THE HAGUE DISTRICT COURT
Chamber for Commercial Affairs
case number / cause list number: C/09/456689 / HA ZA 13-1396
Judgment of 24 June 2015
in the case of
the foundation
URGENDA FOUNDATION, acting on its own behalf as well as in its capacity as representative ad litem and representative of the individuals included in the list attached to the summons,
with its registered office and principal place of business in Amsterdam,
claimant,
lawyers *mr.* R.H.J. Cox of Maastricht and *mr.* J.M. van den Berg of Amsterdam,
versus
the legal person under public law
THE STATE OF THE NETHERLANDS (MINISTRY OF INFRASTRUCTURE AND THE ENVIRONMENT),
seated in The Hague,
defendant,
lawyers *mr.* G.J.H. Houtzagers of The Hague and *mr.* E.H.P. Brans of The Hague.
Parties are hereinafter referred to as Urgenda and the State.
(Translation) Only the Dutch text of the ruling is authoratative.
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1THE PROCEEDINGS

1.1.

The course of the proceedings is evidenced by:

- the summons, with Exhibits 1-51,
- the defence, with Exhibits 1-15,
- the reply and also change of claim, with Exhibits 52-98,
- the rejoinder, with Exhibits 16-29,
- the document containing Exhibits 99-103 on the part of Urgenda,
- the report of the hearing of 14 April 2015, with the documents stated therein,
- the letters of 30 April and 11 May 2015 of *mr.* Brans and of 6 and 12 May 2015 of *mr.* Cox, with comments on the report,
- the letter of 13 May 2015 of the court registry to the Parties.

1.2.

The court will read the report of the hearing of 14 April 2015 with due observance of the comment of the State in its letter of 30 April 2015 and of the comments of Urgenda in its letter of 6 May 2015 regarding an attribution. In Urgenda's other comments the court sees insufficient reason to amend the report, also in light of the State's response to the comments. However, it should be noted that the report is only an abridged version of that which was discussed at the hearing or of the conclusions drawn by the court from that which was discussed at the hearing.

1.3.

Finally, judgment was scheduled for today.

2THE FACTS

A. Parties

2.1.

Urgenda (a contraction of "urgent agenda") arose from the Dutch Research Institute for Transitions (Drift) at Erasmus University Rotterdam, an institute for the transition to a sustainable society. Urgenda is a citizens' platform with members from various domains in society, such as the business community, media communication, knowledge institutes, government and non-governmental organisations. The platform is involved in the development of plans and measures to prevent climate change.

2.2.

Urgenda was established by a notarial deed of 17 January 2008. Article 2 of the by-laws ("purpose and principle") reads as follows:

"1. The purpose of the Foundation is to stimulate and accelerate the transition processes to a more sustainable society, beginning in the Netherlands.

2. The Foundations aims to meet this objective by, among other things:

a. establishing a sustainability platform which will develop a vision for a sustainable Netherlands in the year two thousand and fifty (2050), as a motivating perspective for all parties involved in sustainability;

b. identifying organisations and initiatives which are involved in sustainability and connecting them to form a sustainability movement;

c. drawing up an action plan for the next fifty (50) years and implementing it with partners from society;

d. initiating, stimulating and assisting Icon projects and regional sustainability projects which subscribe to Urgenda's objectives and which serve as a means of communication in order to show third parties what sustainability means in actual practice."

2.3.

Regarding the meaning of the term "sustainability", in its by-laws Urgenda refers to the definition of sustainable development in the 1987 report of the World Commission on Environment and Development of the United Nations (UN), also known as the Brundtland Report, which reads as follows:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

2.4.

In these proceedings, Urgenda also acts on behalf of 886 individuals who have authorised Urgenda to also conduct these proceedings on their behalf.

2.5.
The Ministry of Infrastructure and the Environment, as a part of the State, is responsible (among other things) for ensuring a healthy and safe living environment, managing scarce resources and environmental compartments, and promoting the development of the Netherlands as a safe, liveable, accessible and competitive delta.

B. Reasons for these proceedings

2.6.
In its letter to the Prime Minister dated 12 November 2012, Urgenda requested the State to commit and undertake to reduce CO2 emissions in the Netherlands by 40% by 2020, as compared to the emissions in 1990.
2.7.
In her letter dated 11 December 2012, the State Secretary for Infrastructure and the Environment replied to Urgenda's letter as follows (among other things):
"I share your concerns over the absence of sufficient international action as well as your concerns that both the scale of the problem and the urgency of a successful approach in the public debate are insufficiently tangible (…).
The most important thing is to eventually have a stable and widely supported policy framework which will lead to sufficient action to keep the long-term perspective of a 80%-95% CO2 reduction by 2050 within reach (…)
It is also clear that collective, global actions are required to keep climate change within acceptable limits. In this context of collective actions, the 25%-40% reduction you refer to in your letter was always the objective. The EU's offer to pursue a 30% reduction by 2020, on the condition that other countries pursue similar reductions, falls within that range. It is a major problem that the current collective, global efforts are falling short and fail to monitor the limitation of the average global temperature rise to 2 degrees. I will cooperate with national and international partners to launch and support initiatives to tackle this (…).

C. Scientific organisations and publications

IPCC
2.8.
The Intergovernmental Panel on Climate Change (IPCC) is a scientific body established by the United Nations Environment Program (UNEP) and World Meteorological Organization (WMO) in 1988, under the auspices of the UN. The IPCC aims to acquire insight into all aspects of climate change, such as

the risks, consequences and options for adaptation and mitigation. Mitigation (reducing the problem) is intended to prevent or limit further climate change. Adaptation (adapting to the consequences) is aimed at attempting to make nature, society and the economy less vulnerable to a changing climate. The IPCC itself does not conduct research nor does it keep climate-related data, but studies and assesses the latest scientific, technical and socio-economic information produced worldwide and publishes reports about it.

2.9.

The IPCC is not just a scientific body, but also an intergovernmental organisation. Membership is open to all states which are members of the UN and the WMO. The IPCC currently has 195 countries as members, including the Netherlands.

2.10.

Upon its establishment, the IPCC was divided into three working groups, which are responsible for identifying and listing the following subjects:
Working group I: existing scientific knowledge about the climate system and climate change;
Working group II: the consequences of climate change for the environment, economy and society;
Working group III: the possible strategies in response to these changes.

2.11.

Since its inception, the IPCC has published five reports (each consisting of four subreports). The most recent reports are relevant for these proceedings: the "Fourth Assessment Report" from 2007 (hereinafter: AR4/2007) and the "Fifth Assessment Report" from 2013/2014 (hereinafter: AR5/2013).

AR4/2007

2.12.

In this report, the IPCC – in so far as currently still relevant – established that a global temperature rise of 2°C above the pre-industrial level (up to the year 1850) creates the risk of dangerous, irreversible change of climate:[2]
"Confidence has increased that a 1 to 2 oC increase in global mean temperature above 1990 levels (about 1.5 to 2.5o C above pre-industrial) poses significant risks to many unique and threatened systems including many biodiversity hotspots."

2.13.

In this report, the IPCC provided insight into options for not exceeding the 2°C limit based on the table below.[3] To this end, the IPCC provided an overview of the link between the various emission scenarios, stabilisation targets and temperature change, while taking account of a climate sensitivity

of probably (>66%) 2-4.5°C. “Climate sensitivity” represents the extent to which temperature is expected to respond to a doubling of the concentration of CO2 in the atmosphere. The report proceeds to make calculations with a “best estimate” climate sensitivity of 3°C.

“Table 3.10: Properties of emissions pathways for alternative ranges of C02 and C02-eq stabilization targets. Post-TAR stabilization scenarios in the scenario database (see also Sections 3.2 and 3.3); data source: after Nakicenovic et al., 2006 and Hanaoka et al., 2006)

Class	Anthropogenic addition to radiative forcing at stabilization (Wim2)	Multi-gas concentration level (ppmv C02-eq)	Stabilization level for C02 only, consistent with multi-gas level (ppmv C02)	Number of scenario studies	Global mean temperature C increase above pre-industrial at equilibrium, using best estimate of climate sensitivity c)	Likely range of global mean temperature C increase above pre-industrial at equilibrium a)	Peaking year for C02 emissions b)	Change in global emissions in 2050 (% of 2000 Class emissions) b)
I	2.5-3.0	445-490	350-400	6	2.0-2.4	1.4-3.6	2000-2015	-85 to -50
II	3.0-3.5	490-535	400-440	18	2.4-2.8	1.6-4.2	2000-2020	-60 to -30
III	3.5-4.0	535-590	440-485	21	2.8-3.2	1.9-4.9	2010-2030	-30 to +5
IV	4.0-5.0	590-710	485-570	118	3.2-4.0	2.2-6.1	2020-2060	+10 to +60
V	5.0-6.0	710-855	570-660	9	4.0-4.9	2.7-7.3	2050-2080	+25 to +85
VI	6.0-7.5	855-1130	660-790	5	4.9-6.1	3.2-8.5	2060-2090	+90 to +140

Notes:
a. Warming for each stabilization class is calculated based on the variation of climate sensitivity between 2°C —4.5°C, which corresponds to the likely range of climate sensitivity as defined by Meehl et al. (2007,Chapter 10).
b. Ranges correspond to the 70% percentile of the post-TAR scenario distribution.
c. 'Best estimate' refers to the most likely value of climate sensitivity, i.e. the mode (sea Meehl et al. (2007, Chapter 10) and Table 3.9"

2.14.

This table (after I) shows that in order to limit the temperature rise to 2-2.4°C, the concentration of greenhouse gases in the atmosphere will have to be stabilised at a level of 445-490 ppmv (parts per million by volume) CO2-eq (CO2 and other anthropogenic greenhouse gases. This unit, which hereinafter is referred to with the abbreviation "ppm", designates the concentration of greenhouse gases in the atmosphere. The report states that, assuming a climate sensitivity of 3°C, a temperature rise of 2°C maximum can only be achieved when the concentration of greenhouse gases in the atmosphere is stabilised at about 450 ppm:[4]

"This 'best estimate' assumption shows that the most stringent (category I) scenarios could limit global mean temperature increases to 2°C–2.4°C above pre-industrial levels, at equilibrium, requiring emissions to peak within 10 years. Similarly, limiting temperature increases to 2°C above preindustrial levels can only be reached at the lowest end of the concentration interval found in the scenarios of category I (i.e. about 450 ppmv CO2-eq using 'best estimate' assumptions). By comparison, using the same 'best estimate' assumptions, category II scenarios could limit the increase to 2.8°C–3.2°C above pre-industrial levels at equilibrium, requiring emissions to peak within the next 25 years, whilst category IV scenarios could limit the increase to

3.2°C–4°C above pre-industrial at equilibrium requiring emissions to peak within the next 55 years. Note that Table 3.10 category IV scenarios could result in temperature increases as high as 6.1°C above pre-industrial levels, when the likely range for the value of climate sensitivity is taken into account."

2.15.

Following an analysis of the various scenarios about the question which emission reductions are needed to achieve certain particular climate goals, the IPCC concluded that in order to reach a maximum of 450 ppm, the total emission of greenhouse gases by the Annex I countries (including the Netherlands, as explained below) must be lower than in 1990. In this scenario, the total emission of these countries will have to have been reduced by 80 to 95% compared to 1990. See the table below.[5]

"Box 13.7 The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG [Greenhouse Gasses*; added by the court*] concentration levels for Annex I and non-Annex I countries as a groupa

Scenario category	Region	2020	2050
A-450 ppm CO2-eqb	Annex I	–25% to –40%	–80% to –95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
B-550 ppm CO2-eq	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle E
C-650 ppm CO2-eq	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America Middle East, East Asia

Notes:

a The aggregate range is based on multiple approaches to apportion emissions between regions (contraction and convergence, multistage, Triptych and intensity targets, among others). Each approach makes different assumptions about the pathway, specific national efforts and other variables. Additional extreme cases – in which Annex I undertakes all reductions, or non-Annex I undertakes all reductions – are not included. The ranges presented here do not imply political feasibility, nor do the results reflect cost variances.

b Only the studies aiming at stabilization at 450 ppm CO2-eq assume a (temporary) overshoot of about 50 ppm (See Den Elzen and Meinshausen, 2006). (…)"

2.16.

A table comparable to the one in 2.13 has been included in the Technical Summary of the contribution of Working Group III to AR4/2007 (p. 39), in which the following is stated (p. 90):
"Under most equity interpretations, developed countries as a group would need to reduce their emissions significantly by 2020 (10–40% below 1990 levels) and to still lower levels by 2050 (40–95% below 1990 levels) for low to medium stabilization levels (450–550ppm CO2-eq) (see also Chapter 3)."
The Bali Action Plan, which is discussed below, refers to these sections and to the table in 2.15.
2.17.
The IPCC report also states that mitigation is generally better than adaptation:[6]
"Over the next 20 years or so, even the most aggressive climate policy can do little to avoid warming already 'loaded' into the climate system. The benefits of avoided climate change will only accrue beyond that time. Over longer time frames, beyond the next few decades, mitigation investments have a greater potential to avoid climate change damage and this potential is larger than the adaptation options that can currently be envisaged (medium agreement, medium evidence)."
AR5/2013
2.18.
In 2013-2014, the IPCC published its latest insights into the scope, effects and causes of climate change. In the report concerned (AR5/2013) the IPCC, in accordance with AR4/2007, established that the earth has been warming as a result of the high increase of CO2 concentrations in the atmosphere since the Industrial Revolution (base year 1850) and that this has been caused by human activity, particularly the combustion of oil, natural gas and coal as well as deforestation:[7]
"Warming of the climate system is unequivocal, and since the 1950's, many of the observed changes are unprecedented over decades to millenia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased (…)
Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850 (…). In the Northern Hemisphere, 1983-2012 was likely the warmest 30-year period of the last 1400 years (medium confidence).
The globally averaged combined land and ocean surface temperature data as calculated by a linear trend, show a warming of 0.85 [0.65 to 1.06]°C, over

the period 1880 to 2012, when multiple independently produced datasets exist. The total increase between the average of the 1850-1900 period and the 2003-2012 period is 0.78 [0.72 to 0.85]°C, based on the single longest dataset available (…).
Human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, in global mean sea level rise, and in changes in some climate extremes (…). This evidence for human influence has grown since AR4. It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century."

2.19.

In the report, the IPCC also concluded that if concentrations of greenhouse gases in the atmosphere will have stabilised to about 450 ppm in 2100, there is a 66% chance that the rise of the global temperature will not exceed 2°C. In order to achieve a concentration level of 450 ppm in 2100, the global greenhouse emissions in 2050 will have to be 40 to 70% lower than those in the year 2010. The total of emissions will have to have been reduced to zero or even to below zero (as compared to the comparative year) by 2100:[8]
"Mitigation scenarios in which it is likely that the temperature change caused by anthropogenic GHG emissions can be kept to less than 2 °C relative to pre-industrial levels are characterized by atmospheric concentrations in 2100 of about 450 ppm CO2eq (*high confidence*). Mitigation scenarios reaching concentration levels of about 500 ppm CO2eq by 2100 are *more likely than not* to limit temperature change to less than 2 °C relative to pre-industrial levels, unless they temporarily 'overshoot' concentration levels of roughly 530 ppm CO2eq before 2100, in which case they are *about as likely as not* to achieve that goal. Scenarios that reach 530 to 650 ppm CO2eq concentrations by 2100 are more unlikely than likely to keep temperature change below 2°C relative to pre-industrial levels. Scenarios that exceed about 650 ppm CO2eq by 2100 are unlikely to limit temperature change to below 2°C relative to pre-industrial levels. Mitigation scenarios in which temperature increase is*more likely than not* to be less than 1.5°C relative to pre-industrial levels by 2100 are characterized by concentrations in 2100 of below 430 ppm CO2eq. Temperature peaks during the century and then declines in these scenarios. (…)
Scenarios reaching atmospheric concentration levels of about 450 ppm CO2eq by 2100 (consistent with a likely chance to keep temperature change below 2°C relative to pre-industrial levels) include substantial cuts in anthropogenic GHG emissions by mid-century through large-scale changes in

energy systems and potentially land use (*high confidence*). Scenarios reaching these concentrations by 2100 are characterized by lower global GHG emissions in 2050 than in 2010, 40% to 70% lower globally, and emissions levels near zero GtCO2eq or below in 2100. In scenarios reaching 500 ppm CO2eq by 2100, 2050 emissions levels are 25% to 55% lower than in 2010 globally. In scenarios reaching 550 ppm CO2eq, emissions in 2050 are from 5% above 2010 levels to 45% below 2010 levels globally (…). At the global level, scenarios reaching 450 ppm CO2eq are also characterized by more rapid improvements of energy efficiency, a tripling to nearly a quadrupling of the share of zero- and low-carbon energy supply from renewables, nuclear energy and fossil energy with carbon dioxide capture and storage (CCS), or bioenergy with CCS (BECCS) by the year 2050 (…). These scenarios describe a wide range of changes in land use, reflecting different assumptions about the scale of bioenergy production, afforestation, and reduced deforestation. All of these emissions, energy, and land-use changes vary across regions. Scenarios reaching higher concentrations include similar changes, but on a slower timescale. On the other hand, scenarios reaching lower concentrations require these changes on a faster timescale. […]

Mitigation scenarios reaching about 450 ppm CO2eq in 2100 typically involve temporary overshoot of atmospheric concentrations, as do many scenarios reaching about 500 ppm to 550 ppm CO2eq in 2100. Depending on the level of the overshoot, overshoot scenarios typically rely on the availability and widespread deployment of BECCS and afforestation in the second half of the century. The availability and scale of these and other Carbon Dioxide Removal (CDR) technologies and methods are uncertain and CDR technologies and methods are, to varying degrees, associated with challenges and risks (*high confidence*) (…). CDR is also prevalent in many scenarios without overshoot to compensate for residual emissions from sectors where mitigation is more expensive. There is only limited evidence on the potential for large-scale deployment of BECCS, large-scale afforestation, and other CDR technologies and methods.
Estimated global GHG emissions levels in 2020 based on the Cancún Pledges are not consistent with cost effective long-term mitigation trajectories that are at least *as likely as not* to limit temperature change to 2°C relative to pre-industrial levels (2100 concentrations of about 450 and about 500 ppm CO2eq), but they do not preclude the option to meet that goal (*high confidence*). Meeting this goal would require further substantial reductions

beyond 2020. The Cancún Pledges are broadly consistent with cost-effective scenarios that are *likely* to keep temperature change below 3°C relative to preindustrial levels. […]
Delaying mitigation efforts beyond those in place today through 2030 is estimated to substantially increase the difficulty of the transition to low longer-term emissions levels and narrow the range of options consistent with maintaining temperature change below 2°C relative to pre-industrial levels (high confidence). Cost-effective mitigation scenarios that make it at least *as likely as not* that temperature change will remain below 2°C relative to pre-industrial levels (2100 concentrations between about 450 and 500 ppm CO2eq) are typically characterized by annual GHG emissions in 2030 of roughly between 30 GtCO2eq and 50 GtCO2eq (Figure SPM.5, left panel). Scenarios
with annual GHG emissions above 55 GtCO2eq in 2030 are characterized by substantially higher rates of emissions reductions from 2030 to 2050 (…); much more rapid scale-up of low-carbon energy over this period (…); a larger reliance on CDR technologies in the long-term (…); and higher transitional and long-term economic impacts (…). Due to these increased mitigation challenges, many models with annual 2030 GHG emissions higher than 55 GtCO2eq could not produce scenarios reaching atmospheric concentration levels that make it *as likely as not* that temperature change will remain below 2°C relative to pre-industrial levels."

2.20.

The following has been observed about the scope of the emissions:[9]
"Total anthropogenic GHG emissions have continued to increase over 1970 to 2010 with larger absolute decadal increases toward the end of this period (*high confidence*). Despite a growing number of climate change mitigation policies, annual GHG emissions grew on average by 1.0 gigatonne carbon dioxide equivalent (GtCO2eq) (2.2%) per year from 2000 to 2010 compared to 0.4 GtCO2eq (1.3%) per year from 1970 to 2000 (…). Total anthropogenic GHG emissions were the highest in human history from 2000 to 2010 and reached 49 (±4.5) GtCO2eq/yr in 2010. The global economic crisis 2007/2008 only temporarily reduced emissions."

2.21.

The IPCC expects that temperatures on earth will have increased by 3.7 to 4.8°C by 2100 and that the 450 ppm level will have been exceeded in 2030 if reduction measures fail to materialise:[10]
"Without additional efforts to reduce GHG emissions beyond those in place today, emissions growth is expected to persist driven by growth in global

population and economic activities. Baseline scenarios, those without additional mitigation, result in global mean surface temperature increases in 2100 from 3.7°C to 4.8°C compared to pre-industrial levels10 (median values; the range is 2.5°C to 7.8°C when including climate uncertainty (…) (*high confidence*). The emission scenarios collected for this assessment represent full radiative forcing including GHGs, tropospheric ozone, aerosols and albedo change. Baseline scenarios (scenarios without explicit additional efforts to constrain emissions) exceed 450 parts per million (ppm) CO2eq by 2030 and reach CO2eq concentration levels between 750 and more than 1300 ppm CO2eq by 2100. This is similar to the range in atmospheric concentration levels between the RCP 6.0 and RCP 8.5 pathways in 2100. For comparison, the CO2eq concentration in 2011 is estimated to be 430 ppm (uncertainty range 340 – 520 ppm)."

PBL and KNMI

2.22.

The Netherlands Environmental Assessment Agency (PBL) is a national independent research institute working in the field of the environment, nature and spatial planning. It conducts research, both when asked and on its own initiative, in support of political and administrative policies. Established in 2008, the institute currently forms part of the Ministry of Infrastructure and the Environment.

2.23.

The Royal Netherlands Meteorological Institute (KNMI) is the Dutch national institute for meteorology and seismology established by law. The institute provides the best information available in the field of weather, climate and earthquakes in support of the security, accessibility, liveability and prosperity of the Netherlands. The KNMI represents the Netherlands in the IPCC and other bodies.

2.24.

Both the PBL and the KNMI analyse results of the IPCC reports and report about the consequences of the IPCC findings for the Netherlands.

EDGAR

2.25.

The Emissions Database for Global Atmospheric Research (EDGAR) is a database in which a country's emission data are collected based on which the global emission of greenhouse gases can be determined. EDGAR is a joint project of the European Commission and the PBL.

2.26.

According to the latest data from EDGAR the following amounts of greenhouse gases have been emitted worldwide and in the Netherlands:
Worldwide
1990 38232170.06 megatons (hereinafter: Mt) CO2-eq.
2010 50911113.68 Mt CO2-eq
2012 53526302.83 Mt CO2-eq
The Netherlands
1990 224468.09 Mt CO2-eq
2010 212418.45 Mt CO2-eq
2012 19587376 Mt CO2-eq

2.27.

In 2010, the Dutch share in the global emissions was 0.42%; the Chinese share in that year was 21.97%; the share of the United States was 13.19%; the total share of the European Union (then 27 countries) was 9.5%; the Brazilian share was 5.7%; India's share was 5.44% and Russia's share was 5.11%.

2.28.

Per capita emissions in the Netherlands in 2010 were 12.78 tons CO2-eq. and in 2012 11.72 tons CO2-eq. In China, per capita emissions in 2012 were 9.04 tons CO2-eq.; in the United States 19.98 tons CO2-eq.; in Brazil 15.05 tons CO2-eq.; in India 2.43 tons CO2-eq. and in Russia 19.58 tons CO2-eq.

UNEP

2.29.

The UNEP, referred to in 2.8, has issued annual reports about the "emissions gap" since 2010. The gap is the difference between the desired emissions level in a certain year and the level of emissions anticipated for that year based on the reduction goals pledged by the countries concerned.

2.30.

The "executive summary" of the Emissions Gap Report 2013 includes the following:

"(...) This report confirms and strengthens the conclusions of the three previous analyses that current pledges and commitments fall short of that goal. It further says that, as emissions of greenhouse gases continue to rise rather than decline, it becomes less and less likely that emissions will be low enough by 2020 to be on a least-cost pathway towards meeting the 2°C target.

As a result, after 2020, the world will have to rely on more difficult, costlier and riskier means of meeting the target – the further from the least-cost level in 2020, the higher these costs and the greater the risks will be.

(…)
2. What emission levels are anticipated for 2020?
Global greenhouse gas emissions in 2020 are estimated at 59 GtCO2e per year under a business-as-usual scenario. If implemented fully, pledges and commitments would reduce this by 3–7 GtCO2e per year (…).
3. What is the latest estimate of the emissions gap in 2020?
(…) Least-cost emission pathways consistent with a likely chance of keeping global mean temperature increases below 2°C compared to pre-industrial levels have a median level of 44 GtCO2e in 2020 (range: 38–47 GtCO2e). Assuming full implementation of the pledges, the emissions gap thus amounts to between 8–12 GtCO2e per year in 2020 (…).
6. What are the implications of later action scenarios that still meet the 1.5°C and 2°C targets?
Based on a much larger number of studies than in 2012, this update concludes that so-called later-action scenarios have several implications compared to least cost scenario's, including: (i) much higher rates of global emission reductions in the medium term; (ii) greater lock-in of carbon-intensive infrastructure; (iii) greater dependence of certain technologies in the medium-term; (iv) greater costs of mitigation in the medium- and long term, and greater risks of economic disruption; and (v) greater risks of failing to meet the 2°C target. For these reasons later-action scenarios may not be feasible in practise and, as a result, temperature targets could be missed.
(…) although later-action scenarios might reach the same temperature targets as their least-cost counterparts, later-action scenarios pose greater risks of climate impacts for four reasons. First delaying action allows more greenhouse gases to build-up in the atmosphere in the near term, thereby increasing the risk that later emission reductions will be unable to compensate for this build up. Second, the risk of overshooting climate targets for both atmospheric concentrations of greenhouse gases and global temperature increase is higher with later-action scenarios. Third, the near-term rate of temperature is higher, which implies greater near-term climate impacts. Lastly, when action is delayed, options to achieve stringent levels of climate protection are increasingly lost."
2.31.
Chapter 2 of the report contains the following section:
"2.4.5 Pledged reduction effort by Annex I and non-Annex I countries
For Annex I parties, total emissions as a group of countries for the four pledge cases are estimated to be 3–16 percent below 1990 levels in 2020.

For non-Annex I parties, total emissions are estimated to be 7–9 percent lower than business-as-usual emissions. This implies that the aggregate Annex I countries' emission goals fall short of reaching the 25–40 percent reduction by 2020, compared with 1990, suggested in the IPCC Fourth Assessment Report (…)."

2.32.

In contrast to previous reports, the Emissions Gap Report 2014 mainly focuses on the "carbon dioxide emissions budget". The UNEP concludes that in order to be able to maintain the target of a maximum global temperature rise of 2°C above the pre-industrial level (hereinafter: the 2°C target), the CO2 budget may not exceed 3,670 gigatonne (hereinafter: Gt). According to the UNEP, at the beginning of the nineteenth century this budget totaled about 2,900 Gt CO2, of which about 1,000 Gt remains. In the report, the UNEP investigated – in short –the best way to spend this budget (and thereby: which reductions are required). Attention was also paid to the question, given the 2°C target, at what point the world needs to be CO2-neutral (a net result of anthropogenic positive and negative CO2 emissions of zero). The UNEP has depicted this in the following figure:

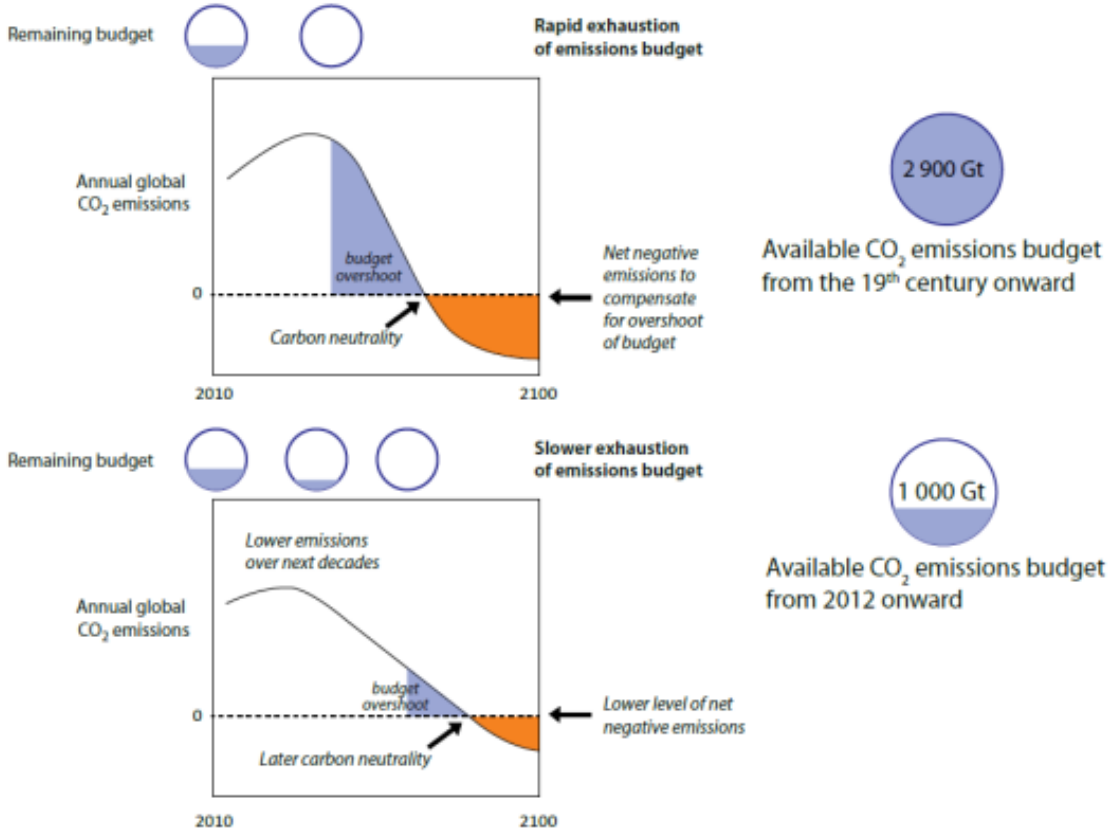


Figure ES.1: Carbon neutrality

2.33.

The “executive summary” of the 2014 report furthermore states the following:
“6. What about the emissions gap in 2030?
(…)
This report estimates that global emissions in 2030 consistent with having a likely chance of staying
within the 2 °C target are about 42 Gt CO2e.
As for expected emissions in 2030, the range of the pledge cases in 2020 (52–54 Gt CO2e) was extrapolated to give median estimates of 56–59 Gt CO2e in 2030.
The emissions gap in 2030 is therefore estimated to be 14–17 Gt CO2e (56 minus 42 and 59 minus 42). This is equivalent to about a third of current global greenhouse emissions (or 26–32 per cent of 2012 emission levels).
As a reference point, the gap in 2030 relative to business-as-usual emissions in that year (68 Gt CO2e) is 26 Gt CO2e. The good news is that the potential to reduce global emissions relative to the baseline is estimated to be 29 Gt CO2e, that is, larger than this gap. This means that it is feasible to close the 2030 gap and stay within the 2°C limit.”

D. Climate change and the development of legal and policy frameworks

2.34.

In light of climate change, agreements have been made and instruments have been developed in an international and European context in order to counter the problems of climate change, which have impacted the national legal and policy frameworks.

In a UN context

UN Framework Convention on Climate Change 1992

2.35.

In 1992, the UN Framework Convention on Climate Change (hereinafter: the UN Climate Change Convention) was agreed and signed under the responsibility of the UN. The UN Climate Change Convention entered into effect on 21 March 1994. Currently, 195 Member States have ratified the convention, including the Netherlands and (the predecessor of) the European Union (both in 1993).

2.36.

The purpose of the Convention, in brief, is to reduce greenhouse gas emissions and thereby prevent the undesired consequences of climate change. Among other things, Its opening words state the following:

"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, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and 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,
Reaffirming the principle of sovereignty of States in international cooperation to address climate change,
Determined to protect the climate system for present and future generations,
(…)"

2.37.

Article 2 of the UN Climate Change Convention describes the objective as follows:

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

2.38.

Article 3 of the UN Climate Change Convention contains the following principles, among other things:

1. 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. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.
(…)
3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full

scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.
4. The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.
2.39.
The signatories to the UN Climate Change Convention constitute two groups of countries: (1) the developed countries, as listed in Annex I to the Convention, also referred to as “Annex I countries”, and (2) the developing countries, or “non-Annex I countries”, being all other countries which have ratified the UN Climate Change Convention. The Netherlands is an Annex I country. Article 4, paragraph 2 of the UN Climate Change Convention stipulates the following in particular regarding the Annex I countries:
The developed country Parties and other Parties included in Annex I commit themselves specifically as provided for in the following:
(a) Each of these Parties shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol would contribute to such modification, and taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective. These Parties may implement such policies and measures jointly

with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention and, in particular, that of this subparagraph;
(b) In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol. This information will be reviewed by the Conference of the Parties, at its first session and periodically thereafter, in accordance with Article 7; (…)

2.40.

The article thus means that the Annex I countries, separately or jointly, have assumed the obligation to have reduced the growth of their greenhouse gas emissions to the level of 1990 by the year 2000. All Member States are furthermore obliged to annually report their emissions to the UN Climate Change Convention secretariat. The obligations of all other Parties to the Convention (the "non-Annex I countries") are less far-reaching and they do not have to introduce emission reductions.

2.41.

Several countries of the group of Annex I countries, including the Netherlands, have furthermore committed to rendering financial assistance to the non-Annex I countries, in accordance with the UN Climate Change Conventions.

Kyoto Protocol 1997 and Doha Amendment 2012

2.42.

The Kyoto Protocol was agreed in 1997 in the context of the UN Climate Change Convention. The Netherlands, but also (the predecessor of) the European Union, which then comprised fifteen countries, including the Netherlands, ratified the Kyoto Protocol. It entered into force on 16 February 2005.

2.43.

In the Protocol, the signatories set as their objective for the period 2008-2012 to reduce the mean annual greenhouse gas emissions in developed countries by 5.2% compared to 1990 (Article 3, paragraph 1 of and Appendix

B to the Kyoto Protocol). The reduction percentages differ per country. A reduction target of 8% (Appendix B) was set for the European Union for the same period. The EU proceeded to determine the emission reductions per Member State, after consulting the Member States. An emission reduction of 6% was agreed for the Netherlands.

2.44.

Several countries, including the United States and China, did not ratify the Protocol and Canada withdrew from the Protocol in 2011. Before Canada's withdrawal, the Protocol covered 14% of global emissions.

2.45.

On 8 December 2012, an Amendment to the Kyoto Protocol was adopted in Doha (Qatar). In the Amendment, various countries and the European Union as a whole as well as its individual Member States agreed on a CO2 emission reduction target for the period 2013-2020. The European Union committed to a 20% reduction target as of 2020, compared to 1990. The European Union offered to commit to a 30% reduction target, on the condition that both the developed and the more advanced developing countries commit to similar emission targets. This condition has not materialised thus far nor has the Doha Amendment entered into force yet.

2.46.

Japan, the Russian Federation and New Zealand did not commit to a particular reduction target for this second period. Therefore, the Kyoto Protocol regulates the CO2 emissions of 37 developed countries, namely the (then) 27 individual EU Member States, Australia, Iceland, Croatia, Liechtenstein, Monaco, Norway, Ukraine, Kazakhstan, Switzerland and Belarus, as well as the EU as an independent organisation.

Climate change conferences (Conference of the Parties – COP)

2.47.

The UN Climate Change Convention has also provided for the establishment of the Conference of the Parties (COP). All Parties hold a seat on the COP and have one vote. Based on the reports submitted by the Member States, the COP makes annual assessments of the status of the achievement of the Convention's objective and issues reports about it. The COP can issue decisions during these climate conferences, usually based on consensus.

a) *Bali Action Plan 2007*

2.48.

The signatories to the UN Climate Change Convention issued various decisions during the climate conference on Bali in 2007, including the Bali

Action Plan (Decision 1/CP.13). The preamble to this decision, among others, contains the following sections:

"*Responding* to the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve lower stabilization levels and increases the risk of more severe climate change impacts,

Recognizing that deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasizing the urgency1 to address climate change as is indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

[Note 1: Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Technical Summary, pages 39 and 90, and Chapter 13, page 776.]"

b) *The Cancun Agreements 2010*

2.49.

At the climate conference in Cancun in 2010, the parties involved issued various decisions, including The Cancun Agreements (Decision 1/CP.16), which contains the following sections, among others:

"Recalling its decision 1/CP.13 (the Bali Action Plan) and decision 1/CP.15 (…),

Noting resolution 10/4 of the United Nations Human Rights Council on human rights and climate change, which recognizes that the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights and that the effects of climate change will be felt most acutely by those segments of the population that are already vulnerable owing to geography, gender, age, indigenous or minority status, or disability (…),

4. *Further recognizes* that deep cuts in global greenhouse gas emissions are required according to science, and as documented in the Fourth Assessment Report of the Inter- governmental Panel on Climate Change, with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2°C above pre- industrial levels, and that Parties should take urgent action to meet this long-term goal, consistent with science and on the basis of equity; also recognizes the need to consider, in the context of the first review, as referred to in paragraph 138 below, strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to a global average temperature rise of 1.5°C; (…)"

2.50.
At the Cancun climate conference in 2010, the Annex I countries also took the decision which contains the following section, among others:[11]
"Decision 1/CMP.6 The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its fifteenth session
(…)
Recognizing that Parties included in Annex I (Annex I Parties) should continue to take the lead in combating climate change,
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, (…)
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 mechanisms and the carry-over of units from the first to the second commitment period; (…)"
Durban 2011
2.51.
The parties at the climate conference in Durban in 2011 issued several decisions. Decision 1/CP.17 states the following, among other things:
"*Recognizing* that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires to be urgently addressed by all Parties (…),
Noting with grave concern the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with having a likely chance of holding the increase in global average temperature below 2°C or 1.5°C above pre-industrial levels, (…)"
2.52.

At the Durban conference, the Parties also agreed that a new legally binding climate change convention or protocol must be concluded no later than 2015 and must be implemented by 2020. The climate conference which will be held in Paris in December 2015 is a follow-up to this agreement.

In a European context

2.53.

Article 191 of the Treaty on the Functioning of the European Union (TFEU) currently reads as follows:

Article 191

1. Union policy on the environment shall contribute to pursuit of the following objectives:

– preserving, protecting and improving the quality of the environment;

– protecting human health;

– prudent and rational utilisation of natural resources;

– promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a procedure of inspection by the Union.

3. In preparing its policy on the environment, the Union shall take account of:

– available scientific and technical data,

– environmental conditions in the various regions of the Union,

– the potential benefits and costs of action or lack of action,

– the economic and social development of the Union as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Union and the Member States shall cooperate with third countries and with the competent international organisations. The arrangements for Union cooperation may be the subject of agreements between the Union and the third parties concerned.

The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

2.54.

Under Article 192 TFEU, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure (meaning on the proposal of the Commission) and after consulting the European Economic and Social Committee (EESC) and the Committee of the Regions, generally decide what action is to be taken by the Union in order to achieve the objectives referred to in Article 191 (apart from exception formulated the paragraph 2).

2.55.

Article 193 TFEU currently reads as follows:

Article 193

The protective measures adopted pursuant to Article 192 shall not prevent any Member State from
maintaining or introducing more stringent protective measures. Such measures must be compatible
with the Treaties. They shall be notified to the Commission.

2.56.

Partly as a follow-up to the Kyoto Protocol, the EU formulated its environmental objectives and priorities in Decision no 1600/2002/EC of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme as follows:

"Article 2 *Principles and overall aims* (…)

2. The Programme aims at:

— emphasising climate change as an outstanding challenge of the next 10 years and beyond and contributing to the long term objective of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Thus a
long term objective of a maximum global temperature increase of 2 °Celsius over pre-industrial levels and a CO2 concentration below 550 ppm shall guide the Programme. In the longer term this is likely to require a global reduction in emissions of greenhouse gases by 70% as compared to 1990 as identified by the Intergovernmental Panel on Climate Change (IPCC); (…)"

2.57.

The European Union subsequently converted its objectives in European regulations, including by introducing a large number of directives, among them Directive 2003/87/EC establishing a scheme for greenhouse gas

emission allowance trading within the Community, which introduced the European Union Emission Trading System (ETS). This system only applies to major energy-intensive businesses, such as major electricity generation plants and refineries (hereinafter also referred to as: the ETS businesses). Non-ETS sectors, including transport, agriculture, housing and small companies, do not fall under the scope of the ETS.

2.58.

The preamble to Directive 2009/29/EC amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community states the following:

"(6) In order to enhance the certainty and predictability of the Community scheme, provisions should be specified to increase the level of contribution of the Community scheme to achieving an overall reduction of more than 20%, in particular in view of the European Council's objective of a 30% reduction by 2020 which is considered scientifically necessary to avoid dangerous climate change (…).

(13) The Community-wide quantity of allowances should decrease in a linear manner calculated from the mid-point of the period from 2008 to 2012, ensuring that the emissions trading system delivers gradual and predictable reductions of emissions over time. The annual decrease of allowances should be equal to 1.74% of the allowances issued by Member States pursuant to Commission Decisions on Member States' national allocation plans for the period from 2008 to 2012, so that the Community scheme contributes cost-effectively to achieving the commitment of the Community to an overall reduction in emissions of at least 20% by 2020.

(14) This contribution is equivalent to a reduction of emissions in 2020 in the Community scheme of 21% below reported 2005 levels, (…)."

2.59.

Articles 1 and 9 of the ETS Directive read as follows – following amendment:

Article 1 *Subject matter*

This Directive establishes a scheme for greenhouse gas emission allowance trading within the Community (hereinafter referred to as the 'Community scheme') in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner.

This Directive also provides for the reductions of greenhouse gas emissions to be increased so as to contribute to the levels of reductions that are considered scientifically necessary to avoid dangerous climate change.

This Directive also lays down provisions for assessing and implementing a stricter Community reduction commitment exceeding 20%, to be applied upon the approval by the Community of an international agreement on climate change leading to greenhouse gas emission reductions exceeding those required in Article 9, as reflected in the 30% commitment endorsed by the European Council of March 2007.

Article 9 *Community-wide quantity of allowances*

The Community-wide quantity of allowances issued each year starting in 2013 shall decrease in a linear manner beginning from the mid-point of the period from 2008 to 2012. The quantity shall decrease by a linear factor of 1.74% compared to the average annual total quantity of allowances issued by Member States in accordance with the Commission Decisions on their national allocation plans for the period from 2008 to 2012.

The Commission shall, by 30 June 2010, publish the absolute Community-wide quantity of allowances for 2013, based on the total quantities of allowances issued or to be issued by the Member States in accordance with the Commission Decisions on their national allocation plans for the period from 2008 to 2012.

The Commission shall review the linear factor and submit a proposal, where appropriate, to the European Parliament and to the Council as from 2020, with a view to the adoption of a decision by 2025."

2.60.

The Communication of the European Commission to the European Parliament, the Council, the EESC and the CoR of 10 January 2007, entitled "Limiting Global Climate Change to 2 degrees Celsius. The way ahead for 2020 and beyond", states the following, among other things:[12]

"2. THE CLIMATE CHALLENGE: REACHING THE 2ºC OBJECTIVE

Strong scientific evidence shows that urgent action to tackle climate change is imperative. Recent studies, such as the Stern review, reaffirm the enormous costs of failure to act. These costs are economic, but also social and environmental and will especially fall on the poor, in both developing and developed countries. A failure to act will have serious local and global security implications. Most solutions are readily available, but governments must now adopt policies to implement them. Not only is the economic cost of doing so manageable, tackling climate change also brings considerable benefits in other respects. The EU's objective is to limit global average temperature increase to less than 2°C compared to pre-industrial levels. This will limit the impacts of climate change and the likelihood of massive and irreversible disruptions of the global ecosystem. The Council has noted that

this will require atmospheric concentrations of GHG to remain well below 550 ppmv CO2-eq. By stabilising long-term concentrations at around 450 ppmv CO2-eq. there is a 50% chance of doing so. This will require global GHG emissions to peak before 2025 and then fall by up to 50% by 2050 compared to 1990 levels. The Council has agreed that developed countries will have to continue to take the lead to reduce their emissions between 15 to 30% by 2020. The European Parliament has proposed an EU CO2 reduction target of 30% for 2020 and 60 to 80% for 2050."

2.61.

In July 2008, the EESC issued its Opinion on the "Proposal for a directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community". This proposal pertains the following, among other things:[13]

"6.5 The EESC has therefore paid particular attention to the role of the ETS in delivering equitable and sustainable impact on global GHG reduction. Does it demonstrate that European action is both credible and effective? In this context it has to be stated that the EU target of a 20% reduction in GHG emissions by 2020 compared to 1990 levels (which underlies the ETS and the burden sharing proposals) is lower than the 25-40% reduction range for industrialised nations which was supported by the EU at the Bali Climate Change Conference in December 2007. The Commission starts from the targets as agreed in the European Spring Council 2007 leaving undiscussed whether this level of reduction is really sufficient to achieve global objectives or whether it is just the maximum reduction that may conceivably be accepted, given the balance of short-term political and economically motivated interests of Member States. The EESC concludes that accumulating evidence on climate change demands the re-setting of targets to achieve greater GHG emission reductions."

2.62.

In Decision No 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 (the "Effort Sharing Decision"), the following was considered and adopted to regulate emissions in the non-ETS sectors:

" (2) The view of the Community, most recently expressed, in particular, by the European Council of March 2007, is that in order to meet this objective, the overall global annual mean surface temperature increase should not exceed 2°C above pre-industrial levels, which implies that global greenhouse

gas emissions should be reduced to at least 50% below 1990 levels by 2050. The Community's greenhouse gas emissions covered by this Decision should continue to decrease beyond 2020 as part of the Community's efforts to contribute to this global emissions reduction goal. Developed countries, including the EU Member States, should continue to take the lead by committing to collectively reducing their emissions of greenhouse gases in the order of 30% by 2020 compared to 1990. They should do so also with a view to collectively reducing their greenhouse gas emissions by 60 to 80% by 2050 compared to 1990. (…)

(3) Furthermore, in order to meet this objective, the European Council of March 2007 endorsed a Community objective of a 30% reduction of greenhouse gas emissions by 2020 compared to 1990 as its contribution to a global and comprehensive agreement for the period after 2012, provided that other developed countries commit themselves to comparable emission reductions and economically more advanced developing countries commit themselves to contributing adequately according to their responsibilities and capabilities.

(4) The European Council of March 2007 emphasised that the Community is committed to transforming Europe into a highly energy-efficient and low greenhouse-gas-emitting economy and has decided that, until a global and comprehensive agreement for the period after 2012 is concluded, and without prejudice to its position in international negotiations, the Community makes a firm independent commitment to achieve at least a 20% reduction of greenhouse gas emissions by 2020 compared to 1990 (…).

(6) Directive 2003/87/EC(1) establishes a scheme for greenhouse gas emission allowance trading within the Community, which covers certain sectors of the economy. All sectors of the economy should contribute to emission reductions in order to cost-effectively achieve the objective of a 20% reduction of greenhouse gas emissions by 2020 compared to 1990 levels. Member States should therefore implement additional policies and measures in an effort to further limit the greenhouse gas emissions from sources not covered under Directive 2003/87/EC.

(7) The effort of each Member State should be determined in relation to the level of its 2005 greenhouse gas emissions covered by this Decision, adjusted to exclude the emissions from installations that existed in 2005 but which were brought into the Community scheme in the period from 2006 to 2012. Annual emission allocations for the period from 2013 to 2020 in terms of tonnes of carbon dioxide equivalent should be determined on the basis of reviewed and verified data.

(9) To further ensure a fair distribution between the Member States of the efforts to contribute to the implementation of the independent reduction commitment of the Community, no Member State should be required to reduce its greenhouse gas emissions in 2020 to more than 20% below 2005 levels nor allowed to increase its greenhouse gas emissions in 2020 to more than 20% above 2005 levels. Reductions in greenhouse gas emissions should take place between 2013 and 2020. Each Member State should be allowed to carry forward from the following year a quantity of up to 5% of its annual emission allocation. Where the emissions of a Member State are below that annual emission allocation, a Member State should be allowed to carry over its excess emission reductions to the subsequent years (…).

(17) (17) This Decision should be without prejudice to more stringent national objectives. Where Member States limit the greenhouse gas emissions covered by this Decision beyond their obligations under this Decision in order to meet a more stringent objective, the limitation imposed by this Decision on the use of greenhouse gas emission reduction credits should not apply to the additional emission reductions to attain the national objective. (…)

Article 1 Subject matter

This Decision lays down the minimum contribution of Member States to meeting the greenhouse gas emission reduction commitment of the Community for the period from 2013 to 2020 for greenhouse gas emissions covered by this Decision, and rules on making these contributions and for the evaluation thereof.

This Decision also lays down provisions for assessing and implementing a stricter Community reduction commitment exceeding 20%, to be applied upon the approval by the Community of an international agreement on climate change leading to emissions reductions exceeding those required pursuant to Article 3, as reflected in the 30% reduction commitment as endorsed by the European Council of March 2007 (…).

Article 3 Emission levels for the period from 2013 to 2020.

1. Each Member State shall, by 2020, limit its greenhouse gas emissions at least by the percentage set for that Member State in Annex II to this Decision in relation to its emissions in 2005. (…)

Annex II

	Member State greenhouse gas emission limits in 2020 compared to 2005 greenhouse gas emissions levels
(…)	
Netherlands	-16%

(…)”

2.63.

In the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions, entitled "Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage" of 26 May 2010, the following, among other things, was stated:[14]

"When the EU decided in 2008 to cut its greenhouse gas emissions, it showed its commitment to tackling the climate change threat and to lead the world in demonstrating how this could be done. The agreed cut of 20% from 1990 levels by 2020, together with a 20% renewables target, was a crucial step for the EU's sustainable development and a clear signal to the rest of the world that the EU was ready to take the action required. The EU will meet its Kyoto Protocol target and has a strong track record in climate action.

But it has always been clear that action by the EU alone will not be enough to combat climate change and also that a 20% cut by the EU is not the end of the story. EU action alone is not enough to deliver the goal of keeping global temperature increase below 2°C compared to pre-industrial levels. All countries will need to make an additional effort, including cuts of 80- 95% by 2050 by developed countries. An EU target of 20% by 2020 is just a first step to put emissions onto this path.

That was why the EU matched its 20% unilateral commitment with a commitment to move to 30%, as part of a genuine global effort. This remains EU policy today.

Since the EU policy was agreed, circumstances have been changing rapidly. We have seen an economic crisis of unprecedented scale. It has put huge pressure onto businesses and communities across Europe, as well as causing huge stress on public finances. But at the same time, it has confirmed that there are huge opportunities for Europe in building a resource-efficient society.

We have also had the Copenhagen summit. Despite the disappointment of failing to achieve the goal of a full, binding international agreement to tackle climate change, the most positive result was that countries accounting for some 80% of emissions today made pledges to cut emissions, even though these will be insufficient to meet the 2°C target. It will remain essential to integrate the Copenhagen Accord in on-going UNFCCC negotiations (United Nations Framework Convention on Climate Change). But the need for action remains as valid as ever.

The purpose of this Communication is not to decide now to move to a 30% target: the conditions set are clearly not met. To facilitate a more informed debate on the implications of the different levels of ambition, this

Communication sets out the result of analysis into the implications of the 20% and 30% targets as seen from today's perspective. (…)"

2.64.

In the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions of 8 March 2011, entitled "A roadmap for moving to a competitive low carbon economy in 2050", the following was stated, among other things:[15]

" 1. EUROPE'S KEY CHALLENGES

(…) In order to keep climate change below 2ºC, the European Council reconfirmed in February 2011 the EU objective of reducing greenhouse gas emissions by 80-95% by 2050 compared to 1990, in the context of necessary reductions according to the Intergovernmental Panel on Climate Change by developed countries as a group. This is in line with the position endorsed by world leaders in the Copenhagen and the Cancun Agreements. These agreements include the commitment to deliver long-term low carbon development strategies. Some Member States have already made steps in this direction, or are in the process of doing so, including setting emission reduction objectives for 2050. (…)

2. MILESTONES TO 2050

The transition towards a competitive low carbon economy means that the EU should prepare for reductions in its domestic emissions by 80% by 2050 compared to 1990. The Commission has carried out an extensive modelling analysis with several possible scenarios showing how this could be done, (…). This analysis of different scenarios shows that domestic emission reductions of the order of 40% and 60% below 1990 levels would be the cost-effective pathway by 2030 and 2040, respectively. In this context, it also shows reductions of 25% in 2020. (…). Such a pathway would result in annual reductions compared to 1990 of roughly 1% in the first decade until 2020, 1.5% in the second decade from 2020 until 2030, and 2% in the last two decades until 2050. The effort would become greater over time as a wider set of cost-effective technologies becomes available. (…)

Emissions, including international aviation, were estimated to be 16% below 1990 levels in 2009. With full implementation of current policies, the EU is on track to achieve a 20% domestic reduction in 2020 below 1990 levels, and 30% in 2030. However, with current policies, only half of the 20% energy efficiency target would be met by 2020.

If the EU delivers on its current policies, including its commitment to reach 20% renewables, and achieve 20% energy efficiency by 2020, this would

enable the EU to outperform the current 20% emission reduction target and achieve a 25% reduction by 2020. This would require the full implementation of the Energy Efficiency Plan (…)

6. CONCLUSIONS

(…) In order to be in line with the 80 to 95% overall GHG reduction objective by 2050, the Roadmap indicates that a cost effective and gradual transition would require a 40% domestic reduction of greenhouse gas emissions compared to 1990 as a milestone for 2030, and 80% for 2050. (…)

(…) This Communication does not suggest to set new 2020 targets, nor does it affect the EU's offer in the international negotiations to take on a 30% reduction target for 2020, if the conditions are right. This discussion continues based on the Commission Communication from 26 May 2010."

2.65.

On 15 March 2012, the European Parliament adopted a resolution on the Roadmap referred to in 2.64, in which the Roadmap as well as the path and specific milestones for the reduction of the Community's domestic emissions of 40%, 60% and 80% for 2030, 2040 and 2050, respectively, were endorsed.[16]

2.66.

On 22 January 2014, the European Commission published the following Communication: "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions, "A policy framework for climate and energy in the period from 2020 to 2030", in which the Commission announced the following, among other things:[17]

"2.1 Greenhouse gas emissions target

The Commission proposes to set a greenhouse gas emission reduction target for domestic EU emissions of 40% in 2030 relative to emissions in 1990. It is important to note that the policies and measures implemented and envisaged by the Member States in relation to their current obligations to reduce greenhouse gas emissions will continue to have effect after 2020. If fully implemented and fully effective, these measures are expected to deliver a 32% reduction relative to emissions in 1990. This will require continued effort but at the same time shows that the proposed target for 2030 is achievable. Continuous appraisal will, however, be important to take account of the international dimension and to ensure that the Union continues to follow the least cost pathway to a low-carbon economy.

The EU level target must be shared between the ETS and what the Member States must achieve collectively in the sectors outside of the ETS. The ETS

sector would have to deliver a reduction of 43% in GHG in 2030 and the non-ETS sector a reduction of 30% both compared to 2005. In order to bring about the required emissions reduction in the ETS sector, the annual factor by which the cap on the maximum permitted emissions within the ETS decreases will have to be increased from 1.74% currently to 2.2% after 2020.

(…) The Commission sees no merit in proposing a higher "conditional target" ahead of the international negotiations. Should the outcome of the negotiations warrant a more ambitious target for the Union, this additional effort could be balanced by allowing access to international credits."

2.67.

At the European Council meeting of 23/24 October 2014, European leaders reached agreement on the 2030 climate and energy policy framework for the European Union.[18] The reduction targets referred to above and the adjustment of the emission ceilings within the ETS from the Commission's proposal were adopted.

2.68.

On 25 February 2015, the European Commission published the "Communication to the European Parliament and the Council, entitled The Paris Protocol – A blueprint for tackling global climate change beyond 2020", in which it announced the following, among other things:[19]

"1. EXECUTIVE SUMMARY

According to the latest findings of the Intergovernmental Panel on Climate Change (IPCC), without urgent action, climate change will bring severe, pervasive and irreversible impacts on all the world's people and ecosystems. Limiting dangerous rises in global average temperature to below 2°C compared with pre-industrial levels (the below 2°C objective) will require substantial and sustained reductions in greenhouse gas emissions by all countries.

This global transition to low emissions can be achieved without compromising growth and jobs, and can provide significant opportunities to revitalise economies in Europe and globally. Action to tackle climate change also brings significant benefits in terms of public well-being. Delaying this transition will, however, raise overall costs and narrow the options for effectively reducing emissions and preparing for the impacts of climate change.

All countries need to act urgently and collectively. Since 1994, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have focused on this challenge, resulting in more than 90 countries, both developed and developing, pledging to curb their emissions by 2020.

However, these pledges are insufficient to achieve the below 2°C objective. For these reasons, in 2012, the UNFCCC Parties launched negotiations towards a new legally binding agreement applicable to all Parties that will put the world on track to achieve the below 2°C objective. The 2015 Agreement is to be finalised in Paris in December 2015 and implemented from 2020. (…) Well ahead of the Lima conference, the EU continued to show leadership and determination to tackle climate change globally. At the European Summit in October 2014, European leaders agreed that the EU should step up its efforts and domestically reduce its emissions by at least 40% compared to 1990 by 2030. This was followed by announcements of China and the US. In Lima, EU Member States pledged about half of the initial capitalisation of US$10 billion to the Green Climate Fund (GCF) to assist developing countries. Within the EU, a new investment plan was adopted. This will unlock public and private investments in the real economy of at least €315 billion over the next three years (2015-17). These investments will help modernise and further decarbonise the EU's economy.
This communication responds to the decisions taken in Lima, and is a key element in implementing the Commission's priority of building a resilient Energy Union with a forward-looking climate change policy consistent with the President of the Commission's political guidelines. This communication prepares the EU for the last round of negotiations before the Paris conference in December 2015."
In a national context
2.69.
Article 21 of the Dutch Constitution reads as follows:
It shall be the concern of the authorities to keep the country habitable and to protect and improve the environment.
2.70.
Under the EC Greenhouse Gas Emission Allowance Trading Directive (Implementation) Act of 30 September 2004, and by amending the Environmental Management Act, among other acts, the ETS Directive was converted into national law. A sixteenth chapter was added to the Environmental Management Act, entitled "Emission Allowance Trading". Put briefly, this chapter regulates the issuance of permits to businesses with greenhouse gas installations and the issuance, allocation and use of emission allowances. Directive No 2009/29/EC was implemented with the "EC Greenhouse Gas Emission Allowance Trading Directive (Review) Act" of 12 April 2012. The Explanatory Memorandum to this Act contains the following sections, among others:[20]

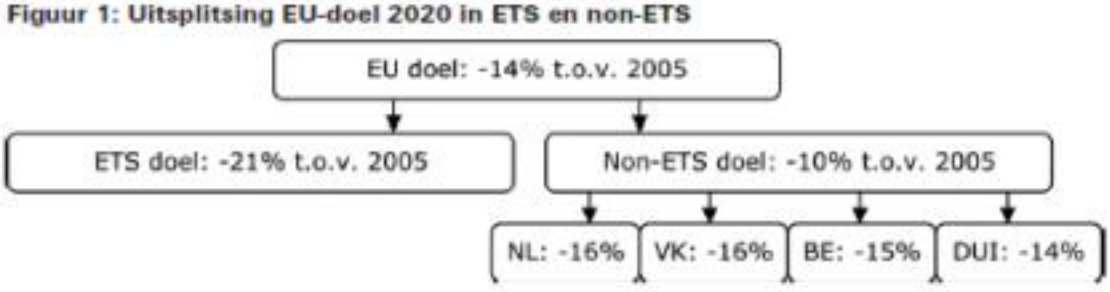
"5. EU ceiling

5.1.

Introduction

In phase I and II of the ETS, each Member State had separate emission ceilings. The calculation of the allocation of emission allowances also took place on a national level, by means of a National Allocation Plan (hereinafter: NAP). This approach was in line with the national Kyoto commitments. Phase III introduces a European ceiling and strict European regulation for the allocation of emission allowances. Under Article 9 of Directive 2003/87/EC, an absolute number of emission allowances for the entire Community (hereinafter: EU ceiling) was introduced. The EU has set as an objective to reduce the emission of greenhouse gases by at least 20% by 2020 compared to 1990. The year 1990 was chosen, as this is also the base year in the Kyoto Protocol. This objective relates to all sectors, including the sectors that fall under the scope of the ETS and the sectors that do not fall under that system (hereinafter: non-ETS sectors). An example of a non-ETS sector is the built environment. The objective for 1990 can be translated into an objective for 2005 and thus corresponds with a 14% reduction in 2020 compared to 2005. This translation is needed, as 2005 is the start year for the ETS and data verified in the ETS will be published in 2005. The overall objective is divided over the ETS and non-ETS sectors. The reduction for the non-ETS sectors is set at 10% compared to 2005; and for the ETS sector at 21% compared to 2005. The ETS objective of -21% means that all ETS sectors combined have to achieve the 21% reduction compared to 2005. These objectives of -10% and -21% apply to phase III of the ETS. The non-ETS objectives have been divided over the various Member States. The Netherlands has a reduction obligation of 16% compared to the level of 2005. By way of comparison, the reduction obligations of several Member States are depicted in the diagram below.[1]

This objective has been depicted in the figure below.



{TRANSLATION OF FIGURE

Figure 1: EU objective for 2020 divided into ETS and non-ETS

EU objective: -14% compared to 2005
ETS objective: -21% compared to 2005
Non-ETS objective: -10% compared to 2005
NL: -16% UK: -16% BE: -15% GER: -14%}
[Note 1: Decision No. 406/2009/EC of the European Parliament and of the Council of the European Union 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 (OJEU L 140).]"

2.71.

The "New energy for the climate Work Programme of the Clean and Sustainable Project" (*Werkprogramma Nieuwe energie voor het klimaat van het*
project Schoon en Zuinig) rom 2007, in which the then cabinet formulated its climate policy, contains as a climate objective a 30% reduction for 2020 compared to 1990. According to the report, this means that as of 2020 an annual climate ceiling of 150Mt CO2-eq. will apply. The report states the following, among other things:
"Climate change calls for action, as it threatens our security, food supply, water management and biodiversity. In this work programme, the cabinet focuses on ambitious climate targets: a 30% reduction of greenhouse gas emissions in 2020 (compared to 1990) is needed, preferably in a European context (…). The European target is a 20% reduction of greenhouse gas emissions in the absence of a global agreement. In light of the Dutch objective of -30%, there is a chance that this will cause a shortfall in attaining the overall Dutch target. If European decision-making leads to a shortfall in the reduction targets the Netherlands has committed to, the cabinet will review whether it can reach agreement with other countries in similar situations (formulating high national reduction targets). If this fails, a part of the reduction shortfall will have to be covered by the government (…) and the reduction targets of sectors will be reassessed in consultation with the sectors."

2.72.

In a letter of 29 April 2008 of the then Ministers of Housing, Spatial Planning and the Environment and Development Cooperation to the House of Representatives on the climate conference in Bali, the following, among other things, was stated:
"(…) First, the Netherlands will continue to take as a basis that the mean global temperature rise should be limited to 2 degrees over the pre-industrial level in order to keep the consequences of climate change manageable.

Second, it remains important for the developed countries to take the lead by committing to a joint 30% reduction of their greenhouse gas emissions by 2020, compared to 1990. The third element is the notion that the participation of countries has to be expanded in a post-2012 regime. The Netherlands will continue to focus on agreements in which developing countries – particularly the larger countries and the countries that are experiencing rapid economic growth – also make tangible contributions and in some cases also commit to targets, depending on their different responsibilities and capabilities. Only then will it be possible to stabilise global emissions within 10 to 15 years and subsequently reduce them. (…)
The 13th Conference of the signatories to the UN Climate Change Convention was held in Bali, Indonesia from 3 to 14 December of last year. The Netherlands was represented by Minister Cramer in the negotiations and the High Level Segment. In this capacity, she participated in the ministerial EU coordination and addressed the plenary session of the COP. In her statement, she called on the rich countries to reduce their greenhouse gas emissions by 25 to 40% by 2020 and to focus more on adaptation, deforestation and technology funds in developing countries. (…)"

2.73.

In her letter of 12 October 2009 with the subject "objective of the negotiations in Copenhagen and appreciation of the Commission's announcement about climate financing", the then Minister of Housing, Spatial Planning and the Environment reported the following to the House of Representatives:

"Main elements of the field of influence
The negotiations essentially revolve around the well-known triangle of climate negotiations: reduction targets, mitigation actions of developing countries and financing.
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 feasible track to keep the 2 degrees objective within reach.(…)"

2.74.

In 2013, the Ministry of Infrastructure and the Environment drew up a Climate Agenda, "Climate Agenda: Resilient, Prosperous and Green" (*Klimaatagenda: weerbaar, welvarend en groen*). The second chapter, entitled "The Approach", contains the following section:[21]

"2.1 The Dutch contribution worldwide
(…) Global climate agreements in a rapidly changing world

The climate problem requires an international approach (…). The static agreements made over the years with highly divergent targets for developed and developing countries is no longer in line with the current dynamic situation of rapidly growing economies, including those of Brazil, South Africa and China. These changing relationships require a new and more effective global approach in order to involve as many parties as possible, including governments, the business community and civil society. Virtually all countries are combating climate change, although current efforts have not yielded the desired result of remaining under the 2 degree temperature rise. Efforts of countries such as Chine and the United States are, however, essential for making progress (…).

2.3

The national contribution: clear objectives and frameworks

In part due to policy and also as a consequence of the recession, greenhouse gas emissions in the Netherlands have started to decline following years of escalation (…). This means that the Netherlands is on track to attain the commitments for 2008-2012 (Kyoto) and internationally for 2020.[20] Estimates gauge that non-ETS sectors will surpass the EU target for 2020, without the need to acquire allowances. However, the fact that the targets will be attained does not mean that we are sufficiently on course to achieve the required long-term emission reductions. (…) With the policy announced in the SER Energy Agreement and in this Climate Agenda, the cabinet seeks to ensure the required extra acceleration in the Netherlands to realise its objective of having a climate-neutral economy in 2050.

Mitigation targets

The Dutch contribution in the EU is to attain a CO2 reduction of at least 40% in 2030. (…)

[Note 20: This concerns the following targets:

• A mean reduction of 6% over 2008-2012 compared to 1990 for the Netherlands as a whole (Kyoto target).

• In 2020 a 21% reduction of emissions that fall below the ETS compared to 2005 (below a European ceiling).

• In 2020 a 16% reduction compared to 2005 for non-ETS sectors.]"

2.75.

On 6 September 2013, the State and over forty organisations concluded the "Energy Agreement for Sustainable Growth" (*Energieakkoord voor duurzame groei*). This Agreement is intended to realise the following objectives:

- an annual saving of 1.5% of the final energy consumption;

- 100 petajoules in energy savings in the final energy consumption in the Netherlands as of 2020;
- an increase in the share of renewable energy generation (currently over 4%) to 14% in 2020;
- a further increase of this share to 16% in 2023;
- at least 15,000 fulltime positions, most to be created in the first few years.

2.76.

In her letter of 19 September 2013 to the House of Representatives, the State Secretary for Infrastructure and the Environment reported as follows:

"(…)

- The crux of the matter is that the Netherlands argues for a greenhouse gas emission reduction of at least 40% by 2030 compared to 1990, as proposed by the Commission in the Green Paper (…).
- The Netherlands considers a structural reinforcement of the European Emissions Trading Scheme (ETS) necessary and therefore argues to tighten the emission ceiling after 2020 and to attune it to the European reduction targets for 2030 and 2050 (…).

1. Which lessons from the 2020 framework and from the current state of affairs of the EU's energy should carry the most weight in designing the policy for 2030?

According to analyses carried out by the Commission, the European Union's 20% CO2 reduction target deviates from the most cost-efficient path to the objective of 80-95% in 2050. The European Union's objective of reducing greenhouse gas emissions by 20% is within reach. The European Union has not decided to raise it to the conditional target of 30%, partly because there is no agreement whether or not the formulated condition – a significant reduction by other major economies – has been met (…). With the climate and energy framework policy for 2030, the European Union would get back on track with to the most cost-efficient path to a decarbonised economy."

2.77.

In response to an analysis carried out by the Energy Research Centre of the Netherlands (ECN) and the PBL regarding the consequences for the Netherlands of the 2030 climate and energy policy framework proposed by the European Commission and of the targets stated therein, the State Secretary for Infrastructure and the Environment reported to the House of Representatives with her letter of 26 September 2014:

"As for the CO2 reduction target for the non-ETS sectors, the burden sharing among the Member States will be an important subject of discussion in the European negotiations. Depending on the criterion applied to the burden

sharing, for the Netherlands this will result in a CO2 reduction of 28 to 48% for the non-ETS sectors in 2030. The ECN and the PBL state that the associated costs in the report are subject to uncertainties: the bandwidth of the emission level in the reference situation, for instance, is about 9Mt, to which the uncertainty of the data used in the calculations should also be added. Regarding the efforts for the Netherlands for the various reduction targets for non-ETS sectors, the research agencies have found as follows:

- -
  On a national level, achieving a 33% reduction target for non-ETS sectors and an associated target of 20% for renewable energy and 12% energy savings in 2030 is possible with the current policy.
- -
  The costs for a non-ETS target in the range 33-38% and an associated target of 21% for renewable energy and 12% energy savings are € 80 million – € 200 million per year.
- -
  Higher targets for non-ETS sectors will come with a sharp rise in costs for the Netherlands, up to € 870 – € 1,490 million per year at 43% and € 5 – € 15 billion at 48%."

2.78.

In her letter of 24 February 2015, the State Secretary for Infrastructure and the Environment sent the House of Representatives the annotated agenda of the Environmental Council. It states the following, among other things:
"The road to the UN Climate Conference Paris (COP21/CMP11)
Exchange of views and adoption of the intended nationally determined contribution to the EU
(…)
The Dutch position and field of influence
The Dutch objective is to attain an ambitious global climate agreement in which all parties participate. Not only does this apply to countries, but also to businesses, cities and civil society with which we cooperate on the road to a climate-neutral world. The agreement will have to offer sufficient flexibility to countries to enable them to contribute according to their capacity. This does not mean that the new agreement should be non-binding. Countries will have to monitor, report, and test and discuss the results. Subsequently we have to challenge countries to raise their ambitions to limit the global temperature rise to 2 degrees. Therefore, the Netherlands endorses the EU's target of a 80-95% reduction of greenhouse gas emissions in 2050 compared to 1990. In October 2014, the European Council set a binding target of at least a 40%

reduction of greenhouse gas emissions for 2030, which serves as an intermediary step.”

3THE DISPUTE

3.1.

In summary, after the amendment, Urgenda’s claim involves the court, with immediate effect:

to rule that:

(1) the substantial greenhouse gas emissions in the atmosphere worldwide are warming up the earth, which according to the best scientific insights, will cause dangerous climate change if those emissions are not significantly and swiftly reduced;

(2) the hazardous climate change that is caused by a warming up of the earth of 2°C or more, in any case of about 4 °C, compared to the preindustrial age, which according to the best scientific insights is anticipated with the current emission trends, is threatening large groups of people and human rights;

(3) of all countries which emit a significant number of greenhouse gases in the atmosphere, per capita emissions in the Netherlands are one of the highest in the world;

(4) the joint volume of the current annual greenhouse gas emissions in the Netherlands is unlawful;

(5) the State is liable for the joint volume of greenhouse gas emissions in the Netherlands;

(6) *principally:* the State acts unlawfully if it fails to reduce or have reduced the annual greenhouse gas emissions in the Netherlands by 40%, in any case at least 25%, compared to 1990, by the end of 2020;

alternatively: the State acts unlawfully if it fails to reduce or have reduced the annual greenhouse gas emissions in the Netherlands by at least 40% compared to 1990, by the end of 2030;

and furthermore orders the State to:

(7) *principally:* to reduce or have reduced the joint volume of annual greenhouse gas emissions in the Netherlands that it will have been reduced by 40% by the end of 2020, in any case by at least 25%, compared to 1990;

alternatively: reduce or have reduced the joint volume of annual greenhouse gas emissions in the Netherlands that it will have been reduced by at least 40% by 2030, compared to 1990;

(8) to publish or have published the text contained in the reply and also change of claim or a text to be drawn up by the court in the proper administration of justice immediately on the request of Urgenda, at a date to

be determined by Urgenda and to be communicated to the State at least two weeks in advance, in no more than six national daily newspapers to be designated by Urgenda, full-page and page-filling, and by means of logos or other marks clearly and directly recognisable as originating from the State or the government;
(9) to publish and keep published on the homepage of the website www.rijksoverheid.nl the text referred to in (8), starting on the date of publication and also during two consecutive weeks, in such a manner that the text appears on screen clearly legible for all visitors to the website, without the need for any mouse-clicking, and which has to be clicked to be closed before being able to go to other pages of the website;
and
(10) orders the State to pay the costs of these proceeding.
3.2.
Briefly summarized, Urgenda supports its claims as follows.
The current global greenhouse gas emission levels, particularly the CO2 level, leads to or threatens to lead to a global warming of over 2 °C, and thus also to dangerous climate change with severe and even potentially catastrophic consequences. Such an emission level is unlawful towards Urgenda, as this is contrary to the due care exercised in society. Moreover, it constitutes an infringement of, or is contrary to, Articles 2 and 8 of the ECHR, on which both Urgenda and the parties it represents can rely. The greenhouse gas emissions in the Netherlands additionally contribute to the (imminent) hazardous climate change. The Dutch emissions that form part of the global emission levels are excessive, in absolute terms and even more so per capita. This makes the greenhouse gas emissions of the Netherlands unlawful. The fact that emissions occur on the territory of the State and the State, as a sovereign power, has the capability to manage, control and regulate these emissions, means that the State has “systemic responsibility” for the total greenhouse gas emission level of the Netherlands and the pertinent policy. In view of this, the fact that the emission level of the Netherlands (substantially) contributes to one of several causes of hazardous climate change can and should be attributed to the State. In view of Article 21 of the Dutch Constitution, among other things, the State can be held accountable for this contribution towards causing dangerous climate change. Moreover, under national and international law (including the international-law “no harm” principle, the UN Climate Change Convention and the TFEU) the State has an individual obligation and responsibility to ensure a reduction of the emission level of the Netherlands in order to prevent dangerous

climate change. This duty of care *principally* means that a reduction of 25% to 40%, compared to 1990, should be realised in the Netherlands by 2020. A reduction of this extent is not only necessary to continue to have a prospect of a limitation of global warming of up to (less than) 2°C, but is furthermore the most cost-effective. *Alternatively*, the Netherlands will need to have achieved a 40% reduction by 2030, compared to 1990. With its current climate policy, the State seriously fails to meet this duty of care and therefore acts unlawfully.

3.3.

The State argues as follows – also briefly summarised. Urgenda partially has no cause of action, namely in so far as it defends the rights and interests of current or future generations in other countries. Aside from that, the claims are not allowable, as there is no (real threat of) unlawful actions towards Urgenda attributable to the State, while the requirements of Book 6, Section 162 of the Dutch Civil Code and Book 3, Section 296 of the Dutch Civil Code have also not been met. The State acknowledges the need to limit the global temperature rise up to (less than) 2°C, but its efforts are, in fact, aimed at achieving this objective. The current and future climate policies, which cannot be seen as being separate from the international agreements nor from standards and (emission) targets formulated by the European Union, are expected to make this feasible. The State has no legal obligation – either arising from national or international law – to take measures to achieve the reduction targets stated in Urgenda's claims. The implementation of the Dutch climate policy, which contains mitigation and adaptation measures, is not in breach of Articles 2 and 8 of the ECHR. Allowing (part of) the claims is furthermore contrary to the State's discretionary power. This would also interfere with the system of separation of powers and harm the State's negotiating position in international politics.

3.4.

The arguments of the parties are examined in more detail below, in so far as relevant.

4THE ASSESSMENT

A. Introduction

4.1.

This case is essentially about the question whether the State has a legal obligation towards Urgenda to place further limits on greenhouse gas emissions – particularly CO2 emissions –in addition to those arising from the plans of the Dutch government, acting on behalf of the State. Urgenda argues that the State does not pursue an adequate climate policy and

therefore acts contrary to its duty of care towards Urgenda and the parties it represents as well as, more generally speaking, Dutch society. Urgenda also argues that because of the Dutch contribution to the climate policy, the State wrongly exposes the international community to the risk of dangerous climate change, resulting in serious and irreversible damage to human health and the environment. Based on these grounds, which are briefly summarised here, Urgenda claims, except for several declaratory decisions, that the State should be ordered to limit, or have limited, the joint volume of the annual greenhouse gas emissions of the Netherlands so that these emissions will have been reduced by 40% and at least by 25% in 2020, compared to 1990. In case this claim is denied, Urgenda argues for an order to have this volume limited by 40% in 2030, also compared to 1990.

4.2.

For its part, the State argues that the Netherlands – also based on European agreements – pursues an adequate climate policy. Therefore, and for many other reasons, the State believes Urgenda's claims cannot succeed. The key motivation is that the State cannot be forced at law to pursue another climate policy. The terms "the State" and "the Netherlands" will be used interchangeably below, depending on the context. The term "the State" refers to the legal person that is party to these proceedings, while the term "the Netherlands" refers to the same entity in an international context. The government is the State's executive body.

4.3.

The court faces a dispute with complicated and "climate-related" issues. The court does not have independent expertise in this area and will base its assessment on that which the Parties have submitted and the facts admitted between them. This concerns both current scientific knowledge and (other) data the State acknowledges or deems to be correct. Many of these data are available under section 2 of this judgment ("The facts"). An analysis of these data, which are sometimes repeated, will enable the court to determine the severity of the climate change problem. Based on this information, the court will assess the claim and the defence put up against it. Prior to this, the court will assess Urgenda's standing. If Urgenda is not in a position to confront the State about the issues that are the subject of these proceedings, the court is unable to proceed to assess the merits of the claim. This more in-depth assessment (if applicable) will contain all further questions, including those pertaining to the absence, or not, of the State's legal obligation towards Urgenda, and the question whether the court's options also include imposing the order claimed by Urgenda.

B. Urgenda's standing (acting on its own behalf)

4.4.

Under Book 3, Section 303 of the Dutch Civil Code, an individual or legal person is only entitled to bring an action to the civil court if he has sufficient own, personal interest in the claim. Under Book 3, Section 303*a* of the Dutch Civil Code, a foundation or association with full legal capacity may also bring an action to the court pertaining to the protection of general interests or the collective interests of other persons, in so far as the foundation or association represents these general or collective interests based on the objectives formulated in its by-laws. However, there is a proviso, namely that the legal person concerned can only bring its action to the court if he, in the given circumstances, has made sufficient efforts to enter into a dialogue with the defendant to achieve having his requirements met (paragraph 2).

4.5.

The position of the State regarding Urgenda's standing, in so far as this party acts on its own behalf, can be summarised as follows. The State does not challenge that Urgenda, in view of the interests it protects under its by-laws, has a case when on behalf of the current generations of Dutch citizens protests the emission of greenhouse gases from Dutch territory. Nor does the State contest Urgenda's standpoint that the order to reduce emissions in these proceedings against the State in principle belongs to the group of claims the Dutch legislature finds allowable and has made possible with Book 3, Section 303*a* of the Dutch Civil Code. Regarding the question whether Urgenda has a case in so far as it defends the interests of future generations of Dutch citizens (and that "in perpetuity"), the State defers to the court's opinion. The State argues that Urgenda has no case in so far as it defends the rights or interests of current or future generations in other countries.

4.6.

The court finds as follows. Urgenda's claims against the State indeed belong to the group of claims the Dutch legislature finds allowable and has wanted to make possible with Book 3, Section 303*a* of the Dutch Civil Code. It was set out in the Explanatory Memorandum that an environmental organisation's claim in order to protect the environment without an identifiable group of persons needing protection, would be allowable under the proposed scheme.[22]

4.7.

Article 2 of Urgenda's by-laws stipulate that it strives for a more sustainable society, "beginning in the Netherlands". This demonstrates prioritisation – as it rightly argues – and not a limitation to Dutch territory. The interests

Urgenda wants to defend appear to be – from its objective formulated in its by-laws – primarily but not solely Dutch interests. Moreover, the term "sustainable society" has an inherent international (and global) dimension. As based on its by-laws Urgenda is defending the interest of a "sustainable society", it actually protects an interest that by its nature crosses national borders. Therefore, Urgenda can partially base its claims on the fact that the Dutch emissions also have consequences for persons outside the Dutch national borders, since these claims are directed at such emissions.

4.8.

The term "sustainable society" also has an intergenerational dimension, which is expressed in the definition of "sustainability" in the Brundtland Report referred to under 2.3:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

In defending the right of not just the current but also the future generations to availability of natural resources and a safe and healthy living environment, it also strives for the interest of a sustainable society. This interest of a sustainable society is also formulated in the legal standard invoked by Urgenda for the protection against activities which, in its view, are not "sustainable" and threaten to lead to serious threats to ecosystems and human societies. In this context, reference can also be made to Article 2 of the UN Climate Change Convention. Relying on Articles 2 and 8 ECHR, Urgenda's claim is an extension of its objectives formulated in its by-laws. After all, these stipulations are also aimed at protecting the interests Urgenda seeks to defend.

4.9.

Seeing as it is not in dispute that Urgenda has met the requirement of Book 3, Section 305a of the Dutch Civil Code that it has made sufficient efforts to attain its claim by entering into consultations with the State, the court concludes that Urgenda's claims, in so far as it acts on its own behalf, are allowable to the fullest extent.

4.10.

The court's judgment about Urgenda's standing is sufficient for now. On the pages below, the court will focus on Urgenda's position for the time being. The position of the (886) principals on whose behalf Urgenda is also acting will be discussed at the end.

C. Current climate science and climate policy

The UN Framework Convention on Climate Change and the IPCC

4.11.
Well before the 1990s, there was a growing realisation among scientists that human caused (anthropogenic) greenhouse gas emissions possibly led to a global temperature rise, and that this could have catastrophic consequences for man and the environment. This realisation led to the UN Climate Change Convention in 1992, of which the objective is formulated in Article 2, referred to in 2.37, as follows: to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. As stated previously, 195 countries, including the Netherlands and the EU, have endorsed this objective.
4.12.
The UN Climate Change Convention also made provisions for the establishment of the IPCC as a global knowledge institute. The IPCC reports have bundled the knowledge of hundreds of scientists and to a great extent represent the current climate science. The IPCC is also an intergovernmental organisation. The IPCC's findings serve as a starting point for the COP decisions, which are taken by the signatories to the UN Climate Change Convention during their climate conferences. Similarly, the Dutch and European decision-making processes pertaining to the climate policies to be pursued are also based on the climate science findings of the IPCC. The court – and also the Parties – therefore considers these findings as facts.
The IPCC reports
4.13.
The IPCC's reports have allowed for scientific uncertainty, a concept which comprises the question to what extent it is possible, based on scientific knowledge, to give a definitive answer about the probability of a negative effect occurring. In climate science, it has to be established (i) to what extent the current anthropogenic greenhouse gas emissions will increase the future greenhouse gas concentration and (ii), given many other circumstances, will result in dangerous climate change. The IPCC has stated in each of its reports how certain or uncertain its observations and findings are.
4.14.
In AR4/2007 and AR5/2013, the IPCC has established that a worldwide climate change is taking place and that it is very probable that human actions, particularly the combustion of fossil fuels (oil, gas, coal) and deforestation, are the main causes of the observed global warming since the middle of the nineteenth century. In AR4/2007, the IPCC furthermore has stated that a temperature rise of more than 2 °C over the pre-industrial level

would cause dangerous and irreversible climate change which would threaten the environment and man. This has resulted in the formulation of the aforementioned 2°C target. The IPCC has not changed this target in AR5/2013. The signatories to the UN Climate Change Convention, including, as stated previously, the Netherlands and the EU, have explicitly acknowledged these findings during the climate conference of 2010 (Cancun Agreements). The court therefore finds that the 2 °C target has globally been taken as the starting point for the development of climate policies. Incidentally, this comes with a restriction for a number of countries in the Pacific Ocean, such as Tuvalu and Fiji, for which dangerous climate change, with the associated risk of destruction of their entire territories, probably will already occur at a temperature rise of 1.5 °C. The signatories therefore decided in Cancun to "maintain a view on" a 1.5 °C target.

4.15.

The IPCC reports referred to here also state that the anthropogenic greenhouse gas emissions need to be decreased substantially in order to prevent dangerous climate change. This, too, has been acknowledged by the signatories to the UN Climate Change Convention, including during the 2007 climate conference (Bali Action Plan) and again in 2010 (Cancun). From AR5/2013, supported by publications of other knowledge institutes, such as EDGAR (see 2.25) and UNEP (see 2.29), it is apparent that the global anthropogenic emissions of greenhouse gases is increasing rather than decreasing. The court also considers this information as certain.

4.16.

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

4.17.

The reports of the PBL and KNMI are based on the IPCC reports and also describe that in the next hundred years the Netherlands will face higher average temperatures, changing precipitation patterns and a sea level rise. Chances of heatwaves in the summer will increase and extreme precipitation will become more prevalent. The basins of major rivers will on the one hand have to contend with more extreme precipitation, while on the other hand chances of a decreased amount of supplied water are high in the summer. High levels of river discharge, in combination with rising sea levels and high water levels at sea, could more frequently lead to dangerous situations in the downstream areas. Less water in the summer means, among other things, higher risks of salinization in the coastal areas and less freshwater for agriculture. The Netherlands will also feel the consequences of climate change elsewhere in the world. Some import products will become more expensive.[23]

4.18.

The aforementioned considerations lead to the following intermediate conclusion. Anthropogenic greenhouse gas emissions are causing climate change. A highly hazardous situation for man and the environment will occur with a temperature rise of over 2 °C compared to the pre-industrial level. It is therefore necessary to stabilise the concentration of greenhouse gases in the atmosphere, which requires a reduction of the current anthropogenic greenhouse gas emissions.

4.19.

Given the severity of the problem of hazardous climate change, climate scientists have investigated with which degree of probability current human actions have negative or positive effects on future climate change. Moreover, there is scientific uncertainty about the question when, where and to what extent which specific effects will occur, but also about the effectiveness and possible negative side-effects of certain precautionary measures. Climate science (scientific research) therefore focuses on risk regulation: determining the desired convention and possible adverse effects. In view of this, the IPCC reports have described different scenarios which offer an insight into the consequences of a certain emission level for the environment and into the costs of achieving a certain emission level. Furthermore, it is being investigated with which scenario the 2 °C target can be achieved in the most cost-effective way (meaning: in the most efficient way, also in view of the related costs).

The maximum level of greenhouse gas concentrations in the atmosphere

4.20.

In AR4/2007, the IPCC has established that in order to achieve the 2 °C target the greenhouse gas concentrations in the atmosphere have to be stabilised at 450 ppm, which will be referred to below as "the 450 scenario". It is not disputed between the Parties that there is a 50% chance of achieving the climate target with the 450 scenario. The signatories to the UN Climate Change Convention have reported about the 450 scenario by making a reference to the AR4/2007 in the Bali Action Plan (the COP decision of 2007). The court does not deduce an explicit choice for the 450 scenario from this reference. The section referred to (see 2.16) shows that the signatories are at least focused on a scenario in which emissions are stabilised at a level of 450–550 ppm. The pleadings and other documents show that in 2007 the European institutions started from the idea that the greenhouse gas concentrations in the atmosphere would have to remain well below 550 ppm and in the long term would have to stabilise at a level of about 450 ppm. As evidenced by these documents, this would mean that global emissions will reach a peak in 2025 and subsequently should decrease to 50% by 2050 (see 2.60).

4.21.

In AR5/2013, the IPCC made a more favourable estimate of the chances that the climate target will be reached with the 450 scenario, namely at over 66%. When starting from a concentration level of 500 ppm in 2100, those chances are over 50% according to the IPCC. However, the concentration level may not (temporarily) exceed the level of 530 ppm in the period before 2100. The chances that the climate target will not be achieved in that case are 33 to 66%. It is assumed that with scenarios with a concentration of 530 to 650 ppm, the chances of attaining the climate target are less than 33%. The documents submitted do not show that the signatories to the UN Climate Change Convention have explicitly responded to these scenarios.

4.22.

From the IPCC reports listed here, the court concludes that in view of risk management and from scientific considerations, there is a strong preference for the 450 scenario, as the risks are much higher with a 500 scenario. In order to maintain a 50% chance of being able to prevent hazardous climate change, the current scientific position stipulates that the level of CO2 concentration in the atmosphere may not exceed 530 ppm.

The reduction targets

4.23.

In AR4/2007, the IPCC also determined that in order to prevent the concentration level from exceeding 450 ppm, global emissions of CO2-eq

must to be substantially reduced. In order to achieve a concentration level of 450 ppm the total emissions of Annex I countries (which include the Netherlands and the EU as a whole) will at most have to be 20 to 40% lower in 2020 compared to 1990 – with due regard for a fair distribution. In 2050, the total emissions of these countries will need to have been reduced by 80 to 95% compared to 1990. The non-Annex I countries will also have to reduce their emissions substantially. The objective is to initiate a reduction before 2015 and to reduce the global emissions by 50% in 2050 compared to the year 2000.[24]

4.24.

In 2007, the signatories to the UN Climate Change Convention, with reference to AR4/2007, acknowledged in the Bali Action Plan that "deep cuts" in the greenhouse gas emissions were urgent and necessary to prevent dangerous climate change. The section regarding this states that an emission reduction of 10-40% is required to keep concentration levels in the atmosphere below 450-550 ppm in 2020, and a reduction of 40-95% by 2050, both compared to the 1990 levels. During the 2010 climate conference in Cancun, the Ad Hoc Working Group of Annex I countries took a decision and expressly acknowledged that they will have to have limited their emissions by 25-40% by 2020, compared to 1990. In this decision, the Annex I countries urged themselves to adjust their reduction targets accordingly.

4.25.

In the European context, in response to AR4/2007, the European Council considered that the industrialised countries should take the lead and commit to a collective 30% reduction of their greenhouse gas emissions by 2020, compared to 1990. The Council also believed that the countries should also do this in order to reduce their collective emissions by 60-80% by 2050, compared to 1990. Therefore, the European Council established the reduction target at 30% in 2020, provided that other industrialised countries and economically more advanced countries commit to similar emission reductions. Therefore, the European Council commits to realising an international emission reduction of 20% in 2020 compared to 1990, and to a 30% reduction target if the aforementioned condition is met. However, the condition has not been met so far, keeping the EU-wide reduction target at 20% for 2020. Various policy documents of European institutions state that the EU's 20% reduction target are not in line with the target for industrialised countries established by the IPCC, which after all is aimed at a 25-40%

reduction in 2020 and an 80-95% reduction in 2050 (see 2.58, 2.61, 2.63 and 2.64).

4.26.

In the period 2007-2009, the Netherlands initially focused its climate policy on a reduction target of 30% in 2020 compared to 1990, which was therefore higher than the EU's target of 20%. However, this reduction target deviated at a later stage. In these proceedings, the State has stated that the Dutch climate policy is based on a minimum reduction target of 16% in 2020 (compared to 2005) for the non-ETS sectors and 21% in 2020 (compared to 2005) for the ETS sectors. At the hearing, the State confirmed that the combined reduction for both sectors is expected to be 14 to 17% in 2020 compared to 1990.

4.27.

In AR5/2013, the IPCC established that the global greenhouse gas emissions in 2050 will have to be 40 to 70% lower than in the year 2010 to realise a concentration level of 450 ppm in 2100. In the year 2100, total emissions will need to have been reduced to at least zero or lower. At a concentration level of 500 ppm, a 25 to 55% reduction is expected for 2050. During the 2011 climate conference in Durban, agreement was reached that a new legally binding climate convention or protocol would have to be concluded in 2015. During the 2014 climate conference in Lima, the signatories to the UN Climate Change Convention agreed to submit their own emission reduction targets before the upcoming climate conference in Paris.

4.28.

In 2014, the EU announced that it was striving for a reduction target of 40% by 2030 compared to 1990. The Netherlands supports this reduction target as well as the EU's reduction target of 80% for 2050, both compared to 1990. The State has failed to explain which reduction target will apply to the Netherlands.

4.29.

The foregoing leads to the further intermediate conclusion that according to the current scientific position, the prevention of dangerous climate change calls for a 450 scenario with an associated reduction target for the Annex I countries, which includes the Netherlands and the EU as a whole, of 25-40% in 2020, and 80-95% in 2050. The EU and the Netherlands have acknowledged this finding as such and (initially) focused on an emission reduction target of 30%. However, the EU subsequently refused to commit to more than a 20% reduction, with the Netherlands joining this path from about 2010. For 2030, the EU and the Netherlands have committed to a 40%

reduction target; and to an 80% reduction target for 2050. This brings the reduction target back in line with the IPCC's proposed reduction target for a 450 scenario for 2050.

The effect of the reduction measures thus far

4.30.

The EDGAR database shows that global emissions are increasing substantially despite the measures that have been taken so far. The UNEP reports reveal that the Annex I countries have failed to meet the 25-40% emission reduction target in 2020, which has left a "budget" of about 1,000 Gt. The UNEP has established that there is a discrepancy between the reduction that is required to achieve the climate objective and the reduction promised by the signatories to the UN Climate Change Convention. At the same time, the institute has established that it will still be possible to close this gap in 2030.

Conclusions and specification of the scope of the dispute

4.31.

The court has made the following conclusions based on the foregoing.

- -
  i) In AR4/2007, the 450 scenario is presented as necessary for a more than 50% chance of realising the 2 °C target, according to the parties. In AR5/2013, the IPCC established this chance at 66%. In order to realise the 450 scenario, Annex I countries need to attain a reduction resulting in an emission in 2020 of 35-40% below the level of 1990.
- -
  ii) In accordance with this, the Netherlands has cooperated with the decision in Cancun (2010) in which it was established that the Annex I countries at least have to realise a 25-40% reduction in 2020.
- -
  iii) In an international context the EU has committed to a reduction target of 20% for 2020, with an increase to 30% (both compared to 1990) if other Annex I countries commit to a similar reduction target. The standard of 20% for the EU is below the 30% standard deemed necessary by scientists.
- -
  iv) The Netherlands has committed to the EU target of 30% reduction in 2020, provided that the other Annex I countries do the same.
- -

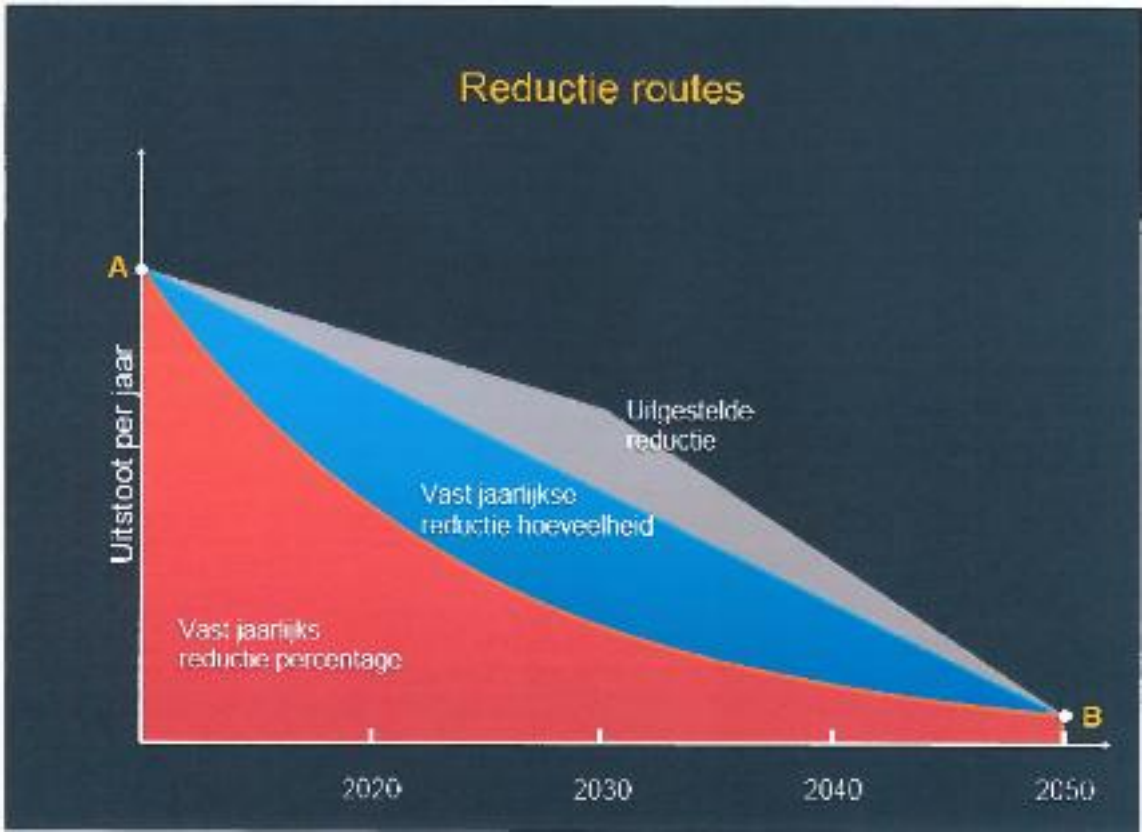
v) Up to about 2010, the Netherlands assumed a reduction target of 30% for 2020 compared to 1990, and after 2010 took on a reduction target that is derived from the EU reduction target of 20% and which is expected to result in a total reduction of 14-17% in 2020.

- -

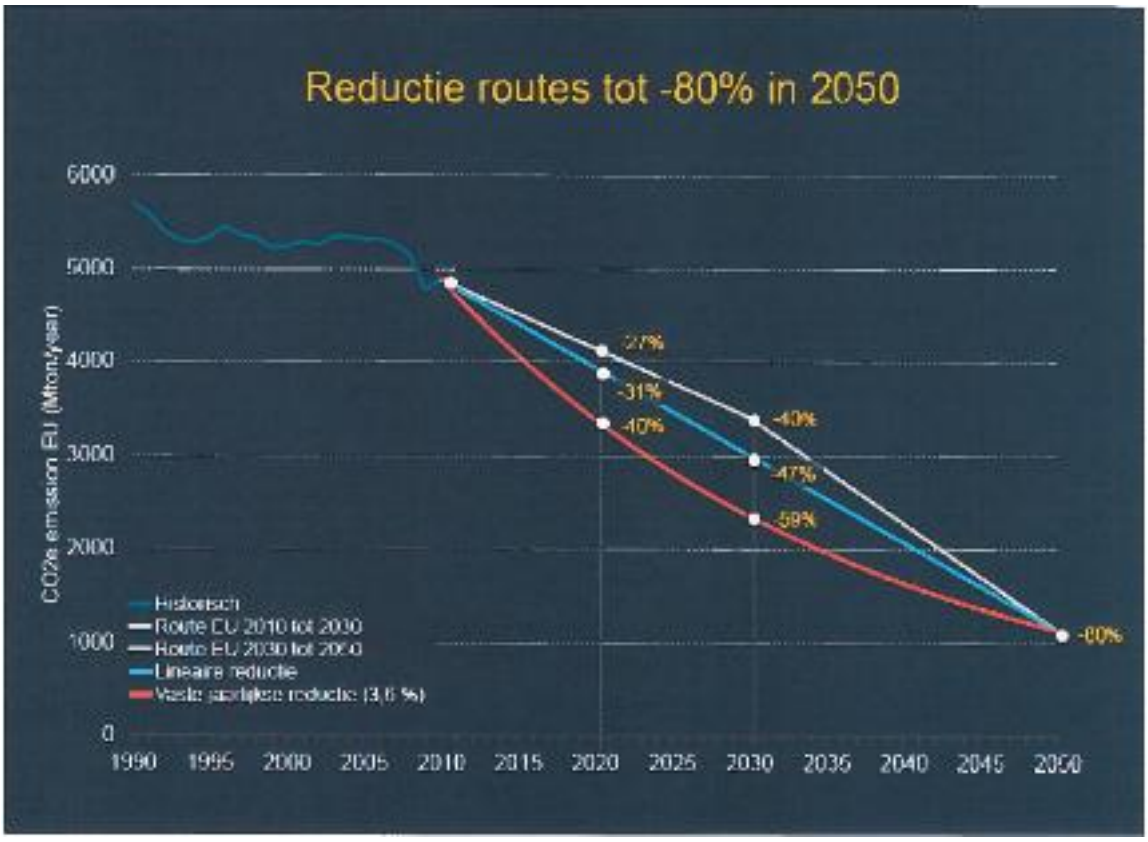
vi) The Dutch reduction target is therefore below the standard deemed necessary by climate science and the international climate policy, meaning that in order to prevent dangerous climate change Annex I countries (including the Netherlands) must reduce greenhouse gas emissions by 25-40% by 2020 to realise the 2°C target.

4.32.

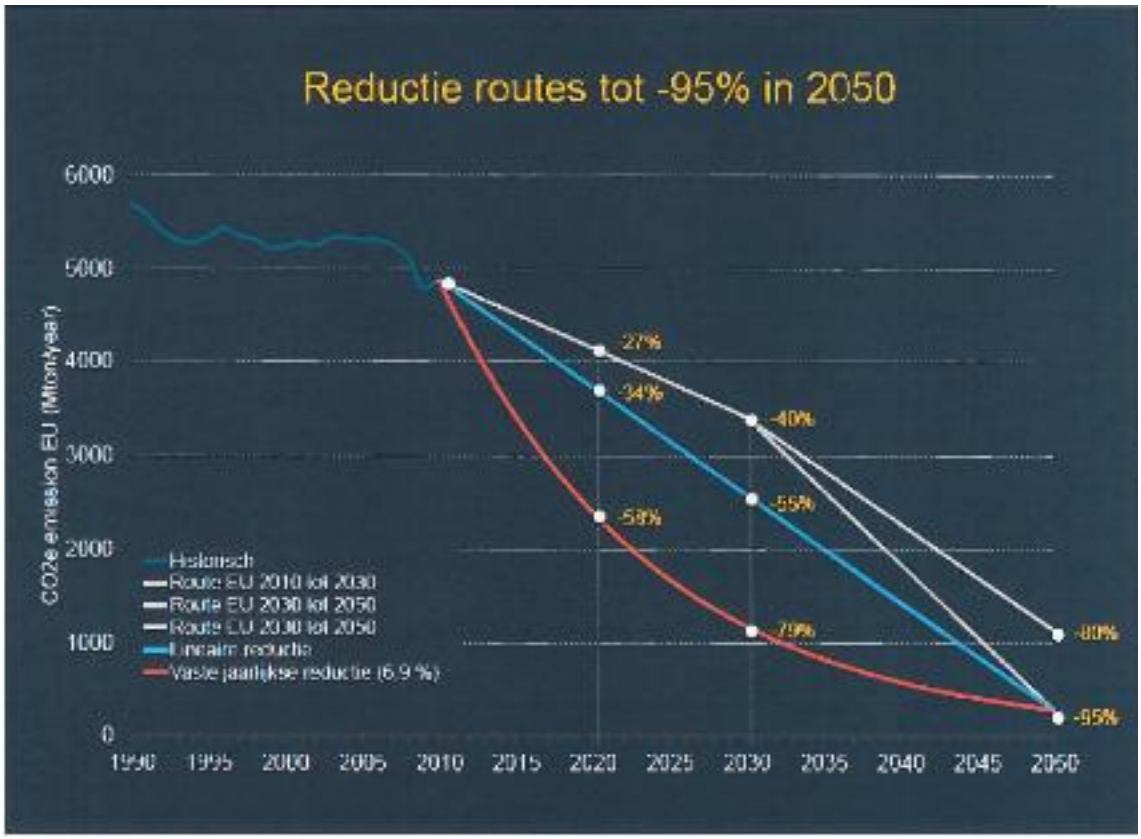
From the foregoing it follows that it is currently very probable that within several decades dangerous climate change will occur with irreversible consequences for man and the environment. The State acknowledges that this is a serious problem and that it is also necessary to avert this threat by mitigating greenhouse gas emissions. The dispute between the Parties therefore does not concern the need for mitigation, but rather the pace, or the level, at which the State needs to start reducing greenhouse gas emissions. By way of explanation of the reduction percentages deemed necessary by Urgenda, the foundation argues that by not or no longer focusing on a reduction of 25-40% in 2020, but only on a reduction of 40% by 2030 and of 80-95% by 2050, the State will have higher emission levels than if it were to adhere to the intermediate objective of a 25-40% reduction in 2020. In this context, Urgenda refers to the graphs below (submitted during the plea):



{TRANSLATION
Reduction paths
Y axis: annual emissions
X axis: Fixed annual reduction – percentage
Fixed annual reduction – amount
Delayed reduction}



{TRANSLATION
Reduction paths up to -80% in 2030
X axis: Historical
Path EU 2010 to 2030
Path EU 2030 to 2050
Linear reduction
Fixed annual reduction (3.6%)}



{TRANSLATION
Reduction paths up to -95% in 2035
X axis: Historical
Path EU 2010 to 2030
Path EU 2030 to 2050
Path EU 2030 to 2050
Linear reduction
Fixed annual reduction (6.9%)}

Urgenda argues that the first graph – whose information is detailed further in the second and third graphs – shows that a delayed reduction path results in higher emissions than does a more evenly distributed reduction effort over the entire period up to the year 2050 or with a linear approach. Urgenda claims that graph also shows that a delayed reduction (less reduction until 2030 and more thereafter) will lead to higher total emissions and thereby increases the chances of exceeding the remaining "budget". Urgenda also states that it is more cost-effective to intervene now, an argument that is based on AR5/2013 which states that scenarios in which the rigorous reduction is postponed to the 2030-2050 period lead to a greater dependence on CO2 reducing technologies. According to the same report, these technologies are not yet developed enough to contribute substantially

to the reduction (see 2.19). In this context, Urgenda finally states that it is still possible for the EU to realise the 30% reduction target provided the condition would arise.

4.33.

The State argues that the Netherlands will reach a total reduction of 17% in 2020, as a derivative of the EU's 20% reduction target. The Netherlands has committed to a 40% reduction for the year 2030 for the EU as a whole, while the State presumes a reduction percentage of 80-95% for the entire EU for the year 2050. The court has established that it is not clear yet which reduction percentages will apply to the Netherlands as a derivative of the European percentages. The State deems the milestones stated here sufficient for ensuring the 2 °C target.

4.34.

The final target for 2050 and the required intermediate target for 2030 is not disputed between the Parties. The State concurs with Urgenda's argument that CO2 emissions will have to have been reduced by 80-95% in 2050, compared to 1990. Their dispute concentrates on the question whether the State is falling short – as argued by Urgenda – in its duty of care by pursuing a reduction target for 2020 that is lower than 25-40%, compared to 1990, which is the standard accepted in climate science and the international climate policy. First, the State argues that it cannot be forced at law towards Urgenda to adhere to the 25-40% target. Second, the State contests Urgenda's argument that it is failing to meets its duty of care by pursuing the proposed lower target of 25-40% for 2020. In the following section, it is examined whether and if so, to what extent, the State is subject to an obligation towards Urgenda to pursue a reduction target higher than the current one for the Netherlands.

D. Legal obligation of the State?

Introduction

4.35.

As mentioned briefly above, Urgenda accuses the State of several things, such as the State acting unlawfully by, contrary to its constitutional obligation (Article 21 of the Dutch Constitution), mitigating insufficiently as defined further in international agreements and in line with current scientific knowledge. In doing so, the State is damaging the interests it pursues, namely: to prevent the Netherlands from causing (more than proportionate) damage, from its territory, to current and future generations in the Netherlands and abroad. Furthermore, Urgenda argues that under Articles 2 and 8 of the ECHR, the State has the positive obligation to take protective

measures. Urgenda also claims that the State is acting unlawfully because, as a consequence of insufficient mitigation, it (more than proportionately) endangers the living climate (and thereby also the health) of man and the environment, thereby breaching its duty of care. Urgenda asserts that in doing so the State is acting unlawfully towards Urgenda in the sense of Book 6, Section 162 of the Dutch Civil Code, whether or not in combination with Book 5, Section 37 of the Dutch Civil Code. The State contests that a duty of care arises from these sections for a further limitation of emissions than currently realised by it. The court finds as follows.

Contravention of a legal obligation

Article 21 of the Constitution and international conventions

4.36.

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

4.37.

The realisation that climate change is an extra-territorial, global problem and fighting it requires a worldwide approach has prompted heads of state and government leaders to contribute to the development of legal instruments for combating climate change by means of mitigating greenhouse gas emissions as well as by making their countries "climate-proof" by means of taking mitigating measures. These instruments have been developed in an international context (in the UN), European context (in the EU) and in a national context. The Dutch climate policy is based on these instruments to a great extent.

4.38.

The Netherlands has committed itself to UN Climate Change Convention, a framework convention which contains general principles and starting points, which form the basis for the development of further, more specific, rules, for instance in the form of a protocol. The Kyoto Protocol is an example of this. The COP with a number of subsidiary organs was set up for the further development and implementation of a climate regime. Almost all COP's decisions are not legally binding, but can directly affect obligations of the

signatories to the convention or the protocol. This applies, for instance, to several decisions taken pursuant to the Kyoto Protocol. These involve mechanisms which enable the trade in emission (reduction) allowances and which allow collaboration between the parties so that greenhouse gas emissions can be reduced where it is cheapest.

4.39.

In this context, Urgenda also brought up the international-law "no harm" principle, which means that no state has the right to use its territory, or have it used, to cause significant damage to other states. The State has not contested the applicability of this principle.

4.40.

The care and protection of the living environment is also increasingly determined by the EU. The basis for the European environmental policy is enclosed in Article 19 TFEU. For the development and implementation of the Community's environmental policy use has mostly been made of directives These often concern minimum harmonisation, so that on the one hand the entire Union will have a basic protection level while on the other hand the Member States still have the power to establish stricter standards for their own territories.

4.41.

In view of the obligation of Member States to take reduction measures, the implementation of the ETS Directive in Chapter 16 of the Environmental Management Act (see 2.70) is relevant to these proceedings. The Directive has introduced an emission allowance trading system, with the European Commission determining the CO2 emission ceiling for five year periods. The allowed emission level is allocated to the Member State concerned in the form of emission allowances. In the context of the EU, the Effort Sharing Decision (see 2.62) is also relevant. Based on these schemes, the Netherlands has committed itself to a 21% reduction of emissions that fall under the ETS in 2020, compared to 2005 and to a 16% reduction for non-ETS sectors in 2020, compared to 2005 (see 2.74).

4.42.

From an international-law perspective, the State is bound to UN Climate Change Convention, the Kyoto Protocol (with the associated Doha Amendment as soon as it enters into force) and the "no harm" principle. However, this international-law binding force only involves obligations towards other states. When the State fails one of its obligations towards one or more other states, it does not imply that the State is acting unlawfully towards Urgenda. It is different when the written or unwritten rule of

international law concerns a decree that "connects one and all". After all, Article 93 of the Dutch Constitution determines that citizens can derive a right from it if its contents can connect one and all. The court – and the Parties – states first and foremost that the stipulations included in the convention, the protocol and the "no harm" principle do not have a binding force towards citizens (private individuals and legal persons). Urgenda therefore cannot directly rely on this principle, the convention and the protocol (see, among other things, HR 6 February 2004, ECLI:NL: HR:2004:AN8071, NJ 2004, 329, Vrede et al./State).

4.43.

This does not affect the the fact that a state can be supposed to want to meet its international-law obligations. From this it follows that an international-law standard – a statutory provision or an unwritten legal standard – may not be explained or applied in a manner which would mean that the state in question has violated an international-law obligation, unless no other interpretation or application is possible. This is a generally acknowledged rule in the legal system. This means that when applying and interpreting national-law open standards and concepts, including social proprietary, reasonableness and propriety, the general interest or certain legal principles, the court takes account of such international-law obligations. This way, these obligations have a "reflex effect" in national law.

4.44.

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

Violation of a personal right

Articles 2 and 8 ECHR

4.45.

In assessing the question whether or not the State with its current climate policy is breaching one of Urgenda's personal rights, the court considers that Urgenda itself cannot be designated as a direct or indirect victim, within the meaning of Article 34 ECHR, of a violation of Articles 2 and 8 ECHR. After all,

unlike with a natural person, a legal person's physical integrity cannot be violated nor can a legal person's privacy be interfered with (cf. ECtHR 12 May 2015, Identoba et al./Georgia, no. 73235/12). Even if Urgenda's objectives , formulated in its by-laws, are explained in such a way as to also include the protection of national and international society from a violation of Article 2 and 8 ECHR, this does not give Urgenda the status of a potential victim within the sense of Article 34 ECHR (cf. ECtHR 29 September 2009, Van Melle et al./Netherlands, no. 19221/08). Therefore, Urgenda itself cannot directly rely on Articles 2 and 8 ECHR.

4.46.

However, both articles and their interpretation given by the ECtHR, particularly with respect to environmental right issues, can serve as a source of interpretation when detailing and implementing open private-law standards in the manner described above, such as the unwritten standard of care of Book 6, Section 162 of the Dutch Civil Code. Therefore, the court will now – briefly – reflect on the environmental law principles and scope of protection of Articles 2 and 8 ECHR, such as those that can be derived from the ECtHR's rulings.

4.47.

At the recommendation of the Parliamentary Assembly and by order of (and under the responsibility of) the Committee of Ministers of the Council of Europe, a "Manual on human rights and the environment" was published for the first time, in 2005. The goal of this manual is to raise awareness among a wide audience about the relationship between the protection of the human rights under the ECHR and the environment, thereby contributing to the reinforcement of environmental law protection on a national level. With this goal in mind, the manual (and other documents) provides information about the rulings of the ECtHR in this area and also pays attention to the impact of the European Social Charter and the relevant explanation of this charter by the European Committee of Social Rights. The last version of the manual was published in 2012. In so far as an explanation is given of the ECtHR's rulings below, the court concurs with it.

4.48.

Part II of the manual describes the environemental principles that can be derived from the ECtHR's rulings. The court deems the following passages from this part relevant:

"(…) the Court has emphasised that the effective enjoyment of the rights which are encompassed in the Convention depends notably on a sound, quiet and healthy environment conducive to well-being. The subject-matter of the

cases examined by the Court shows that a range of environmental factors may have an impact on individual convention rights, such as noise levels from airports, industrial pollution, or town planning.
As environmental concerns have become more important nationally and internationally since 1950, the case-law of the Court has increasingly reflected the idea that human rights law and environmental law are mutually reinforcing. Notably, the Court is not bound by its previous decisions, and in carrying out its task of interpreting the Convention, the Court adopts an evolutive approach. Therefore, the interpretation of the rights and freedoms is not fixed but can take account of the social context and changes in society. As a consequence, even though no explicit right to a clean and quiet environment is included in the Convention or its protocols, the case-law of the Court has shown a growing awareness of a link between the protection of the rights and freedoms of individuals and the environment. The Court has also made reference, in its case law, to other international environmental law standards and principles (…).
However, it is not primarily upon the European Court of Human Rights to determine which measures are necessary to protect the environment, but upon national authorities. The Court has recognised that national authorities are best placed to make decisions on environmental issues, which often have difficult social and technical aspects. Therefore, in reaching its judgments, the Court affords the national authorities in principle a wide discretion – in the language of the Court a wide "margin of appreciation" – in their decision-making in this sphere. This is the practical implementation of the principle of subsidiarity, which has been stressed in the Interlaken Declaration of the High Level Conference on the Future of the European Court of Human Rights. According to this principle, violations of the Convention should be prevented or remedied at the national level with the Court intervening only as a last resort. The principle is particularly important in the context of environmental matters due to their very nature."
4.49.
The scope of protection based on various articles of the ECHR regarding environmental issues has been detailed in separate chapters. In the context of this case, the court finds the following principles from the first chapter of part II ("Chapter I: the right to life and environment") relevant, including the subsequent explanation (the footnotes referring to the rulings of the ECtHR concerned have not been included in the quotation):
"(a) The right to life is protected under Article 2 of the Convention.

This Article does not solely concern deaths resulting directly from the actions of the agents of a State, but also lays down a positive obligation on States to take appropriate steps to safeguard the lives of those within their jurisdiction. This means that public authorities have a duty to take steps to guarantee the rights of the Convention even when they are threatened by other (private) persons or activities that are not directly connected with the State.

1. (…) in some situations Article 2 may also impose on public authorities a duty to take steps to guarantee the right to life when it is threatened by persons or activities not directly connected with the State. (…) In the context of the environment, Article 2 has been applied where certain activities endangering the environment are so dangerous that they also endanger human life.

2. It is not possible to give an exhaustive list of examples of situations in which this obligation might arise. It must be stressed however that cases in which issues under Article 2 have arisen are exceptional. So far, the Court has considered environmental issues in four cases brought under Article 2, two of which relate to dangerous activities and two which relate to natural disasters. In theory, Article 2 can apply even though loss of life has not occurred, for example in situations where potentially lethal force is used inappropriately.

(b) The Court has found that the positive obligation on States may apply in the context of dangerous activities, such as nuclear tests, the operation of chemical factories with toxic emissions or waste-collection sites, whether carried out by public authorities themselves or by private companies. In general, the extent of the obligations of public authorities depends on factors such as the harmfulness of the dangerous activities and the foreseeability of the risks to life.

(c) (…)

(d) In the first place, public authorities may be required to take measures to prevent infringements of the right to life as a result of dangerous activities or natural disasters. This entails, above all, the primary duty of a State to put in a place a legislative and administrative framework which includes: (…)"

4.50.

The following principles from Chapter II ("respect for private and family life as well as the home and the environment"), with explantion, are relevant:

"(a) (…)

(b) Environmental degradation does not necessarily involve a violation of Article 8 as it does not include an express right to environmental protection or nature conservation.
(c) For an issue to arise under Article 8, the environmental factors must directly and seriously affect private and family life or the home. Thus, there are two issues which the Court must consider – whether a causual link exists between the activity and the negative impact on the individual and whether the adverse have attained a certain threshold of harm. The assessment of that minimum threshold depends on all the circumstances of the case, such as the intensity and duration of the nuisance and its physical or mental effects, as well as on the general environmental context.
(…)
15. In the Kyrtatos v. Greece case, the applicants brought a complaint under Article 8 alleging that urban development had led to the destruction of a swamp adjacent to their property, and that the area around their home had lost its scenic beauty. The Court emphasised that domestic legislation and certain other international instruments rather than the Convention are more appropriate to deal with the general protection of the environment. The purpose of the Convention is to protect individual human rights, such as the right to respect for the home, rather than the general aspirations or needs of the community taken as a whole. The Court highlighted in this case that neither Article 8 nor any of the other articles of the Convention are specifically designed to provide general protection of the environment as such. In this case, the Court found no violation of Article 8.
(d) While the objective of Article 8 is essentially that of protecting the individual against arbitrary interference by public authorities, it may also imply in some cases an obligation on public authorities to adopt positive measures designed to secure the rights enshrined in this article. This obligation does not only apply in cases where environmental harm is directly caused by State activities but also when it results from private sector activities. Public authorities must make sure that such measures are implemented so as to guarantee rights protected under Article 8. The Court has furthermore explicitly recognised that public authorities may have a duty to inform the public about environmental risks. Moreover, the Court has stated with regard to the scope of the positive obligation that it is generally irrelevant of whether a situation is assessed from the perspective of paragraph 1 of Article 8 which, inter alia, relates to the positive obligations of State authorities, or paragraph 2 asking whether a State interference was justified, as the principles applied are almost identical.

(…)”

Book 5, Section 37 of the Dutch Civil Code

4.51.

In so far as Urgenda has relied on Book 5, Section 37 of the Dutch Civil Code (nuisance), the court is of the opinion that in addition to that which is stated below about the duty of care, this section does not have an independent meaning.

Intermediate conclusion about the duty of care

4.52.

The foregoing leads the court to conclude that a legal obligation of the State towards Urgenda cannot be derived from Article 21 of the Dutch Constitution, the “no harm” principle, the UN Climate Change Convention, with associated protocols, and Article 191 TFEU with the ETS Directive and Effort Sharing Decision based on TFEU. Although Urgenda cannot directly derive rights from these rules and Articles 2 and 8 ECHR, these regulations still hold meaning, namely in the question discussed below whether the State has failed to meet its duty of care towards Urgenda. First of all, it can be derived from these rules what degree of discretionary power the State is entitled to in how it exercises the tasks and authorities given to it. Secondly, the objectives laid down in these regulations are relevant in determing the minimum degree of care the State is expected to observe. In order to determine the scope of the State’s duty of care and the discretionary power it is entitled to, the court will therefore also consider the objectives of international and European climate policy as well as the principles on which the policies are based.

Breach of standard of due care observed in society, discretionary power

4.53.

The question whether the State is in breach of its duty of care for taking insufficient measures to prevent dangerous climate change, is a legal issue which has never before been answered in Dutch proceedings and for which jurisprudence does not provide a ready-made framework. The answer to the question whether or not the State is taking sufficient mitigation measures depends on many factors, with two aspects having particular relevance. In the first place, it has to be assessed whether there is a unlawful hazardous negligence on the part of the State. Secondly, the State’s discretionary power is relevant in assessing the government’s actions. From case law about government liability it follows that the court has to assess fully whether or not the State has exercised or exercises sufficient care, but that this does not alter the fact that the State has the discretion to determine how it fulfils its duty of care. However, this discretionary power vested in the

State is not unlimited: the State's care may not be below standard. However, the test of due care required here and the discretionary power of the State are not wholly distinguishable. After all, the detailing of the duty of care of the person called to account will also have been included in his specific position in view of the special nature of his duty or authority. The standard of care has been attuned to this accordingly.

Factors to determine duty of care

4.54.

Urgenda has relied on the "Kelderluik" ruling of the Supreme Court (HR 5 November 1965, ECLI:NL:HR:1965:AB7079, NJ 1966, 136) and on jurisprudence on the doctrine of hazardous negligence developed later to detail the requirement of acting with due care towards society. Understandably, the State has pointed out the relevant differences between this juridprudence and this case. This case is different in that the central focus is on dealing with a hazardous global development, of which it is uncertain when, where and to what extent exactly this hazard will materialise. Nevertheless, the doctrine of hazardous negligence, as explained in the literature, bears a resemblance to the theme of hazardous climate change, so that several criteria stated below can be derived from hazardous negligence jurisprudence in order to detail the concept of acting negligently towards society.[25]

4.55.

In principle, the extent to which the State is entitled to a scope for policymaking is determined by the statutory duties and powers vested in the State. As has been stated above, under Article 21 of the Constitution, the State has a wide discretion of power to organise the national climate policy in the manner it deems fit. However, the court is of the opinion that due to the nature of the hazard (a global cause) and the task to be realised accordingly (shared risk management of a global hazard that could result in an impaired living climate in the Netherlands), the objectives and principles, such as those laid down in the UN Climate Change Convention and the TFEU, should also be considered in determining the scope for policymaking and duty of care.

4.56.

The objectives and principles of the international climate policy have been formulated in Articles 2 and 3 of the UN Climate Change Convention (see 2.37 and 2.38). The court finds the principles under (i), (ii), (iii) and (iv)

particularly relevant for establishing the scope for policymaking and the duty of care. These read as follows, in brief:
(i) protection of the climate system, for the benefit of current and future generations, based on fairness;
(iii) the precautionary principle;
(iv) the sustainability principle.

4.57.

The principle of fairness (i) means that the policy should not only start from what is most beneficial to the current generation at this moment, but also what this means for future generations, so that future generations are not exclusively and disproportionately burdened with the consequences of climate change. The principle of fairness also expresses that industrialised countries have to take the lead in combating climate change and its negative impact. The justification for this, and this is also noted in literature, lies first and foremost in the fact that from a historical perspective the current industrialised countries are the main causers of the current high greenhouse gas concentration in the atmosphere and that these countries also benefited from the use of fossil fuels, in the form of economic growth and prosperity. Their prosperity also means that these countries have the most means available to take measures to combat climate change.[26]

4.58.

With the precautionary principle (ii) the UN Climate Change Convention expresses that taking measures cannot be delayed to await full scientific certainty. The signatories should anticipate the prevention or limitation of the causes of climate change or the prevention or limitation of the negative consequences of climate change, regardless of a certain level of scientific uncertainty. In making the consideration that is needed for taking precautionary measures, without having absolute certainty whether or not the actions will have sufficient effects, the Convention states that account can be taken of a cost-benefit ratio: precautionary measures which yield positive results worldwide at as low as possible costs will be taken sooner.

4.59.

The sustainability principle (iv) expresses that the signatories to the Convention will promote sustainability and that economic development is vital for taking measures to combat climate change.

4.60.

The objectives of the European climate policy have been formulated in Article 191, paragraph 1 TFEU (see 2.53). The following are the principles relevant to this case (as evidenced by paragraph 2 of this article):

- the principle of a high protection level;
- the precautionary principle;
- the prevention principle.

4.61.

With the principle of a high protection level, the EU expresses that its environmental policy has high priority and that it has to be implemented strictly, with account taken of regional differences. The precautionary principle also means that the Community should not postpone taking measures to protect the environment until full scientific certainty has been achieved. In short, the prevention principle means: "prevention is better than cure"; it is better to prevent climate problems (pollution, nuisance, in this case: climate change) than combating the consequences later on.

4.62.

Article 191, paragraph 3 TFEU also means that in determining its environmental policy, the EU takes account of:

- the available scientific and technical information;
- the environmental circumstances in the various EU regions;
- the benefits and nuisances that could ensue from taking action or failing to take action;
- the economic and social development of the Union as a whole and the balanced development of its regions.

4.63.

The objectives and principles stated here do not have a direct effect due to their international and private-law nature, as has been considered above. However, they do determine to a great extent the framework for and the manner in which the State exercises its powers. Therefore, these objectives and principles constitute an important viewpoint in assessing whether or not the State acts wrongfully towards Urgenda. With due regard for all the above, the answer to the question whether or not the State is exercising due care with its current climate policy depends on whether according to objective standards the reduction measures taken by the State to prevent hazardous climate change for man and the environment are sufficient, also in view of the State's discretionary power. In determining the scope of the duty of care of the State, the court will therefore take account of:

(i) the nature and extent of the damage ensuing from climate change;
(ii) the knowledge and foreseeability of this damage;
(iii) the chance that hazardous climate change will occur;
(iv) the nature of the acts (or omissions) of the State;
(v) the onerousness of taking precautionary measures;

(vi) the discretion of the State to execute its public duties – with due regard for the public-law principles, all this in light of:
- the latest scientific knowledge;
- the available (technical) option to take security measures, and
- the cost-benefit ratio of the security measures to be taken.

Duty of care

(i-iii) the nature and extent of the damage ensuing from climate change, the knowledge and foreseeability of this damage and the chance that hazardous climate change will occur

4.64.

As has been stated before, the Parties agree that due to the current climate change and the threat of further change with irreversible and serious consequences for man and the environment, the State should take precautionary measures for its citizens. This concerns the extent of the reduction measures the State should take as of 2020.

4.65.

Since it is an established fact that the current global emissions and reduction targets of the signatories to the UN Climate Change Convention are insufficient to realise the 2° target and therefore the chances of dangerous climate change should be considered as very high – and this with serious consequences for man and the environment, both in the Netherlands and abroad – the State is obliged to take measures in its own territory to prevent dangerous climate change (mitigation measures). Since it is also an established fact that without farreaching reduction measures, the global greenhouse gas emissions will have reached a level in several years, around 2030, that realising the 2° target will have become impossible, these mitigation measures should be taken expeditiously. After all, the faster the reduction of emissions can be initiated, the bigger the chance that the danger will subside. In the words of Urgenda: trying to slow down climate change is like trying to slow down an oil tanker that has to shut down its engines hundreds of kilometres off the coast not to hit the quay. If you shut down the engines when the quay is in sight, it is inevitable that the oil tanker will sooner or later hit the quay. The court also takes account of the fact that the State has known since 1992, and certainly since 2007, about global warming and the associated risks. These factors lead the court to the opinion that, given the high risk of hazardous climate change, the State has a serious duty of care to take measures to prevent it.

(iv) the nature of the acts (or omission) of the State

4.66.

The State has argued that it cannot be seen as one of the *causers* of an imminent climate change, as it does not emit greenhouse gases. However, it is an established fact that the State has the power to control the collective Dutch emission level (and that it indeed controls it). Since the State's acts or omissions are connected to the Dutch emissions a high level of meticulousness should be required of it in view of the security interests of third parties (citizens), including Urgenda. Apart from that, when it became a signatory to the UN Climate Change Convention and the Kyoto Protocol, the State expressly accepted its responsibility for the national emission level and in this context accepted the obligation to reduce this emission level as much as needed to prevent dangerous climate change. Moreover, citizens and businesses are dependent on the availability of non-fossil energy sources to make the transition to a sustainable society. This availability partly depends on the options for providing "green energy" (compare, for instance, legislative proposal 34 058, Wind energy at sea, which is currently being reviewed by the Senate). The State therefore plays a crucial role in the transition to a sustainable society and therefore has to take on a high level of care for establishing an adequate and effective statutory and instrumental framework to reduce the greenhouse gas emissions in the Netherlands.

(v) the onerousness of taking precautionary measures

4.67.

In answering the question if and if so, to what extent, the State has the obligation to take precautionary measures, it is also relevant to find out whether taking precautionary measures is onerous. Various aspects can be discerned in this. For instance, it is important to know whether the measures to be taken are costly. Moreover, it may also be important to establish whether the precautionary measures are costly in relation to the possible damage. The effectiveness of the measures can also be relevant. Finally, significance should be attached to the availability of the (technical) possibilities to take the required measures.

4.68.

Subject of the dispute between the Parties is the question if the reduction target intended by the State or the reduction target ordered by Urgenda is the most cost effective. This concerns macro economic costs of a particular mitigation policy. The IPCC reports describe prognoses per scenario.

4.69.

Urgenda has argued that it is more cost-effective to maintain the (stricter) reduction target of 25-40% in 2020. Referring to European policy documents,

the State has alleged that it is also cost-effective to realise a 40% reduction in 2030 and 80% in 2050 (see 2.64 and 2.66). The court finds as follows.

4.70.

Assuming – as has been considered above – that in its foreign policy the State for a long time has started from a required reduction of 25-40% in 2020 for Annex I countries, compared to 1990 and consequently has committed to the EU's aim to formulate a 30% reduction target for 2020. Up to about 2010, the Netherlands had had a national reduction target of 30% for 2020 (compared to 1990). According to the then cabinet, in 2009, a scientifically established emission reduction of 25-40% by 2020 was needed in order to attain the 2°C target and to "stay on a plausible route to keep [that] target within reach" (see 2.73). Apparently, this reduction target was then deemed to be cost-effective. The State has not argued that the decision to let go of this national reduction target of 30% and instead follow the EU target of 20% for 2020, compared to 1990 (which according to the current prognoses comes down to a reduction in the Netherlands of about 17%), was driven by improved scientific insights or because it was allegedly not economically responsible to continue to maintain that 30% target. Nor did the State issue concrete details from which it could be derived that the reduction path of 25-40% in 2020 would lead to disproportionately high costs, or would not be cost-effective in comparison with the slower reduction path for other reasons. On the contrary: at the hearing of 14 April 2015, the State confirmed that it would be possible for the Netherlands to meet the EU's 30% target for 2020 provided that the condition for that target was met in the short term. Based on this, the court concludes that there is no serious obstacle from a cost consideration point of view to adhere to a stricter reduction target.

4.71.

The court also considers that in climate science and the international climate policy there is consensus that the most serious consequences of climate change have to be prevented. It is known that the risks and damage of climate change increase as the mean temperature rises. Taking immediate action, as argued by Urgenda, is more cost-effective, is also supported by the IPCC and UNEP (see 2.19 and 2.30). The reports concerned also prove that mitigation of greenhouse gas emissions in the short and long term is the only effective way to avert the danger of climate change. Although adaptation measures can reduce the effects of climate change, they do not eliminate the danger of climate change. Mitigation therefore is the only really effective tool.

4.72.
The court has deduced from the various reports submitted by the Parties that mitigation can be realised in various ways. This could include the limitation of the use of fossil fuels by means of, among other things, emissions trading or tax measures, the introduction of renewable energy sources, the reduction of energy consumption and reforestation and combating deforestation. The State has also referred to new technologies such as CO2 capture and storage. The court deems the State's viewpoint that a high level of CO2 reduction can be expected to be achieved in the future through CO2 capture and storage insufficiently supported. Such an expectation would be relevant if it has been established that the use of these techniques would enable such a reduction that the emission between now and 2050, as depicted in the first graph above, could be compensated. Without sufficient objection from the State, Urgenda has argued that in so far as these techniques are sufficiently available (CO2 capture and storage are still in the experimental phase) it is not plausible that techniques of this nature can be applied in the short term and therefore in time. Urgenda has also referred to the further regulations required for that. At the hearing, it was brought up that initiatives have been taken in various areas, such as for renewable energy (the legislative proposal 34 058 for wind energy at sea, referred to above) and for CO2 capture and storage, but that these initiatives are still in the preliminary stages without any concrete prospect of success. In the UNEP and IPCC reports, which the Parties have referred to, it is therefore emphasised that later intervention increases the need for new technologies, while the risks and options of these technologies are still uncertain.
4.73.
Based on its considerations here, the court concludes that in view of the latest scientific and technical knowledge it is the most efficient to mitigate and it is more cost-effective to take adequate action than to postpone measures in order to prevent hazardous climate change. The court is therefore of the opinion that the State has a duty of care to mitigate as quickly and as much as possible.
(vi) the discretion of the State to execute its public duties – with due regard for the public-law principles
4.74.
In answering the question whether the State is exercising enough care with its current climate policy, the State's discretionary power should also be considered, as stated above. Based on its statutory duty – Article 21 of the Constitution – the State has an extensive discretionary power to flesh out the

climate policy. However, this discretionary power is not unlimited. If, and this is the case here, there is a high risk of dangerous climate change with severe and life-threatening consequences for man and the environment, the State has the obligation to protect its citizens from it by taking appropriate and effective measures. For this approach, it can also rely on the aforementioned jurisprudence of the ECtHR. Naturally, the question remains what is fitting and effective in the given circumstances. The starting point must be that in its decision-making process the State carefully considers the various interests. Urgenda has stated that the State meets its duty of care if it applies a reduction target of 40%, 30% or at least 25% for the year 2020. The State has contested this with reference to the intended adaptation measures.

4.75.

The court emphasises that this first and foremost should concern mitigation measures, as adaptation measures will only allow the State to protect its citizens from the consequences of climate change to a limited level. If the current greenhouse gas emissions continue in the same manner, global warming will take such a form that the costs of adaptation will become disproportionately high. Adaptation measures will therefore not be sufficient to protect citizens against the aforementioned consequences in the long term. The only effective remedy against hazardous climate change is to reduce the emission of greenhouse gases. Therefore, the court arrives at the opinion that from the viewpoint of efficient measures available the State has limited options: mitigation is vital for preventing dangerous climate change.

4.76.

The State’s options are limited further by the private-law principles applicable to the State and mentioned above. After all, these principles were developed in response to the special risk of climate change and therefore limit the State’s options. This also applies, for instance, to the circumstance that Annex I countries, including the Netherlands, have taken the lead in taking mitigation measures and have therefore committed to a more than proportional contribution to reduction, in view of a fair distribution between industrialised and developing countries. Due to this principle of fairness, the State, in choosing measures, will also have to take account of the fact that the costs are to be distributed reasonably between the current and future generations. If according to the current insights it turns out to be cheaper on balance to act now, the State has a serious obligation, arising from due care, towards future generations to act accordingly. Moreover, the State cannot postpone taking precautionary measures based on the sole reason that there

is no scientific certainty yet about the precise effect of the measures. However, a cost-benefit ratio is allowed here. Finally, the State will have to base its actions on the principle of "prevention is better than cure".

4.77.

To all these principles it applies that if the State wants to deviate from them, it will have to argue and prove sufficient justification for the deviation. A justification could be the costs. The State should not be expected to do the impossible nor may a disproportionately high burden be placed on it. However, as has been considered above, it has neither been argued, nor has it become evident that the State has insufficient financial means to realise higher reduction measures. It can also not be concluded that from a macro economic point of view there are obstructions to choosing a higher emission reduction level for 2020.

4.78.

The State has argued that allowing Urgenda's claim, which is aimed at a higher reduction of greenhouse gas emission in the Netherlands, would not be effective on a global scale, as such a target would result in a very minor, if not negligible, reduction of global greenhouse gas emissions. After all, whether or not the 2°C target is achieved will mainly depend on the reduction targets of other countries with high emissions. More specifically, the States relies on the fact that the Dutch contribution to worldwide emissions is currently only 0.5%. If the reduction target of 25-40% from Urgenda's claim were met the State argues that this would result in an additional reduction of 23.75 to 49.32 Mt CO2-eq (up to 2020), representing only 0.04-0.09% of global emissions. Starting from the idea that this additional reduction would hardly affect global emissions, the State argues that Urgenda has no interest in an allowance of its claim for additional reduction.

4.79.

This argument does not succeed. It is an established fact that climate change is a global problem and therefore requires global accountability. It follows from the UNEP report that based on the reduction commitments made in Cancun, a gap between the desired CO2 emissions (in order to reach the climate objective) and the actual emissions (14-17 Gt CO2) will have arisen by 2030. This means that more reduction measures have to be taken on an international level. It compels all countries, including the Netherlands, to implement the reduction measures to the fullest extent as possible. The fact that the amount of the Dutch emissions is small compared to other countries does not affect the obligation to take precautionary measures in view of the

State's obligation to exercise care. After all, it has been established that any anthropogenic greenhouse gas emission, no matter how minor, contributes to an increase of CO2 levels in the atmosphere and therefore to hazardous climate change. Emission reduction therefore concerns both a joint and individual responsibility of the signatories to the UN Climate Change Convention. In view of the fact that the Dutch emission reduction is determined by the State, it may not reject possible liability by stating that its contribution is minor, as also adjudicated *mutatis mutandis* in the Potash mines ruling of the Dutch Supreme Court (HR 23 September 1988, NJ 1989, 743). The rules given in that ruling also apply, by analogy, to the obligation to take precautionary measures in order to avert a danger which is also the subject of this case. Therefore, the court arrives at the opinion that the single circumstance that the Dutch emissions only constitute a minor contribution to global emissions does not alter the State's obligation to exercise care towards third parties. Here too, the court takes into account that in view of a fair distribution the Netherlands, like the other Annex I countries, has taken the lead in taking mitigation measures and has therefore committed to a more than proportionte contribution to reduction. Moreover, it is beyond dispute that the Dutch per capita emissions are one of the highest in the world.

4.80.

Finally, the State has put forward that higher emission reductions in the ETS sector are not allowed. In support of this argument, the State has referred to the emission ceiling for the ETS sector as adopted by the EU, which is intended to have led to an EU-wide emission reduction of 21% by 2020, compared to 2005. In view of this ceiling and of the principles of EU law laid down in the TFEU, the State argues that it is not possible to impose a stricter (or less strict) reduction target of over 21% on ETS businesses established in the Netherlands. In so far as the State hereby argues that in allocating the emission allowances (emission allocation) among the ETS businesses the State should act in accordance with EU legislation and observe the ceiling stated therein, then this is correct. However, the court does not follow the State in this argument in so far as this means that a Member State is not allowed to reduce more than the amount adopted in EU policy. As has been stated previously, the State has determined a higher reduction target for the period up to 2010, namely 30%. Urgenda was right in arguing that regardless of the ceiling Member States have the option to influence (directly or indirectly) the greenhouse gas emissions of national ETS businesses by taking own, national measures. In its argument, Urgenda has named several

of such measures taken in other Member States, such as increasing the share of sustainable energy in the national electricity network in Denmark and the introduction of the carbon price floor taks in the United Kingdom, with which the price of CO2 emission has been increased. In response to Urgenda's argument, the State acknowledged in a more general sense that it is legally and practically possible to develop a national ETS sector policy that is more far-reaching than the EU's policy. It is of the opinion of the court that the European legislation discussed here does not prevent the State from pursuing a higher reduction for 2020.

4.81.

The court also does not follow the State's argument that other European countries will neutralise reduced emissions in the Netherlands, and that greenhouse gas emission in the EU as a whole will therefore not decrease. The phenomenon the State refers to and which could occur at various levels (between countries, but also between provinces, regions or on a global scale) and which could have various causes, is also known as the "waterbed effect" or "carbon leakage". AR5/2013 describes research results from 2012, which show that a mean 12% of carbon losses will have to be taken into account. The accompanying document to the announcement of the European Commission of 22 January 2014 ("summary of the effect assessment") referred to in 2.66 states that "so far there have been no signs" of carbon leakage. In view of this, it cannot be maintained that extra reduction efforts of the State would be without substantial influence.

4.82.

In so far as the State argues that a higher reduction path will decrease the "level playing field" for Dutch businesses, it failed to provide adequate explanations or supporting documents. This road would have been open to the State, as the Parties agree that some of the countries neighbouring the Netherlands have implemented a stricter national climate policy (United Kingdom, Denmark and Sweden) and as there are no indications that this has created an unlevel "playing field" for business in those countries. It is furthermore unclear which businesses the State is referring to: the climate policy can have a negative effect on one sector, while it can also have a positive effect on another sector. It is also unclear if and if so, to what extent, on a global level a stricter climate policy in the Netherlands will have any sort of effect on the position of businesses (including multinationals) compared tot heir nationally and internationally operating competitors. This argument is therefore rejected.

Conclusion about the duty of care and determining the reduction target

4.83.
Due to the severity of the consequences of climate change and the great risk of hazardous climate change occurring – without mitigating measures – the court concludes that the State has a duty of care to take mitigation measures. The circumstance that the Dutch contribution to the present global greenhouse gas emissions is currently small does not affect this. Now that at least the 450 scenario is required to prevent hazardous climate change, the Netherlands must take reduction measures in support of this scenario.
4.84.
It is an established fact that with the current emission reduction policy of 20% at most in an EU context (about 17% in the Netherlands) for the year 2020, the State does not meet the standard which according to the latest scientific knowledge and in the international climate policy is required for Annex I countries to meet the 2°C target.
4.85.
Urgenda is correct in arguing that the postponement of mitigation efforts, as currently supported by the State (less strict reduction between the present day and 2030 and a significant reduction as of 2030), will cause a cumulation effect, which will result in higher levels of CO2 in the atmosphere in comparison to a more even procentual or linear decrease of emissions starting today. A higher reduction target for 2020 (40%, 30% or 25%) will cause lower total, cumulated greenhouse gas emissions across a longer period of time in comparison with the target of less than 20% chosen by the State. The court agrees with Urgenda that by choosing this reduction path, even though it is also aimed at realising the 2°C target, will in fact make significant contributions to the risk of hazardous climate change and can therefore not be deemed as a sufficient and acceptable alternative to the scientifically proven and acknowledged higher reduction path of 25-40% in 2020.
4.86.
This would only be different if the reduction target of 25-40% was so disproportionately burdensome for the Netherlands (economically) or for the State (due to its limited financial means) that this target should be deviated from to prevent a great potential danger. However, the State did not argue that this is the case. On the contrary: the State also argues that a higher reduction target is one of the possibilities. This leads the court to the conclusion regarding this issue of the dispute that the State, given the limitation of its discretionary power discussed here, in case of a reduction below 25-40% fails to fulfil its duty of care and therefore acts unlawfully.

Although it has been established that the State in the past committed to a 30% reduction target and it has not been established that this higher reduction target is not feasible, the court sees insufficient grounds to compel the State to adopt a higher level than the minimum level of 25%. According to the scientific standard, a reduction target of this magnitude is the absolute minimum and sufficiently effective, for the Netherlands, to avert the danger of hazardous climate change, but the obligation to adhere to a higher percentage clashes with the discretionary power vested in the State, also with due regard for the limitation discussed here.

Attributability

4.87.

From the aforementioned considerations regarding the nature of the act (which includes the omission) of the government it ensues that the excess greenhouse gas emission in the Netherlands that will occur between the present time and 2020 without further measures, can be attributed to the State. After all, the State has the power to issue rules or other measures, including community information, to promote the transition to a sustainable society and to reduce greenhouse gas emission in the Netherlands.

Damages

4.88.

The State has argued that an allowance of one of Urgenda's claims, although it requests preventative legal protection, there is at least the *possibility* of damages in the form of a decrease in assets or loss of benefits. Although the State acknowledges that it is not required for damages to actually have been *incurred*, the State believes that it has to be established that Urgenda's interests are concretely at risk of being affected. The State also argues that it is insufficient that there is a risk in abstract terms or that there is a chance that anywhere in the world a risk of loss will occur for anyone. Urgenda has responded by stating that it has a sufficiently concrete interest.

4.89.

The court finds as follows. It is an established fact that climate change is occurring partly due to the Dutch greenhouse gas emissions. It is also an established fact that the negative consequences are currently being experienced in the Netherlands, such as heavy precipitation, and that adaptation measures are already being taken to make the Netherlands "climate-proof". Moreover, it is established that if the global emissions, partly caused by the Netherlands, do not decrease substantially, hazardous climate change will probably occur. In the opinion of the court, the possibility of damages for those whose interests Urgenda represents, including current and

future generations of Dutch nationals, is so great and concrete that given its duty of care, the State must make an adequate contribution, greater than its current contribution, to prevent hazardous climate change.

Causal link

4.90.

From the above considerations, particularly in 4.79, it follows that a sufficient causal link can be assumed to exist between the Dutch greenhouse gas emissions, global climate change and the effects (now and in the future) on the Dutch living climate. The fact that the current Dutch greenhouse gas emissions are limited on a global scale does not alter the fact that these emission contribute to climate change. The court has taken into consideration in this respect as well that the Dutch greenhouse emissions have contributed to climate change and by their nature will also continue to contribute to climate change.

Relativity

4.91.

The government's care for a safe living climate at least extends across Dutch territory. In view of the fact that Urgenda also promotes the interests of persons living on this territory now and in the future, the court has arrived at the opinion that the breached security standard – exercising due care in combating climate change – also extends to combating possible damages incurred by Urgenda as a result of this, thereby meeting the so-called relativity requirement.

4.92.

No decision needs to be made on whether Urgenda's reduction claim can als be successful in so far as it also promotes the rights and interests of current and future generations from other countries. After all, Urgenda is not required to actually serve that wide "support base" to be successful in that claim, as the State's unlawful acts towards the current or future population of the Netherlands is sufficient.

Conclusion regarding the State's legal obligation

4.93.

Based on the foregoing, the court concludes that the State – apart from the defence to be discussed below – has acted negligently and therefore unlawfully towards Urgenda by starting from a reduction target for 2020 of less than 25% compared to the year 1990.

E. The system of separation of powers

4.94.

The main point of this dispute concerns if allowing Urgenda's main claim – an order for the State to limit greenhouse gas emissions further than it has currently planned –would constitute an interference with the distribution of powers in our democratic system. Urgenda has answered this question in the negative and the State, relying on the *trias politica*, has arrived at an opposing viewpoint.

4.95.

The court states first and foremost that Dutch law does not have a full separation of state powers, in this case, between the executive and judiciary. The distribution of powers between these powers (and the legislature) is rather intended to establish a balance between these state powers. This does not mean that the one power in a general sense has primacy over the other power. It does mean that each state power has its own task and responsibilities. The court provides legal protection and settles legal disputes, which it *must* to do this if requested to do so. It is an essential feature of the rule of law that the actions of (independent, democratic, legitimised and controlled) political bodies, such as the government and parliament can – and sometimes must – be assessed by an independent court. This constitutes a review of lawfulness. The court does not enter the political domain with the associated considerations and choices. Separate from any political agenda, the court has to limit itself to *its own*domain, which is the application of law. Depending on the issues and claims submitted to it, the court will review them with more or less caution. Great restraint or even abstinence is required when it concerns policy-related considerations of ranging interests which impact the structure or organisation of society. The court has to be aware that it only plays one of the roles in a legal dispute between two or more parties. Government authorities, such as the State (with bodies such as the government and the States-General), have to make a general consideration, with due regard for possibly many more positions and interests.

4.96.

This distinctive difference between these state powers does not automatically provide an answer to the question how the court should decide if it finds that allowing a claim in a dispute between two parties has substantial consequences for third parties which are not part of the proceedings. A decision between two private parties in itself does not have consequences for the position of third parties, so that the position of these third parties does not need to be considered in principle. However, a claim seeking an order such as is the case here, in a case against central government, could have

direct or indirect consequences for third parties. This prompts the court to exercise restraint in allowing such claims, all the more if the court does not have a clear picture of the magnitude and meaning of these consequences.

4.97.

It is worthwhile noting that a judge, although not elected and therefore has no democratic legitimacy, has democratic legitimacy in another – but vital – respect. His authority and ensuing "power" are based on democratically established legislation, whether national or international, which has assigned him the task of settling legal disputes. This task also extends to cases in which citizens, individually or collectively, have turned against government authorities. The task of providing legal protection from government authorities, such as the State, pre-eminently belong to the domain of a judge. This task is also enshrined in legislation.

4.98.

In a general sense, given the grounds put forward by Urgenda, the claim does not fall outside the scope of the court's domain. The claim essentially concerns legal protection and therefore requires a "judicial review". This does not mean that allowing one or more components of the claim can also have political consequences and in that respect can affect political decision-making. However, this is inherent in the role of the court with respect to government authorities in a state under the rule of law. The possibility – and in this case even certainty – that the issue is also and mainly the subject of political decision-making is no reason for curbing the judge in his task and authority to settle disputes. Whether or not there is a "political support base" for the outcome is not relevant in the court's decision-making process. This does not mean that the requirement of restraint referred to above applies in full to judgments with unforeseaable or difficult to assess consequences for third parties.

4.99.

The court has also established that the State has failed to argue that it does not have the *possibility*, at law or effectively, to take measures that go further than those in the current national climate policy. The follows from the fact that the EU is willing to pursue further-reaching targets if other countries do more than currently can be expected. Nor has the State argued that the court should apply equally Book 6, Section 168, subsection 1 of the Dutch Civil Code, which offers the court the option to reject a claim intended to prohibit an wrongful conduct based on the fact that this conduct should be tolerated due to compelling social interests. The court is of the opinion that the opposite has occurred in this case, namely that based on the facts agreed

between the Parties the State must take further-reaching measures to realise the 2° target.

4.100. It deserves separate discussion that climate policy is to a great extent adopted in an international context, although it can also be established at state level. The State has put forward that allowing the claim regarding the reduction order would damage the Netherlands' negotiation position at, for instance, the conference in Paris in late 2015. In the opinion of the court, this does not have independent significance in the sense that – if the court rules that the law obliges the State towards Urgenda to realise a certain target – the government is not free to disregard that obligation in the context of international negotiations. However, it applies here too that the court should exercise restraint given the possibility that the consequences of the court's intervention are difficult to assess.

4.101. In this, it is relevant to note that the claim discussed here is not intended to order or prohibit the State from taking *certain* legislative measures or adopting a *certain* policy. If the claim is allowed, the State will retain full freedom, which is pre-eminently vested in it, to determine how to comply with the order concerned. The court has also taken into account here that the State has failed to argue that he is actually incapable of executing the order. The State has also failed to argue here that other, fundamental interests it is expected to promote would be damaged.

4.102. The court has arrived at the conclusion regarding the issue discussed here that the aspects associated with the *trias politica* in general do not constitute an obstacle to allowing one or more components of the claim, particularly those related to ordering the reduction concerned. The restraint which the court should exercise does not result in a further limitation than that ensuing from the State's discretionary power, discussed previously.

F. Consequences of the foregoing for components of the claim

The reduction order

4.103. The essence of Urgenda's claim is formed by that which has been discussed on numerous occasion in section 7. Based on all the above, this component in its primary form is allowable, with the proviso that for an order that goes beyong the 25% reduction, there is insufficient grounds for the lower limit of the 25-40% bandwidth. The rest of this component of the claim is hereby rejected.

Declaratory decisions

4.104. Urgenda initially claimed that the court should order the State to pursue an emission reduction of 40%, or at least 25%, as of end 2020 compared to 1990 and to rule that the State acts unlawfully if it fails to

pursues that reduction. Urgenda changed its claim in its reply, explaining among other things that it realises that the claim concerning the order is "a tall order". The change of the claim provides for various declaratory decisions dealing with sub-issues which the court is already supposed to answer "working up" to the assessment of the claim regarding the reduction order. In its reply, Urgenda answered the court's question in the affirmative whether these declaratory decisions would be "available separately", meaning: apart from the reduction order in case the order is not allowable. In this context, Urgenda has argued that it attaches importance to the separate declaratory decisions, as they could contribute to realising its objectives. Urgenda also believes they could create a support base and initiate a discussion. Moreover, the declaratory decisions also serve the interest of emotional redress. At the hearing, Urgenda also repeated that the declaratory decisions can be viewed as the steps the court has to take to arrive at the reduction order.

4.105. Since the court deems the reduction order allowable in the aforementioned manner, the court is of the opinion that Urgenda does not have sufficient interest in allowing the declaratory decisions under 1-6 in 3.1. Partly in view of Urgenda explanation paraphrased above, the court fails to see how the remaining declaratory decisions could add to Urgenda's primary objective and the result it has already obtained. The State's objections to these components therefore do not need to be discussed.

The information order

4.106. Regarding the other claim, the order to the State to inform Dutch society in the manner ordered in Urgenda's claim, the court finds as follows. In Urgenda's vision, the State contributes to issuing false community information about the severity and urgency of the climate problems, thereby hindering Urgenda in realising its objectives. In view of the fact that Urgenda has argued – uncontested by the State – that allowing the claim could contribute to realising its objectives, or at least could contribute to creating a support base for these objectives or to initiating a discussion about the subject, Urgenda has proved to have sufficient interest in the relevant components of the claim.

4.107. However, these components are not allowable on substantive grounds. The State can be expected to adequately inform society about the climate policy to be pursued by it, in line with the court's ruling in this case. However, there is no legal rule that prescribes for cases such as these that the State has to issue a public statement or warning with a contents "dictated" by Urgenda, while it is still entirely unclear *which* measures the

States will take. The manner in which the State chooses to inform society about the risks of climate change and the climate policy to be pursued – within the bounds of law – is entirely at the sole discretion of the State. There is no cause for assuming beforehand that the State will not find an appropriate way of informing society, within these margins. This means that the court has no role to play here.

G. Urgenda's standing (acting on behalf of the principles)

4.108. As announced in 4.10, the court now comes back to the position of the 886 principles whose interests Urgenda also promotes.

4.109. In 4.45 and 4.46, the court considered that Urgenda itself cannot rely on Articles 2 and 8 ECHR, but that these treaty obligations have contributed to the detailing of the standard of care under Book 6, Section 162 of the Dutch Civil Code invoke by Urgenda towards the State. In its argument put forward at the hearing Urgenda stated that regarding the claim which is based on Articles 2 and 8 ECHR, the position of the individual claimants (its principals) is "possibly stronger" than its own position. The court currently does not have sufficient details about the individual claimants to be able to determine that this interest indeed exists. Even if it is assumed that the individual claimants can rely on Articles 2 and 8 ECHR, their claims cannot lead to a decision other than the one on which Urgenda can rely for itself. In this situation, the court finds that the individual claimants do not have sufficient (own) interests besides Urgenda's interest. Partly in view of practical grounds, this had led the court to reject the claim in so far as it has been instituted on behalf of the claimants. The question of *locus standi* can therefore be left unanswered.

H. Costs of the proceeding

4.110. Regarding the key point of these proceedings, the order to reduce greenhouse gas emissions, Urgenda has mainly succeeded in its action. From this it follows that the State must be ordered to pay the costs of the proceedings incurred by Urgenda. In estimating the these costs, the court deviates from the usual fixed rate for a claim for "an unspecified amount", such as the one discussed here, namely € 452 allocated per component. However, as this is an exceptional case – exceptional in the sense of complicated subject matter and the major social and financial interests involved – the court deems the maximum fixed rate of € 3,210 per component appropriate. Urgenda's lawyer's fee is therefore assessed at € 12,840 (four components of € 3,210 each). Urgenda's disbursements total € 681.82 (€ 92.82 incl. VAT for the costs of the summons and € 589 in court fees). The State is hereby ordered to pay € 13,521.82 in costs of the

proceedings incurred by Urgenda, plus statutory interest as claimed. There are no grounds for an order to pay subsequent costs, as the cost award is also enforceable for the subsequent costs. The court sees no ground for a cost award for the individual claimants on whose behalf Urgenda acts. This results in the below-mentioned ruling regarding this point.

5THE RULING

The court:

5.1.

orders the State to limit the joint volume of Dutch annual greenhouse gas emissions, or have them limited, so that this volume will have reduced by at least 25% at the end of 2020 compared to the level of the year 1990, as claimed by Urgenda, in so far as acting on its own behalf;

5.2.

orders the State to pay the costs of the proceedings incurred by Urgenda (acting on its own behalf) and estimates these costs at € 13,521.82, plus statutory interest, as from fourteen days following this judgment;

5.3.

declares this judgment provisionally enforceable to this extent;

5.4.

compensates the other costs of the proceedings, in the sense that the Parties bear their own costs to this extent;

5.5.

rejects all other claims.

This judgment was passed by *mr.* H.F.M. Hofhuis, *mr.* J.W. Bockwinkel and *mr.* I. Brand and pronounced in open court on 24 June 2015.[27]

[1]Translator's note: *mr.* is the traditional title for university graduates in law. The abbreviated Dutch title is written before the name.

[2]Synthesis Report 2007, pp. 64/65; Exhibit U9 (Urgenda's Exhibits are hereinafter expressed with a number after the letter U; and the State's Exhibits with a number after the letter S).

[3]Table from: Climate Change 2007: Mitigation of Climate Change, Chapter 3: Issues related to mitigation in the long-term context, p. 229, Exhibit U43.

[4]See note 2, p. 227.

[5]Climate Change 2007: Mitigation of Climate Change, Chapter 13: Policies, Instruments and Co-operative Arrangements, p. 776, prod. U42.

[6]See the Technical Summary named in 2.16, p. 33.

[7]Climate Change 2013: The Physical Science Basis. Summary for Policymakers of Working Group I, pp. 2, 3 and 17, Exhibit U6.

[8]Climate Change 2014: Mitigation of Climate Change. Summary for Policymakers of Working Group III, pp. 10-13, Exhibit U91.
[9]See note 7, p. 6
[10]See note 7, p. 9.
[11]See: http://unfccc.int, FCC/KP/CMP/2010/12/Add.1, p. 3, and also Exhibit U89, which contains the draft decision.
[12]COM (2007) 2 final, Exhibit U24.
[13]COM (2008) 16 final, Exhibit U30.
[14]COM (2010) 265 final, Exhibit U29.
[15]COM (2011) 112 final.
[16]2011/2095 (INI).
[17]COM (2014) 15 final.
[18]EUCO 169/14.
[19]COM (2015) 81 final.
[20]*Parliamentary Papers II*, 2010/11, 32 667, no. 3, pp. 9/10.
[21]*Parliamentary Papers II*, 2013/14, 32 813, no. 70, pp. 16, 19 and 20; Exhibit S2.
[22]*Kamerstukken II* 1991/92, 22 486, nr. 3, p. 22.
[23]See http://pbl.nl/publicaties/klimaatverandering-samenvatting-van-het-vijfde-ipcc-assessment-en-een-vertaling-naar-nederland, p. 33, and http://knmi.nl/cms/content/118841/ipcc_effecten_klimaatverandering_steeds_duidelijker.
[24]See note 2, p. 199.
[25]See among other sources, E. Bauw, Green Series, Unlawful Act (*Onrechtmatige daad*), scheme from Book 6 of the Dutch Civil Code, note 12, W. Braams, A. van Rijn and M. Scheltema, Climate and Law, Deventer: Kluwer 2010, p. 5 and Chr. H. van Dijk, Private-law liability for global warming, NJB 2007, p. 2333.
[26]M. Goote and E. Hey, Chapter 19: International Environmental Law (*Internationaal milieurecht*), in N. Horbach, R. Lefeber, and O. Ribbelink (ed.), International Law Manual (*Handboek Internationaal Recht*), The Hague: T.M.C. Asser press 2007, p. 19-21.
[27]type: