3.3 Mankind has been using energy, primarily obtained by burning fossil fuels (coal, oil and gas), on a massive scale since the beginning of the Industrial Revolution. Carbon dioxide (CO2) is released in this process. Some of the released CO2 is emitted into the atmosphere, where it lingers for hundreds of years, or even longer. The remainder of the released CO2 is absorbed by the ecosystems of forests and oceans. This absorption capability is gradually decreasing due to deforestation and the warming of sea water.

3.4 CO2 is the main greenhouse gas which, together with other greenhouse gases, captures heat emitted by the earth in the atmosphere. This is known as the greenhouse effect, which intensifies as more greenhouse gases end up in the atmosphere. This in turn increasingly warms the earth. The climate system has a delayed response to greenhouse gas emissions: greenhouse gases emitted today will not have their full warming effect for 30 to 40 years. Greenhouse gases other than CO2 include methane, nitrous oxide and fluorinated gases. The unit 'parts per million' (hereinafter: ppm) is used to express the concentration of greenhouse gases in the atmosphere. The average CO2 concentration in 2022 was about 417 ppm. There is a direct, linear link between human-caused greenhouse gas emissions, in part caused by the burning of fossil fuels, and global warming. The latest understanding is that the earth has now warmed by about 1.2ºC relative to the average temperature at the beginning of the Industrial Revolution. Over the past decades, global CO2 emissions have increased by 2% per year.

2. *Scope 1, 2 and 3 emissions*

3.5 The 'Greenhouse Gas Protocol' (GHG Protocol) is a global standard for the accounting and reporting of greenhouse gas emissions by companies, governments and other organizations. The GHG Protocol categorises a company's emissions in scope 1, 2 and 3 emissions:

- scope 1: direct emissions from installations that are owned or controlled in full or in part by the company;

- scope 2: indirect emissions from third-party installations from which the company purchases electricity, steam or heat for its business activities;

- scope 3: other indirect emissions not included in scope 2 generated in the company's value chain, including emissions generated from the use or consumption of products the company supplies to third parties, such as other organizations or consumers.

Shell reports its greenhouse gas emissions in accordance with the GHG Protocol methodology.

3. *Scientific consensus on climate change and mitigation pathways*

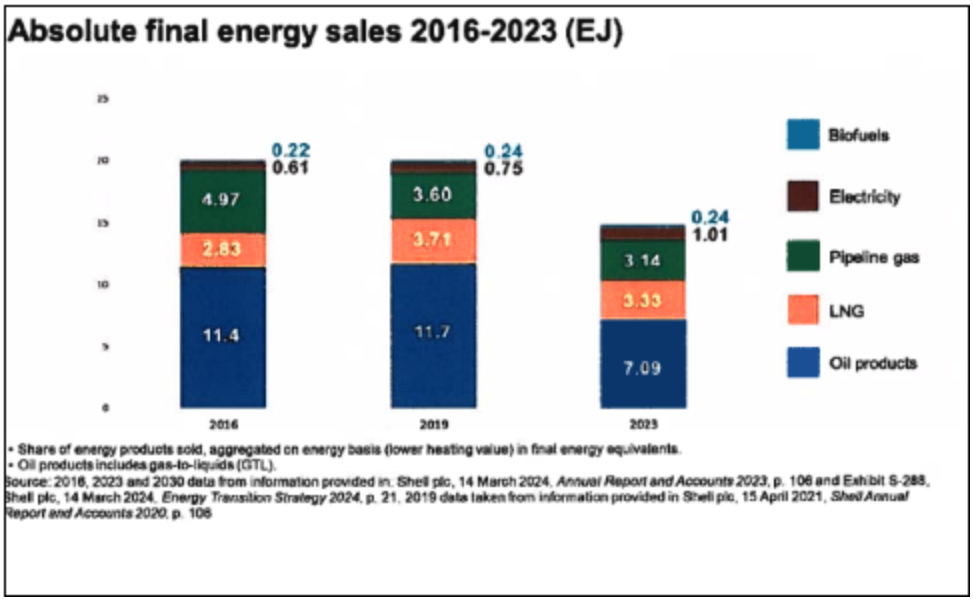
3.6 The global impacts of climate change are apparent from the reports of the 'Intergovernmental Panel on Climate Change' (hereinafter: IPCC), the United Nations climate panel in place since 1988, among other sources. The IPCC is "the leading international body for the assessment of climate change". It focuses on gaining insight into all aspects of climate change through scientific research. The IPCC does not conduct research itself, but studies and assesses the most recent scientific and technical information that becomes available worldwide. The IPCC is not just a scientific but also an intergovernmental organization, of which 195 countries are a member, including the Netherlands.

3.7 It follows from IPCC reports and other sources that there has long been consensus among climate scientists that the Earth's average temperature should not increase by more than 2ºC relative to the average temperature in pre-industrial times. If the concentration of greenhouse gases in the atmosphere stays below 450 ppm, climate science says there is a good chance that this target will be reached. From about 2015, further insight has shown that a safe temperature rise should not exceed 1.5ºC with a corresponding concentration level of greenhouse gases of no more than 430 ppm.

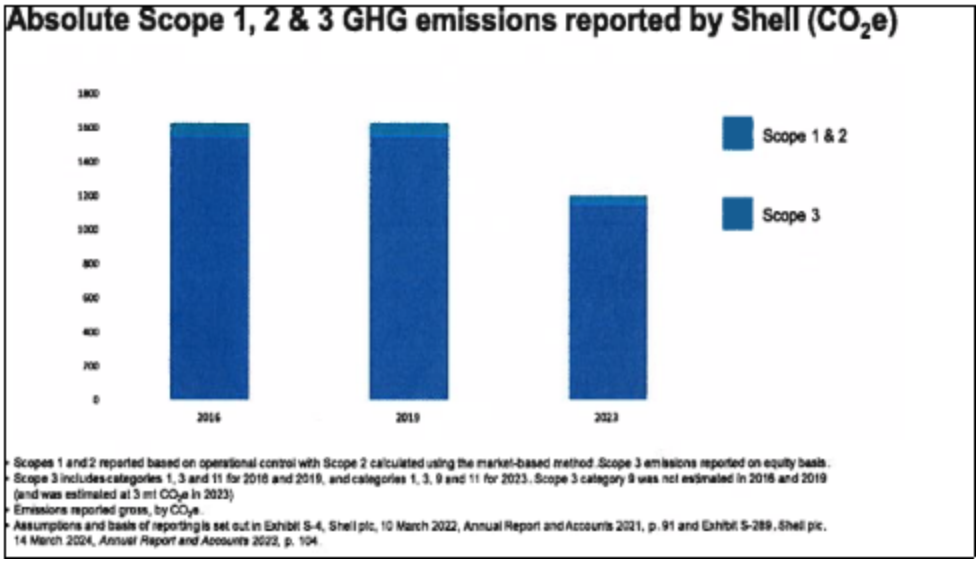
3.8 The IPCC's 'Synthesis Report Climate Change 2023' states the following on the current state of affairs in its Summary for Policymakers:

"A.2 Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts and related losses and damages to nature and people *(high confidence)* . Vulnerable communities who have historically contributed the least to current climate change are disproportionately affected *(high confidence)* .

(…)



3.44 The following diagram shows Shell's absolute scope 1, 2 and 3 greenhouse gas emissions over the period 2016-2023 (expressed in CO2 equivalent (CO2e). The diagram shows that scope 1, 2 and 3 emissions remained roughly the same between 2016 and 2019, and decreased in 2023 relative to 2019.



3.45 The table below shows Shell's individual scope 1, 2 and 3 emissions over the period 2016-2023 in absolute numbers (in million tonnes of CO2 equivalent). By far the majority of emissions (about 95%) are scope 3 emissions. These are down from 1,551 in 2019 to 1,147 in 2023 (a 26% decrease).

	2016	2019	2020	2021	2022	2023	Target 2030	Target 2050
scope 1	72	70	63	60	51	50	50% relative to 2016	0
scope 2	11	10	8	8	7	7	50% relative to 2016	0
scope 3	1,545	1,551	1,305	1,299	1,174	1,147	No target	0

3.46 Scope 3 emissions are broken down as follows (in million tonnes of CO2 equivalent):

therein are factored into the interpretation of the unwritten social standard of care. These provisions also provide protection against the effects of dangerous climate change due to global warming caused by CO2 emissions. It follows from (among other sources) the UN Guiding Principles on Business and Human Rights (UNGP) that the responsibility of companies to respect human rights is a global standard of behaviour to which all companies are expected to adhere, wherever they operate. It is not enough for companies to monitor developments and follow the measures states take.

- A great deal can be expected of Shell in terms of its responsibility to refrain from infringing on the human rights of others and to address negative impacts on human rights in which it plays a part. This also follows from the UNGP, which stipulates that a company should endeavour to prevent or mitigate adverse human rights impacts that are directly linked to its activities, products or services through its business relations, even if the company itself has not contributed to those adverse impacts.
- Due to Shell's far-reaching control and influence over the Shell Group, Shell's reduction obligation is an obligation of results for emissions associated with the Shell Group's own activities (scope 1).
- With regard to business relations (including end-users) of the Shell Group, the Shell Group has a significant best-efforts obligation to minimise the CO2 emissions it generates. Shell has control and influence over its suppliers' scope 2 emissions through its procurement policy. Through the energy package it produces and sells, Shell has control and influence over the Shell Group's scope 3 emissions released by end-users, even though it will have to take into account existing commitments. With due observance of its existing commitments, Shell is free to decide not to make new investments in exploration and fossil fuels, and to change the energy package offered by the Shell Group.
- The consensus in climate science is that mitigation pathways providing for a 45% reduction by 2030 relative to global CO2 emissions in 2010, and a net 100% reduction by 2050, maximise the likelihood of avoiding the most severe impacts of dangerous climate change (that is, warming to a maximum of 1.5oC). Furthermore, it is generally accepted that there should be room for scenarios with negative emissions. The absolute reduction of 45% by 2030 claimed by Milieudefensie et al. goes beyond this and is therefore disregarded.
- Activities of the Shell group are covered by the ETS system. These emission allowances relate to scope 1 emissions. The ETS system has an indemnifying effect up to the reduction percentage it seeks to achieve. This means that Shell does not have an additional obligation with respect to scope 1 and 2 emissions in the EU that fall under the system and scope 3 emissions of end-users in the EU.

5 The claims on appeal

5.1 Shell has submitted ten grounds for appeal and has requested the court of appeal to reverse the contested judgment and to declare, by way of a provisionally enforceable ruling, that Milieudefensie et al. have no cause of action, or at least to dismiss Milieudefensie et al.'s claims, and to order Milieudefensie et al. to pay the costs of the proceedings in both instances, plus subsequent costs and statutory interest.

5.2 In the document for a change of claim on appeal Shell has indicated that it no longer maintains its objections to the application of Dutch law to the claims brought by Milieudefensie et al. This concerns the (sub) grounds for appeal developed under the umbrella of ground for appeal IV against the district court's decisions that led to the ruling that Dutch law applied. Shell does uphold the part of ground for appeal IV in which it is argued that account must be taken of local safety regulations and rules of conduct in all countries where the conduct in question takes place (statement of appeal, nos. 10.5.2(d) and 10.5.18).

5.3 Milieudefensie et al. have requested the court of appeal to uphold the contested judgment, if necessary with amendment of the grounds, and to order Shell to pay the costs of the appeal proceedings, plus subsequent costs and statutory interest. In addition, Milieudefensie et al. want that the court of appeal:

☐ further clarifies how Shell should deal with CO2 offsets when fulfilling its reduction obligation, in the sense that Shell has a significant best-efforts obligation to minimise the use of CO2 offsets;

☐ considers that Shell's legal obligation should be characterised as an obligation of results, or clarifies that the significant best-efforts obligation does not mean that Shell may make the necessary proactive action to reduce its scope 1, 2 and 3 emissions dependent on customers' action;

☐ clarifies that the ETS system has no indemnifying effect at all, or that the court of appeal clarifies, confirms and upholds the district court's interpretation that any indemnifying effect cannot detract from complying with the reduction order;

The commentary to this chapter mentions, among other things, that companies have an important role in contributing to the reduction of greenhouse gases to net zero, in keeping with the best available science as established by the IPCC. To this end, companies should set reduction targets (short-, medium- and long-term) not only for scope 1 and 2, but also, if applicable, for scope 3.

4. *Other initiatives*

7.23 The court further points to a range of other (informal and non-binding) regulations and guidelines, from international organisations and private initiatives, which take as their starting point that companies have a responsibility on climate.

a. The 'United Nations Global Compact' is an initiative of non-state actors dating from the year 2000, inviting companies worldwide to work towards 'corporate sustainability' and 'corporate social responsibility'. Shell is one of the founding members of Global Compact. To achieve the goal, a number of 'Sustainable Development Goals' (SDGs) have been drawn up, which address global issues such as poverty, hunger, clean water and inequality. SDG 13 addresses 'Climate action: Take urgent action to combat climate change and its impacts'.

The 'International Organisation for Standardization' (ISO) published its 'Net Zero Guidelines' in 2022. The report contains recommendations for organisations to achieve net zero greenhouse gas emissions as soon as possible. The Guidelines define, for example:

"Organizations set long-term targets to meet net zero by or before 2050, and interim targets to achieve substantial emissions reductions of Scope 1, Scope 2 and Scope 3 emissions by 2030 or earlier. Subsequent targets are no more than five years from the preceding target and support long-term commitments for ongoing action towards and beyond 2050."

The Exponential Roadmap Initiative's '1.5oC Business Playbook' has been developed for the benefit of companies wishing to commit to the 1.5oC target.
To this end, the Playbook contains a "strategic framework for business planning, development, and target setting." The Playbook describes and elaborates on the four pillars for climate action: "1) Reduce your own emissions; 2) Reduce your value chain emissions; 3) Provide and scale solutions; 4) Accelerate climate action in society".

The Race to Zero initiative – endorsed by the United Nations – is a campaign calling on non-state actors, including companies, to take immediate action:

"to halve global emissions within this decade and deliver a healthier, fairer, zero carbon world in time to achieve the goals of the Paris Agreement."

It lists as an interim target towards net-zero emissions by 2050:

"[to] set an interim target to achieve in the next decade, which reflects maximum effort toward or beyond a fair share of the 50% global reduction in CO2 by 2030."

A similar call is also made in a report by the United Nations' 'High-level expert group on the net zero emissions commitments of non-state entities'. The 2022 report 'Integrity matters: net zero commitments by business, financial institutions, cities and regions' ((hereinafter: the UN expert report) contains recommendations for (inter alia) companies committing to the Paris Agreement targets. The commentary on the first recommendation ("Announcing a Net Zero Pledge") includes the following:

"While governments must take the lead in reducing emissions, action by non-state actors is critical to achieving global net zero.

In the years since this call, many corporations, cities, states and regions have made voluntary commitments to reach net zero. This is commendable, but in the absence of regulation, too many of these pledges are not aligned with the science, do not contain enough detail to be credible, and use the terms "net zero" or "net zero aligned" (as well as many other similar terms) inconsistently. Deceptive or misleading net zero claims by non-state actors not only erode confidence in net zero pledges overall, they undermine sovereign state

products. CBAM applies to sectors with high emission intensity, such as cement, aluminium, electricity, fertiliser, hydrogen, iron and steel sectors, and with a high risk of relocation of activities outside the EU. Shell has argued that many of its customers belong to these sectors. Shell has further stated that the scope of CBAM is expected to expand over time to include all EU ETS sectors.

7.32 Since the district court issued its judgment, the EU ETS system's relevance has increased. In the contested judgment, the district court considered that Shell was entitled to consider that the interests to be taken into account had been fully and properly weighed when the emission allowances were granted. At issue was the reduction goal pursued by the EU ETS system. The district court considered that, to this extent, the EU ETS has indemnifying effects. According to the district court, this means that – as far as the reduction goal of the EU ETS system is concerned – Shell has no additional obligation with regard to the scope 1 and 2 emissions covered by that system. However, the EU ETS system only covers a small part of the Shell group's total emissions. Only for those emissions, Shell does not need to adjust its policy, the district court stated.

7.33 On appeal, Shell explained that its European scope 1 and 2 emissions are largely covered by the EU ETS system: 75-100% of its scope 1 emissions and 100% of its scope 2 emissions. Moreover, Shell explained that there are currently 36 ETS systems in place worldwide and that these systems cover just over 40% of Shell's global scope 1 and 2 emissions.

7.34 Milieudefensie et al. have argued that Shell (in 2019) generated only 16.6% of its turnover in the EU and that just 5% of Shell's emissions fall under scope 1 or 2. On this basis, Milieudefensie et al. estimate that only a small percentage (7.6%) of Shell's global scope 1, 2 and 3 emissions fall under the EU ETS system. Furthermore, according to Milieudefensie et al., only 17% of global emissions are covered by any form of an emissions trading scheme, so the impact of emissions trading schemes on Shell's emissions is not particularly large.

7.35 Based on Shell's figures and the contested judgment, the court of appeal understands that Shell's European CO2 emissions in scope 1 and 2 allegedly fall (almost) completely outside the scope of the district court's order. It is worth noting here that the EU ETS system cannot easily be reconciled with the claims of Milieudefensie et al. It does not fit well with the EU ETS system that Shell would have to reduce its 'European emissions', for which it obtains and then surrenders emission allowances, by 45%. The EU ETS system does not achieve the reduction of CO2 emissions by forcing companies to reduce their emissions by a certain percentage. The goal is achieved through an emissions cap combined with freely tradable emission allowances.

3. *The EU ETS2 Directive*

7.36 A second emissions trading system (EU ETS2) was introduced in 2023.**33** EU ETS2 will apply to fuels supplied to the built environment, road transport and some other sectors, such as small industries. The system will be introduced gradually over the next few years. EU ETS2 has a greenhouse gas reduction goal of 42% by 2030 compared to 2005. Within the EU ETS2 system, not the ultimate emitters (building users, vehicle drivers) but the suppliers of fuels have an obligation to buy emission allowances. The suppliers will pass on the price to their customers, so that the actual emitters do end up paying for their emissions. There are no free allowances; allowances can be bought at auctions. The European Union has taken measures to avoid immediate high costs for end-users when the system is introduced. These include a cap on the CO2 price and stricter vehicle emission standards that could result in end-users spending less money on petrol.

7.37 Shell has clarified that, as a fuel supplier, it will be subject to EU ETS2. Since half of Shell's reported scope 3 emissions are from the 'transport' sector and a quarter from the 'buildings' sector, a large part of Shell's activities within the EU will fall under EU ETS2, Shell has stated.

7.38 In short, if Shell's expectations about the functioning of EU ETS2 come true, a significant part of its European scope 3 emissions will fall under the scope of EU ETS2.

4. *The CSRD*

7.39 The Corporate Sustainability Reporting Directive (CSRD)**34** ensues from the European Green Deal. Under the CSRD, larger companies will have to prepare a sustainability report as part of their annual report from fiscal year 2024. Companies must include in their annual report information needed to understand the company's impact on sustainability issues, as well as information needed to understand how sustainability issues affect the company's development, performance and position.

7.40 The information to be provided should include a brief description of the company's business model and strategy, including, inter alia, the company's plans to ensure that the business model and strategy are compatible with the transition to a sustainable economy and with limiting global warming to 1.5oC and the

European Union's goal of achieving climate neutrality by 2050. The information should also include a description of the company's time-bound targets, including (where appropriate) the absolute reductions in CO2 emissions for at least 2030 and 2050, as well as whether the sustainability targets to be achieved by the company are based on scientific evidence.

7.41 The reporting requirements under the CSRD are specified in the (comprehensive) European Sustainability Reporting Standards (ESRS).**35** Under the ESRS, companies must report on their scope 1, scope 2 and scope 3 emissions and companies with a climate transition plan must, among other things, provide information on the targets they have set for the reduction of their greenhouse gas emissions in scope 1, scope 2 and (where applicable) scope 3. Shell will have to comply with the reporting requirements in the CSRD. No (direct) reduction obligations for Shell arise from this directive.

5. *The CSDDD*

7.42 The Corporate Sustainability Due Diligence Directive of 13 June 2024 (CSDDD)**36** also ensues from the European Green Deal. During the oral hearing on appeal, the (then) most recent draft text, which had been approved by the 'COREPER' (the Committee of Permanent Representatives of the Member States) on 15 March 2024, was discussed with the parties. As far as relevant, this draft text is (largely) in line with the final text. Article 1(1) CSDDD defines the subject matter of the directive:

"1. This Directive lays down rules on:

a) obligations for companies regarding actual and potential human rights adverse impacts and environmental adverse impacts, with respect to their own operations, the operations of their subsidiaries, and the operations carried out by their business partners in the chains of activities of those companies;

b) liability for violations of the obligations as referred to in point (a); and

c) the obligation for companies to adopt and put into effect a transition plan for climate change mitigation which aims to ensure, through best efforts, compatibility of the business model and of the strategy of the company with the transition to a sustainable economy and with the limiting of global warming to 1.5oC in line with the Paris Agreement."

7.43 Companies falling within the scope of the CSDDD must adopt and implement a climate transition plan that ensures the company's business model and strategy are compatible with the goal of limiting global warming to 1.5oC, in line with the Paris Agreement. In addition, business model and strategy should be compatible with the European Union's goal of achieving climate neutrality by 2050. Article 22(1), paragraph one, CSDDD determines that Member States shall ensure that companies falling within the scope of the directive:

"adopt and put into effect a transition plan for climate change mitigation which aims to ensure, through best efforts, that the business model and strategy of the company are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5oC in line with the Paris Agreement and the objective of achieving climate neutrality as established in Regulation (EU) 2021/1119, including its intermediate and 2050 climate neutrality targets, and where relevant, the exposure of the company to coal-, oil- and gas-related activities.

Clause 73 of the preamble states the following on this:

"Such requirements should be understood as an obligation of means and not of results. Being an obligation of means, due account should be given to the progress companies make, and the complexity and evolving nature of climate transitioning. While companies should strive to achieve the greenhouse gas emission reduction targets contained in their plans, specific circumstances may lead to companies not being able to reach these targets, where this is no longer reasonable."

7.44 Article 22(1) CSDDD further specifies that the climate transition plan includes time-bound targets in five-year increments from 2030 to 2050 based on compelling scientific evidence. The provision states that the plan includes absolute emission reduction targets for greenhouse gases for scope 1, 2 and 3 for each significant category "where appropriate". 'Scientific evidence' means evidence with independent scientific validation consistent with limiting global warming to 1.5oC as established by the IPCC and considering the recommendations of the European Scientific Advisory Board on Climate Change. Under Art 22(2) CSDDD, companies that report a climate change mitigation transition plan in accordance with the CRSD are also deemed to have fulfilled the CSDDD obligation to adopt a climate change mitigation transition plan. The CSDDD provides for administrative enforcement by national regulators. Furthermore, member states must ensure that