protocol no. 16 to the ECHR, which entered into effect on 1 June 2019. In addition, both parties have asked the Supreme Court to hand down its judgment before the end of 2019, in view of the time to which the District Court's order, upheld by the Court of Appeal, relates, which is the end of 2020.

(e) Joint responsibility of the states and partial responsibility of individual states

5.7.1 The answer to the question referred to in 5.6.3 above is in the opinion of the Supreme Court, that, under Articles 2 and 8 ECHR, the Netherlands is obliged to do 'its part' in order to prevent dangerous climate change, even if it is a global problem. This is based on the following grounds.

5.7.2 The UNFCCC is based on the idea that climate change is a global problem that needs to be solved globally. Where emissions of greenhouse gases take place from the territories of all countries and all countries are affected, measures will have to be taken by all countries. Therefore, all countries will have to do the necessary. The preamble to this convention states, among other things, the following in this context:

"Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions, (…).

Recalling also that States have (…) the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."

5.7.3 The objective of the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human induced interference with the climate system (Article 2). Article 3 contains various principles to achieve this objective. For instance, Article 3(1) provides that the parties "should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in

accordance with their common but differentiated responsibilities and respective capabilities". Article 3(3) provides that the parties "should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects". And Article 4 provides, put succinctly, that all parties will take measures and develop policy in this area. It follows from these provisions that each state has an obligation to take the necessary measures in accordance with its specific responsibilities and possibilities.

5.7.4 At the annual climate change conferences held on the basis of the UNFCCC since 1992, the provisions mentioned above in 5.7.3 have been further developed in various COP decisions. In each case these are based first and foremost on an acknowledgement of the above understanding: all countries will have to do the necessary. Articles 3 et seq. of the 2015 Paris Agreement reiterates this in so many words.

5.7.5 This understanding corresponds to what is commonly referred to as the 'no harm principle', a generally accepted principle of international law which entails that countries must not cause each other harm. This is also referred to in the preamble to the UNFCCC (in the section cited in 5.7.2 above). Countries can be called to account for the duty arising from this principle. Applied to greenhouse gas emissions, this means that they can be called upon to make their contribution to reducing greenhouse gas emissions. This approach justifies partial responsibility: each country is responsible for its part and can therefore be called to account in that respect.

5.7.6 This partial responsibility is in line with what is adopted in national and international practice in the event of unlawful acts that give rise to only part of the cause of the damage. Partial responsibility is in line with, inter alia, the Draft Articles on Responsibility of States for Internationally Wrongful Acts, as proposed by the UN International Law Commission and adopted by the UN General Assembly. This is apparent, for example, in the explanatory notes to Article 47(1) thereof, in which the following is remarked:[34]

"6. According to paragraph 1 of article 47, where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act. The general rule in international law is that of separate responsibility of a State for its own wrongful acts and paragraph 1 reflects this general rule. (…)

8. Article 47 only addresses the situation of a plurality of responsible States in relation to the same internationally wrongful act. The identification of such an act will depend on the particular primary obligation, and cannot be prescribed in the abstract. Of course, situations can also arise where several States by separate internationally wrongful conduct have contributed to causing the same damage. For example, several States might contribute to polluting a river by the separate discharge of pollutants. (…) In such cases, the responsibility of each participating State is determined individually, on the basis of its own conduct and by reference to its own international obligations."

Many countries have corresponding rules in their liability law system.[35]

It is true that Article 3(1) UNFCCC referred to in 5.6.3 above entails that the distribution of the measures to be taken against climate change must not be based solely on the basis of responsibility for past emissions by a country, and that consideration must also be given to the possibilities for countries to reduce their emissions. But that does not detract from the fact that the underlying principle of these widely accepted rules is always that, in short, 'partial fault' also justifies partial responsibility.

5.7.7 Partly in view of the serious consequences of dangerous climate change as referred to in 4.2 above, the defence that a state does not have to take responsibility because other countries do not comply with their partial responsibility, cannot be accepted. Nor can the assertion that a country's own share in global greenhouse gas emissions is very small and that reducing

emissions from one's own territory makes little difference on a global scale, be accepted as a defence. Indeed, acceptance of these defences would mean that a country could easily evade its partial responsibility by pointing out other countries or its own small share. If, on the other hand, this defence is ruled out, each country can be effectively called to account for its share of emissions and the chance of all countries actually making their contribution will be greatest, in accordance with the principles laid down in the preamble to the UNFCCC cited above in 5.7.2.

5.7.8 Also important in this context is that, as has been considered in 4.6 above about the carbon budget, each reduction of greenhouse gas emissions has a positive effect on combating dangerous climate change, as every reduction means that more room remains in the carbon budget. The defence that a duty to reduce greenhouse gas emissions on the part of the individual states does not help because other countries will continue their emissions cannot be accepted for this reason either: no reduction is negligible.[36]

5.7.9 Climate change threatens human rights, as follows from what has been considered in 5.6.2 above. This is also recognised internationally outside the context of the Council of Europe.[37] In order to ensure adequate protection from the threat to those rights resulting from climate change, it should be possible to invoke those rights against individual states, also with regard to the aforementioned partial responsibility. This is in line with the principle of effective interpretation, referred to in 5.4.1 above, that the ECtHR applies when interpreting the ECHR and also with the right to effective legal protection guaranteed by Article 13 ECHR, referred to 5.5.1-5.5.3 above.

5.8 In view of the considerations in 5.7.2-5.7.9 above, the Supreme Court finds that Articles 2 and 8 ECHR relating to the risk of climate change should be interpreted in such a way that these provisions oblige the contracting states to do 'their part' to counter that danger. In light both of the facts set out in 4.2-4.7 and of the individual responsibility of the contracting states, this constitutes an interpretation of the positive obligations laid down in those provisions that corresponds to its substance and purport as mentioned in 5.2.1-5.3.3 above. This interpretation is in accordance with the standards set out in 5.4.1-5.4.3 that the ECtHR applies when interpreting the ECHR and that the Supreme Court must also apply when interpreting the ECHR.

(f) Can this obligation pursuant to Articles 2 and 8 ECHR also be relied upon in a case involving a claim pursuant to Article 3:305a DCC?

5.9.1 It follows from the above that, as the Court of Appeal has ruled, the State is obliged on the basis of Articles 2 and 8 ECHR to take appropriate measures against the threat of dangerous climate change, in accordance with its share as referred to in 5.8 above.

5.9.2 Urgenda, which in this case, on the basis of Article 3:305a DCC, represents the interests of the residents of the Netherlands with respect to whom the obligation referred to in 5.9.1 above applies, can invoke this obligation. After all, the interests of those residents are sufficiently similar and therefore lend themselves to being pooled, so as to promote efficient and effective legal protection for their benefit.[38] Especially in cases involving environmental interests, such as the present case, legal protection through the pooling of interests is highly efficient and effective.[39] This is also in line with Article 9(3) in conjunction with Article 2(5) of the Aarhus Convention,[40] which guarantees interest groups access to justice in order to challenge violations of environmental law, and in line with Article 13 ECHR (see 5.5.1-5.5.3 above).

5.9.3 As the Court of Appeal rightly held in para. 35, the fact that Urgenda does not have a right to complain to the ECtHR on the basis of Article 34 ECHR, because it is not itself a potential victim of the threatened violation of Articles 2 and 8 ECHR, does not detract from Urgenda's right to institute proceedings. After all, this does not deprive Urgenda of the power to

institute a claim under Dutch law in accordance with Article 3:305a DCC on behalf of residents who are in fact such victims.

(g) Assessment of the complaints in cassation

5.10 The complaints of grounds for cassation 1-3 fail on the basis of the above. The same applies to the complaints of grounds for cassation 4-8 insofar as these relate to the Court of Appeal's opinion that Articles 2 and 8 ECHR subject the State to the duty to take measures to counter dangerous climate change.

6. Assumptions in answering the question of what specific obligation on the part of the State results from the foregoing

6.1 As considered above, pursuant to Articles 2 and 8 ECHR the State is obliged towards the residents of the Netherlands, in accordance with its share as referred to above in 5.8, to take adequate measures to reduce greenhouse gas emissions from Dutch territory. However, this does not yet answer the question of what this obligation on the part of the State means in concrete terms.

6.2 The answer to this question belongs, in principle, to the political domain, both internationally and nationally. States will have to agree among themselves on their respective individual share in reducing greenhouse gas emissions and make the necessary choices and considerations in this regard. Such agreements have been made, in the UNFCCC, but only in the form of the general obligations mentioned in 5.7.3 above and principles set out in Articles 3 and 4 of the UNFCCC. These general obligations and principles mean that a fair distribution must take place, taking into account the responsibility and state of development of the individual countries. For obvious political reasons, international or otherwise, some which relating to negotiation strategy, the emission reduction agreements made at the various climate conferences are not legally binding in themselves.

6.3 In the Dutch constitutional system, making the agreement referred to in 6.2 above falls within the competence of the government, which is subject to parliamentary oversight. The Netherlands can also decide to reduce greenhouse gas emissions from its territory without binding or non-binding international agreements. The Netherlands is also obliged to do so, as has been considered in 5.9.1 above. Although determining the share to be contributed by the Netherlands in the reduction of greenhouse gas emissions is, in that context too, in principle, a matter for the government and parliament, the courts can assess whether the measures taken by the State are too little in view of what is clearly the lower limit of its share in the measures to be taken worldwide against dangerous climate change. It is clear, for example, in view of what has been considered above in 5.7.2-5.8, that the State cannot at any rate do nothing at all and that the courts can rule that the State is in breach of its obligation referred to in 5.9.1 above if it does nothing.

Under certain circumstances, there may also be such clear views, agreements and/or consensus in an international context about the distribution of measures among countries that the courts can establish what – in accordance with the widely supported view of states and international organisations, which view is also based on the insights of climate science – can in any case be regarded as the State's minimum fair share. On the basis of the standards referred to above in 5.4.2 and 5.4.3 (including the common ground method), which the Dutch courts are obliged to apply when interpreting the ECHR (see above in 5.6.1), the courts are then obliged to proceed to establishing such and to attach consequences to it in their judgment on the extent of the State's positive obligations. It follows from the ECtHR case law referred to above in 5.4.2 that, under certain circumstances, agreements and rules that are not binding in and of themselves may also be meaningful in relation to such establishment. This may be the case if those rules and agreements are the expression of a very widely supported view or insight and are therefore important for the interpretation and application of the State's positive obligations under Articles 2 and 8 ECHR.

6.4 The right to effective legal protection under Article 13 ECHR mentioned above in 5.5.1-5.5.3 entails, in a case such as this, that the courts must examine whether it is possible to grant effective legal protection by examining whether there are sufficient objective grounds from which a concrete standard can be derived in the case in question.

6.5 In addition, the courts can assess whether the State, with regard to the threat of a dangerous climate change, is complying with its duty mentioned above in 5.5.3 under Articles 2 and 8 ECHR to observe due diligence and pursue good governance. Under certain circumstances, the obligation to take measures of a certain scope or quality may arise from this duty. Furthermore, this duty implies that, under certain circumstances, the State must properly substantiate that the policy it pursues meets the requirements to be imposed, i.e. that it pursues a policy through which it remains above the lower limit of its fair share.

6.6 In determining the State's minimum obligations, the courts must observe restraint, especially if rules or agreements are involved that are not binding in themselves. It is therefore only in clear-cut cases that the courts can rule, on the grounds referred to above in 6.3-6.5, that the State has a legal obligation to take measures.

7 The 25-40% target for Annex I countries

7.1 The first question to be addressed in these proceedings is whether the 25% to 40% reduction in greenhouse gas emissions in 2020 compared to 1990, which is based on AR4 (hereinafter: 'the 25-40% target'), formulated as a target for the Annex I countries, represents a corresponding obligation for the state. The State rightly argues that this target is not a binding rule or agreement in and of itself. The question is therefore whether this target nevertheless binds the State on one or more of the grounds mentioned above in 6.3-6.5.

The first question that needs to be answered in this context is (a) to what extent there is support within the international community for the 25-40% target. This question will be dealt with in 7.2.1-7.2.11 below. The next question is (b) whether this target also applies to the Netherlands as an individual country. This question will be dealt with in 7.3.1-7.3.6 below. After that (c) the State's policy to combat dangerous climate change is discussed in 7.4.1-7.4.6. Lastly (d) in 7.5.1-7.5.3 the question is answered whether it follows from all this that the Netherlands is obliged to meet the 25-40% target, as ruled by the District Court and Court of Appeal.

This is based on the facts established by the Court of Appeal.

(a) The degree of international consensus regarding the 25-40% target

7.2.1 The 25-40% target is part of an IPCC scenario in AR4 from 2007 for a global reduction in greenhouse gas emissions.[41] This scenario provides for Annex I countries to reduce greenhouse gas emissions by 25% to 40% in 2020 and by 80% to 95% in 2050, both compared to 1990 emissions. The distribution of measures between Annex I countries and other countries in this scenario is based on the principles of Articles 3 and 4 UNFCCC. The scenario was written for the target of a maximum concentration of greenhouse gases in the atmosphere of 450 ppm by 2100. This is the concentration at which global warming is reasonably expected to be limited to a maximum of 2°C. AR4 was established on the assumption that this is probably the critical limit above which there is risk of dangerous climate change. The scenario offers a good chance of not exceeding the limit of warming of more than 2°C.

7.2.2 The Bali Action Plan, established at the Bali Climate Change Conference in 2007 (COP-13) endorses the need for far-reaching reductions in greenhouse gas emissions to prevent dangerous climate change. In this respect, reference was made to, among other things, the

scenario referred to in 7.2.1. It bears noting here that at climate change conferences decisions are often made on the basis of consensus.

7.2.3 At the Cancún Climate Change Conference in 2010 (COP-16), the countries that are parties to the Kyoto Protocol passed a resolution, the preamble to which expresses, among other things, that, taking into account the findings in AR4, the Annex I countries as a group should reduce their greenhouse gas emissions by 25% to 40% by 2020 compared to 1990:

"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, (…)"

In the same resolution, the parties to the Kyoto Protocol urged Annex I countries to raise their level of ambition to meet the AR4 target individually or as a group:

"4. Urges Annex I Parties to raise the level of ambition of the emission reductions to be achieved by them individually or jointly, with a view to reducing their aggregate level of emissions of greenhouse gases in accordance with the range indicated by Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change 2007: Mitigation of Climate Change, and taking into account the quantitative implications of the use of land use, land-use change and forestry activities, emissions trading and project-based mechanism and the carry-over of units from the first to the second commitment period; (…)."

At the Durban Climate Change Conference in 2011 (COP-17), these countries passed another resolution, the preamble to which explicitly states that the target for Annex I countries is to reduce their total emissions by at least 25% to 40% compared to 1990 levels:

"Aiming to ensure that aggregate emissions of greenhouse gases by Parties included in Annex I are reduced by at least 25–40 per cent below 1990 levels by 2020, noting in this regard the relevance of the review referred to in chapter V of decision 1/CP.16 to be concluded by 2015, (…)"

The need for a reduction of this magnitude was also expressed at the Doha Climate Change Conference in 2012 (COP-18) in a resolution passed by the COP of countries party to the Kyoto Protocol. For the first time, the countries themselves stated in a resolution that, "in order to increase the ambition of its commitment", the Annex I countries should strive to achieve at least a 25-40% reduction in greenhouse gas emissions by 2020 compared to 1990 levels.

The need for a reduction of this magnitude was also expressed at the climate change conferences in Warsaw, Lima and Paris in 2013, 2014 and 2015, respectively (COP-19, COP-20 and COP-21). At these conferences, this need has been endorsed again and again in resolutions, by reference either to the Doha Amendment or to resolutions passed at previous conferences. The preamble to the COP decision to adopt the Paris Agreement stresses the urgency of achieving this reduction.

Climate change conferences after 2015 no longer explicitly addressed or referred to the reduction target of 25-40% by 2020. At those conferences, however, the need for sufficient reductions in greenhouse gas emissions before and by 2020 has always been stressed.

7.2.4 As the Court of Appeal established in para. 49, the 25-40% target has not been superseded

by the 2013-2014 AR5, contrary to what the State suggests. This report, too, is based on the target of a maximum concentration of greenhouse gases in the atmosphere of 450 ppm by 2100 as part of the objective that global warming not exceed 2oC. AR5 no longer discusses 2020. Indeed, this report focuses on later years, i.e. 2030 and in particular 2050 and 2100, and no longer contains targets for 2020. The 2014 and 2015 COP resolutions mentioned above in 7.2.3, which date from after AR5, still refer to the need for Annex I countries to reduce their greenhouse gas emissions by 25% to 40% by 2020 in accordance with AR4.

The distinction made in UNFCCC between Annex I countries and other countries was dropped in AR5, because by that time countries other than Annex I countries had to be deemed developed countries as well. It emerges from the above, however, that, contrary to what the State argues, this does not mean that AR4's reduction scenario for 2020 has become outdated.

7.2.5 AR5 does contain new scenarios to achieve by 2050 and 2100 the reductions in greenhouse gas concentrations deemed necessary. These are largely based on the premise that there will not be a sufficient reduction in greenhouse gas emissions and that the concentration of greenhouse gases will therefore have to be reduced by taking measures to remove these gases from the atmosphere (see 2.1(12) above). It is certain, however, that at the moment there is no technology that allows this to take place on a sufficiently large scale. Therefore, as the Court of Appeal held in para. 49, these new scenarios cannot be taken as a starting point for policy at this time without taking irresponsible risks by doing so. Taking such risks would run counter to the precautionary principle that must be observed when applying Articles 2 and 8 ECHR and Article 3(3) UNFCCC (see 5.3.2 and 5.7.3 above). It does not appear, therefore, that these new scenarios have been taken as a starting point for subsequent decisions at climate change conferences.

The Court of Appeal's finding that the 25-40% target has not been superseded by AR5 is therefore understandable and serves as a starting point in cassation.

7.2.6 The EU also took as a starting point the need for the AR4 scenario mentioned above in 7.2.1. Several EU bodies – the Council, the Commission and the Parliament – expressed the scientifically supported necessity of reducing emissions by 30% in 2020 in comparison to 1990. At the Cancún Climate Change Conference in 2010, the EU offered to commit itself to reducing its emissions by this percentage by 2020 if, among other things, the other developed countries would commit themselves to comparable reductions. The following has been noted on behalf of the EU:[42]

"10. The EU and its 27 member States wished to reconfirm their commitment to a negotiating process aimed at achieving the strategic objective of limiting the increase in global average temperature to below 2°C above pre-industrial levels. Meeting that objective requires the level of global GHG emissions to peak by 2020 at the latest, to be reduced by at least 50 per cent compared with 1990 levels by 2050 and to continue to decline thereafter. To this end, and in accordance with the findings of the Intergovernmental Panel on Climate Change, developed countries as a group should reduce their GHG emissions to below 1990 levels through domestic and complementary international efforts by 25 to 40 per cent by 2020 and by 80 to 95 per cent by 2050, while developing countries as a group should achieve a substantial deviation below the currently predicted rate of growth in emissions, in the order of 15 to 30 per cent by 2020. The EU and its 27 member States are fully committed to continuing to negotiate with the other Parties, with a view to concluding as soon as possible within the United Nations framework a legally binding international agreement for the period commencing 1 January 2013."

In case this condition would not be met – which has proved to be the case – the EU has committed itself to a 20% reduction by 2020. However, by 2020 the EU is expected to achieve a reduction of 26-27% compared to 1990.

7.2.7 It follows from the above that there is a high degree of consensus in the international community on the need for in any case the Annex I countries to reduce greenhouse gas emissions by 25% to 40% by 2020, in order to reduce global warming to the maximum of 2°C deemed responsible at the time of AR4.

7.2.8 After 2007, when AR4 came into being, a high degree of consensus on the need for even greater reductions was reached in the climate science community and the international community. As mentioned in 4.3 above, it has been recognised for some years that global warming should not be limited to a maximum of 2°C to prevent dangerous climate change, but to a maximum of 1.5°C. Therefore, the 2015 Paris Agreement explicitly stipulates that the states will endeavour to limit warming to 1.5°C, "recognising that this would significantly reduce the risks and impacts of climate change" (Article 2(1), opening words and (a), of the Agreement). This necessitates a greater reduction in greenhouse gas emissions than is necessary for a target of no more than 2°C.

7.2.9 The UNEP's 2017 annual report, referring to the carbon budget and the emissions gap described in 4.6 above, therefore states that, in light of the Paris Agreement, the reduction of greenhouse gas emissions is more urgent than ever. The UNEP also remarks that if the emissions gap is not bridged by 2030, achieving the two-degree target is extremely unlikely. Even if the reduction targets underlying the Paris Agreement are fully achieved, 80% of the carbon budget corresponding with the two-degree target will be used up by 2030. Starting from a 1.5°C target, the carbon budget will even have been completely exhausted by then. That is why even more ambitious reduction targets are needed for the year 2020, according to the UNEP. The UNEP concludes that "later-action scenarios may not be feasible in practice and, as a result, temperature targets could be missed" and that "later-action scenarios pose greater risks of climate impacts".[43]

7.2.10 With regard to the above, it must be taken into account that, as the Court of Appeal established in para. 63 without being disputed in cassation, that the maximum targets of 1.5°C or 2°C and the related concentrations of a maximum of 430 or 450 ppm are based on estimates. It is therefore possible that dangerous climate change will occur even with less global warming and a lower concentration of greenhouse gases, for example because a tipping point is reached or because ice melts at a higher rate (see 4.4 above). The precautionary principle therefore means that more far-reaching measures should be taken to reduce greenhouse gas emissions, rather than less far-reaching measures.

7.2.11 From what has been considered above in 7.2.8-7.2.10, it follows once again that there is a high degree of international consensus on the urgent need for the Annex I countries to reduce greenhouse emissions by at least 25-40% by 2020 compared to 1990 levels, in order to achieve at least the two-degree target, which is the maximum target to be deemed responsible. This high degree of consensus can be regarded as common ground within the meaning of the ECtHR case law referred to above in 5.4.2, which according to that case law must be taken into account when interpreting and applying the ECHR.

(b) The 25-40% target for the Netherlands individually

7.3.1 The State has argued that the 25-40% target only applies to the Annex I countries as a group and not to each of them individually. Therefore, according to the State, this objective allegedly does not apply to it individually. In addition, the State has argued that the EU as a whole is committed to a 20% reduction in greenhouse gas emissions by 2020 (see 7.2.6 above) and that it was agreed at EU level that the Netherlands would contribute to this by reducing its greenhouse gas emissions in 2020 by 21% for the ETS sector and by 16% for the non-ETS sector, both compared to 2005 levels. According to the State, it complies with all its obligations by making these contributions.

7.3.2 In and of itself, it is correct that the 25-40% target in AR4 was included for the Annex I countries as a group. However, as shown by the considerations in 5.7.3 and 5.7.4 above, the UNFCCC and the Paris Agreement are both based on the individual responsibility of states. Therefore, in principle, the target from AR4 also applies to the individual states within the group of Annex I countries. As will become clear in 7.4.1, the State itself interpreted this target in the same way. Both the UNFCCC and the Paris Agreement provide for states to cooperate and conclude an agreement whereby they jointly reduce their emissions and whereby one may do more than the other (Article 4(2)(a), last sentence, UNFCCC and Article 4(16) and 4(17) Paris agreement). The State has not argued, however, that such an agreement was concluded by it in relation to the 25-40% target of AR4.

7.3.3 The purport of the State's reference to the agreements at EU level as mentioned in 7.3.1 above is not that such an agreement was reached at EU level. The State refers to those agreements only because, in its view, they are only standards that oblige it to achieve a certain concrete reduction in greenhouse gas emissions. However, this argument fails to recognise that, as considered in 5.8 and 6.3-6.5 above, the State may also be obliged to make such a reduction on the basis of Articles 2 and 8 ECHR, in which regard the consensus mentioned above in 7.2.11 is important.

Incidentally, as far as the present case has shown, the said agreements at EU level are not intended to replace the obligations of the individual EU Member States under the UNFCCC. At the Cancún Climate Change Conference in 2020, the EU formulated its own reduction target as it is a party to the UNFCCC on its own. By virtue of the agreements made within the EU on the distribution of measures necessary to enable the EU to achieve this reduction target, the Netherlands is subject to the reduction obligations set out in 7.3.1 above. However, these agreements are without prejudice to the individual responsibility of the EU Member States by any other virtue. The Effort Sharing Decision therefore states in consideration 17 of the preamble that this decision does not preclude more stringent national objectives. This also follows from Article 193 TFEU.

In addition, the EU itself expressed the need for 30% reduction by 2020 and the EU as a whole is expected to achieve a 26-27% reduction by 2020 compared to 1990, which is above the minimum target of 25% of the AR4 scenario and significantly more than the 20% reduction undertaken by the EU at the Cancún Climate Change Conference in 2010.

7.3.4 Moreover, the Court of Appeal rightly held in para. 60 that it would not be obvious for a lower reduction rate to apply to the Netherlands as an Annex I country than to the Annex I countries as a whole. As the Court of Appeal considered in para. 66, the Netherlands is one of the countries with very high per capita emissions of greenhouse gases. In the above agreements at EU level, the reduction percentage agreed upon for the Netherlands is, accordingly, one of the highest reduction percentages applicable to the EU Member States (Annex II to the Effort Sharing Decision). It can be assumed that this high percentage corresponds to the possibilities and responsibilities of the Netherlands. As the Court of Appeal established in para. 60, the State has not substantiated why a lower percentage should apply.

7.3.5 In ground for cassation 8.2.3, the State complains that the Court of Appeal ignored the State’s argument that it was contributing to reducing global greenhouse gas emissions by providing knowledge and financial resources to developing countries, with which those countries could take mitigation and adaptation measures. However, it did not elaborate on this assertion. The State did, amongst other things, not put forward that this contribution realises a reduction of greenhouse gas emissions and that this should be taken into account when answering the question as to which target applies to the State and whether the State achieves the target applicable to it.[44] This complaint therefore fails.

7.3.6 In view of the foregoing, the Court of Appeal rightly ruled that the urgent need for a 25-40%

reduction by 2020 also applies to the Netherlands individually.

(c) The State's policy regarding measures to counter climate change

7.4.1 As considered in 4.8 above, the State acknowledges the need of the target of a maximum concentration of greenhouse gases in the atmosphere of 430 or 450 ppm by 2100, with global warming reasonably expected to be limited to no more than 1.5°C or 2°C. In this context, the State also endorsed the targets set out in the AR4 scenario. As regards that scenario's targets of 80% to 95% reduction by 2050 and of 450 ppm by 2100 (now 430 ppm by 2100), it still endorses them. For the year 2020, the State assumed a reduction target of 30% until 2011. According to the letter from the Minister of Housing, Spatial Planning and the Environment dated 12 October 2009 cited above in 2.1(27), the State, like the EU (see 7.2.6 and 7.3.3 above), was at the time of the opinion that a reduction of 25% to 40% by 2020 was necessary to stay on a credible track to keep the 2°C target within reach.

7.4.2 After 2011, the State adjusted its target for 2020 downwards to the 20% reduction at EU level as referred to in 7.3.1 above. In these proceedings, the State argues that, on closer inspection, achieving a 25% to 40% reduction by 2020 is not necessary, because the same result can be achieved by accelerating the reduction of greenhouse gas emissions in the Netherlands after 2020. The State argues that it intends to have this accelerated reduction take place after 2020 and that it prefers this reduction path over the AR4 scenario. The question, however, is whether an accelerated reduction of greenhouse gas emissions in the Netherlands after 2020 can indeed achieve the same result. In this context, the following facts taken into account by the Court of Appeal are relevant.

7.4.3 All greenhouse gas emissions lead to a reduction in the carbon budget still available (see also 4.6 above). Any postponement of the reduction of emissions therefore means that emissions in the future will have to be reduced on an increasingly large scale in order to make up for the postponement in terms of both of time and size. This means that, in principle, for each postponement of emissions reductions, the reduction measures to be taken at a later date will have to be increasingly far-reaching and costly in order to achieve the intended result, and it will also be riskier. The UNEP already warned about this in its 2013 annual report (see 2.1(22) above).

7.4.4 Following AR4, it became clear that in order to prevent dangerous climate change even greater reductions of greenhouse gas emissions are actually needed in the short term and that this need is becoming increasingly urgent, both before 2020 and in the subsequent period up to 2030 (see also 7.2.8-7.2.9 above). Also according to the Netherlands Environmental Assessment Agency (*Planbureau voor de Leefomgeving*) (the PBL) – which is an independent research institute that is part of the Ministry of Infrastructure and the Environment – a policy is needed, in view of the Paris Agreement, that goes far beyond the current policies of the countries in question. According to the PBL in a 2016 report, the Dutch policy should be tightened in the short time in order to align it with the Paris Agreement.

7.4.5 The State acknowledges the fact referred to in 7.4.3 above (para. 71 of the Court of Appeal's judgments) and does not contest the facts mentioned in 7.4.4 above. Moreover, it has meanwhile formulated a reduction target for 2030 of 49% and for 2050 of 95% (these targets have been laid down in the Dutch Climate Act after the date of the Court of Appeal's judgment[45]). The target of 49% for 2030 was derived linearly from the target of 95% for 2050. On request, the State informed the Court of Appeal that if this line were extended to 2020 this would result in a target of 28% for that year (para. 47).

7.4.6 In view of the considerations in 7.4.3-7.4.5 above, there may be serious doubts as to whether, with the 20% reduction envisaged by the State at EU level by 2020, the overall reduction over the next few decades, which the State itself believes to be necessary in any

case, is still feasible. After all, the need for this reduction requires the State to aim for a reduction in greenhouse gas emissions by more than 25% by 2020, rather than a reduction that is lower. The State has not explained that and why, despite the above and taking into account the precautionary principle applicable in this context, a policy aimed at 20% reduction by 2020 can still be considered responsible. The State has not provided any insight into which measures it intends to take in the coming years, let alone why these measures, in spite of the above, would be both practically feasible and sufficient to contribute to the prevention of dangerous climate change to a sufficient extent in line with the Netherlands' share. The State has confined itself to asserting that there "are certainly possibilities" in this context.

(d) Must the State adhere to the 25-40% target?

7.5.1 In view of the above, the Court of Appeal was allowed to rule in para. 52 that the State has insufficiently substantiated that it would be possible for a responsible policy to prevent dangerous climate change to include a greenhouse gas emissions reduction target of less than at least 25% by 2020. Therefore, in accordance with the foregoing considerations in 6.3-6.5, there is reason to come to the conclusion that the State should in any event adhere to the target of at least 25% reduction by 2020. As stated above, there is a large degree of consensus in the international community and climate science that at least this reduction by the Annex I countries, including the Netherlands, is urgently needed (see 7.2.11 and 7.3.6 above). Proper legal protection means that this consensus can be invoked when implementing the positive obligations incumbent on the State pursuant to Articles 2 and 8 ECHR. The target of achieving a reduction of at least 25% by 2020 is also in line with what the State itself considers necessary for other years (2030, 2050 and 2100 (see 7.4.1-7.4.5 above). In the context of the positive obligation on the State under Articles 2 and 8 ECHR to take appropriate measures to prevent dangerous climate change, this target can therefore be regarded as an absolute minimum. As the State has not been able to provide a proper substantiation of its claim that deviating from that target is nevertheless responsible (see 7.4.6 above), it must adhere to the target of 25%. It should therefore strive to achieve at least this reduction by 2020, as the Court of Appeal rightly held in para. 53.

7.5.2 The State has also argued, in ground for cassation 8.2, that it meets its obligations under Articles 2 and 8 ECHR by taking adaptation measures, whether or not in combination with mitigation measures already taken and proposed, and that it therefore does not have to meet the 25-40% target. In para. 59, however, the Court of Appeal established fully comprehensibly that although it is correct that the consequences of climate change can be mitigated by taking adaptation measures, it has not been demonstrated or made plausible that the potentially disastrous consequences of excessive global warming can be adequately prevented by such measures. This finding also implies that even if account is taken of the fact that the State is taking adaptation measures, mitigation measures that reduce emissions by at least 25% by 2020 are urgently needed, also for the Netherlands. The State's aforementioned argument therefore does not hold.

7.5.3 It should also be noted that the Court of Appeal's judgment implies in paras. 57 and 66 that the State has not sufficiently substantiated that the reduction of at least 25% by 2020 is an impossible or disproportionate burden, as referred to in 5.3.4 above. In this context, the State only referred to the short time remaining until the end of 2020 and to the impairment of the level playing field of the Dutch business community in an international context. In connection with the first argument, the Court of Appeal took into account that the District Court's order to the State dates back to 2015, i.e. has been in force since then, and that the State has moreover been aware of the seriousness of the climate problem for some time and initially pursued a policy aimed at a 30% reduction by 2020 (para. 66). With respect to the second argument, the Court of Appeal took into account that other EU countries pursue much stricter climate policies and that the State has not explained this argument in more detail

(para. 57). By doing so, the Court of Appeal has comprehensibly rejected the State's assertion that there would be an impossible or disproportionate burden. Ground for cassation 8.4, which accuses the Court of Appeal of not having investigated this assertion, is therefore unfounded.

(e) Assessment of complaints in cassation

7.6.1 The complaints referred to in 4.237-4.248 of the Opinion proffered by the deputy Procurator General and the Advocate General cannot lead to cassation for the reasons stated there.

7.6.2 Insofar as complaints from grounds for cassation 4-8 have not been dealt with in the foregoing, these cannot lead to cassation either. With regard to Article 81(1) DJOA, this does not require any further substantiation since the complaints do not require answers to legal questions in the interest of unity of law or legal development.

8 Permissibility of the order issued; political domain

8.1 The State argues in ground for cassation 9 that the District Court's order to reduce Dutch greenhouse gas emissions by at least 25% in 2020 compared to 1990 levels, which was upheld by the Court of Appeal, is impermissible for two reasons. The first reason is that the order amounts to an order to create legislation, which according to Supreme Court case law is not permissible. The second reason is, briefly put, that it is not for the courts to make the political considerations necessary for a decision on the reduction of greenhouse gas emissions. The following is considered in response to these arguments.

(a) Order to create legislation

8.2.1 If the government is obliged to do something, it may be ordered to do so by the courts, as anyone may be, at the request of the entitled party (Article 3:296 DCC). This is a fundamental rule of constitutional democracy, which has been enshrined in our legal order. As far as the rights and freedoms set out in the ECHR are concerned, this rule is consistent with the right to effective legal protection laid down in Article 13 ECHR referred to above in 5.5.1-5.5.3. Partly in connection with this fundamental rule, the Dutch Constitution stipulates that civil courts have jurisdiction over all claims, so that they can always grant legal protection if no legal protection is offered by another court.[46]

8.2.2 It follows from the considerations in 5.1.7-6.2 above that, in this case, the State has a legal duty by virtue of the protection it must provide to residents of the Netherlands on the basis of Articles 2 and 8 ECHR in order to protect their right to life and their right to private and family life. It may therefore be ordered to comply with this duty by the courts, unless there are grounds for an exception in accordance with Article 3:296 DCC. Under that provision, an exception arises if the law so provides or if it follows from the nature of the obligation or the legal act. The Supreme Court case law relating to orders to create legislation constitutes an application of this exception.[47]

8.2.3 This case law is based on two considerations. First of all, there is the consideration that the courts should not intervene in the political decision-making process involved in the creation of legislation. Secondly, there is the consideration that such an order should create an arrangement that also applies to parties other than the parties to the proceedings.[48]

8.2.4 The first consideration does not mean that courts cannot enter the field of political decision-making at all. In the case law referred to above, therefore, the earlier case law of the

Supreme Court has been reiterated, which dictates that, on the basis of Article 94 of the Dutch Constitution, the courts must disapply legislation if any binding provisions of treaties entail such.[49] It has also been decided in that case law that the courts may issue a declaratory decision to the effect that the public body in question is acting unlawfully by failing to enact legislation with a particular content.[50]

The first consideration on which the case law referred to in 8.2.2 is based must therefore be understood to mean that the courts should not interfere in the political decision-making process regarding the expediency of creating legislation with a specific, concretely defined content by issuing an order to create legislation. In view of the constitutional relationships, it is solely for the legislator concerned to determine for itself whether legislation with a particular content will be enacted. Therefore, the courts cannot order the legislator to create legislation with a particular content.

8.2.5 The second consideration on which the case law referred to in 8.2.2 above is based relates to the circumstance that the civil courts only pronounce binding decisions between the parties to the dispute (cf. Article 236 DCCP). The courts do not have the power to decide in a manner binding on everyone how a statutory provision should read. An order to create legislation is therefore subject to the objection that third parties, which are not involved in the proceedings and are therefore not bound by the judgment, would still be bound (indirectly) by that order by virtue of the fact that that legislation would also apply to them. This objection does not arise in the case of an order not to apply statutory provisions, which applies only to a particular claimant, or in the case of a declaratory decision. The same applies to a general order to take measures, while respecting the legislator's freedom, as referred to in the second paragraph of 8.2.4 above, to create or not to create legislation with a particular content. After all, the courts in that case do not determine the content of the statutory provision by issuing their order; this determination is still reserved to the legislator in question.

8.2.6 It follows from the above that the courts are only not permitted to issue an order to create legislation with a particular, specific content. After all, only then do the objections arise which are raised in the consideration on which the case law referred to in 8.2.2 above is based. Therefore, the courts are not prevented to issue a declaratory decision to the effect that the omission of legislation is unlawful (see 8.2.4 above). They may also order the public body in question to take measures in order to achieve a certain goal, as long as that order does not amount to an order to create legislation with a particular content. In the Supreme Court judgment of 9 April 2010 (SGP), the impermissibility of courts issuing an order to create legislation is for that reason limited to this case.[51]

8.2.7 In light of the foregoing, the District Court's order, upheld by the Court of Appeal, constitutes an application of the main rule of Article 3:296 DCC. Indeed, this order does not amount to an order to take specific legislative measures, but leaves the State free to choose the measures to be taken in order to achieve a 25% reduction in greenhouse gas emissions by 2020. This is not altered by the fact that many of the possible measures to be taken will require legislation, as argued by the State. After all, it remains for the State to determine what measures will be taken and what legislation will be enacted to achieve that reduction. The exception to Article 3:296 DCC made in the case law referred to in 8.2.2 above therefore does not apply in this case.

(b) Political domain

8.3.1 This brings the Supreme Court to the assessment of the State's more general argument that it is not for the courts to make the political considerations necessary for a decision on the reduction of greenhouse gas emissions.

8.3.2 As considered in 6.3 above, in the Dutch constitutional system of decision-making on the reduction of greenhouse gas emissions is a power of the government and parliament. They have a large degree of discretion to make the political considerations that are necessary in this regard. It is up to the courts to decide whether, in availing themselves of this discretion, the government and parliament have remained within the limits of the law by which they are bound.

8.3.3 The limits referred to in 8.3.2 above include those for the State arising from the ECHR. As considered in 5.6.1 above, the Netherlands is bound by the ECHR and the Dutch courts are obliged under Articles 93 and 94 of the Dutch Constitution to apply its provisions in accordance with the interpretation of the ECtHR. The protection of human rights it provides is an essential component of a democratic state under the rule of law.

8.3.4 This case involves an exceptional situation. After all, there is the threat of dangerous climate change and it is clear that measures are urgently needed, as the District Court and Court of Appeal have established and the State acknowledges as well (see 4.2-4.8 above). The State is obliged to do 'its part' in this context (see 5.7.1-5.7.9 above). Towards the residents of the Netherlands, whose interests Urgenda is defending in this case, that duty follows from Articles 2 and 8 ECHR, on the basis of which the State is obliged to protect the right to life and the right to private and family life of its residents (see 5.1-5.6.4 and 5.8-5.9.2 above). The fact that Annex I countries, including the Netherlands, will need to reduce their emissions by at least 25% by 2020 follows from the view generally held in climate science and in the international community, which view has been established by the District Court and the Court of Appeal (see 7.2.1-7.3.6 above). The policy that the State pursues since 2011 and intends to pursue in the future (see 7.4.2 above), whereby measures are postponed for a prolonged period of time, is clearly not in accordance with this, as the Court of Appeal has established. At least the State has failed to make it clear that its policy is in fact in accordance with the above (see 7.4.6 and 7.5.1 above).

8.3.5 In this case, therefore, the Court of Appeal was allowed to rule that the State is in any case obliged to achieve the aforementioned reduction of at least 25% by 2020.

(c) Assessment of the complaints in cassation

8.4 Ground for cassation 9 therefore cannot lead to cassation either.

9 Decision

The Supreme Court:

- rejects the appeal;

- orders the State to pay the costs of the proceedings in cassation, up to this decision estimated on the part of Urgenda at EUR 882.34 in disbursements and EUR 2,200 in fees.

This judgment rendered by Vice President C.A. Streefkerk as chairman and justices G. Snijders, M.V. Polak, T.H. Tanja-van den Broek and H.M. Wattendorff, and pronounced in open court by Vice President C.A. Streefkerk on 20 December 2019.

Appendix

List of abbreviations used

AR4 The Fourth IPCC Assessment Report (2007)
AR5 The Fifth IPCC Assessment Report (2013– 2014)
oC degrees Celsius
Cf. compare
CO2 carbon dioxide
COP Conference of the Parties to the UNFCCC
DCC Dutch Civil Code (*Burgerlijk Wetboek*)
DCCP Dutch Code of Civil Procedure (*Wetboek van Burgerlijke Rechtsvordering*)
DJOA Dutch Judiciary Organisation Act (*Wet op de Rechterlijke Organisatie*)
ECHR European Convention on the Protection of Human Rights and Fundamental Freedoms
ECtHR European Court of Human Rights
et al. and other(s)
ETS Emissions Trading System
EU The European Union
GDP gross domestic product
GHG greenhouse gases
IPCC Intergovernmental Panel on Climate Change
no. or nos. number or numbers

p. or pp. page or pages

para. paragraph
PBL The Netherlands Environmental Assessment Agency (*Planbureau voor de Leefomgeving*)
ppm parts per million
Stb. The Dutch Bulletin of Acts and Decrees (*Staatsblad)*
Supreme Court The Supreme Court of the Netherlands
TFEU Treaty on the Functioning of the European Union
Trb. The Dutch Bulletin of Treaties (*Tractatenblad)*
UN United Nations
UNEP United Nations Environment Program
UNFCCC The United Nations Framework Convention on Climate Change
Vol. Volume
VROM Ministry of Public Health, Spatial Planning and the Environment
WMO World Meteorological Organization

[1] The Hague District Court 24 June 2015, ECLI:NL:RBDHA:2015:7145. English translation

ECLI:NL:RBDHA:2015:7196.

[2] The Hague Court of Appeal 9 October 2018, ECLI:NL:GHDHA:2018:2591. English translation ECLI:NL:GHDHA:2018:2610.

[3] United Nations Framework Convention on Climate Change, New York, 9 May 1992, Trb. 1992, 189, entered into force in the Netherlands on 21 March 1994 (Trb. 1994, 63).

[4] Paris Agreement, 12 December 2015, Trb. 2016, 94 (rectification in Trb. 2016, 127), entered into force in the Netherlands on 27 August 2017 (Trb. 2017, 141).

[5] Decision 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

[6] Supreme Court 5 November 1965, ECLI:NL:HR:1965:AB7079.

[7] See, inter alia, ECtHR 28 March 2000, no. 22492/93 (Kiliç/Turkey), para. 62, and ECtHR 17 July 2014, no. 47848/08 (Centre for Legal Resources on behalf of Valentin Câmpeanu/Romania), para. 130.

[8] Cf. ECHR, Guide on Article 2 of the European Convention on Human Rights (version 31 August 2019), nos. 9, 10 and 31-37 and the ECtHR judgments mentioned there.

[9] Cf., inter alia, the following judgments in which the ECtHR held that the requirements set out here were met: ECtHR 30 November 2004, no. 48939/99 (Öneryildiz/Turkey), paras 98-101 (gas explosion at landfill; the risk of this occurring at any time had existed for years and had been known to the authorities for years), ECtHR 20 March 2008, no. 15339/02 (Budayeva et al./Russia), paras. 147-158 (life-threatening mudslide; the authorities were aware of the danger of mudslides there and of the possibility that they might occur at some point on the scale it actually did) and ECtHR 28 February 2012, no. 17423/05 (Kolyadenko et al./Russia), paras. 165 and 174-180 (necessary outflow from the reservoir because of exceptionally heavy rains; the authorities knew that in the event of exceptionally heavy rains evacuation might be necessary). See in this sense also Administrative Jurisdiction Division of the Council of State 18 November 2015,ECLI:NL:RVS:2015:3578 (Gas extraction in Groningen), para. 39.3.

[10] Cf. ECtHR, Guide on Article 8 of the European Convention on Human Rights (version dated 31 August 2019), nos. 119-127, 420-435 and 438-439 and the ECtHR judgments mentioned there.

[11] Cf. ECtHR 10 November 2004, no. 46117/99 (Taşkin et al./Turkey), paras. 107 and 111-114 (Article 8 ECHR also applies to the threat of environmental pollution that might materialise only in twenty to fifty years), and ECtHR 27 January 2009, no. 67021/01 (Tătar/Romania), paras. 89-97 (possible longer-term health risks from heavy metal emissions from gold mining).

[12] ECtHR 20 March 2008, no. 15339/02 (Budayeva et al./Russia), para. 133.

[13] ECtHR 24 July 2014, no. 60908/11 (Brincat et al./Malta), para. 102.

[14] With regard to Article 2 ECHR, see, inter alia, ECtHR 12 January 2012, no. 36146/05 (Gorovenky and Bugara/Ukraine), para. 32, and ECtHR 13 April 2017, no. 26562/07 (Tagayeva et al./Russia), para. 482. With regard to Article 8 ECHR, see, inter alia, ECtHR 26 July 2011, no. 9718/03 (Stoicescu/Romania), para. 59.

[15] See ECtHR 10 January 2012, no. 30765/08 (Di Sarno et al./Italy), para. 110 and ECtHR 24 January 2019, no. 54414/13 (Cordella et al./Italy), para. 172.

[16] See, inter alia, the judgments cited in 5.2.2 and 5.2.3 above.

[17] With regard to Article 8 ECHR, see: ECtHR 27 January 2009, no. 67021/01 (Tătar/ Romania), para. 120.

[18] With regard to Article 2 ECHR, see, inter alia, ECtHR 20 March 2008, no. 15339/02 (Budayeva et al./Russia), para. 134, and ECtHR 24 July 2014, no. 60908/11 (Brincat et al./Malta), para. 101. With regard to Article 8 ECHR, see, inter alia, ECtHR 9 June 2005, no. 55723/00 (Fadeyeva/Russia), para. 96.

[19] See again the judgments cited in 5.2.2 and 5.2.3, above.

[20] See, inter alia, ECtHR 30 November 2004, nr. 48939/99 (Öneryildiz/Turkey), para. 128, ECtHR 9 June

2005, no. 55723/00 (Fadeyeva/Russia), para. 128, and ECtHR 26 July 2011, no. 9718/03 (Stoicescu/Romania), para. 59

[21] See ECtHR 9 June 2005, no. 55723/00 (Fadeyeva/Russia), paras. 124-134, ECtHR 20 March 2008, no. 15339/02 (Budayeva et al./Russia), paras. 156-158, ECtHR 24 January 2019, no. 54414/13 (Cordella et al./Italy), paras. 161-174, ECtHR 10 February 2011, no. 30499/03 (Dubetska et al./Ukraine), paras. 150-156, and ECtHR 13 July 2017, no. 38342/05 (Jugheli et al./Georgia), paras. 76-78.

[22] ECtHR 13 July 2017, no. 38342/05 ECtHR 13 July 2017, no. 2017/190 (Jugheli et al./Georgia).

[23] See ECtHR 20 March 2008, no. 15339/02 (Budayeva et al./Russia), para. 135, and ECtHR 24 July 2014, no. 60908/11 (Brincat et al./Malta), para. 101.

[24] See ECtHR 26 July 2011, no. 9718/03 (Stoicescu/Romania), para. 59.

[25] See, inter alia, ECtHR 7 July 1989, no. 14038/88 (Soering/United Kingdom), para. 87.

[26] Vienna Convention on the Law of Treaties, Vienna, 23 May 1969, Trb. 1972, 51 and 1985, 79.

[27] ECtHR 12 September 2012, no. 10593/08 (Nada/Switzerland).

[28] ECtHR 12 November 2008, no. 34503/97 (Demir and Baykara/Turkey). For an example, see ECtHR 27 January 2009, no. 67021/01 (Tătar/Romania), para. 120 (reference to the Rio Declaration).

[29] See, inter alia, ECtHR 17 October 1986, no. 9532/81 (Rees), para. 47, ECtHR 30 November 2004, no. 48939/99 (Öneryildiz/Turkey), paras. 59, 71, 90 and 93 (meaning 'dangerous activities'), and ECtHR 20 May 2010, no. 61260/08 (Oluić/Croatia), paras. 29-31, 49, 60 and 62 (WHO noise standards).

[30] See ECtHR 26 October 2000, no. 30210/96 (Kudla/Poland), para. 157, ECtHR 27 January 2015, no. 36925/10 (Neshkov et al./Bulgaria), paras. 180 and 181, and ECtHR 31 October 2019, no. 21613/16 (Ulemek/Croatia), para. 71.

[31] See, inter alia, ECtHR 15 January 2015, no. 62198/11 (Kuppinger/Germany), paras. 136 and 137, with regard to a violation of Article 8 ECHR, and ECtHR 27 January 2015, no. 36925/10 (Neshkov et al./Bulgaria), para. 181, and ECtHR 31 October 2019, no. 21613/16 (Ulemek/Croatia), para. 71, with regard to a violation of Article 3 ECHR.

[32] See ECtHR 27 January 2015, no. 36925/10 (Neshkov et al./Bulgaria), paras.186 and 187, and ECtHR 31 October 2019, no. 21613/16 (Ulemek/Croatia), para. 71.

[33] Cf. Supreme Court 16 December 2016, ECLI:NL:HR:2016:2888, para. 3.3.3, first paragraph.

[34] Yearbook of the International Law Commission 2001, Vol. II, Part Two, p. 125, right-hand column.

[35] Cf. the overview at A.M. Honoré, Causation and Remoteness of Damage, International Encyclopedia of Comparative Law, Vol. XI, Torts Chapter 7, no. 112, and A.J. Akkermans, WPNR 6043. Cf. also Article 3:105 of Principles of European Tort Law. For the Netherlands, see: Supreme Court 23 September 1988, ECLI:NL:HR:1988:AD5713 (Kalimijnen), para. 3.5.1, third paragraph.

[36] See in this sense also the judgment of the Supreme Court of United States in the case Massachusetts et al. v. Environmental Protection Agency et al., 2 April 2007, 549 U.S. 497 (2007), pp. 22-23.

[37] Cf., inter alia, the data mentioned in 2.79-2.80 of the Opinion proffered by the deputy Procurator General and the Advocate General.

[38] Cf., inter alia, Parliamentary Papers II, 1991/92, 22 486, no. 3, pp. 7 and 21-22, Supreme Court 27 June 1986, ECLI:NL:HR:1986:AD3741 (de Nieuwe Meer), para. 3.2, and Supreme Court 9 April 2010, ECLI:NL:HR:2010:BK4549 (SGP), para. 4.3.2.

[39] Supreme Court 27 June 1986, ECLI:NL:HR:1986:AD3741 (de Nieuwe Meer), para. 3.2, and Parliamentary Papers II, 1991/92, 22 486, no. 3, pp. 22-23.

[40] Convention on access to information, public participation in decision-making and access to justice in environmental matters, 25 June 1998, Trb. 1998, 289, entered into force in the Netherlands on 29 March 2005, Trb. 2005, 22.

[41] See box 13.7 from the Working Group III report that forms part of AR4.

[42] United Nations Framework Convention on Climate Change, Compilation of economy-wide emission

reduction targets to be implemented by Parties included in Annex I to the Convention, 7 June 2011, FCCC/SB/2011/INF.1/Rev.1, p. 4-5.

[43] UNEP Emission Gap Report 2013, executive summary, under 6. According to the glossary of the report, 'later-action scenarios' refer to scenarios where emissions in the period 2020 to 2030 are higher than in the corresponding least-cost scenarios.

[44] Cf. the provisions in 4.222 of the Opinion proffered by the deputy Procurator General and the Advocate General.

[45] Act of 2 July 2019, Stb. 2019, 253.

[46] Cf., inter alia, Supreme Court 28 September 2018, ECLI:NL:HR:2018:1806, para. 3.5.2, Parliamentary Papers II, 1979/80, 16 162, no. 3, pp. 6 and 10, and Parliamentary Papers II, 1991/92, 22 495, no. 3, pp. 83-84.

[47] Supreme Court 21 March 2003, ECLI:NL:HR:2003:AE8462 (Waterpakt), para. 3.5, second paragraph.

[48] See Supreme Court 21 March 2003, ECLI:NL:HR:2003:AE8462 (Waterpakt), para. 3.5, Supreme Court 1 October 2004, ECLI:NL:HR:2004:AO8913 (Faunabescherming/Fryslân), paras. 3.3.4 and 3.3.5, Supreme Court 9 April 2010, ECLI:NL:HR:2010:BK4549 (SGP), para. 4.6.2, and Supreme Court 7 March 2014, ECLI:NL:HR:2014:523 (State/Norma et al.), para. 4.6.2.

[49] See Supreme Court 21 March 2003, ECLI:NL:HR:2003:AE8462 (Waterpakt), para. 3.5, third paragraph, and Supreme Court 1 October 2004, ECLI:NL:HR:2004:AO8913 (Faunabescherming/Fryslân), para. 3.3.4, third paragraph.

[50] See the judgments Supreme Court 9 April 2010, ECLI:NL:HR:2010:BK4549 (SGP), paras. 4.6.1-4.6.2, which involved a similar declaratory decision and Supreme Court 7 March 2014, ECLI:NL:HR:2014:523 (State/Norma et al.), para. 4.6.2.

[51] See Supreme Court 9 April 2010, ECLI:NL:HR:2010:BK4549 (SGP), para. 4.6.2.