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INTERNATIONAL COURT OF JUSTICE

CASE CONCERNING OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE

(REQUEST FOR ADVISORY OPINION)

WRITTEN STATEMENT OF THE DEMOCRATIC REPUBLIC OF THE CONGO

4 March 2024

[Translation by the Registry]

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Acronyms and Abbreviations

COP	Conference of the Parties
DRC	Democratic Republic of the Congo
EEA	European Environment Agency
GHG	Greenhouse gas
GWP	Global warming potential
IAEA	International Atomic Energy Agency
ICJ	International Court of Justice
ILC	International Law Commission
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
LOAC	Land-ocean aquatic continuum
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WMO	World Meteorological Organization

1. By its resolution 77/276 dated 29 March 2023, the United Nations General Assembly (hereinafter the "General Assembly") requested the International Court of Justice (hereinafter the "Court"), pursuant to Article 65 of the Statute of the Court, to give an advisory opinion on the following questions:

> "Having particular regard to the Charter of the United Nations, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the United Nations Framework Convention on Climate Change, the Paris Agreement, the United Nations Convention on the Law of the Sea, the duty of due diligence, the rights recognized in the Universal Declaration of Human Rights, the principle of prevention of significant harm to the environment and the duty to protect and preserve the marine environment,
>
> *(a)* What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations;
>
> *(b)* What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to:
>
> (i) States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change?
>
> (ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?"

The request for an advisory opinion was transmitted to the Court by the Secretary-General of the United Nations by a letter dated 12 April 2023 and received in the Registry on 17 April 2023.

By letters dated 17 April 2023, the Deputy-Registrar gave notice of the request for an advisory opinion to all States entitled to appear before the Court, pursuant to Article 66, paragraph 1, of the Statute.

In its Order of 20 April 2023, the Court decided that "the United Nations and its Member States are considered likely to be able to furnish information on the questions submitted to the Court for an advisory opinion and may do so within the time-limits fixed in this Order".

The Court fixed 20 October 2023 as the time-limit within which written statements on the questions may be presented to the Court, in accordance with Article 66, paragraph 2, of its Statute. This time-limit was extended to 22 January by an Order of the President of the Court dated 4 August 2023.

As a Member State of the United Nations and as a party to the Statute of the Court by virtue of Article 93, paragraph 1, of the Charter of the United Nations, the Democratic Republic of the Congo (hereinafter the "DRC") wishes to avail itself of the opportunity afforded to it by that Order to submit to the Court its observations in response to the General Assembly's request for an advisory opinion.

SUMMARY OF THE OBSERVATIONS

The Court has jurisdiction and there is no reason for it to exercise its discretion to decline to respond to the request for an advisory opinion (paras. 10-42).

(a) The Court has jurisdiction

(i) The General Assembly is an organ duly authorized to request an advisory opinion of the Court (paras. 15-18)

(ii) The questions on which the request for an advisory is sought by the General Assembly are legal (paras. 19-27)

(b) There is no reason why the Court should decline to give the advisory opinion requested (paras. 28-42)

1. FIRST QUESTION

As regards the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations, the obligations of States under international law are the following:

(a) First, regarding the duty of due diligence:

[(i)] This obligation is applicable to climate change (paras. 75-97, 98-110).

[(ii)] This obligation is embodied in the norms and instruments of international human rights law and international environmental law, and more specifically of the international law on climate change (paras. 134-152).

[(iii)] Climate change causes serious harm to human rights, including the right to life and the right to a clean, healthy and sustainable environment. Consequently, the duty of due diligence requires States to take extremely urgent action and adopt a series of measures to protect and preserve the human rights of both present and future generations (paras. 153-165).

[(iv)] The duty of due diligence also requires States not to cause harm to areas beyond national jurisdiction. This is an obligation *erga omnes* (paras. 172-173).

[(v)] Due diligence must also be interpreted and applied in light of international conventional rules setting quantified targets based on officially recognized scientific studies. States have an international obligation to limit the increase in global temperature to 1.5°C, in order to substantially reduce the risks and effects of climate change (paras. 211-212).

[(vi)] In light of the work of the Intergovernmental Panel on Climate Change (IPCC), States are under an international obligation to make rapid and deep reductions in the use of fossil fuels. Industrialized countries and countries with economies in transition must be the first to end the use of fossil fuels, in accordance with the principle of common but differentiated responsibilities and respective capabilities (paras. 305-309).

(b) Second, regarding the international law of the sea and Part XII of the United Nations Convention on the Law of the Sea (UNCLOS):

(i) States have obligations not only to prevent but also to reduce and control pollution of the marine environment, and obligations to preserve and conserve the marine environment. These are simultaneously negative and positive obligations. Violation of these obligations does not depend on whether the event to be prevented has occurred (paras. 221-227).

(ii) Article 1 of UNCLOS defines “pollution” as the introduction of substances or energy into the marine environment which results or is likely to result in harm to that environment. States can therefore be held responsible for their acts and omissions relating to the

introduction of substances into the environment rather than with regard only to the harmful consequences (para. 224).

(c) Third, regarding the obligation of international co-operation:

(i) States have customary and conventional obligations to co-operate in the fight against climate change. These obligations extend to the adaptation of States to the impacts of climate change and reparation for loss and damage (paras. 136-139; 140-144; 229-233).

(ii) These obligations must be interpreted in light of the principle of common but differentiated responsibilities and respective capabilities (paras. 234-238).

(iii) These obligations are reflected in particular in the obligation for developed countries to provide developing countries with adequate and appropriate resources, not only to reduce their greenhouse gas emissions but also to enable them to deal with climate change and its impacts. This concerns in particular the countries most vulnerable to the effects of climate change and those that have insufficient capabilities to deal with them (paras. 239-250).

(d) Fourth, regarding international economic law:

(i) The rules of international economic law must be interpreted and applied in such a way as to reinforce the measures taken by States and regional organizations to address climate change and its impacts. In particular, the measures taken by States to address climate change and its impacts must be considered necessary and proportionate within the meaning of the relevant rules of international economic law (paras. 251-258).

(ii) International investment law does not allow investors to obtain reparation for the economic harm they suffer as a result of measures taken in good faith by States in addressing climate change and its effects (paras. 252, 255-256).

2. SECOND QUESTION

The legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to States, including, in particular, small island developing States which, due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change, and to peoples and individuals of the present and future generations affected by the adverse effects of climate change, are the following:

(a) Obligations to protect the environment beyond national jurisdiction, including the obligation of reparation and mitigation, are *erga omnes* in nature. Every State is entitled to seek compliance with primary obligations and seek reparation for any harm caused to the environment beyond national jurisdiction (paras. 280-282).

(b) Any State that has caused significant harm to the climate system bears individual responsibility towards any other State (or, in respect of treaty obligations, any other State party):

(i) to *cease* the wrongful act, in such a way as to limit the increase in the global temperature to 1.5°C, and, as a corollary to this, other States have the right to seek cessation of such conduct (paras. 255-261);

The States concerned must adopt urgent (para. 258) and effective (para. 259) measures to that end. They must in particular adopt compliance plans (para. 261).

(ii) to *mitigate* the harm, which requires funding for adaptation measures for delayed harm (paras. 264-267);

(iii) to *make reparation* for all damage in accordance with the following principles (para. 268 *et seq.*):

1. The treaty mechanism in the Framework Convention on Climate Change for "loss and damage" is not a mechanism for responsibility for internationally wrongful acts (paras. 269-271).

2. States having caused significant harm to the climate system beyond national jurisdiction have an obligation *erga omnes* to make reparation for the harm (paras. 280-290).

3. States having caused significant harm to other States as a result of climate change have an individual obligation to make reparation (paras. 291-295).

4. Each State has an individual obligation to make reparation for the entirety of the harm, in accordance with the rule set out in Article 47 of the Articles on the Responsibility of States for Internationally Wrongful Acts (paras. 296-304), subject to what follows.

5. States that have made only a negligible contribution to climate change cannot be held internationally responsible (paras. 305-309).

6. Responsible States may offset their respective debts through a comparison of the respective contributions of the States concerned to global GHG emissions (para. 310).

7. States having caused significant harm to the climate system can limit their responsibility in proportion to their contributions of GHG emissions, by creating a multilateral mechanism ensuring full reparation for the harm caused to injured States (para. 316).

(c) The responsibility of any State having caused significant harm to the climate system is engaged with respect to peoples and individuals of the present and future generations affected by the adverse effects of climate change, including when they are not on its territory, when the harm results from activities under its control or jurisdiction (paras. 316-320).

(d) States must guarantee that peoples and individuals affected by the adverse effects of climate change have access to effective remedies and appropriate reparations (paras. 321-330). To that end:

1. Financial barriers to private action before remedy mechanisms of industrialized States by victims from developing countries must be eliminated (para. 325).

2. Victims from developing countries, who suffer harm in their own country, must have effective access to remedy mechanisms in industrialized countries, in particular collective action mechanisms (para. 326).

3. States, and particularly industrialized States, must ensure that the rules governing jurisdiction and the structure of commercial companies and businesses do not constitute barriers, in law or in fact, to obtaining effective remedies (para. 327).

4. The operation of remedy mechanisms must take due account of the various vulnerabilities to climate change and its impacts (para. 329).

5. States must take all appropriate measures to ensure effective representation of the rights and interests of future generations in any decision-making process that may affect them (para. 330).

(e) States whose wrongful conduct affects the rights of individuals or peoples must cease the violations and adopt measures to bring their legislation and practices into conformity with their international obligations as quickly as possible (paras. 331-332).

(f) States whose wrongful conduct affects the rights of individuals and peoples are under an obligation to make full reparation for the injury caused. The reparation must be tailored to each specific case. This may require a combination of different forms of reparation, pecuniary and non-pecuniary (paras. 333-343).

I. THE JURISDICTION OF THE COURT AND THE EXERCISE OF ITS DISCRETION

2. In its recent Advisory Opinion on the *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, the Court reaffirmed its earlier jurisprudence that

> "[w]hen [it] is seised of a request for an advisory opinion, it must first consider whether it has jurisdiction to give the opinion requested and if so, whether there is any reason why the Court should, in the exercise of its discretion, decline to answer the request"[1].

3. In this instance, the DRC's immediate view is that the Court has jurisdiction (A) and that there is no reason for it to exercise its discretion to decline to respond to the request (B).

A. The Court has jurisdiction

4. The Court's advisory jurisdiction derives from Article 65, paragraph 1, of its Statute, according to which it "may give an advisory opinion on any legal question at the request of whatever body may be authorized by or in accordance with the Charter of the United Nations to make such a request".

5. Pursuant to that provision, the Court considers that

> "[i]t is . . . a precondition of [its] competence that the advisory opinion be requested by an organ duly authorized to seek it under the Charter, that it be requested on a legal question, and that, except in the case of the General Assembly or the Security Council, that question should be one arising within the scope of the activities of the requesting organ"[2].

6. It appears from the foregoing that two conditions must be met: (1) the request for an advisory opinion must be made by a duly authorized organ, and (2) the questions must be of a legal character. In accordance with the Court's jurisprudence quoted above, since the request was made by the General Assembly, it is not necessary to establish whether the questions in resolution 77/276 of 29 March 2023 of the General Assembly arise within the scope of its activities.

1. The General Assembly is an organ duly authorized to request an advisory opinion of the Court

7. While the Court has stated in the past that "it is for the Court to satisfy itself that the request for an advisory opinion comes from an organ or agency having competence to make it"[3], it has also

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[1] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 112, para. 54. Similarly, see *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 232, para. 10; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 144, para. 13; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, p. 412, para. 17.

[2] *Application for Review of Judgment No. 273 of the United Nations Administrative Tribunal, Advisory Opinion, I.C.J. Reports 1982*, pp. 333-334, para. 21. See also *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 144, para. 14; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, p. 412, para. 19.

[3] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 144, para. 15.

always "note[d] that the General Assembly is competent to request an advisory opinion by virtue of Article 96, paragraph 1, of the Charter"[4].

8. In this regard, the Court has stated that the explicit terms of this provision of the Charter leave no doubt that the General Assembly is "an organ duly authorized [to seek an advisory opinion] under the Charter"[5].

9. The request for an advisory opinion having been submitted by a duly authorized organ, the DRC would ask the Court to find that the first condition for the exercise of its advisory jurisdiction under Article 65, paragraph 1, of the Statute of the Court is fully met.

10. The DRC will now show that General Assembly resolution 77/276 of 29 March 2023 is consistent with the requirement under Article 96 of the Charter and Article 65 of the Statute of the Court, which provides that the advisory opinion must concern a "legal question".

2. The questions raised in the General Assembly's request for an advisory opinion are legal questions

11. In these proceedings, the first question put to the Court consists in determining the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations. The second question concerns the legal consequences for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment.

12. Furthermore, the General Assembly calls on the Court to determine the legal obligations of States and the legal consequences arising from their violation in light of treaty law, as expressed in the following legal instruments:

> "the Charter of the United Nations, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the United Nations Framework Convention on Climate Change, the Paris Agreement, the United Nations Convention on the Law of the Sea"[6].

13. The Court is also invited to determine these legal obligations and consequences in light of a certain number of established legal principles and rules of international law, in particular:

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[4] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 112, para. 56.

[5] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 112, para. 56; *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, I.C.J. Reports 1971*, p. 22, para. 20. Similarly, see *Legality of the Use by a State of Nuclear Weapons in Armed Conflict, Advisory Opinion, I.C.J. Reports 1996 (I)*, pp. 82-83, para. 29.

[6] See resolution 77/276 of 29 March 20[2]3, p. 3.

> "the duty of due diligence, the rights recognized in the Universal Declaration of Human Rights, the principle of prevention of significant harm to the environment and the duty to protect and preserve the marine environment"[7].

14. It follows that it is in accordance with international law that the General Assembly requests the Court to respond to the questions put to it in resolution 77/276 of 29 March 2023. As the Court stated in its 1975 Opinion in the *Western Sarah* case, the questions submitted by the General Assembly

> "have been framed in terms of law and raise problems of international law . . . These questions are by their very nature susceptible of a reply based on law . . . In principle, therefore, they [are] questions of a legal character"[8].

15. To that end, "the Court must identify the existing principles and rules, interpret them and apply them to the [relevant situation], thus offering a reply to the question posed based on law"[9]. They are necessarily and by definition legal questions within the meaning of the Charter, the Court's Statute and jurisprudence. In this regard, the Court itself has considered that "a request from the General Assembly for an advisory opinion to examine a situation by reference to international law concerns a legal question"[10]. It has found that a request of this nature "has been made in accordance with the Charter and that the . . . questions submitted to it are legal in character"[11].

16. Moreover, the established legal character of the questions posed by the General Assembly in resolution 77/276 of 29 March 2023 is not undermined by the fact that they may also touch on issues of a political nature. The Court has asserted that it is in the nature of things for a question to have political aspects, as is the case with so many questions which arise in international life, and that this "does not suffice to deprive it of its character as a 'legal question' and to 'deprive the Court of a competence expressly conferred on it by its Statute'"[12]. It has therefore concluded that "the political nature of the motives which may be said to have inspired the request and the political implications that the opinion given might have are of no relevance in the establishment of its jurisdiction to give such an opinion"[13].

17. Consequently, it follows that the second condition for the exercise of the Court's advisory jurisdiction under Article 65, paragraph 1, of the Statute is also met.

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[7] *Ibid.*

[8] *Western Sahara, Advisory Opinion, I.C.J. Reports 1975*, p. 18, para. 15.

[9] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 13.

[10] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 112, para. 58.

[11] *Ibid.*, para. 59.

[12] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 13. *Application for Review of Judgment No. 273 of the United Nations Administrative Tribunal, Advisory Opinion, I.C.J. Reports 1982*, p. 172, para. 14.

[13] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 13. See also *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 155, para. 41; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II),* para. 27; *Interpretation of the Agreement of 25 March 1951 between the WHO and Egypt, Advisory Opinion, I.C.J. Reports 1980*, p. 87, para. 33.

18. The DRC is of the view that since the two conditions are met, the Court has jurisdiction to give the advisory opinion sought by the General Assembly in resolution 77/276 of 29 March 2023.

19. It must now be shown that, in this instance, there is no call for the Court to exercise its discretion to decline to give the advisory opinion sought by the General Assembly.

B. There is no reason for the Court to decline to give the advisory opinion

20. The Court has recalled many times in the past that Article 65, paragraph 1, of its Statute, which provides that it "'may give an advisory opinion . . . ', should be interpreted to mean that [it] has a discretionary power to decline to give an advisory opinion even if the conditions of jurisdiction are met"[14].

21. Nevertheless, irrespective of the discretionary character of its advisory jurisdiction "[t]he present Court has never, in the exercise of this discretionary power, declined to respond to a request for an advisory opinion"[15].

22. According to the Charter, the Court is "the principal judicial organ of the United Nations"[16]. It has always been mindful of this and emphasized that it takes account of "its responsibilities as the principal judicial organ of the United Nations"[17] in one of its most well-known opinions, namely the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*. In this regard, the Court has never hesitated to note that its response to a request for an advisory opinion "represents its participation in the activities of the Organization, and, in principle, should not be refused"[18]. For the Court, therefore, only "compelling reasons" could justify its refusal to give an opinion on a request falling within its jurisdiction[19].

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[14] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 113, para. 63; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 156, para. 44; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, pp. 415-416, para. 29.

[15] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, pp. 156-157, para. 44. Only in the case concerning *Legality of the Use by a State of Nuclear Weapons in Armed Conflict* did the Court decline to give an advisory opinion on the grounds that the request for an advisory opinion from the World Health Organization did not concern a question that arose "within the scope of [the] activities" of that organization (see para. 23). However, this restriction does not apply in this case, because Article 96, paragraph 1, confers competence on the General Assembly to request a legal opinion on any legal question.

[16] Charter of the United Nations, 24 October 1945, *United Nations, Treaty Series*, Vol. 1, p. XVI, Art. 92.

[17] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, pp. 156-157, para. 44.

[18] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 113, para. 65; *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania, First Phase, Advisory Opinion, I.C.J. Reports 1950*, p. 71; *Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission of Human Rights, Advisory Opinion, I.C.J. Reports 1999 (I)*, pp. 78-79, para. 29; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, pp. 156-157, para. 44; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, para. 30.

[19] *Judgments of the Administrative Tribunal of the ILO upon Complaints Made against UNESCO, Advisory Opinion, I.C.J. Reports 1956*, p. 86; *Certain Expenses of the United Nations (Article 17, paragraph 2, of the Charter), Advisory Opinion, I.C.J. Reports 1962*, p. 155; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, pp. 156-157, para. 44; *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 14.

23. In determining whether any such compelling reasons may exist, the Court does not conduct an abstract assessment but takes into account the particular circumstances of each case. Its consistent practice in this regard shows that the existence of such "compelling reasons" is assessed in light of the statements made by the participants in the proceedings.

24. Thus, when the Court broached the question of its discretionary power to decline to give the opinion sought in the case concerning *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, it began by making the following observation:

> "Some participants in the present proceedings have argued that there are 'compelling reasons' for the Court to exercise its discretion to decline to give the advisory opinion requested. Among the reasons raised by these participants are that . . . "[20].

The same approach was taken by the Cour in its Advisory Opinion on the [*Legality of the Threat or Use of Nuclear Weapons*], where it noted the following:

> "Most of the reasons adduced in these proceedings in order to persuade the Court that in the exercise of its discretionary power it should decline to render the opinion requested by General Assembly resolution 49/75 K were summarized in the following statement made by one State in the written proceedings"[21].

25. In any event, it is by examining each ground relied on by the participants in the proceedings that the Court determines whether it is appropriate to exercise its discretion to decline to give the advisory opinion requested[22]. As its relevant jurisprudence currently stands, there have been various reasons relied on by participants in proceedings which the Court has examined. They include, in particular, the question whether advisory proceedings are suitable for the determination of complex and disputed factual issues[23] or whether the questions asked relate to a pending dispute between two States that have not consented to its settlement by the Court[24] or whether the response would assist the General Assembly in the performance of its functions[25]. There have been occasions when the Court has assessed the latter aspect by examining whether "[t]he question presented is vague and abstract, addressing complex issues which are the subject of consideration among interested States and within other bodies of the United Nations which have an express mandate to address these matters"[26].

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[20] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 114, para. 67.

[21] [*Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I),* p. 236,] para. 15.

[22] *Ibid.*, para. 19; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, para. 35.

[23] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 114, para. 69; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, pp. 160-161, para. 55.

[24] *Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 157, para. 46.

[25] *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, para. 75; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, para. 32; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 162, para. 59.

[26] [*Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I),* p. 236,] para. 15.

26. In the present proceedings, the particular context in which resolution 77/276 of 29 March 2023 was adopted leaves no doubt that it would not be possible to uphold the grounds relied on in previous cases.

27. Resolution 77/276 was adopted by consensus (with the participation of 133 States), without there being any need to vote[27]. During the debate on this resolution, several delegations declared that

> "[n]ever before was a resolution requesting an advisory opinion of the International Court of Justice adopted by consensus (resolution 77/276) [and] co-sponsored by such a large number of States Members of the United Nations"[28].

28. A review of the statements shows that no State expressed "serious concerns" about the advisory opinion being inappropriate. Quite the contrary, the delegations emphasized how important it was[29]. In particular, a large number of States stressed that the Court's opinion would bring greater legal clarity on the climate crisis[30], and that

> "[t]he legal questions contained in resolution 77/276 represent a careful balance achieved after extensive consultations. At the heart of the question is a desire to further strengthen our efforts to deal with climate change, give climate justice the importance it deserves and bring the entirety of international law to bear on that unprecedented challenge"[31].

29. Some delegations, such as the United States, nevertheless took the view that "launching a judicial process, especially given the broad scope of the questions, w[ould] likely accentuate disagreements and not be conducive to advancing ongoing diplomatic and other processes"[32]. It then stated that it "disagree[d] that the initiative is the best approach to achieving [the] shared goals and [took] th[e] opportunity to reaffirm [its] view that diplomatic efforts are the best means by which to address the climate crisis"[33]. Nonetheless, despite expressing this doubt, the United States soon asserted that it "recognize[d] that this process w[ould] go forward, in the light of the significant support enjoyed by the resolution" and that it would "welcome the opportunity to share [its] legal views and engage with States and the Court on the questions posed"[34]. It is clear that while they suggest a preference for diplomatic negotiations, such States nevertheless do not consider that the advisory opinion sought would be inappropriate and that the Court should therefore decline to respond to the questions put by the General Assembly.

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[27] See https://www.un.org/en/ga/77/resolutions.shtml and https://www.citepa.org/fr/2023_05_a04/

[28] See Statement of Viet Nam, *ibid.*, pp. 17-18. See also, in particular, the Republic of Korea, *ibid.*, pp. 21-22; Portugal, *ibid.*, p. 24; Papua New Guinea, *ibid.*, pp. 29-31.

[29] See General Assembly, Seventy-seventh session, Official Record of the 64th plenary meeting held on Wednesday 29 March 2023 at 10 a.m., New York, A/77/PV.64 (2023).

[30] See Statement of Latvia, *ibid.*, p. 19; see also, United Kingdom, *ibid.*, pp. 20-21; Jordan, *ibid.*, p. 4; Bangladesh, *ibid.*, pp. 23-24; Liechtenstein, *ibid.*, pp. 13-14; New Zealand, *ibid.*, p. 14; Singapore, *ibid.*, pp. 15-16.

[31] In particular Uganda, *ibid.*, p. 18; Trinity and Tobago, *ibid*., p. 11.

[32] See Statement of the United States, *ibid.*, p. 28.

[33] *Ibid.*

[34] *Ibid.*

30. In any event, the Court has already had to consider arguments such as these several times in the past. Thus, in its Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, the Court stated :

> "It has . . . been submitted that a reply from the Court in this case might adversely affect disarmament negotiations and would, therefore, be contrary to the interest of the United Nations. The Court is aware that, no matter what might be its conclusions in any opinion it might give, they would have relevance for the continuing debate on the matter in the General Assembly and would present an additional element in the negotiations on the matter. Beyond that, the effect of the opinion is a matter of appreciation"[35].

31. Moreover, the Court stated, in another case, that it did not consider that it should refuse to respond to the General Assembly's request on the ground that its opinion might lead to adverse political consequences. The Court took the view that, just as it "cannot substitute its own assessment for that of the requesting organ in respect of whether its opinion will be useful to that organ, it cannot . . . substitute its own view as to whether an opinion would be likely to have an adverse effect"[36].

32. In this regard, the DRC considers that in light of the information before it, in particular the statements made by States during the vote on resolution 77/276 of 29 March 2023, there is no compelling reason for the Court to *decline to give* the advisory opinion that has been requested in these proceedings. On the other hand, there are compelling reasons for it to *give* the advisory opinion sought by the General Assembly to assist it in its functions. Those functions were identified in the preamble to resolution 77/276, where the Assembly firmly stressed the need for an "immediate and urgent response" to the "unprecedented challenge of civilizational proportions" that is climate change.

33. It is clear that the advisory opinion requested by the General Assembly is intended to provide it with the legal advice it needs for the consideration of questions that have long been among its main priorities. The DRC notes here that, as recalled in the preamble of resolution 77/276 of 29 March 2023, the General Assembly has made unremitting efforts to address the challenges arising from climate change.

34. At a time when urgent discussions are being held on these issues in the General Assembly, the role of the Court in determining the legal obligations of States to protect the environment and address climate change, and the consequences of breaching those obligations, is clear. As it has always been mindful to recall, "the purpose of [its] advisory jurisdiction is to enable organs of the United Nations . . . to obtain opinions from the Court which will assist them in the future exercise of their functions"[37]. Accordingly, the Court's response to the questions posed by the General Assembly

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[35] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 237, para. 17.; see also, *Western Sahara, Advisory Opinion, I.C.J. Reports 1975*, p. 37, para. 73; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 159, para. 51.

[36] *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, para. 35; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 163, para. 61.

[37] *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, para. 44; *Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, Advisory Opinion, I.C.J. Reports 1951*, p. 19; *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, I.C.J. Reports 1971*, para. 32.

in resolution 77/276 represents its participation in the activities of the Organization and therefore it should not refuse to exercise its advisory jurisdiction in these proceedings.

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35. The DRC concludes that the Court has jurisdiction to give the advisory opinion requested by the General Assembly in resolution 77/276 of 29 March 2023: the General Assembly is an organ duly authorized to request an advisory opinion of the Court, and the request raises questions of a legal character. Moreover, there is no "compelling reason" for the Court to decline to exercise the advisory jurisdiction conferred on it by the Charter and its Statute. On that basis and in accordance with its jurisprudence, it must exercise that jurisdiction and give the advisory opinion requested by the General Assembly.

II. THE CAUSES AND CONSEQUENCES OF CLIMATE CHANGE

36. The existence of climate change and its human origin, which have long been disputed, are now scientifically proven. The vulnerability arising from climate change and the necessary adaptation and mitigation measures remain a challenge for all States (A). In view of States' widely differing interests and the economic and social insecurity of many of them, account must be taken of inequalities in the relations between industrialized States — which are largely responsible for climate change — and less developed countries, especially those in Africa, in determining their obligations to ensure the protection of the climate system (B).

A. Climate change: a global challenge

37. Developments in the science and physical evidence of climate change and its impacts have revealed the vulnerability of planet Earth, which now appears precious and extremely fragile. The Intergovernmental Panel on Climate Change (IPCC) has expressed serious concerns about the depletion of resources and falling birth rates in its various reports.

38. Some of the difficulties in responding to the challenges of climate change stem from the challenges involved and ineffective international co-ordination. It is important to stress the role of the IPCC in this regard (1) and its constant efforts to identify the causes and impacts of climate change (2).

1. The role of the IPCC

39. The IPCC, an intergovernmental organ established jointly by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988[38], is the largest and most reliable scientific source for studies on climate change. It is composed of experts in various scientific disciplines. Since its establishment, this body has worked on assessing knowledge relating to climate change. It produces summaries of research findings by highly qualified scientists and by bodies such as the National Aeronautics and Space Administration (NASA), the

[38] IPCC-WMO-UNEP, 2015. IPCC Factsheet: Timeline — highlights of IPCC history (p. 1, para. 1), https://www.ipcc.ch/site/assets/uploads/2018/04/FS_timeline.pdf.

National Oceanic and Atmospheric Administration (NOAA), the International Atomic Energy Agency (IAEA) and the WMO, all of which have a reputation for providing reliable data.

40. In resolution 44/207 of 6 December 1989 entitled "Protection of global climate for present and future generations of mankind"[39], the United Nations General Assembly confirmed the IPCC's role as the "appropriate forum" and invited States to support and participate in its work[40]. The substantial participation of State delegates in the work of the IPCC reflects their support and confidence in that body.

41. There is considerable confidence that the IPCC's models provide credible quantitative estimates of future climate change, particularly at a global scale. The credibility and scientific value of these models come from the body's methodology and the fact that the models are based on accepted physical principles and their ability to reproduce observed features of current climate and past climate changes[41].

42. The IPCC's technical work consists in assessing and synthesizing scientific literature in a transparent and participatory manner. The IPCC publishes global assessment reports and special reports, identifying the causes and impacts of climate change. It also puts forward options for mitigating the impacts. Each part of its reports comes with a summary for policymakers. The IPCC thus provides them with the relevant information for international negotiations on the implementation of the United Nations Framework Convention on Climate Change (UNFCCC).

43. The summary for policymakers synthesizes the most important messages on which there is a consensus among the scientific experts. This executive summary is approved line by line at the IPCC's general assemblies, which bring together government delegations. *These are therefore scientific facts confirmed by the international community of States.*

44. The other factor that lends credibility to its reports is that the IPCC identifies the limits of its knowledge and sources of uncertainty. The degree of certainty of the main findings of its reports is based on an assessment of the underlying science. Depending on the knowledge level, the degree of certainty is expressed by reference to the robustness of the evidence when scientific proof is available, confidence in the validity of results based on the level of agreement and the qualitative level of confidence, and, where possible, it is quantified in terms of probability[42].

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[39] A/RES/44/207 of 6 Dec. 1989, Protection of global climate for present and future generations of mankind, para. 5.

[40] *Ibid*., para. 6: "*Welcomes* the joint efforts of the World Meteorological Organization and the United Nations Environment Programme in providing support to the urgent work being undertaken by the Intergovernmental Panel on Climate Change and its three working groups established to assess scientific information on, and the social and economic impact of, climate change and to formulate response strategies"; para. 7: "*Invites* all Governments, as well as relevant intergovernmental organizations, to support fully and participate actively in the work of the Intergovernmental Panel"; para. 9: "*Urges* the Intergovernmental Panel to take the necessary steps to ensure the participation of developing countries in scientific and policy aspects of its work, and calls upon the international community, in particular the developed countries, to consider contributing generously to the Trust Fund, with a view to financing the participation of experts designated by Governments of developing countries in all the meetings of the Intergovernmental Panel, including its working groups and subgroups".

[41] IPCC, 2007 — Fourth Assessment Report: Climate Change 2007: Working Group I: The Physical Science Basis/ Frequently Asked Question 8.1 How Reliable Are the Models Used to Make Projections of Future Climate Change? Para. 1 https://archive.ipcc.ch/publications_and_data/ar4/wg1/en/faq-8-1.html.

[42] See the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) on the physical science basis of climate change. Summary for Policymakers, published on 9 Aug. 2021, p. 6.

45. The message from the IPCC when it warns States of the urgency of implementing the commitments they have made at the various Conferences of the Parties (COP) on climate change[43] is thus objectively indisputable. The same holds true when it communicates to the international community an assessment report on the climate situation based on the most recent, post-Convention scientific advances[44]. All these scientific sources confirm with certainty that global warming is a reality.

46. Thanks to the credibility of its work, the IPCC shared the Nobel Peace Prize with the former Vice-President of the United States of America, Mr Al Gore, in 2007. This recognition of the work of the IPCC further raised awareness of the causes and consequences of the changes observed in the climate throughout the world.

2. The causes of climate change

47. Global warming is caused by the continual increase in greenhouse gas (GHG) emissions. Human activities since pre-industrial times are behind this phenomenon. To support this assertion, it is necessary to explain briefly the greenhouse effect by first outlining the main gases that cause it *(a)*. We will then identify the activities that generate these GHGs *(b)*, and their geographic location *(c)*.

(a) *The greenhouse effect*

48. The greenhouse effect is a natural phenomenon consisting in the retention in the atmospheric layer bordering the Earth of a proportion of the energy that it receives from the sun. The sunlight that hits the Earth's surface is partly absorbed and transformed into heat energy. Another part is reflected back into the atmosphere, in the form of infrared radiation, depending on the reflective power of the illuminated terrestrial surfaces (rocks, soil, water, ice, etc.). This so-called albedo effect represents around 30 per cent of the solar energy received by Earth. Atmospheric greenhouse gases (GHGs) absorb this energy and radiate it back to space and to Earth. This is what causes the surface of the Earth and its immediate vicinity to warm[45]. The climate is warming continually[46].

49. As regards atmospheric concentrations, the main GHGs are, in turn, carbon dioxide (CO_2), methane (CH_4), nitrogen oxides including nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). The latter destroy the stratospheric ozone (O_3) layer (more than 15 km above the surface of the Earth). This results in a transfer of a proportion of that gas to the troposphere (the atmospheric layer closest to Earth), where it contributes to the greenhouse effect.

50. Each GHG is also distinguished on the basis of its own "global warming potential" (GWP). The GWP property is determined by how efficiently a GHG retains heat and how long it maintains

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[43] IPCC, 2022 — Climate change: a threat to human wellbeing and health of the planet. Taking action now can secure our future. IPCC Press release 2022/08/PR https://www.ipcc.ch/report/ar6/wg2/resources/press/press-release/.

[44] S. Boehm and C. Schumer, 2023 — 10 Big Findings from the 2023 IPCC Report on Climate Change; World Resources Institute (WRI). See https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings.

[45] See https://climatescience.org/en/advanced-greenhouse-effect and https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-i.pdf.

[46] WMO 2023 — The annual report of the WMO underlines that climate change has reached record levels. https://wmo.int/news/media-centre/climate-change-indicators-reached-record-levels-2023-wmo.

the ability to do so. At present the (reference) unit of measurement of that time is 100 years[47]. Because CO_2 is used as the basis for comparisons of various GHGs, its GWP is equal to 1, which is 25 times lower than the figure for methane. However, methane diffuses into the atmosphere in smaller quantities than CO_2.

51. The greenhouse effect due to each GHG depends on its concentration. Since pre-industrial times, GHGs have been increasing continuously. The WMO reports that concentrations of CO_2, CH_4 and N_2O have increased by 149 per cent, 262 per cent and 124 per cent respectively[48]. Graphs showing the trend for concentrations of these three GHGs (Fig. 2)[49] show that between the decades 2000-2009 and 2010-2019 the average annual global growth rate in the atmosphere increased from 1.9 to 2.4 parts per million (ppm) per year for carbon dioxide, from 2.2 to 7.6 parts per billion (ppb) for methane and from 0.7 to 1.0 ppb for nitrous oxide. However, CO_2 concentrations are most indicative of the increase in global warming, especially since its trajectory follows concentrations of that gas the most closely.

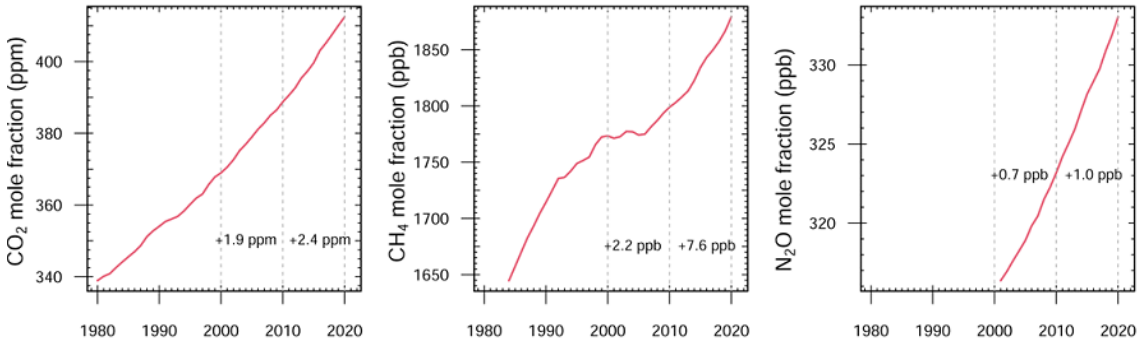

Figure 2: Global annual concentrations of CO_2, CH_4 and N_2O in the marine boundary layer. The rate of growth between 2000-2009 and 2010-2019 has accelerated for all three gases (Canadell, in press). Data from the NOAA, https://gml.noaa.gov, accessed on January 15, 2022.

52. That is the reason for the substantial rise in the Earth's surface temperature. In this regard, the 2023 IPCC report[50] shows that the temperature has already increased by more than 1°C, with a likely range between 0.8°C and 1.2°C above pre-industrial levels. It could reach the 1.5°C mark by

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[47] United Nations Climate Change/Frequently Asked Questions/Global Warming Potentials (IPCC Fourth Assessment Report). Global Warming Potential (100-year time horizon) https://unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/frequently-asked-questions/global-warming-potentials-ipcc-fourth-assessment-report; IPCC, 2007 - Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K. and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp. Annex 2-Glossary, p. 81, https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf.

[48] WMO, Provisional State of the Global Climate 2022; https://www.un.org/tr/node/107855; https://storymaps.arcgis.com/stories/5417cd9148c248c0985a5b6d028b0277. WMO 2023 — Records smashed — new WMO climate report confirms 2023 hottest so far. https://news.un.org/en/story/2024/03/1147716#:~:text=Records%20smashed%20%E2%80%93%20new%20WMO%20climate%20report%20confirms%202023%20hottest%20so%20far,-19%20March%202024&text=Records%20were%20once%20again%20broken,(WMO)%20on%20Tuesday%20shows.

[49] Poulter, B.; Bastos, A.; Josep G. Canadell, J. G.; Ciais, P. Gruber, N.; Hauck, J.; Jackson, R. B.; Masao Ishii, M.; Müller, J. D.; Patra, P. K.; and Tian, H. 2022 — Inventorying Earth's Land and Oceans Greenhouses Gases. A decade of record growth in greenhouse-gas concentrations (2010-2019), para. 2. EOS — https://eos.org/editors-vox/inventorying-earths-land-and-ocean-greenhouse-gases.

[50] IPCC, 2023 — Synthesis Report of the IPCC Sixth Assessment Report (AR6) - Longer Report 85pp. Section 2. Current Status and Trends. 2.1. Observed Changes, Impacts and Attributions, p. 6 https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_LongerReport.pdf.

2040 if its current trajectory remains unchanged[51]. Under current policies and without additional action, it is estimated that GHGs will lead to global warming of 2.8°C before the end of the 21st century[52]. This is a particularly alarming prospect for present and future generations.

(b) ***Human activities behind global warming***

53. By determining the origin of GHGs, it is possible to identify the States responsible for the impacts which will be addressed later in these observations.

54. According to the IPCC, direct emissions from the construction sector represent 5.6 per cent of the total, transport 15 per cent, agriculture and forestry 22 per cent, industry 24 per cent and other energy and heating 33 per cent[53].

55. Carbon dioxide (CO_2) is the most prevalent of all the GHGs; its concentrations in the atmosphere are measured in parts per million (ppm), but methane (CH_4) and nitrous oxide (N_2O) also play an extremely significant role in global warming even though their concentrations in the atmosphere are measured in parts per billion (ppb)[54].

(i) Carbon dioxide and fossil fuels

56. The largest CO_2 emissions by far result from the oxidation of carbon when fossil fuels are burned[55]. Fossil fuels are the dominant form of energy used in the world (86 per cent)[56]. Plastics are made from hydrocarbons; the plastics industry accounts for 6 per cent of global oil consumption[57]. The incineration of plastic also generates CO_2[58].

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[51] Allen, M.R., O.P. Dube, W. Solecki, F. Aragón-Durand, W. Cramer, S. Humphreys, M. Kainuma, J. Kala, N. Mahowald, Y. Mulugetta, R. Perez, M. Wairiu, and K. Zickfeld, 2018: Framing and Context. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 49-92, doi:10.1017/9781009157940.003. Frequently Asked Questions (FAQ1.2: How close are we to 1.5°C? Human induced warming reached approximately 1°C above pre-industrial levels in 2017) Special Report: Global Warming of 1.5 ºC, Ch.01 Framing and Context https://www.ipcc.ch/sr15/chapter/chapter-1/

[52] UNEP, 2022 — Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies. Nairobi. https://www.unep.org/resources/emissions-gap-report-2022, p. XXI, point 7.

[53] https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_TechnicalSummary.pdf. Figure TS.6 | Total anthropogenic direct and indirect GHG emissions for the year 2019 (in GtCO2-eq) by sector and subsector (data taken from www.notre-planete.info).

[54] WMO, Provisional State of the Global Climate 2022. https://storymaps.arcgis.com/stories/5417cd9148c248c0985a5b6d028b0277; — Records smashed — new WMO climate report confirms 2023 hottest so far.

[55] IPCC Special Report on Carbon dioxide Capture and Storage 2: pp. 76-104. Source of C02, point 2.2.1.1, para. 1, https://www.ipcc.ch/site/assets/uploads/2018/03/srccs_chapter2-1.pdf.

[56] IPCC Special Report on Carbon dioxide Capture and Storage 1: pp. 52-74. Source of C02, point 1.2.1., para. 1, https://www.ipcc.ch/site/assets/uploads/2018/03/srccs_chapter1-1.pdf.

[57] www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf.

[58] Plastic & Climate. The hidden cost of Plastic Planet, https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf.

57. The link between cumulative CO_2 emissions and global warming is approximately linear[59]. This means that the increase in warming closely follows the increase in carbon dioxide.

58. That is why each sector of activity's footprint on the climate is expressed as a CO_2 equivalent ("carbon footprint"), when in fact that footprint comes in whole or in part from other GHGs, in particular those discussed below[60].

(ii) Methane and cattle

59. Current methane emissions are approximately 2.6 times higher than they were before 1750. They are of both anthropogenic and natural origin. Approximately 60 per cent of methane emissions come from human activities[61]. The share generated by livestock (37 per cent) is among the highest[62], with the majority coming from cattle, more specifically dairy and beef cows. This is because of the particular metabolism of these animals. As with all ruminants, the grass ingested by cattle ferments in their forestomach (rumen, reticulum and omasum) through the action of anaerobic micro-organisms present in their digestive tract. It is estimated that around half of 20 kg of dry matter ingested each day by an adult cow is fermented in the rumen, producing 1,500 l of gas, including 500 l of methane[63]. This data provides a very clear picture of the vast quantities of CH_4 emitted by cows, given that there is an estimated total of 1.7 billion head of cattle in the world[64].

60. Crop production (rice-growing, etc.) constitutes the second source of CH_4 (23 per cent) from the agricultural sector. Apart from agriculture, other notable sources of GHGs are the production and use of fossil fuels, waste disposal and alterations to natural methane fluxes due to the increased atmospheric CO_2 concentrations and climate change[65].

61. It should be recalled that methane (CH_4) is a powerful greenhouse gas, with a global warming potential 25 times greater than that of CO_2. Changes in atmospheric methane concentrations may have a significant impact on the climate in the future.

(iii) Nitrous oxide

62. Nitrous oxide emissions come for the most part from the agricultural sector, including managed grasslands[66]. The boom in crop and livestock production relies heavily on the application

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[59] See FCCC, Conference of the Parties, Twenty-sixth session (Glasgow, 1-12 Nov. 2021), 2020 round table on pre-2020 implementation and ambition, Summary report by the secretariat. Doc FCCC/CP/2021/2, available at https://unfccc.int/sites/default/files/resource/cp2021_02E.pdf.

[60] *Ibid*., para. 9.

[61] Saunois, M. *et al*., "The Global Methane Budget 2000–2017", Earth System Sciences Data, Vol. 12(3), 2020, https://essd.copernicus.org/articles/12/1561/2020//.

[62] https://www.fao.org/3/a0701f/a0701f07.pdf.

[63] Jouany, J. P. and Thivend, P., "La production du méthane d'origine digestive chez les ruminants et son impact sur le réchauffement climatique", Management & Avenir, 2008/6 (No. 20): pp. 259-274; https://www.cairn.info/revue-management-et-avenir-2008-6-page-259.htm&wt.src=pdf.

[64] FAO taken from Livestock.geo-wiki.org; https://www.web-agri.fr/bovin-viande/article/105763/decouvrez-l-etonnante-repartition-des-bovins-a-travers-le-monde.

[65] Ciais *et al*., 2013), quoted by Saunois, M. *et al*., "The Global Methane Budget 2000–2017", Earth System Sciences Data, Vol. 12(3), 2020, https://essd.copernicus.org/articles/12/1561/2020/.

[66] https://www.globalcarbonproject.org/nitrousoxidebudget/20/hl-compact.htm.

of fertilizers, in particular industrial nitrogen fertilizers, and manure and liquid manure from cattle. Fertilizers emit nitrous oxide into the atmosphere. Agriculture contributed almost 70 per cent to the global anthropogenic N_2O emissions in the decade from 2007 to 2016[67]. This GHG derives from fertilizers through the action of micro-organisms in the soil that break down the soluble forms of nitrogen, in particular nitrate (NO_3), into gaseous compounds such as nitrous oxide (N_2O)[68]. These emissions are a major drawback for the development of conventional agriculture, which remains dependent on the application of fertilizers. N_2O destroys the ozone layer[69] and, because of its long atmospheric lifetime (around 116 years) and high radiative capacity, is a major contributor to global warming[70].

(c) ***States with the highest GHG emissions***

63. As regards the geographic location of sources of carbon dioxide emissions, UNEP shows that historic emissions and contributions to global warming vary significantly across countries and groups of countries:

> "Nearly 80 per cent of historical cumulative . . . CO_2 emissions came from G20 countries, with the largest contributions from China, the United States of America and the European Union, while least developed countries contributed 4 per cent. The United States of America account[s] for 4 per cent of current world population, but contributed 17 per cent of global warming from 1850 to 2021, including the impact of methane and nitrous oxide emissions. India, by contrast, accounts for 18 per cent of the world population, but to date only contributed 5 per cent of warming"[71].

64. Current global warming results from carbon dioxide that has been accumulating mostly since the end of the pre-industrial era (1850). From this point of view, all the States that have been at the forefront of the industrial revolution over the last two centuries are responsible for a very large share of cumulative GHGs, despite recent efforts — which are still insufficient — pursued by just a few countries to reduce their CO_2 emissions.

65. Conversely, "Small Island Developing States (SIDS) and least developed countries (LDCs) represent less than 1 percent and between 3 percent and 6 percent of global greenhouse emissions respectively. Yet they face much higher annual losses, as a percentage of GDP, due to the effects, compared with the global average" [72], while their historic and current GHG emissions are very low. "[Africa] contributes just 4 percent of global total greenhouse gas (GHG) emissions, the lowest of any region, yet its socio-economic development is threatened by the climate crisis"[73]. A recent report

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[67] *Ibid.*

[68] Viard, A.; Hénault, C.; Rochette, P., Kuikman, P., Flénet, F., Cellier, P. 2013 "Le protoxyde d'azote (N_2O), puissant gaz à effet de serre émis par les sols agricoles : méthodes d'inventaire et leviers de reduction", OCL-Oilseeds and fats, Crops and Lipids , Vol. 20, No. 2, 2013, pp. 108-118.

[69] https://www.globalcarbonproject.org/nitrousoxidebudget/20/hl-compact.htm.

[70] Skiba, U. M. and Rees, R. M. 2014 — Nitrous oxide, climate change and agriculture. CAB Reviews 9, No. 010 (1-7), http://www.cabi.org/cabreviews).

[71] UNEP Emissions Gap Report 2023, Executive Summary: https://www.unep.org/interactives/emissions-gap-report/2023/fr/#section-2.

[72] UNDP, 2021 — Backing Small Island Developing States and least developed countries to meet the climate challenge, https://www.undp.org/blog/progressive-platforms-backing-small-island-developing-states-and-least-developed-countries-meet-climate-challenge.

[73] COP26 on climate, Top priorities for Africa: https://www.un.org/africarenewal/magazine/july-2021/cop26-climate-top-priorities-africa#:~:text=Africa%27s%20situation%20deserves%20extraordinary%20attention,threatened%20by%20the%20climate%20crisis.

by OXFAM, published ahead of the Climate Change Conference in Dubai and based on research by the Stockholm Environment Institute, establishes that the richest one per cent produced as much carbon pollution in 2019 as the five billion people who make up the poorest two thirds of humanity[74].

66. Climate change manifests itself differently depending on the region.

3. Manifestations of climate change

67. Climate change manifests itself by increased temperatures that affect the atmosphere, the terrestrial environment, the seas and the cryosphere.

(a) *The terrestrial environment*

68. The terrestrial environment is warming because of human activity. Whereas the increase in the global mean surface temperature (land and sea) is 0.87°C (likely range between 0.75°C and 0.99°C), the increase in the land surface air temperature is 1.53°C (very likely range between 1.38°C and 1.68°C) from the pre-industrial period to the present day[75]. According to the IPCC, anthropogenic changes in land use, in particular an increase in built-up areas and a reduction in natural vegetation cover, have altered the albedo and resulted in a mean annual global warming of surface air from biogeochemical effects (very high confidence)[76].

69. The overheating of the terrestrial environment is what is causing the extension of warm climate zones, increased aridification in several regions of the world, including the Sahel and the Mediterranean Basin, advancing deserts and a decrease in polar climate zones. The climate is warming in extratropical latitudes and at high altitudes (high confidence)[77].

70. Because of these environmental changes, many plant and animal species have undergone changes in their size and abundance, their ranges and seasonal activities (very high confidence)[78]. Some of these activities, such as nesting, migration, reproduction, pollination, fruit-forming and budding, are of prime importance for the long-term survival of the species.

71. Notwithstanding this very unfavourable climate context for ecosystems and biodiversity, current data on global forest carbon fluxes shows that forests are still a major sink for CO_2, with -7.6 ± 49 Gt $CO_2e\ yr^{-1}$. Tropical forests removed more atmospheric carbon than temperate and boreal forests (-8.6 versus -4.4 and -2.5 Gt $CO_2e\ yr^{-1}$, respectively)[79]. The contribution made by the different forests in the tropical zone to this positive result is mixed however, with forests in some

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[74] OXFAM, Climate Equality: A Planet for the 99%, Nov. 2023, https://www.oxfam.org/en/press-releases/richest-1-emit-much-planet-heating-pollution-two-thirds-humanity.

[75] IPCC- 2019 - Special Report on Climate Change and Land. An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Chapter 2: Land–Climate interactions. https://www.ipcc.ch/srccl/.

[76] https://www.ipcc.ch/site/assets/uploads/sites/4/2022/11/SRCCL_Chapter_2.pdf., p. 134, last para.

[77] https://www.ipcc.ch/site/assets/uploads/sites/4/2022/11/SRCCL_Technical-Summary.pdf., p. 44.

[78] IPCC — 2019 — Special Report on Climate Change and Land. An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems Chapter 2: Land–Climate interactions, https://www.ipcc.ch/srccl/.

[79] Harris, N. L. *et al.*, "Global maps of twenty-first century forest carbon fluxes", Nature Climate Change, Vol. 11, 2021, pp. 234-240.

countries, in particular Brazil, having emitted more CO_2 than they have removed because of deforestation and other disturbances[80].

72. With an increasingly dry climate, tropical forest ecosystems — especially rainforests whose existence depends entirely on abundant and regular rainfall — will dwindle and remove less carbon[81], whereas they are a key pillar of the strategies to address global warming. It is crucial to prevent the collapse of this pillar by taking climate mitigation measures. These measures must take account of specific and local ecological, socio-economic and cultural circumstances, and at the same time remain consistent with global forest management[82].

(b) ***The marine environment***

73. Oceans receive GHGs from the atmosphere as well via the Land-Ocean Aquatic Continuum (LOAC), which is a network of pathways (including rivers and streams) through which pollutants from the Earth's crust are transported to the seas. This is above all the case for carbon dioxide (CO_2) and methane (CH_4). Plastics also have a major role here: 14 million tonnes of plastic end up in the oceans every year and generate methane and ethylene when exposed to the sun[83].

74. This exported anthropogenic carbon is partly respired by marine organisms, partly sequestered in sediments and, to a lesser extent, transferred to the open ocean where it may accumulate or be outgassed[84].

75. As the World Bank notes, marine ecosystems are thus a major carbon (CO_2) sink, "absorbing 23% of human-caused CO_2 emissions. Ecosystems such as mangroves, which grow in coastal areas but with roots in sea water, as well as tidal marshes and seagrass meadows, all sequester and store more carbon per unit area than forests"[85].

76. In other words, far from contributing to atmospheric GHG emissions, oceans remove them, at least up until now. For example, in 2010, it is estimated that the world's oceans had already

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[80] *Ibid.*, p. 2.

[81] IPCC — 2019 — Special Report on Climate Change and Land. An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, *op. cit*.

[82] Harris, N.L. et al., "Global maps of twenty-first century forest carbon fluxes", Nature Climate Change, *op. cit*.

[83] Royer S.-J., Ferrón S., Wilson S. T., Karl D. M., "Production of methane and ethylene from plastic in the environment", PLoS ONE, Vol.13, No. 8, 2018, https://doi.org/10.1371/journal.pone.0200574; see also, IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (2019), available at https://www.ipcc.ch/site/assets/uploads/sites/3/2019/12/SROCC_FullReport_FINAL.pdf. See also, "Le réchauffement climatique va-t-il s'emballer à cause du méthane s'échappant du fond des océans?, https://www.futura-sciences.com/planete/actualites/climatologie-rechauffement-climatique-va-t-il-emballer-cause-methane-echappant-fond-oceans-22906/.

[84] C – Cascade, "Le cycle du carbone le long du continuum aquatique continent -océan : Un élément clé pour les projets climatiques", 2013, https://c-cascades.ulb.ac.be/images/FichiersPDF/Factsheet_french.pdf; Friedlingstein *et al*., "Global Carbon Budget 2022", Data description paper, 2022, https://doi.org/10.5194/essd-14-4811-2022.

[85] World Bank, "What You Need to Know About Oceans and Climate Change", https://www.worldbank.org/en/news/feature/2022/02/08/what-you-need-to-know-about-oceans-and-climate-change.

absorbed 28 per cent of the total human-made CO_2 emissions. This capacity to sequester carbon helps limit the increase in the concentration of atmospheric CO_2 and reduce climate change[86].

77. The oceans are thus accumulating ever-increasing amounts of CO_2, as well as methane (CH_4) and nitrous oxide (N_2O), and are becoming saturated. This prediction is already certainly coming true in Antarctica, since this major carbon sink, having absorbed up to 15 per cent of GHG emissions from fossil fuels, has no additional storage capacity[87]. It should also be noted that in general the capacity of the ocean to act as a carbon sink decreases as it acidifies because of the increased levels of atmospheric carbon dioxide (CO_2) generated by human activities[88].

78. The oceans warm less quickly than land mass does because of their capacity to store thermal energy (4 kJ/kg/K)[89] [90], which is four times higher than that of air. They have absorbed more than 90 per cent of the energy generated by the greenhouse effect over the last 50 years[91]. The moderate temperatures of the marine environment compared to land temperatures can be explained by the fact that the excess energy generated by the greenhouse effect is gradually transferred to the deeper layers of the oceans, and that waves and storms move heat to colder waters in latitudes further and further away from the equator[92]. However, at the ocean surface, the temperature has on average increased by 0.88 [0.68 to 1.01]°C between 1850-1900 and 2011-2020, with 0.60 [0.44 to 0.74]°C having occurred since 1980[93]. Like the rest of the Earth, the oceans will continue to warm and will reach extreme values even if global warming stabilizes at 1.5°C[94]. "The ocean is therefore accumulating energy at a rate of 4×10^{21} Joules per year, equivalent to 127,000 nuclear power plants (with an average production of 1 Gigawatt) discharging their energy directly into the world oceans"[95].

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[86] Tanhua, T.; James C. Orr, J. C.; Laura Lorenzoni, L.; Lina Hansson, L., "Monitoring Ocean Carbon and Ocean Acidification", WMO Bulletin, Vol. 64, No. 1, 2015, https://public.wmo.int/fr/ressources/bulletin/surveillance-des-concentrations-de-carbone-et-de-lacidification-des-oc%C3%A9ans.

[87] Jean-Luc Goudet, « Les océans bientôt saturés de dioxyde de carbone ? », *Futura*, 2007, https://www.futura-sciences.com/planete/actualites/oceanographie-oceans-bientot-satures-dioxyde-carbone-11859/.

[88] International Geosphere-Biosphere Programme (IGBP) and UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO), International Council for Science/Scientific Committee on Oceanic Research (SCOR), 2013 - Ocean acidification: summary for policymakers; third Symposium on the Ocean in a High-CO2 World, 26pp.

[89] Marcelja, S., 2010, The timescale and extent of thermal expansion of the global ocean due to climate change. Oceans Sciences Ocean Sci., 6, 179–184, 2010.

[90] Blanc, G. 2023, Le réchauffement climatique. Licence. Anthropocène, Université Paris Cité, France. 2023, p. 20. hal-04142694. https://hal.science/hal-04142694/document. p. 3, para. 5.

[91] Rebecca Lindsey, R. and Dahlman, 2020, Climate Change: Ocean Heat Content. NOAA climate.gov. https://www.climate.gov/news-features/understanding-climate/climate-change-ocean-heat-content.

[92] *Ibid.*

[93] Fox-Kemper, B., H.T. Hewitt, C. Xiao, G. Aðalgeirsdóttir, S.S. Drijfhout, T.L. Edwards, N.R. Golledge, M. Hemer, R.E. Kopp, G. Krinner, A. Mix, D. Notz, S. Nowicki, I.S. Nurhati, L. Ruiz, J.-B. Sallée, A.B.A. Slangen, and Y. Yu, 2021: Ocean, Cryosphere and Sea Level Change. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1211–1362, doi:10.1017/9781009157896.011."IPPC , 2021, Ch. 9, p. 1214, para. 2, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter09.pdf.

[94] *Ibid.*

[95] Sabrina Speich, "The ocean, a heat reservoir", https://ocean-climate.org/wp-content/uploads/2020/01/1.-The-ocean-a-heat-reservoir-scientific-fact-sheets-2019.pdf.

79. Taken together, the data above shows that "heat already stored in . . . the ocean will eventually be released, committing Earth to . . . some additional surface warming in the future"[96]. Thus, heat energy in the ocean can warm the marine and land environment for decades after its absorption, which intensifies the melting of ice shelves[97].

80. Added to this is the rise in the global mean sea level (GMSL), which rose by 1.5 mm yr-1 during the period 1901-1990, accelerating to 3.6 mm yr-1 during the period 2005-2015. These are weighted averages of measurements taken by an altimeter during a single satellite trajectory repetition cycle. Water level is likely to rise "0.61-1.10 m by 2100 if global GHG emissions are not mitigated"[98]. Sea level rise is exacerbated in particular by the melting of glaciers, which is in turn linked to "the effects of warmer sea currents beneath ice shelves that lead to thinning and instability and the effects of melted water seeping through vertical ice chimneys"[99] (notably in Greenland).

(c) ***Flooding — storms — salinity fluctuations — acidification***

81. According to the IPCC[100], the combined effect of mean and extreme sea levels results in an increase in the frequency of events that are rare in the historical context (return period of 100 years or larger). These events will occur yearly at some locations by the middle of this century, for example on intertropical low-lying coasts that are currently exposed to storm surges only infrequently. The discharge of increasing volumes of fresh water into the oceans, in particular as a result of the melting of ice, reduces salinity in subpolar oceans. At the same time, the upper horizons of coastal and island soil are salinized in tropical and subtropical regions because of the rising water[101].

82. The increase in acidity in the marine environment is linked to the increase in carbon dioxide sequestered by it[102]. According to the IAEA[103], the oceans have absorbed 20 to 30 per cent of anthropogenic CO_2. Because they are absorbing more and more CO_2, more than 95 per cent of the oceans are acidified[104], as the reaction of water with CO_2 produces carbonic acid. This produces a decrease in oxygen content. The pH of the ocean surface has thus dropped from 8.2 to 8.1 since

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[96] Rebecca Lindsey, R. and Dahlman, 2020 - Climate Change: Ocean Heat Content. NOAA climate.gov. https://www.climate.gov/news-features/understanding-climate/climate-change-ocean-heat-content.

[97] *Ibid.*

[98] Oppenheimer, M., et al., "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities", in Pörtner, H.-O., et al. (eds), IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 321–445, p. 441: " (. . .) It is likely to rise 0.61–1.10 m by 2100 if global GHG emissions are not mitigated." https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08_SROCC_Ch04_FINAL.pdf. See p. 411, para. 3.

[99] UNEP, "An Overview of Our Changing Environment", Yearbook 2008, p. 7 https://wedocs.unep.org/bitstream/handle/20.500.11822/7641/-The%20UNEP%20YEAR%20BOOK%202008%20%28Formerly%20called%20GEO%20Year%20Book%29-2008804.pdf?sequence=7&isAllowed=y.

[100] Oppenheimer, M., *et al.*, "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities", op. cit., p. 327, para. 2. "The combined effect of mean and extreme sea levels results in events which are rare in the historical context (return period of 100 years or larger)".

[101] IPCC Fourth Assessment Report: Climate Change 2007 — Working Group I: The Physical Science Basis, RT.6.2.3 — Oceans and Sea Level, 2007, https://archive.ipcc.ch/publications_and_data/ar4/wg1/en/tssts-6-2-3.html.

[102] Ove Hoegh-Guldberg, Poloczanska, E. S. William Skirving, W.; Dove, S. 2017 — Coral Reef Ecosystems under Climate Change and Ocean Acidification. Frontiers in Marine Science, www.frontiersin.org, 1 May 2017, Vol. 4, Article 158: https://www.frontiersin.org/articles/10.3389/fmars.2017.00158/full, p. 4.

[103] IAEA, "What is Ocean Acidification?" https://www.iaea.org/newscenter/news/what-is-ocean-acidification, p. 1.

[104] https://www.ipcc.ch/srocc/, p. 7.

1860[105]. Over the period from 1970 to 2010, this loss of oxygen was in a very likely range of 0.5-3.3 per cent from the surface to 1,000 m in ocean depth[106].

(d) ***Melting of the cryosphere***

83. With global warming, the cryosphere (the part of the Earth's surface consisting of frozen water) is shrinking. The mass of icesheets and glaciers has reduced throughout the world (very high degree of confidence)[107].

84. The extent and thickness of sea ice in the Arctic have considerably reduced (very high degree of confidence). "Between 1979 and 2018, Arctic sea ice extent has very likely decreased for all months of the year. September sea ice reductions are very likely 12.8 ± 2.3% per decade"[108]. Data recorded in 2022 shows that "Arctic sea-ice extent was below the long-term average for most of the year"[109].

85. Antarctic sea-ice extent dropped to 1.92 million km^2 in 2022, almost 1 million km^2 below the long-term average (1981-2010). The shrinkage of the cryosphere is also exacerbated by a loss in the mass of land ice. It is to be noted that, between 2006 and 2015, the Greenland ice sheet lost ice mass at a rate of 278 ± 11 Gt/year and worldwide the loss was 220 ± 30 Gt/year[110].

(e) ***Tipping points***

86. "In 2018, IPCC highlighted the unprecedented scale of the challenge required to keep warming to 1.5°C. Five years later, that challenge has become even greater due to a continued increase in greenhouse gas emissions. The pace and scale of what has been done so far, and current plans, are insufficient to tackle climate change"[111] .

87. According to the WMO's 2022 report, "the last 8 years are likely to be the 8 warmest years on record", and the tell-tale signs and impacts of climate change are becoming increasingly dramatic[112].

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[105] Tanhua, T.; James C. Orr, J. C.; Laura Lorenzoni, L.; Lina Hansson, L, "Monitoring Ocean Carbon and Ocean Acidification", *op. cit*.

[106] https://www.ipcc.ch/srocc/, p. 4.

[107] https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/01_SROCC_SPM_FINAL.pdf, p. 6, para. 1.

[108] IPCC, 2019: Summary for Policymakers. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*. https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/01_SROCC_SPM_FINAL.pdf.

[109] WMO, Provisional State of the Global Climate 2022. https://storymaps.arcgis.com/stories/5417cd9148c248c0985a5b6d028b0277.

[110] IPCC, 2019: Summary for Policymakers. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*. https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/01_SROCC_SPM_FINAL.pdf.

[111] IPCC Press release on the synthesis report: "Urgent climate action can secure a liveable future for all", 2023, https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf.

[112] WMO, Provisional State of the Global Climate 2022, https://storymaps.arcgis.com/stories/5417cd9148c248c0985a5b6d028b0277.

88. The IPCC notes that "[e]very increment of warming results in rapidly escalating hazards. More intense heatwaves, heavier rainfall and other weather extremes further increase risks for human health and ecosystems"[113].

89. According to the IPCC's most recent findings,

> "[i]n this decade, accelerated action to adapt to climate change is essential to close the gap between existing adaptation and what is needed. Meanwhile, keeping warming to 1.5°C above pre-industrial levels requires deep, rapid and sustained greenhouse gas emissions reductions in all sectors. Emissions should be decreasing by now and will need to be cut by almost half by 2030, if warming is to be limited to 1.5°C"[114].

This would spare States some of the many life-threatening consequences.

[4.] The consequences of climate change

90. The increase in temperatures, sea level rise and frequent flooding combined with catastrophic storms, salinity fluctuations and acidification are causing unprecedented damage across multiple sectors. Without ignoring the mutual influence between these various changes, for the sake of clarity this section identifies four types of harm: harm to physical and mental integrity; socio-economic harm; loss of cultural heritage; and biodiversity loss.

(a) *Harm to physical and mental integrity*

91. Sea level rise, heavy and more frequent flooding and storms, salinity fluctuations and acidification are all consequences of climate change and are causing enormous loss of human life and harm to health through malnutrition and pandemics. This is especially the case for 23 per cent of the world's population who live less than 100 km from the coast and less than 100 m above sea level, and given that population densities in coastal regions are around three times higher than the global average[115].

92. "Almost half of the world's population lives in regions that are highly vulnerable to climate change. In the last decade, deaths from floods, droughts and storms were 15 times higher in highly vulnerable regions"[116].

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[113] IPCC Press release on the synthesis report: "Urgent climate action can secure a liveable future for all", 2023, https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf.

[114] https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf.

[115] Small, C.; et Nicholls, R. J. 2003 — A Global Analysis of Human Settlement in Costal Zones. Journal of Coastal Research 19(3)584-599. Summary, Abstract para. 4 "The near-costal population within 100 km of a shoreline and 100 m of sea level was estimated as 1.2 billion people with overage densities nearly 3 times higher than the global average density".

[116] https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf.

93. These phenomena will lead to an increase in population displacement, not only within a country but to foreign countries (so-called climate refugees), because coastal areas are not viable. The IPCC's 2023 report[117] highlighted the scale of this tragedy for island countries:

> "Climate and weather extremes are increasingly driving displacement in Africa, Asia, North America (high confidence), and Central and South America (medium confidence) (Figure 2.3), with small island states in the Caribbean and South Pacific being disproportionately affected relative to their small population size (high confidence)[118]".

It further stated that "[t]hrough displacement and involuntary migration from extreme weather and climate events, climate change has generated and perpetuated vulnerability (medium confidence)[119]".

94. Experience of extreme events and loss of livelihoods and culture make members of communities vulnerable to mental health problems[120].

(b) ***Socio-economic harm***

95. The economic losses to which coastal areas are exposed include the following[121]:

(i) Loss of coastal areas through devastating erosion, due to the breaking of giant waves and flooding, which will increase even if global warming is stabilized at 1.5° C[122] [123]. According to the IPCC[124], "[n]early 50% of coastal wetlands have been lost over the last 100 years, as a result of . . . sea level rise, warming . . . (high confidence)".

(ii) Destruction of basic infrastructure, including homes, businesses, means of transport, health, energy and other systems.

(iii) Deterioration of arable land, not only on account of submersion, but also because its properties are altered by the increase in the salinity of water and its acidification, which makes it unsuitable for agricultural use.

(iv) Loss of drinking water, especially due to its salinization and acidification, which make it unsafe.

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[117] AR6 Synthesis Report: Climate Change 2023 -The IPCC finalized the Synthesis Report for the Sixth Assessment Report during the Panel's 58th Session held in Interlaken, Switzerland from 13-19 March 2023; https://www.ipcc.ch/report/sixth-assessment-report-cycle/, p. 16.

[118] https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf, p. 6, para. 2.5, last line.

[119] https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf, p. 51, para. 1.

[120] https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf, para. 6, para. 2.

[121] André OZER, Pierre OZER, Sergio GINESU, La géographie physique et les risques de pertes et préjudices liés aux changements climatiques : une introduction. Physical geography and the risks of loss and damage related to climate change: an introduction. Geo-Eco-Trop., 2017, 41, 3, n.s.: 313-315.

[122] Boehm, S. and Schumer, C. 2023 — 10 Big Findings from the 2023 IPCC Report on Climate Change https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings. para. 8.

[123] https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08_SROCC_Ch04_FINAL.pdf., p. 360, para. 3.

[124] AR6 Synthesis Report: Climate Change 2023 -The IPCC finalized the Synthesis Report for the Sixth Assessment Report during the Panel's 58th Session held in Interlaken, Switzerland from 13-19 March 2023, https://www.ipcc.ch/report/sixth-assessment-report-cycle/

(v) Marked decrease in the quantity and quality of fishery resources (molluscs, crustaceans, fish and other) resulting from the combined effect of temperature rise, acidification of the water and the subsequent disruption of the food chain. Furthermore, the diversity of fishery products in many marine ecosystems has been dominated increasingly by warm-water species since the 1970s (medium confidence).

(vi) The shortfall in the green economy caused by the considerable depletion of carbon sinks, following the bleaching of coral reefs and the influence of changes in seawater density and salinity on mangroves, which grow in coastal areas and whose enormous carbon sequestration capacities were noted in section B.1, paragraph 40.

(vii) Loss of tourism revenue following the destruction of infrastructure (such as hotels), coastal areas, their landscapes and biodiversity, which are the main attractions for visitors.

(c) ***Loss of cultural heritage***

96. With regard to culture, the same IPCC report states that

> "[c]ultural losses, related to tangible and intangible heritage, threaten adaptive capacity and may result in irrevocable losses of sense of belonging, valued cultural practices, identity and home, particularly for Indigenous Peoples and those more directly reliant on the environment for subsistence (medium confidence)"[125].

(d) ***Threats to biodiversity***

97. Extreme temperatures have a considerable negative impact on the survival of species. It has also been established that, "cold-blooded marine animals (ectotherms): fish, turtles, reptiles and other organisms producing little or no heat, are currently experiencing body temperatures closer to their upper thermal limits than terrestrial ectotherms at all latitudes"[126]. Furthermore, "animals need more oxygen to provide for their metabolisms, especially respiration, while this oxygen decreases in water when the water warms up"[127].

98. The other environmental changes described above are detrimental to the health of the oceans and their biodiversity. Acidification is particularly harmful to living organisms because in acidic environments they expend energy on resisting. For this reason, these animals may be confronted with dwindling resources available to them for their physiological processes such as reproduction and growth[128]. Various groups of animals in marine ecosystems face this situation.

99. Acidification (decrease in pH) simultaneously leads to a fall in carbonate ions (CO_3^{2-}) in oysters, crabs, sea urchins, lobsters, corals and many other marine organisms with an external skeleton. This reduces their ability to make and maintain their shell and/or skeleton, severely degrading their health. Some of these species, such as corals and anemones, which are fixed and therefore unable to migrate to other places, remain permanently in hostile conditions, which makes

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[125] IPCC, 2023 — Synthesis Report of the IPCC Sixth Assessment Report (AR6)-Longer Report 85pp. Section 2. Current Status and Trends. 2.1. Observed Changes, Impacts and Attributions (p. 6), https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_LongerReport.pdf , p. 2.

[126] Pinsky, M. L.; Eikeset, M.; McCauley, D. J.; Payne, J. L.; & Sunday, J. M., "Greater vulnerability to warming of marine versus terrestrial ectotherms", Nature, 2017, Vol. 569, No. 7754, pp. 108-111.

[127] *Ibid.*

[128] IAEA, "What is Ocean Acidification?", *op. cit.*

them even more vulnerable. As a result of global warming (temperature rise, fall in oxygen dissolved in the water), coral reefs are bleaching. As they wither away, they offer less shelter and food to the numerous and diverse species that make their home there. The organisms that maintain close relationships with corals (and that are seriously impacted) include a multitude of plankton, on which their coral hosts feed and which are at the bottom of the food chain in marine ecosystems. This chain includes oysters, fish, birds and marine mammals: cetaceans (dolphins and whales), sirenians (manatees) and carnivores (sea lions, otters and walruses). The death of corals therefore represents a huge disturbance at all these levels[129] [130]. Since measures to protect reefs locally are ineffective, "immediate global action to curb future warming is essential to secure a future for coral reefs"[131]. In its 2022 report, the IUCN thus placed coral reefs on the red list of critically endangered species. This is far from unusual as 44 per cent of all shellfish species have been recognized as threatened with extinction[132].

100. Many species of seabirds (including cormorants, seagulls, marabou storks and pelicans) feed on fish and shellfish. Not only are their prey dwindling partly as a result of acidification caused by global warming, they are also being poisoned, which has a dangerous impact on these predatory seabirds.

101. Nor are other animals, including humans, spared, since they feed on poisoned plants and animals. Humans in fact consume nearly all the animals mentioned above; bivalves (molluscs with a two-part shell or interconnected valves) are among our most common foods. However, these organisms filter and absorb chemicals that are harmful to them and to their human consumers (health problems, etc.). Sea turtles are also part of this food chain. Their situation is very complex: they live for a long time, reproduce less than other marine animals and lay their eggs on beaches. The healthy environment these reptiles need in the seas and on land is far from assured given the above-mentioned impacts of global warming. Hence the majority of them are listed as endangered or critically endangered species[133].

102. Mangroves are also severely affected. Climate change impacts the spread of mangroves because of the increase in temperature and salinity. This is because the propagules (organs of dissemination) of many mangrove species have densities similar to those of seawater. Changes in these parameters have repercussions for the dispersal of these trees[134].

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[129] Alliance: Education Series. 2003 — Ecosystems, Threats, and Solutions. Introduction to Coral Reef Ecosystems, Threats, and Solutions. Coral Parks Program. What Are Coral Reefs? The Coral Reef, p. 7. https://www.sprep.org/att/IRC/eCOPIES/Global/264.pdf.

[130] Martin Colognoli, "Coraux : impact du réchauffement climatique sur les récifs", Futura, https://www.futura-sciences.com/planete/dossiers/environnement-coraux-face-rechauffement-climatique-2479/page/6/.

[131] Hughes, T., Kerry, J., Álvarez-Noriega, M. *et al*. "Global warming and recurrent mass bleaching of corals", Nature, Vol. 543, 2017, pp. 373-377, https://doi.org/10.1038/nature21707.

[132] IUCN, "Human activity devastating marine species from mammals to corals — IUCN Red List", https://www.iucn.org/press-release/202212/human-activity-devastating-marine-species-mammals-corals-iucn-red-list.

[133] Hughes, T., Kerry, J., Álvarez-Noriega, M. et al. Global warming and recurrent mass bleaching of corals", Nature, Vol. 543, 2017, pp. 373–377, https://doi.org/10.1038/nature21707.

[134] Van der Stocken, T., Vanschoenwinkel, B., Carroll, D. et al., "Mangrove dispersal disrupted by projected changes in global seawater density", Nat. Clim. Chang, Vol. 12, pp. 685-691, 2022, https://doi.org/10.1038/s41558-022-01391-9.

B. Climate change, Africa and the DRC

103. As will be demonstrated below, climate change has particularly serious consequences in Africa and in the Democratic Republic of the Congo in particular. These impacts exacerbate North-South inequalities.

1. The consequences of climate change in Africa

104. While the contribution of African countries to GHG emissions is minimal, they are becoming increasingly vulnerable to the vagaries of climate change. The IPCC's 2021 report concluded that vast areas of Africa will experience global warming of more than 2°C above pre-industrial levels in the next two years[135]. There are various consequences of climate change in Africa: rainfall anomalies, extreme drought and risks of flooding, with all the attendant impacts on human life and the very survival of States. The situation that is unfolding in Africa is critical and amplifies various socio-economic differences. The impacts of climate change are varied, ranging from threats to health to food and water insecurity and threats to socio-economic development.

105. These impacts affect the different regions of the African continent to varying degrees. North Africa, West Africa and southern Africa are moderately affected by drought. The countries of East Africa are severely affected by drought. A report by the organization World Weather Attribution is telling in this regard. It provides a critical inventory of the extreme drought conditions in the countries of East Africa since the end of 2020[136]. The report notes that climate change has increased by a hundredfold the risk of agricultural drought in Kenya, Somalia, Djibouti, Ethiopia, Sudan and Eritrea[137]. Another study on southern Africa describes the risk of drought from 2015 to 2017 in the Western Cape province of South Africa where rainfall is below average, leading to the depletion of water reserves[138]. As regards North Africa, a study points to a 20 per cent decrease in rainfall in Morocco between 1960 and 2018[139]. This affects the rate of supply to dams, which went from 60 per cent in 2018 to less than 20 per cent in 2022[140]. This will make it difficult to access water and electricity in the near future[141].

106. Rainfall anomalies caused by climate change also have a considerable impact on African States. Heavy rainfall exposes Africa to risks of flooding and a rise in the water level. The situation is of course different from one country or region to another, for island countries and for coastal and non-coastal countries. Studies and research by specialist institutions and bodies provide information on how the various kinds of environmental damage affect people's daily lives and the very survival

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[135] IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

[136] World Weather Attribution, "Human-induced climate change increased drought severity in Horn of Africa", 27 April 2023, https://www.worldweatherattribution.org/human-induced-climate-change-increased-drought-severity-in-southern-horn-of-africa/; https://www.liberation.fr/international/afrique/le-rechauffement-climatique-responsable-de-la-secheresse-en-afrique-de-lest-20230427_JUIJMZZC4NENTBWMZLTVUGIS3Q/.

[137] *Ibid.*

[138] *Ibid.*

[139] Agence française de développement, "Climat au cœur du développement des villes africaines", https://www.afd.fr/fr/ciclia-le-climat-au-coeur-du-developpement-des-villes-africaines.

[140] *Ibid.*

[141] *Ibid.*

of States. The World Food Programme, supported by the UNHCR[142], issued a report in 2022 that painted a bleak picture of flooding caused by rainfall anomalies[143]. The report shows that higher than average rainfall caused devastating flooding in West and Central Africa[144]. This environmental disaster affected five million people in nineteen countries and had serious consequences for health and human life, causing hundreds of casualties and destroying livelihoods[145].

107. Rainfall anomalies also affect sea level rise in Africa. A 2022 study by the Africa Center for Strategic Studies shows that rising sea levels threaten booming African cities[146]. Based on the evidence in the last IPCC report on climate change that projects 0.3 m of sea level rise by 2030, the study concludes that the land area of African coastal cities such as Casablanca, Abidjan, Lagos, Dar es-Salaam, Alexandria, Luanda and Cape Town will shrink, and that they will experience more powerful storm surges and coastal flooding[147]. This will exacerbate the phenomenon of urbanization, with soaring populations in African cities, and other potential consequences: drought, health threats, insecurity[148].

108. An inter-organization report co-ordinated by the WMO draws similar conclusions regarding rising water levels for the countries of sub-Saharan Africa[149]. It notes that half of the coasts of Côte d'Ivoire, Togo, Benin and Senegal are eroding[150]. This trend is even more pronounced in African islands, mostly located in the Indian Ocean: Madagascar, Seychelles, São Tomé-et-Príncipe, Mauritius[151], and will result in the immersion of a large part of these territories in the near future[152].

2. The impacts of climate change in the DRC

109. Climate change is having both an indirect and direct impact in the DRC.

110. The indirect consequences of climate change relate mainly to socio-economic development and are proportional to the geopolitical profile of the giant that is the Democratic Republic of the Congo. They stem from the risks of fragility as a result of the impact on certain key sectors for sustainable development: agriculture, water resources, ecosystems, human health and energy.

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[142] UNHCR, Global Trends Report, https://www.unhcr.org/sites/default/files/2023-06/global-trends-report-2022.pdf.

[143] WFP, Annual performance report for 2022, https://executiveboard.wfp.org/document_download/WFP-0000148942.

[144] *Ibid.*

[145] *Ibid.*

[146] Africa Center for Strategic Studies, Rising Sea Levels Besieging Africa's Booming Coastal Cities, 8 November 2022, https://africacenter.org/spotlight/rising-sea-levels-besieging-africas-booming-coastal-cities-lagos-dakar-alexandria-maputo-nile/.

[147] *Ibid.*

[148] *Ibid.*

[149] WMO, State of Climate in Africa highlights water stress and hazards, September 2022, https://wmo.int/news/media-centre/state-of-climate-africa-highlights-water-stress-and-hazards.

[150] *Ibid.*

[151] *Ibid.*

[152] *Ibid.*

111. In respect of agriculture, the disruption of rainfall patterns due to climate change has an impact on crops and soil fertility, which can lead to an increase in crop diseases[153]. Longer periods of drought and increased temperatures reduce yields and drive farmers to undermine the integrity of the forests by extending their activities into forest areas[154]. All this explains the effect of climate change on the enormous potential of a country with an agricultural size of 80 million hectares of arable land. With a water potential estimated at 62 per cent of the waters of the Congo basin, the DRC is prone to frequent flooding because of the effects of climate change on rainfall patterns[155].

112. In respect of human health, a study conducted by the United States Agency for International Development (USAID) on mosquitoes and rising temperatures is insightful. It demonstrates that by 2030 a further 65 to 80 million more people will be exposed to the risk of endemic malaria[156]. It also reveals that rising temperatures and an increase in the frequency of heavy rainfall engender major health risks: greater stresses on the health of those with HIV/AIDS, an increase in the transmission of infectious diseases, etc.[157].

113. Climate change also affects the ecosystems of the DRC. According to a study by UNEP, there will be a range of impacts on forest ecosystems, with all the foreseeable consequences[158]. This study shows that rainforests will spread southwards and northwards, seasonal forests will be displaced and grassland will decline by 2040[159]. It also shows that mountain gorillas in Virunga Park are at risk of extinction[160]. As regards energy, the USAID study shows that rainfall anomalies could change water flow and affect hydropower production[161].

114. The negative impact of various types of environmental disasters, such as flooding, volcanic eruptions and landslides, are among the most immediate consequences of climate change in the DRC. Over the last three years, there have been ten natural disasters specifically due to climate change in eastern DRC. One of these major disasters occurred recently during the night of 5 May 2023, when flash floods and landslides hit villages in eastern DRC, in Nyamukumbi in Kalehe Territory[162].

115. This disaster took a heavy toll in loss of human life and material damage: 270 dead and 14,000 homes destroyed[163]. The United Nations Secretary-General, Mr Antonio Guterres, said during a visit to Burundi: “This is yet another illustration of accelerating climate change and its disastrous

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[153] USAID, Climate Strategy 2020-2030, November 2022, https://www.usaid.gov/climate/country-profiles/democratic-republic-congo.

[154] *Ibid.*

[155] *Ibid.*

[156] *Ibid.*

[157] *Ibid.*

[158] UNEP, DR Congo: Post-Conflict Environmental Assessment. https://www.unep.org/resources/assessment/dr-congo-post-conflict-environmental-assessment [Synthesis for Policy Makers in English; full report in French].

[159] *Ibid.*

[160] USAID, “Climate Risks in the Central Africa Regional Program for the Environment (CARPE) and Congo Basin, Fact Sheet, available at: https://www.climatelinks.org/sites/default/files/asset/document/20180604_USAID-ATLAS_ClimateRiskProfile_CARPE.pdf

[161] *Ibid.*

[162] UN News, Les inondations dans l’Est de la RD Congo font 270 morts, 8 May 2023, https://news.un.org/fr/story/2023/05/1134887.

[163] *Ibid.*

impact on countries that have done nothing to contribute to global warming"[164]. In December 2022, torrential rain triggered similar floods that caused major damage and loss of human life in the city of Kinshasa[165]: 169 people lost their lives and 5,000 households were affected across five municipalities in Kinshasa[166]. And in 2021, the city of Kalemie experienced flooding and landslides when the waters of Lake Tanganyika overflowed[167].

3. The DRC's climate policy

116. Considered to be the country with the second largest rainforest in the world after Brazil and despite its low anthropogenic GHG emissions, the DRC is extremely vulnerable to climate change. Like other States, the DRC has made numerous commitments under international and regional instruments for combating climate change, in accordance with the principle of common but differentiated responsibilities and respective capabilities.

117. The first action it took was to sign and ratify the UNFCCC, its Kyoto Protocol and the Paris Agreement on 9 January 1995, 23 March 2005 and 13 December 2015, respectively.

118. Since the 2015 Paris Agreement, the DRC has focused on cutting its anthropogenic emissions, setting out its ambitions in its Nationally Determined Contribution (NDC), in accordance with Articles 3 and 4 of the Paris Agreement. In this context, in order to comply with its international obligations, the DRC has revised its NDC. The 2015 target of 17 per cent was increased to 21 per cent in 2021 (conditional setting of 19 per cent, unconditional 2 per cent)[168]. In this regard, it has implemented projects under the Clean Development Mechanism (CDM), with quantified CO_2 sequestration targets.

119. In parallel with these initiatives, voluntary measures for mitigation of GHG emissions outside forests are planned as part of the NAMA process (Nationally Appropriate Mitigation Actions). They are to focus on the energy and agriculture sectors. These initiatives may also include political, legislative and administrative measures, as well as measures aimed at behavioural change, with a view to achieving sustainable, low-carbon development[169].

120. Climate change exacerbates inequalities between countries in the South and in the North. Countries in the South are most exposed to the impacts of climate change, while at the same time they have contributed the least to greenhouse gas emissions. The following maxims reflect this: "The

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[164] Pascal Mulegwa, DRC: le gouvernement au chevet des victimes des inondations de Kalehe, 9 May 2023, https://www.aa.com.tr/fr/monde/rdc-le-gouvernement-au-chevet-des-victimes-des-inondations-de-kalehe/2892688

[165] Le Monde, En RDC, des pluies diluviennes provoquent des inondations meurtrières à Kinshasa, 14 Dec. 2022. https://www.lemonde.fr/afrique/article/2022/12/13/rdc-des-pluies-diluviennes-provoquent-des-inondations-meurtrieres-a-kinshasa_6154278_3212.html.

[166] *Ibid.*

[167] UN News, La montée des eaux du lac Tanganyika provoque des besoins humanitaires urgentes au Burundi, 19 July 2021, https://news.un.org/fr/story/2021/07/1100332

[168] DRC, Revised Nationally Determined Contribution, Kinshasa, 2021, p. 37.

[169] DRC, Third national communication on climate change, Kinshasa, 2015, pp. 116-117.

rich pollute much more than the poor"[170], "those most affected are rarely the most engaged"[171] and "the biggest polluters, the wealthiest, are the slowest to pay"[172]. As we have demonstrated in the second part of this written statement, the countries of the South suffer the most desperately and the most unfairly from the consequences of greenhouse gas emissions, which for the most part result from the model of economic development and political choices of the West. This is particularly true of Africa, which is counting the costs in terms of extreme droughts, various disasters and the most severe impacts of climate change[173].

III. THE SUBSTANCE OF THE OBLIGATIONS OF STATES AND ON-COMPLIANCE WITH THOSE OBLIGATIONS

121. In the request for an advisory opinion transmitted on 12 April 2023, the General Assembly asked the Court to determine

> "*(a)* [w]hat are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations?"

The same text specifies that the question should be addressed

> "[h]aving particular regard to the Charter of the United Nations, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the United Nations Framework Convention on Climate Change, the Paris Agreement, the United Nations Convention on the Law of the Sea, the duty of due diligence, the rights recognized in the Universal Declaration of Human Rights, the principle of prevention of significant harm to the environment and the duty to protect and preserve the marine environment".

122. The instruments referred to in the request for an opinion contain four categories of obligations, which will be examined in turn. First, the "duty of due diligence" (A), then the "the principle of prevention of significant harm to the environment and the duty to protect and preserve the marine environment", expressed, *inter alia*, in Part XII of the United Nations Convention on the Law of the Sea (UNCLOS), which sets out obligations that are enhanced in relation to international custom (B). The treaties and other relevant texts also establish an obligation to co-operate in the fight against climate change (C). Finally, the obligations of States in respect of climate change interact with other rules of international law, including international economic law (D).

123. In addition to providing various clarifications on the interpretation of these obligations, the DRC will, more generally, develop the following point in relation to question *(a)* quoted above, namely that "the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases" involve specific and binding rules that are clearly not always complied with. For that reason, as will

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[170] Hayat Gazzane, "Ces 5 chiffres qui montrent que les riches polluent plus que les pauvres", Les Echos, published on 21 Oct. 2021, https://www.lesechos.fr/monde/enjeux-internationaux/ces-5-chiffres-qui-montrent-que-les-riches-polluent-plus-que-les-pauvres-1357140 [*translation by the Registry*].

[171] Bernard Duterme, "Les fractures nord-sud de l'enjeu climatique", interview in Regard du CETRI, 19 May 2022, https://www.cetri.be/Les-fractures-Nord-Sud-de-l-enjeu-5900 [*translation by the Registry*].

[172] *Ibid*. [*translation by the Registry*].

[173] *Ibid.*

be shown in the fourth part of this written statement, it is important to determine decisive legal consequences in light of this situation.

A. Due diligence: a specific legal obligation that is not systematically complied with

124. It has long been recognized that the general obligation of "due diligence" (sometimes also called "duty of care") applies in the area of international environmental law. The failure to take measures to significantly reduce greenhouse gases, in so far as it is established that such emissions cause considerable and serious damage worldwide, falls within the scope of this obligation. Given the extent of the harm caused and that the measures taken are insufficient considering what is possible (according to the constant recommendations in scientific assessments recognized as reliable)[174], a large number of States are failing to comply with this obligation.

125. The DRC will set out below four characteristics of the duty of due diligence, which all support this conclusion. First, this obligation is well established in positive international law. It cannot be claimed that it is some sort of moral duty without specific legal effects (1). This legal obligation is particularly critical, since it is linked both to the principle of sovereign equality of States and respect for human rights (2). The DRC will then underline the enhanced and specific character of this obligation, especially in the area of climate change. It cannot be reduced to "soft law" because of its alleged vagueness (3). Finally, it is important to set out in detail the appropriate means to ensure that States comply with this obligation. This entails taking account of various sources that cite quantified criteria that enable an accurate assessment of whether or not the duty of due diligence has been complied with (4).

1. A well-established obligation in positive international law

126. In environmental matters, the duty of due diligence was first established in the *Trail Smelter* case, so named for a Canadian smelter located near the boundary with the United States that was emitting a substantial amount of transboundary air pollution. In 1941, an arbitral tribunal held that:

> "under the principles of international law, . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another . . . , when the case is of serious consequence and the injury is established by clear and convincing evidence"[175].

More recently, Principle 21 of the Stockholm Declaration, adopted by the United Nations Conference on the Human Environment in 1972, provides 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 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"[176].

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[174] See above, Part II, paras. 47-54.

[175] *Trail Smelter* case (United States, Canada), 11 March 1941, UNRIAA, Vol. III, p. 1965.

[176] Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972, A/CONF.48/14/Rev.l, 1973, p. 3.

Since then, numerous precedents and instruments have expressed a principle whose status as positive law has become indisputable[177]. In order to eliminate any objection that it is a moral principle insufficiently established in positive law to be able to engage the responsibility of a State in the event of non-compliance, it is to be noted that a wide range of sources, be it custom *(a)*, treaties *(b)* or jurisprudence *(c)*, declare it to be so.

127. Recalling these various sources is not only for didactic purposes, they entail decisive legal effects. For States, the fact that the importance of this principle has been affirmed and reaffirmed is not without consequence: it is not possible to both firmly and frequently proclaim a principle on the one hand and to refrain from applying the legal consequences on the other. Thus, for the duty of due diligence to have full effect it is necessary to carry out a strict assessment of the legality of massive emissions of greenhouse gases in light of this obligation. *A contrario*, proclamations of this principle cannot be reduced to mere incantations devoid of any legal effect.

(a) ***A customary obligation***

128. In 2001, the International Law Commission (ILC) adopted the draft Articles on the Prevention of Transboundary Harm from Hazardous Activities[178]. This text mainly concerns transboundary harm to the environment, and rests on the assumption that such harm, even if it results from an activity that is not prohibited as such by international law, can reveal conduct that is contrary to the duty of due diligence. The Commission thus states that "[t]he obligation of the State of origin to take preventive or minimization measures is one of due diligence"[179]. It concludes, in draft Article 3, that "[t]he State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof"[180]. Such an obligation is preventive by nature: it arises before any harm has been caused.

129. This principle is clearly considered to be rooted in customary practice. The ILC refers to the *Trail Smelter* case and Principle 21 of the Stockholm Declaration, cited above, before recalling Principle 2 of the Rio Declaration of the United Nations Conference on Environment and Development, which provides that States have "the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction"[181]. The ILC goes on to cite numerous texts and precedents that confirm the customary character of this obligation.

130. The Institut de droit international expressed the same view, and has done so on several occasions. As early as 1987, in its resolution on "Transboundary Air Pollution" adopted at its Cairo Session, "[r]ecalling the obligation to respect the sovereignty of every State over its territory, as a

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[177] See in particular Article 30 of the "Charter of Economic Rights and Duties of States" annexed to resolution 3281 (XXIX) adopted on 12 Dec. 1974 by the United Nations General Assembly; the general of the "World Charter for Nature" reproduced in UNGA resolution 37/7 of 28 Oct. 1982 or the "Rio Declaration on Environment and Development" adopted by the General Assembly in resolution 47/190 of 22 Dec. 1992; 2005 World Summit, A/RES/60/1, 24 Oct. 2005, para. 50.

[178] Adopted by the International Law Commission at its fifty-third session in 2001, and submitted to the General Assembly as a part of the Commission's report covering the work of that session (A/56/10).

[179] *Yearbook of the International Law Commission (YILC)*, II(2), p. 154, para. 7.

[180] *Ibid.*, p. 153.

[181] Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, Vol. I, Resolutions Adopted by the Conference (United Nations publication), resolution 1, Annex I. The General Assembly adopted the declaration in resolution 47/190, Report of the United Nations Conference on Environment and Development.

result of which each State has the duty to prohibit and to prevent any use of its territory likely to cause injury in the territory of another State", it affirmed that

> "[i]n the exercise of their sovereign right to exploit their resources pursuant to their own environmental policies, States shall be under a duty to take all appropriate and effective measures to ensure that their activities or those conducted within their jurisdiction or under their control cause no transboundary air pollution"[182].

In 1997, during its Strasbourg session, the Institut de droit international expanded on this subject. In its resolution entitled "Environment", it affirmed that

> "[e]very State, when intervening on the basis of decisions taken in the exercise of its sovereignty in fields of activity where the effects of such decisions on the environment are clear, has the responsibility to ensure that activities within its jurisdiction or under its control do not cause damage which may affect the lives of the present and future generations"[183].

In its resolution devoted more specifically to "Responsibility and Liability under International Law for Environmental Damage", the Institut,

> "*[n]oting* in particular Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration on the responsibility of States 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",

recalled that

> "[t]he breach of an obligation of environmental protection established under international law engages responsibility of the State (international responsibility), entailing as a consequence the obligation to reestablish the original position or to pay compensation".

It is clear from the wording used that the duty of due diligence is considered part of positive international law and that its violation, like any other rule of international law, engages a State's responsibility.

131. The International Law Association (ILA) also worked on this subject[184]. In a 2014 report the sources of States' "due diligence obligations" and the consequences are both mentioned[185]. In general, the ILA affirms that "[t]he concept of due diligence is a key component of the obligation to prevent harm in international environmental law"[186]. Indeed, "this principle evolved in time to cover broader responsibility for States over environmental damage", such that it is well established 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

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[182] Article 2 of the resolution.

[183] Article 6 of the resolution.

[184] Its reports are available at the following address: https://www.ila-hq.org/en/study-groups/due-diligence-in-international-law.

[185] ILA, 2014, p. 28

[186] *Ibid.*, p. 25.

> 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"[187].

A second report published in 2016 stated that the work of the ILC cited above offers "an authoritative statement on the scope of a State's international legal obligation to prevent a risk of transboundary harm"; the ILA quotes Article 3 of the ILC's draft, recalling the obligation to take "all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof"[188].

(b) ***A conventional obligation***

132. The customary character of this principle is also reflected in the fact that it has been introduced into a number of treaties and conventions, especially in two treaties explicitly cited in the request for an opinion submitted to the Court and which, as we shall see, prove particularly important in providing a response.

First, according to the UNFCCC, adopted in 1992, the States parties,

> "[r]ecalling . . . 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,"

affirm that

> "[t]he Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects"[189].

In practice, the Convention obliges all the States parties to make regular inventories of their emissions, put in place national programmes to reduce greenhouse gas emissions and submit periodic reports[190].

Next, the 2015 Paris Agreement is presented as the means to achieve the objectives set out in the 1992 Convention, and lays down various obligations, some of which will be reproduced below. Generally, these obligations are clearly intended to clarify the scope of the principle of due diligence. Article 4 of the Agreement provides that the "Parties *aim to reach* global peaking of greenhouse gas emissions as soon as possible"[191]. This obligation to endeavour must be read in light of Article 2, paragraph 1, according to which the Agreement "aims to strengthen the global response to the threat of climate change, . . . including by: *(a)* Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1,5 °C above pre-industrial levels".

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[187] *Ibid.*

[188] ILA, 2016, p. 24.

[189] Article 3, para. 3, of the Convention.

[190] See Article 4 in particular.

[191] United Nations, Treaty Series, Vol. 3156, p. 79 (emphasis added).

133. Numerous treaties, some of which are cited in the request for an opinion, testify to the universal recognition of the principle of due diligence. For example, Article 3 of the 1992 Convention on Biological Diversity provides 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 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".

The new Kunming-Montreal Global Diversity Framework, adopted by the Conference of the Parties in December 2022, requests the Parties to

> "[m]inimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity"[192]

Article 2 of the Vienna Convention for the Protection of the Ozone Layer, adopted on 22 March 1985, incorporates the duty of due diligence in so far as it states that

> "[t]he Parties shall take appropriate measures in accordance with the provisions of this Convention and of those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer".

Article 194 of UNCLOS, which aims to prevent pollution of the marine environment, provides that "States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment"[193]. These measures must minimize

> "to the fullest possible extent: *(a)* the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping; *(b)* pollution from vessels . . . ; *(c)* pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil . . . ; *(d)* pollution from other installations and devises operating in the marine environment".

(c) ***A customary obligation established by jurisprudence***

134. The customary nature of the duty of due diligence has also been established by the Court. In 1996, the Court found that "[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now a part of the corpus of international law relating to the

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[192] Target 8, CBD/COP/DEC/15/4, 19 December 2022.

[193] Article 2 of the Convention for the Protection of the Marine Environment of the North-East Atlantic (the "OSPAR Convention") uses similar wording. See also Article 7 of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, adopted on 19 Dec. 1966; Article 3 *et seq*. of the Convention on Wetlands of International Importance especially as Waterfowl Habitat, adopted at Ramsar on 2 Feb. 1971; Article 2 *et seq*. of the Kyoto Protocol to the United Nations Framework Convention on Climate Change; Article 6 *et seq*. of the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (the "High Seas Treaty"), adopted on 5 March 2023; and finally, the African Convention on the Conservation of Nature and Natural Resources of 11 July 2003 (preamble, sixth paragraph).

environment"[194]. This dictum has been amply confirmed by the Court's jurisprudence. In the case concerning *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay)*, the Court

> "points out that the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory. It is 'every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States' (*Corfu Channel (United Kingdom* v. *Albania), Merits, Judgment, I.C.J. Reports 1949*, p. 22). A State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. This Court has established that this obligation 'is now part of the corpus of international law relating to the environment' (*Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 242, para. 29)"[195].

This paragraph is reproduced verbatim in the cases concerning *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica* v. *Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua* v. *Costa Rica)*[196]. Finally, in the Judgment rendered on 1 December 2022 in the case concerning the *Dispute over the Status and Use of the Waters of the Silala (Chile* v. *Bolivia)*, the Court reaffirmed the customary obligation to prevent transboundary harm:

> "The Court recalls that in general international law it is 'every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States' (*Corfu Channel (United Kingdom* v. *Albania), Merits, Judgment, I.C.J. Reports 1949*, p. 22). 'A State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State' in a transboundary context, and in particular as regards a shared resource"[197].

135. In addition to the Court, other international courts and tribunals have expressed a similar position. Examples include the International Tribunal for the Law of the Sea (ITLOS)[198] and a number of arbitral courts and tribunals[199].

136. At this stage, it is the extent of the recognition of the duty of due diligence in positive international law that is being assessed. This obligation, even though often couched in general terms, indubitably has the same legal value as any other relevant legal rule. Its importance therefore precludes it being reduced to mere proclamations of a moral nature without any operational scope,

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[194] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 242, para. 29.

[195] *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay), Judgment, I.C.J. Reports 2010 (I)*, pp. 55-56, para. 101.

[196] *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica* v. *Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua* v. *Costa Rica), Judgment, I.C.J. Reports 2015 (II)*, p. 706, para. 104.

[197] *Dispute over the Status and Use of the Waters of the Silala (Chile* v. *Bolivia), Judgment, I.C.J. Reports 2022 (II)*, para. 99.

[198] *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011*, esp. paras. 114, 115 and 135.

[199] See, for example, *Iron Rhine Arbitration (Belgium* v. *Netherlands) (PCA Award), ICGJ 2005*, p. 373, para. 222; *South China sea Arbitration (The Republic of Philippines* v. *The People's Republic of China), PCA Case No. 2013-19, Award of 12 July 2016,* para. 964.

especially since it is an obligation founded not only on respect for State sovereignty but also on the protection of human rights.

2. An obligation linked not only to the sovereignty of States, but also to the protection of human rights, future generations and areas beyond any national jurisdiction

137. The duty of due diligence is founded on the very principle of the sovereignty of States, and thus has an inter-State scope *(a)*. However, the development of international human rights law has led to a strengthening and dramatic extension of the duty of due diligence *(b)*, which today confers rights not only on present generations but also on future generations *(c)*. The duty of due diligence is characterized as an obligation *erga omnes* and includes the protection of areas beyond national jurisdiction *(d)*.

(a) *Due diligence and respect for sovereignty: an obligation towards States*

138. The principle of due diligence has a general scope that is far from being limited to environmental law. It is thus considered to be indissociable from the sovereignty of States, which involves both rights over a State's national territory and obligations not to use that territory in a way that is contrary to the rights of other States. This much is clear from Max Huber's celebrated award of 1928:

> "Territorial sovereignty, as has already been said, involves the exclusive right to display the activities of a State. This right has as corollary a duty: the obligation to protect within the territory the rights of other States, in particular their right to integrity and inviolability in peace and in war, together with the rights which each State may claim for its nationals in foreign territory"[200].

The Court followed the same reasoning in the *Corfu Channel* case when it set out "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States"[201].

139. This is clearly a logical consequence of the principle of peaceful co-existence, which can itself be linked to the principle of good-neighbourliness. In view of the existential threat posed by climate change, compliance with these different obligations is ever more crucial and urgent for the preservation of the sovereignty of States and for their very survival.

140. That is why due diligence must be linked to the United Nations Charter, one of whose objectives is "to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace"[202]. The link between climate change and the maintenance of peace has long been recognized. The Security Council first debated the issue on 17 April 2007[203]. The concept paper then submitted by the United Kingdom, entitled "Energy, Security and Climate", highlighted the "security implications of a changing climate, including through its impact on potential drivers of conflict (such as access to energy, water, food and other scarce resources, population movements and

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[200] *Island of Palma Case (Netherlands/United States of America), Award of April 1928, RIAA, Vol. II (1949)*, p. 164.

[201] *Corfu Channel (United Kingdom* v. *Albania), Merits, Judgment, I.C.J. Reports 1949*, p. 22.

[202] Article 1; see also Article 2, para. 3.

[203] S/PV.5663, 17 April 2007; see Lucile Maertens, "Le changement climatique en débat au sein du Conseil de sécurité de l'ONU", Revue internationale et stratégique, 2018, No. 109, pp. 105-114.

border disputes)"[204]. There have been regular debates on this subject ever since. On 20 July 2011, a Security Council statement noted the following:

> "The Security Council expresses its concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security.
>
> The Security Council expresses its concern that possible security implications of loss of territory of some States caused by sea-level-rise may arise, in particular in small low-lying island States"[205].

More recently, meetings have been held under the agenda item "Threats to international peace and security: Climate change, peace and security". It is in this context that phenomena such as increased competition for resources, the breakdown of State structures caused by desertification and natural disasters are pointed to as manifestations of climate change. Examples such as the situations in Colombia, Haiti, Iraq, Mali, the Central African Republic, Somalia or Suda are mentioned[206].

141. Aside from the debate as to whether the Security Council can address this question and potentially adopt measures based on Chapter VII of the Charter[207], be they issue-based or related to a particular situation, there is a clear consensus on the links between climate change and the maintenance of international peace and security. The United Nations Development Programme (UNDP) summarizes the situation well: "[w]hile climate change does not directly cause violent conflicts, its impacts can exacerbate drivers"[208]. While the Member States of the United Nations, noting in 2005 that climate change is a "serious and long-term challenge that has the potential to affect every part of the globe", added that "we are living in an interdependent and global world and that many of today's threats recognize no national boundaries, are interlinked and must be tackled at the global, regional and national levels in accordance with the Charter and international law"[209]. In the resolution setting out the request for an advisory opinion of the Court, the General Assembly expresses its "determination to address decisively the threat posed by climate change", noting that "as temperatures rise, impacts from climate and weather extremes, as well as slow-onset events, will pose an ever-greater social, cultural, economic and environmental threat"[210].

142. The link between climate change and international security stems in particular from migrations caused by certain manifestations of climate change, such as desertification or the rise in the water level. As early as 1990, the IPCC noted that "the greatest single impact of climate change could be on human migration — with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption"[211]. This link has also been recognized by the International

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[204] S/2007/186, 5 April 2007.

[205] S/PRST/2011/15, 20 July 2011.

[206] Letter dated 5 June 2023 from the Permanent Representative of the United Arab Emirates to the United Nations addressed to the Secretary-General, S/2023/408, p. 3.

[207] Paolo Palchetti, "Débattre des changements climatiques au Conseil de sécurité : pour quoi faire ?", Q.I.L., 30 April 2022 [online].

[208] UNDP, Climate Security [https://climatepromise.undp.org/what-we-do/areas-of-work/climate-security].

[209] 2005 World Summit Outcome, A/RES/60/1, 24 Oct. 2005, paras. 5[1] and 71.

[210] A/RES/77/276.

[211] See also IPCC, AR6 SYR, March 2023, pp. 16 and 75. See above fn 50.

Organization for Migration (IOM)[212] and by various other scientific studies[213]. Given that some migratory movements have already been taken into account by the Security Council on a number of occasions in describing situations that pose a threat to peace[214], the effects of climate change on security clearly cannot be ignored. On top of that, it should be added that military activities in general and armed conflicts in particular themselves cause a huge amount of pollution that is incompatible with the targets for reducing greenhouse gas emissions that States have set themselves and which will be described in detail below. In this regard, the duty of due diligence to prevent harm is based both on international environmental law and on the law of international peace and security.

143. In light of the foregoing, it is clear that the duty of due diligence in environmental matters can also be based on the Charter of the United Nations itself. The Charter requires that all appropriate measures be taken to ensure justice, peace and international security. Article 1 provides that:

> "The Purposes of the United Nations are:
>
> 1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace".

Similarly, Article 2, paragraph 3, provides that "[a]ll Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered". To disregard or violate the duty of due diligence by refraining from taking all possible measures to reduce climate change is thus problematic, both in light of the customary obligation set out above and in light of the Charter itself. In referring to "justice" in general, the Charter should be interpreted, in the current context, as thereby strengthening environmental obligations.

144. This is especially true since, aside from the strict security dimension that entails obligations that are essentially inter-State, the Charter also includes a human-rights-related dimension. It is also from this perspective that the duty of due diligence should be understood: it protects not only the sovereign rights of States but also more broadly the rights of individuals.

(b) ***Due diligence and protection of human rights: an obligation towards individuals***

145. The duty of due diligence must also be linked to respect for human rights. This has a practical consequence: *today, the principle of due diligence requires that no harm be caused not only to other States, but also to all the individuals who come within their territorial and extraterritorial jurisdiction*[215]. Due diligence is thus no longer limited to an inter-State transboundary dimension.

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[212] IOM, Migration Research Series, Migration and Climate Change, No. 31, 2008.

[213] N. Myers, "Environmental refugees: An emergent security issue", 13th Economic Forum, Prague, May 2005; Stern, N., (Ed.), The Economics of Climate Change: The Stern Review, Cambridge University Press, Cambridge, 2006, p. 3; Daniel Compagnon, 2018. "Les 'guerres vertes', du fantasme médiatique à l'émergence de nouveaux enjeux de sécurité", in Benoît Pelopidas and Frédéric Ramel, Guerres et conflits armés au XXIe siècle, Presses de Sciences Po, coll. L'Enjeu mondial; R. McLeman and B. Smit, 2004, "Climate change, migration and security", Canadian Security Intelligence Service, Commentary No. 86, Ottawa, p. 8.

[214] See for example resolutions 688 (1991) of 5 Apr. 1991 or 940 (1994) of 2 Aug. 1994.

[215] See also below, paras. 164-165.

146. The link between due diligence and human rights is already apparent in standard international humanitarian law instruments, and in particular in common Article 1 of the four Geneva Conventions of 1949, which states that "[t]he High Contracting Parties undertake to respect *and to ensure respect for* the present Convention in all circumstances"[216]. In applying this provision, every State is obliged not only not to violate the rules of the law of armed conflict which make up the four Conventions, but also to take all reasonable measures to prevent (or punish) their violation. This is clearly an expression of the principle of due diligence, which extends to the protection of the environment, as illustrated by the conventional[217] and customary[218] prohibition on causing widespread, long-term and severe damage to the natural environment. Diligence is due in times of peace and in times of war.

147. The "right to a clean, healthy and sustainable environment" has, more generally, been proclaimed by the General Assembly in a resolution adopted on 28 July 2022 by 161 votes for, none against and eight abstentions. In that resolution, the Assembly

> "*Reaffirming that States have the obligation to respect, protect and promote* human rights, including in all actions undertaken to address environmental challenges, and to take measures to protect the human rights of all,
>
> . . . . . .
>
> Affirming the importance of a clean, healthy and sustainable environment for the enjoyment of all human rights,
>
> . . . . . .
>
> 1. Recognizes the right to a clean, healthy and sustainable environment as a human right;
>
> 2. Notes that the right to a clean, healthy and sustainable environment is related to other rights and existing international law;
>
> 3. Affirms that the promotion of the human right to a clean, healthy and sustainable environment requires the full implementation of the multilateral environmental agreements under the principles of international environmental law;
>
> 4. Calls upon States, international organizations, business enterprises and other relevant stakeholders to adopt policies, to enhance international cooperation, strengthen capacity-building and continue to share good practices in order *to scale up efforts to ensure a clean, healthy and sustainable environment for all*."[219]

While the duty of due diligence is not explicitly referred to, the affirmation of an obligation to respect and protect human rights and to take measures to that end undeniably reflects the logic of that particular domain.

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[216] Emphasis added.

[217] Articles 35, para. 3 and 55 para. 1 of Protocol I to the Geneva Conventions.

[218] Article 45 of the customary rules codified by the International Committee of the Red Cross.

[219] A/RES/76/300. Emphasis added.

148. This resolution echoes certain instruments such as the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters[220], the Additional Protocol to the American Convention on Human Rights in the area of Economic, Social, and Cultural Rights, adopted in San Salvador on 17 November 1988[221], the Charter of Fundamental Rights of the European Union of 7 December 2000[222], the Arab Charter on Human Rights of 2004[223], or the African Charter on Human and Peoples' Rights of 27 June 1981[224]. Here again, all the relevant instruments express the same idea of due diligence: States are bound by both negative obligations (not to harm the environment) and positive obligations (to take the necessary measures to ensure its protection) which refer to a standard of conduct.

149. In its resolution on the right to a clean, healthy and sustainable environment, quoted above, the United Nations General Assembly simply codifies the practice of human rights treaty monitoring bodies. These bodies consider that the right to a healthy environment is indissociable from basic rights, be they civil and political rights (such as the right to life and the right to a private and family life) or economic and social rights (such as the right to health or the right to an adequate standard of living). More specifically, States are required to ensure respect for these rights by taking appropriate measures to protect the environment, measures in respect of which States *a priori* have a margin of appreciation, but the lawfulness of which may be assessed by the relevant bodies.

150. Thus, in a joint statement of 16 September 2019, the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, the Committee on the Rights of the Child and the Committee on the Rights of Persons with Disabilities took the view that the IPCC's special report on global warming at 1.5°C published on 8 October 2018

> "confirms that climate change poses significant risks to the enjoyment of human rights . . . The adverse impacts identified in the report threaten, among other things, the right to life, the right to adequate food, the right to adequate housing, the right to health, the right to water and cultural rights".

Such a finding obliges States to be particularly vigilant.

151. Similarly, the United Nations Human Rights Council emphasized that

> "the adverse effects of climate change have a range of implications, which can increase with greater global warming, both direct and indirect, for the effective enjoyment of

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[220] "[E]very person has the right to live in an environment adequate to his or her health and well-being" (United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, signed at Aarhus on 25 June 1998, preamble; see also Article 1).

[221] "Everyone shall have the right to live in a healthy environment and to have access to basic public services . . . The States Parties shall promote the protection, preservation, and improvement of the environment" (Article 11).

[222] "A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development" (Article 37).

[223] "Everyone shall have the right to an adequate standard of living for himself and his family, ensuring well-being and a decent life, including adequate food, clothing, housing, services and a right to a safe environment. The State Parties shall take appropriate measures within their available resources to ensure the realization of this right" (Article 38).

[224] "All people shall have the right to a general satisfactory environment favourable to their development" (Article 24; see similar wording in the African Convention on the Conservation of Nature and Natural Resources of 11 July 2003, Article III).

> human rights, including, *inter alia*, the right to life, the right to adequate food, the right to the enjoyment of highest attainable standard of physical and mental health, the right to adequate housing, the right to self-determination, the rights to safe drinking water and sanitation, the right to work and the right to development, and recalling that in no case may a people be deprived of its own means of subsistence"[225].

Once again, beyond obligations not to impair the human rights enshrined in existing treaties, such a situation entails a broader duty of diligence.

152. For many years the European Court of Human Rights has also interpreted various provisions of the Convention it oversees in such a way as to ensure that individuals coming under the jurisdiction of the States parties have the right to a healthy environment. This right is based mainly on positive obligations to protect the right to life (Article 2) and the right to a private and family life (Article 8). A wealth of jurisprudence shows that judgments can be rendered against States for matters relating to the right to a healthy environment[226]. In the *Tatar* v. *Romania* case, for example, the court set out a "positive obligation to take all reasonable and suitable measures to protect the rights [of the applicants to a private life]" which entails "the paramount duty to put in place a legislative and administrative framework for the effective prevention of damage to the environment and to human health"[227]. Besides this well-established jurisprudence, several applications have recently been filed more specifically denouncing greenhouse gas emissions. In the *Duarte Agostinho and Others* v. *Portugal* case, the applicants consider that the forest fires experienced by Portugal every year since 2017 are the direct result of climate change, and that they are therefore suffering harm and are at risk of health-related problems. They consider that the 33 States they brought before the court have violated Articles 2 and 8 of the Convention by failing to take sufficient action on climate change, as recommended in the 2015 Paris Agreement[228]. This case was submitted to the Grand Chamber which, at the time of writing, had not yet handed down its judgment. Other similar cases are pending[229]. Climate litigation has considerably grown in importance in European jurisprudence, which is reflected in the fact that the European court has decided to deal with a number of these applications as a priority. Without prejudging the outcome of these proceedings with regard to the particular facts specific to each case, the existence of a positive obligation to take all reasonable steps to protect the right to life and the right to a private and family life, including in environmental matters, has become indisputable.

153. In this regard, the African Commission on Human and Peoples' Rights found that Nigeria had violated several provisions of the African Charter. Citing Articles 16 (right to health) and 24 (right of peoples to a healthy environment), the Commission emphasized that[230]

> "[i]nternationally accepted ideas of the various obligations engendered by human rights indicate that all rights, both civil and political rights and social and economic, generate at least four levels of duties for a State that undertakes to adhere to a rights regime,

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[225] Resolution "Human rights and climate change" adopted on 16 July 2020 (A/HRC/RES/44/7).

[226] See the numerous cases cited and commented on by Paul Bauman, *Le droit à un environnement sain et la Convention européenne des droits de l'homme*, L.G.D.J., 2021.

[227] ECHR, Judgment of 27 January 2009, para. 88 (*translation by the Registry*).

[228] *Duarte Agostinho and Others* v. *Portugal and 32 other States*, No. 39371/20.

[229] For example, ECHR, *Verein KlimaSeniorinnen Scheitz and Others* v. Switzerland, No.53600/20; *Carême* v. *France*, No. 7189/21; *Greenpeace Nordic and Others* v. *Norway*, No. 3408/21.

[230] *African Commission on Human and Peoples' Rights, Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR)* v. *Nigeria*. Communication 155/96. Decision of October 27 2001.

> namely *the duty to respect, protect, promote, and fulfil these rights*. These obligations universally apply to all rights and entail a *combination of negative and positive duties*"

and that

> "[t]hese rights recognise the importance of a clean and safe environment that is closely linked to economic and social rights in so far as the environment affects the quality of life and safety of the individual. As has been rightly observed by Alexander Kiss, 'an environment degraded by pollution and defaced by the destruction of all beauty and variety is as contrary to satisfactory living conditions and the development as the breakdown of the fundamental ecologic equilibria is harmful to physical and moral health'"[231].

Besides the right to life or other civil and political rights, the right to a healthy environment is manifestly linked to fundamental economic, social and cultural rights and entails "a combination of negative and positive obligations", the latter of which amount to a duty of care.

154. This principle has been recognized by the Inter-American Court of Human Rights in an opinion of 15 November 2017[232]. The court begins by recognizing "the existence of an undeniable relationship between the protection of the environment and the realization of other human rights, in that environmental degradation and the adverse effects of climate change affect the real enjoyment of human rights", underlining that "there is extensive recognition of the interdependent relationship between protection of the environment, sustainable development, and human rights in international law"[233]. It is on this basis that it asserts that

> "in addition to the right to a healthy environment, damage to the environment may affect all human rights, in the sense that the full enjoyment of all human rights depends on a suitable environment. Nevertheless, some human rights are more susceptible than others to certain types of environmental damage (*supra* paras. 47 to 55). The rights especially linked to the environment have been classified into two groups: (i) rights whose enjoyment is particularly vulnerable to environmental degradation, also identified as substantive rights (for example, the rights to life, personal integrity, health or property), and (ii) rights whose exercise supports better environmental policymaking, also identified as procedural rights (such as the rights to freedom of expression and association, to information, to participation in decision-making, and to an effective remedy)"[234].

The Inter-American Court has also affirmed that, to comply with the right to life and to dignity,

> "States must regulate, supervise and monitor the activities under their jurisdiction that could cause significant damage to the environment; carry out environmental impact assessments when there is a risk of significant damage to the environment; prepare contingency plans in order to establish safety measures and procedures to minimize the possibility of major environmental disasters, and mitigate any significant environmental damage that could have occurred, even when this happened despite preventive actions by the State . . . States must act in keeping with the precautionary principle to protect

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[231] Ibid., paras. 44 and 51. Emphasis added.

[232] Advisory Opinion OC-23/17, "The Environment and Human Rights", 15 November 2017.

[233] *Ibid*., paras. 47 and 52.

[234] *Ibid.*, para. 64.

> the rights to life and to personal integrity in the event of possible serious and irreversible damage to the environment, even in the absence of scientific certainty"[235].

Based on these findings, the Inter-American Court concludes its opinion with the affirmation that States have an obligation

> "[t]o respect and to ensure the rights to life and to personal integrity of the persons subject to their jurisdiction, States have the obligation to prevent significant environmental damage within or outside their territory and, to this end, must regulate, supervise and monitor activities within their jurisdiction that could produce significant environmental damage; conduct environmental impact assessments when there is a risk of significant environmental damage; prepare a contingency plan to establish safety measures and procedures to minimize the possibility of major environmental accidents, and mitigate any significant environmental damage that may have occurred, in accordance with paragraphs 127 and 174 of this Opinion"[236].

These considerations confirm the essential link between the duty of due diligence in environmental matters and the basic rights of the human person.

155. This "greening" of human rights has also been recognized by the Human Rights Committee on a number of occasions. In its General comment No. 36 on the right to life (Article 6 of the International Covenant on Civil and Political Rights), adopted on 30 October 2018, it makes the following general affirmation:

> "Environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life. The obligations of States parties under international environmental law should thus inform the contents of article 6 of the Covenant, and the obligation of States parties to respect and ensure the right to life should also inform their relevant obligations under international environmental law. Implementation of the obligation to respect and ensure the right to life, and in particular life with dignity, depends, *inter alia*, on *measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors*"[237].

These principles were applied by the Committee in its examination of certain individual complaints. In the *Daniel Billy et al.* case, decided on 22 September 2022, the Human Rights Committee stated that "when environmental damage threatens disruption to privacy, family and the home, States parties must prevent serious interference with the privacy, family and home of individuals under their jurisdiction"[238]. On that basis, Australia was found responsible for having failed to take adequate measures to mitigate the negative effects of climate change on the complainants. The Committee found that Article 17 (right to a private and family life) and Article 27 (rights of minorities) had been violated.

156. It appears especially important in the present proceedings that the Court should ascribe "great weight" to the interpretation of the Human Rights Committee. Thus, "[a]lthough the Court is

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[235] *Ibid.*, para. 242, b.

[236] *Ibid.*, para. 244, 5.

[237] *Ibid*., para. 65. Emphasis added.

[238] Human Rights Committee, *Views adopted by the Committee under Article 5 (4) of the Optional Protocol, concerning communication N°3624/2019, Daniel Billy et al., CCPR/C/135/D/3624/2019*, 22 September 2022, para. 8.9.

in no way obliged, in the exercise of its judicial functions, to model its own interpretation of the Covenant on that of the Committee, it believes that it should ascribe *great weight* to the interpretation adopted by this independent body that was established specifically to supervise the application of that treaty. The point here is to achieve the necessary clarity and the essential consistency of international law, as well as legal security, to which both the individuals with guaranteed rights and the States obliged to comply with treaty obligations are entitled"[239].

157. Two interim conclusions can be drawn at this stage.

— First, the duty of due diligence is unanimously recognized as a rule of positive international law, the violation of which, as for any relevant rule, entails international responsibility and all the consequences that ensue.

— Second, this rule is essentially linked to other fundamental rules of international law, such as respect for sovereignty and human rights. The harm that is to be prevented is not only that which affects other States: it also extends to that which affects individuals coming under the territorial and the extraterritorial jurisdiction of a State. As will be demonstrated below, it also extends to future generations and to areas beyond any State jurisdiction.

(c) ***Obligations to future generations***

158. States have also recognized that they have obligations to future generations and have recognized their rights.

159. The Court previously considered humanity's future generations in its Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*. The Court noted in particular that it recognizes that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, "including generations unborn"[240]. There was thus already a recognition, in a judicial context, of the need to take the interests of future generations into account.

160. States themselves recognize that they have international obligations towards future generations, be it the obligation to protect their needs and interests, or more recently to respect and protect their rights. In this regard, reference can be made to the Stockholm Declaration on the Human Environment[241], the Rio Declaration[242], and a series of General Assembly resolutions, starting with resolution 43/53 of 6 December 1988, entitled "Protection of global climate for present and future generations of mankind". The last resolution in this series, adopted without a vote[243] on 14 December 2022, states in the recitals that the measures undertaken by the United Nations to protect the climate must also ensure "the well-being of present and future generations"[244]. Similarly, resolution 76/300, quoted above, entitled "The human right to a clean, healthy and sustainable environment", refers to

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[239] *Ahmadou Sadio Diallo (Republic of Guinea* v. *Democratic Republic of the Congo), Merits, Judgment, I.C.J. Reports 2010 (II)*, p. 664, para. 66. Emphasis added.

[240] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 29. See also paras. 35-36.

[241] Stockholm Declaration on the Human Environment, 5-16 June 1972, A/CONF.48/14/Rev.l, Principle 2.

[242] Rio Declaration on Environment and Development, 3-14 June 1992, Principle 3, A/CONF.151/26.

[243] United Nations Meetings coverage and press releases "General Assembly Takes Up Second Committee Reports, Adopting 38 Resolutions, 2 Decisions", 14 Dec. 2022.

[244] UNGA, resolution 77/165 of 14 Dec. 2022, Protection of global climate for present and future generations of humankind.

"all human rights, for present and future generations"[245]. As already noted, this resolution was adopted by 161 votes in favour, with eight abstentions and no votes against[246]. However, the abstentions (People's Republic of China, the Russian Federation, Belarus, Cambodia, Ethiopia, Iran, Kirghizstan and Syria) did not relate to the rights of future generations but the fact that the process followed to enshrine the right to a clean environment was not treaty-based (Russian Federation[247]) or the exact scope of the right to a clean environment and its relationship to the principle of common but differentiated responsibilities and respective capacities (People's Republic of China[248]). This recognition of obligations for States and human rights for future generations can also be found in the resolutions of the Human Rights Council[249].

161. In accordance with these commitments, States are under an obligation to protect future generations in a non-discriminatory manner in relation to present generations. The interests, needs or rights of future generations cannot be sacrificed to those of present generations. Present and future generations are thus perceived as *a whole*, which have *common* interests and needs. Once again, the texts cited above are unequivocal: United Nations General Assembly resolution 76/300, entitled "The human right to a clean, healthy and sustainable environment", refers to "the full enjoyment of all human rights, for present and future generations"[250], while resolution 45/30 of the Human Rights Council, entitled "Rights of the child: realizing the rights of the child through a healthy environment", affirms that every child, "of present and future generations", must be able to "enjoy an environment adequate to their health"[251]. Non-discrimination is the very foundation of human rights, without which they could not prosper. The first and second articles of the Universal Declaration of Human Rights refer to the principles of equality and non-discrimination, thus indicating that the rights and freedoms enshrined in the Declaration cannot be effective without respect for those principles. Similarly, Articles 2 and 3 of the International Covenant on Civil and Political Rights refer to equality and non-discrimination. Accordingly, States are under an international obligation to ensure respect for the human rights of future generations, on an equal footing with the rights of present generations[252].

162. Effective respect for the rights of future generations limits the right of today's generations to conduct polluting activities or use resources in an unsustainable manner. States must impose restrictions on the activities of today's generations that are undermining respect for the rights of future generations, in particular their right to life and a healthy environment, which also results from

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[245] UNGA, resolution 76/300 of 28 July 2022, The human right to a clean, healthy and sustainable environment, A/RES/76/300, recital. Emphasis added.

[246] UN News, "UN General Assembly declares access to clean and healthy environment a universal human right", 28 July 2022, available at https://news.un.org/en/story/2022/07/1123482.

[247] UNGA, Official Records of the 97th plenary meeting, 76th session, 28 July 2022, A/76/PV.97, pp. 6-7. Available at https://documents.un.org/doc/undoc/gen/n22/442/19/pdf/n2244219.pdf?OpenElement.

[248] *Ibid.*, p. 18.

[249] Human Rights Council, resolution 45/30 adopted with a vote on 7 Oct. 2020, Rights of the child : realizing the rights of the child through a healthy environment, A/HRC/RES/45/30, para. 3, https://documents.un.org/doc/undoc/gen/g20/264/86/pdf/g2026486.pdf?OpenElement.

[250] UNGA, resolution 76/300 of 28 July 2022, The human right to a clean, healthy and sustainable environment, A/RES/6/300, recital, available at https://documents.un.org/doc/undoc/gen/n22/442/77/pdf/n2244277.pdf.

[251] Human Rights Council, resolution 45/30 of 7 October 2020, Rights of the child: realizing the rights of the child through a healthy environment, A/HRC/RES/45/30, paragraph 3, available at: https://documents.un.org/doc/undoc/gen/g20/264/86/pdf/g2026486.pdf?OpenElement.

[252] Maastricht Principles on The Human Rights of Future Generations, adopted on 3 Feb. 2023, paragraph 6 *(e)*. Available at https://giescr.org/en/?preview=1&option=com_dropfiles&format=&task=frontfile.download&catid=93&id=432&Itemid=1000000000000.

the principle of sustainable development[253]. States must therefore act according to the principles of prevention and precaution, and prevent any activity, be it State or non-State, when they have reasonable grounds to believe that it may violate the rights of future generations[254].

163. In light of all the implications and based on certain proclamations in both treaty and non-treaty texts, as well as certain legal precedents, the legal scope of due diligence, whether in the area of respect for sovereignty or human rights, clearly cannot be minimized on the pretext that it is general or even vague in nature.

(d) ***An obligation erga omnes including protection of areas beyond national jurisdiction***

164. The duty of due diligence requires States not only to cause no harm to other States but to cause no harm to the environment in areas beyond any national jurisdiction. Principle 21 of the Stockholm Declaration, adopted by the United Nations Conference on the Human Environment in 1972, provides that

> "States have, in accordance with the Charter of the United Nations and the principles of international law, . . . 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*"[255].

This was confirmed by the Court in its 1996 Opinion, in which it affirmed that

> "[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States *or of areas beyond national control* is now part of the corpus of international law relating to the environment"[256].

165. This clearly holds for the atmosphere, the high seas and beyond, for the climate system itself, which are central to the request for an advisory opinion.

3. A strict and specific obligation: the need for urgent and decisive action to bring an end to violations

166. In an opinion of 1 February 2011, ITLOS conceded that "[t]he content of 'due diligence' obligations may not easily be described in precise terms"[257]. This is because they are obligations of conduct rather than of result[258], as reflected in this extract from the 2001 ILC Report:

> "It is the conduct of the State of origin that will determine whether the State has complied with its obligation under the present articles. The duty of due diligence involved, however, is not intended to guarantee that significant harm be totally

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[253] *Ibid.*, para. 7 *(c)*.

[254] *Ibid.*, para. 9.

[255] Emphasis added.

[256] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, para. 29. Emphasis added.

[257] ITLOS, *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion No. 17*, 1 Feb. 2011, para. 117.

[258] *Ibid.*, para. 110.

> prevented, *if it is not possible to do so*. In that eventuality, the State of origin is required . . . *to exert its best possible efforts* to minimize the risk. In this sense, it does not guarantee that the harm would not occur"[259].

The conduct of each State should be analysed in each particular case to determine whether, in light of its means and taking account of the gravity of the harm to be avoided, it has "exert[ed] its best possible efforts", i.e. taken all "possible" measures.

167. At the same time, it has been established for some years now that due diligence requires action in climate-related matters that must translate into "clear obligations"[260]. Consequently, while it is "difficult" to give a general and abstract description of the ensuing obligations "in precise terms", the general obligation can be realized in practical terms in a specific case. This is particularly true with climate change. In this area, given the gravity of the situation, due diligence must translate into *urgent* measures to put an end to violations that are already apparent *(a)*, into *effective* measures that must be adopted to that end *(b)*, and these measures must be adapted according to the means of the States concerned *(c)*.

(a) *Urgent measures to put an end to violations of the principle: towards a presumption of non-compliance*

168. The fact that we are *a priori* in the presence of obligations of means does not mean that these obligations fall within the margin of discretion of States, which could hide behind a general presumption of compliance with international law to absolve themselves of all responsibility. In the extract quoted above, the ILC states that due diligence must be understood in relation to what is "possible" and that each State must therefore "exert its best possible efforts". This language may prove to be particularly demanding. Because it has to be said that the objectives to be achieved have now become particularly demanding, that the damage caused by the failure to adopt the necessary measures has become particularly serious and that the appropriate means to stop or mitigate that damage do exist — even though there is increasingly little time and space to do so.

169. The duty of due diligence must first be assessed in light of the *objective to be achieved in the fight against climate change*. In 1992, States clearly set the following objective:

> "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"[261].

When studying the principle of due diligence more than 20 years ago, the ILC, for its part, noted that for this principle to be applicable "[t]he harm must lead to a real detrimental effect on matters such as, for example, *human health*, industry, property, *environment or agriculture* in other States. Such detrimental effects must be susceptible of being measured by factual and objective standards"[262].

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[259] *YILC,* 2001, II (2), pp. 421-422, para. 7. Emphasis added.

[260] African Commission on Human and Peoples' Rights, decision cited above, para. 52.

[261] United Nations Framework Convention on Climate Change, Article 2. Emphasis added.

[262] *YILC*, 2001, II (2), p. 417, para. 4. Emphasis added.

170. The phenomenon of climate change indubitably goes much further today: we have gone from effects that are simply "detrimental" to *serious and largely irreversible damage*. Every delay in combating climate change causes significant harm not only to all States but to each individual on the planet, whether they belong to present or future generations, as well as to the planet itself, because of the inertia of the climate system. As noted in the joint statement of the human rights treaty bodies quoted above,

> "[the] adverse impacts on human rights are already occurring at 1°C of warming and every additional increase in temperatures will further undermine the realization of rights. The IPCC report makes it clear that to avoid the risk of irreversible and large-scale systemic impacts, urgent and decisive climate action is required"[263].

It may therefore be considered that, for several years now, there has been "dangerous anthropogenic interference with the climate system". The failure to take appropriate measures urgently can no longer be justified. A passage from the opinion of ITLOS may be quoted here:

> "'due diligence' is a variable concept. It may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge. It may also change in relation to the risks involved in the activity . . . The standard of due diligence has to be more severe for the riskier activities"[264].

171. In this regard, it is now inconceivable to argue scientific uncertainty in order to justify the failure to take action or the adoption of measures on a small scale or that are generally not effective enough. Apart from the fact that such an argument would be contrary legally to the precautionary principle[265], it is quite simply no longer factually justified since scientific uncertainty about the links between human activities and climate change has been removed[266]. As early as 2001, the ILC considered that

> "[d]ischarge of the duty of prevention or due diligence is all the more required as knowledge regarding the operation of hazardous activities, materials used and the process of managing them and the risks involved is steadily growing. From a legal point of view, the enhanced ability to trace the chain of causation, i.e. the physical link between the cause (activity) and the effect (harm), and even the several intermediate links in such a chain of causation, *makes it also imperative for operators of hazardous activities to take all steps necessary to prevent harm*"[267].

Back in 1987, the Institut de droit international observed that "States shall take, and adapt to the circumstances, all appropriate and effective measures, in particular . . . progressively to eliminate existing transboundary air pollution *within the shortest possible time*"[268]. That finding is especially valid today, in view of the progress that has been made in the scientific study of the phenomenon of climate change. That is why the argument of scientific uncertainty is rejected in a number of treaty instruments, such as the UNFCCC (Article 3, para. 3) or the Convention on Biological Diversity

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[263] Joint Statement on "Human Rights and Climate Change". Emphasis added.

[264] *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011*, para. 117.

[265] UNFCCC, Article 3, para. 3.

[266] See Part II above.

[267] *YILC*, 2001, II (2), p. 148, para. (2). Emphasis added.

[268] Institut de droit international, 1987 Cairo resolution cited above, Article 3. Emphasis added.

(preamble). That is also why the Paris Agreement no longer refers to the precautionary principle, the initial uncertainties having given way to scientific certainty.

172. As the DRC has demonstrated in the second part of this written statement (see above paras. 42 et seq.), the *measures that can be taken to mitigate the effects of climate change are not only "possible" and "necessary", they have also been clearly identified* by numerous expert reports. It is indubitably "possible" today, for many States at least, to reduce fossil fuel consumption or to change lifestyles and consumption and production patterns, such as diets or modes of transport. It is also "possible" to reduce or even to abolish large State subsidies for the intensive exploitation of fossil fuels, which many States persist in maintaining. States very clearly acknowledged this in the recent COP28 Global Stocktake decision, stating that "feasible, effective and low-cost mitigation options are already available in all sectors to keep 1.5 °C within reach in this critical decade with the necessary cooperation on technologies and support"[269]. Yet there is no denying that, generally, such measures have not been taken systematically by all States.

173. As the latest official assessments show a considerable gap between the measures already taken and those required to meet the objectives of the Paris Agreement[270], *the traditional assumption that every State is presumed to respect international law is being overturned in the specific area of climate change*: under the circumstances, *it instead falls to each State to prove that certain recommended measures were, and for now remain, "impossible" to adopt*. It has been imperative to take action for a number of years now, no longer for prevention but also and above all to put an end to violations of the duty of due diligence. From a general obligation of means, it is increasingly becoming a specific obligation, even an obligation of result.

(b) *Specific and effective measures, further limiting the margin of State discretion*

174. It is absolutely clear from numerous relevant instruments that States are required to adopt a whole series of specific measures, some of which will be described in detail below[271]. These measures cannot be just institutional or formal: it is necessary to adopt domestic legislative or regulatory measures, action plans, impact studies, to gather information, to adopt new declarations or instruments redefining objectives or setting out further commitments in respect of climate change, to set more ambitious nationally determined contribution targets, etc. Such specific obligations considerably reduce the margin of State discretion.

175. At this stage, two factors need to be emphasized. First, it is not sufficient for a State to show that it has adopted certain measures to claim that it has fulfilled its duty of due diligence (i). Second, the fact that the harm has mostly been caused by private actors does not absolve a State of its responsibility (ii).

(i) A State's responsibility can be engaged notwithstanding the adoption of certain measures

176. The first factor stems directly from the requirement, underlined in particular by the ILC, to take all "possible" measures to prevent harm. The Court itself took the view that, in implementing the duty of due diligence, "[a] State is . . . obliged to use *all the means at its disposal* in order to

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[269] Decision -/CMA.5, Outcome of the first global stocktake.

[270] United Nations Environment Programme, 2022. — Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies; https://www.unep.org/resources/emissions-gap-report-2022.

[271] See section B below.

avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State"[272]. It is thus not sufficient to take just any measures, even ones that might be effective to some extent (but whose effectiveness is relative and does not reduce the harm in any significant way). It is necessary to take all possible measures, all those at a State's disposal.

177. In the *Daniel Billy et al.* v. *Australia* case mentioned above, the respondent State had adopted certain measures against the effects of climate change. A committee had been established which included Torres Strait islanders (of which the complainants formed part) to take appropriate measures. It had been decided to build a sea wall, work on which had been started, and efforts had been made to reduce emissions through the adoption of "clean energy" technologies[273]. These measures were duly taken into account by the Human Rights Committee, as can be seen by the long description in its decision[274].

178. The Committee nevertheless found that the rights of the claimants in the case had been violated. The Committee noted that other measures which could have been taken were not and that Australia was unable to provide an explanation[275].

179. The Committee properly implements the duty of due diligence here. The precedent also shows that appropriate measures involve, first, emission mitigation measures but also, second, climate change adaptation measures, such as the construction of sea walls. The Committee focuses on the latter aspect, noting that Australia could have done more to protect the claimants from the effects of climate change. In the words of the ILC, quoted above, it cannot be concluded in this regard that the respondent State had exerted "its best possible efforts", nor that all "possible" measures had been taken. In any event, it is not sufficient to rely on the adoption of certain measures (even on the scale of those taken by Australia in that case) to claim that the positive obligation linked to the duty of due diligence has been properly complied with.

(ii) A State's responsibility can also be engaged when the harm has been caused by private actors

180. Furthermore, it is not sufficient for a State to show that the harm has been caused by private firms or actors for it to be absolved of or to mitigate its responsibility. Once again, a State can, and is therefore legally required to, ensure that all activities taking place in its territory or under its jurisdiction or control, no matter who or what is conducting such activities, do not cause significant harm to the environment of other States or violate the rights of individuals.

181. This aspect of the duty of due diligence was made clear in the arbitral award in the *Trail Smelter* case, where it was held that no State has the right "to use or permit the use of its territory"

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[272] *Dispute over the Status and Use of the Waters of the Silala (Chile* v. *Bolivia), Judgment, I.C.J. Reports 2022 (II)*, para. 99, citing other precedents mentioned above. Emphasis added.

[273] CCPR/C/135/D/3624/2019, 22 September 2022, paras. 4.5-4.6.

[274] *Ibid.*, para. 8.11.

[275] *Ibid.*, para. 8.12

in such a manner as to cause injury to another State[276]. This has been observed generally in various relevant texts, some examples of which are the following:

— "[States must] ensure that all activities taking place in whole or in part within their territory and in other places subject to their jurisdiction, but having a direct and reasonably foreseeable impact on the right to life of individuals outside their territory, *including activities taken by corporate entities based in their territory or subject to their jurisdiction*, are consistent with article 6, taking due account of related international standards of corporate responsibility [Guiding Principles on Business and Human Rights, principle 2] and of the right of victims to obtain an effective remedy"[277].

— "Governments have a duty to protect their citizens, not only through appropriate legislation and effective enforcement *but also by protecting them from damaging acts that may be perpetrated by private parties* (see Union des jeunes avocats du Tchad). This duty calls for positive action on [the] part of governments in fulfilling their obligation under human rights instruments"[278].

— "[T]his principle of no-harm is breached only when the origin State has not acted diligently *with regard to its own activities, over state-owned enterprises, or private activities*"[279].

182. The principle has also been upheld by the Court, which underlined that the duty of due diligence entails "not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the *exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators*"[280].

183. Accordingly, States, and industrialized States in particular, are under an obligation to prevent corporate entities or any other non-State actor under their jurisdiction from adopting conduct in or outside their territory that would harm the climate system or pose a foreseeable threat to the exercise of human rights by present or future generations, including outside their territory or jurisdiction.

184. Such an obligation has been explicitly stated by human rights bodies.

185. In its commentary on Article 6 of the International Covenant on Civil and Political Rights, which proclaims the right to life, the United Nations Human Rights Committee took the view that the States parties must take legislative and other measures to

"ensure that all activities taking place in whole or in part within their territory and in other places subject to their jurisdiction, but having a direct and reasonably foreseeable

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[276] *Trail Smelter (United States of America/Canada), Award of 11 March 1941, United Nations, Reports of International Arbitral Awards*, Vol. III, p. 1965.

[277] Human Rights Committee, General Comment No. 36 on the right to life (Article 6 of the International on Civil and Political Rights), adopted on 30 Oct. 2018. Emphasis added.

[278] African Commission on Human and Peoples' Rights, *Social and Economic Rights Center (SERAC) and Center for Economic and Social Rights (CESR)* v. *Nigeria*; op. cit., para. 57. Emphasis added.

[279] ILA, 2014, report cited above, p. 26. Emphasis added.

[280] *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay), Judgment, I.C.J. Reports 2010 (I)*, para. 197. Emphasis added.

> impact on the right to life of individuals outside their territory, including activities taken by corporate entities based in their territory or subject to their jurisdiction, are consistent with article 6, taking due account of related international standards of corporate responsibility and of the right of victims to obtain an effective remedy"[281].

The Committee also recalls that environmental degradation and climate change are among the most serious threats to the ability of present and future generations to enjoy the right to life. Article 6 of the Covenant must therefore be interpreted in light of the obligations arising from international environmental law. Similarly, the proper implementation of the obligation to respect and guarantee the right to life is dependent on measures adopted by States to preserve the environment and protect it against harm by public and private actors[282].

186. The Committee on Economic, Social and Cultural Rights made a similar statement in its General Comment No. 24 on "State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities". Such obligations arise

> "when a State party may influence situations located outside its territory, consistent with the limits imposed by international law, by controlling the activities of corporations domiciled in its territory and/or under its jurisdiction, and thus may contribute to the effective enjoyment of economic, social and cultural rights outside its national territory"[283].

There is thus an obligation to protect that requires States parties

> "to take steps to prevent and redress infringements of Covenant rights that occur outside their territories due to the activities of business entities over which they can exercise control, especially in cases where the remedies available to victims before the domestic courts of the State where the harm occurs are unavailable or ineffective"[284].

187. In the *Chiara Sacchi et al.* case, the Committee on the Rights of the Child upheld the principle of extraterritorial jurisdiction in relation to environmental protection. The Committee interpreted the concept of jurisdiction as covering a situation where "the State party has effective control over the sources of emissions that contribute to the causing of reasonably foreseeable harm to children *outside its territory*"[285] and considered that the "authors ha[d] sufficiently justified, for the purposes of establishing jurisdiction, that the impairment of their Convention rights as a result of the State party's acts or omissions regarding the carbon emissions originating within its territory was reasonably foreseeable"[286].

188. The Committee on the Rights of the Child referred to the interpretation adopted by the Inter-American Court of Human Rights in its 2017 opinion cited above, in which the Court

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[281] Human Rights Committee, *General Comment No. 36, Article 6: the right to life*, CCPR/C/GC/36. Emphasis added.

[282] *Ibid.*, para. 62.

[283] Committee on Economic, Social and Cultural Rights, General Comment No. 24 (2017) State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities, E/C.12/GC/24 of 10 Aug. 2017, para. 28.

[284] *Ibid.*, para. 30.

[285] Decision adopted by the Committee on the Rights of the Child under the Optional Protocol to the Convention on the Rights of the Child on a communications procedure in respect of Communication No. 104/2019, *Chiara Sacchi et al.*, CRC/C88/D/106/2019, 10 Nov. 2021, para. 10.12. Emphasis added.

[286] *Ibid.,* para. 10.14.

considered that any person falls within the jurisdiction of a State party to the Inter-American Convention if there is a causal link between the act that originated in its territory and the infringement of the human rights of that person, even outside the territory of the State concerned[287].

189. Accordingly, as regards climate change and its impacts, there is an obligation for States, and industrialized States in particular, to effectively monitor businesses under their jurisdiction or control to ensure that activities within or outside their territory do not infringe the human rights of present and future generations, within or outside their territory. This obligation requires a drastic reduction in GHG emissions as soon as possible and the protection and strengthening of carbon sinks and biodiversity.

190. In conclusion, while leaving the choice of means open, the duty of due diligence requires urgent and effective measures to be taken, including in respect of private actors. In this respect, in the area of climate change, it has become essential for a certain result to be achieved (and the DRC will show that this result can be quantified). Of course, the due diligence standard has to be assessed on a case-by-case basis and implemented in accordance with the means of each State concerned.

(c) ***Differentiated measures: specific responsibility of developed countries***

191. The UNFCCC clearly sets out the unanimously recognized principle of "common but differentiated responsibilities and respective capabilities":

> "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.*
>
> 2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration"[288].

This principle is also set out in the Rio Declaration[289] and the Paris Agreement[290].

192. As the DRC noted in the second part of this written statement (see above, paras. 63-65), a comparison made over time and across countries shows that industrialized countries' share of GHG emissions is huge compared to that of developing countries. The latter are, moreover, particularly vulnerable to climate change and are facing its more alarming consequences. As all the relevant instruments recognize, industrialized countries are under an obligation to take on the greatest burden as a priority in this regard, in accordance with the principle of common but differentiated responsibilities and respective capabilities.

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[287] *Advisory Opinion OC-23/17*, cited above, paras. 101 and 104.

[288] UNFCCC, Article 3. Emphasis added.

[289] Principle 7.

[290] Preamble.

193. The major role of developed States in climate change has been widely recognized. UNEP informs us in this regard that

> "[o]ver the last decade, the top four emitters (China, the United States of America, EU27+UK and India) have contributed to 55 per cent of the total GHG emissions without LUC [land-use change]. The top seven emitters (including the Russian Federation, Japan and international transport) have contributed to 65 per cent, with G20 members accounting for 78 per cent"[291].

Current global warming is the result of carbon dioxide that has, for the most part, accumulated since the end of the pre-industrial era (from approximately 1850). From this perspective, all the States that have been at the forefront of the industrial revolution over the last two centuries are responsible for very large shares of accumulated GHGs.

194. In the same vein, it is important to note that

> "Small Island Developing States (SIDS) and least developed countries (LDCs) represent less than 1 percent and between 3 percent and 6 percent of global greenhouse emissions respectively. Yet they face much higher annual losses, as a percentage of GDP, due to the effects, compared with the global average".

Africa, for its part, "contributes just 4 percent of global total greenhouse gas (GHG) emissions, the lowest of any region, yet its socio-economic development is threatened by the climate crisis"[292]. This paradox leads to common but differentiated responsibilities, whereby developed States' share of the efforts required must be in proportion to both the extent of the damage they cause and the fact that it is mostly other States that are harmed.

195. Particular account must be taken of the principle of common but differentiated responsibilities in determining whether a given State has complied with its duty of due diligence. It is traditionally recognized that due diligence is assessed differently depending on the means of the State concerned[293], which is quite logical when you recall that the criterion for each State is to exert "its best possible efforts" or do what is "possible". It is essential to stress the particular responsibility of developed States in this regard when setting out the extent of their obligations. This leads us directly to certain quantified criteria that must be taken into account to clarify the duty of due diligence.

4. Method for assessing whether the obligation has been complied with: the possibility of using quantified criteria in various relevant instruments

196. As the Institut de droit international noted in its Strasbourg resolution on "Responsibility and Liability under International Law for Environmental Damage",

> "[w]hen due diligence is utilized as a test for engaging responsibility it is appropriate that it be measured in accordance with objective standards relating to the conduct to be expected from a good government and detached from subjectivity. Generally accepted

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[291] UNEP Emissions Gap Report 2020, https://www.unep.org/emissions-gap-report-2020, p. XV. See also the UNEP 2022 report, cited below in Part IV.

[292] Mr Tanguy Gahouma-Bekale, "COP26 on climate: Top priorities for Africa", *Africa Renewal*, 2021, fifth para. https://www.un.org/africarenewal/magazine/july-2021/cop26-climate-top-priorities-africa.

[293] See *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina* v. *Serbia and Montenegro), Judgment, I.C.J. Reports 2007 (I)*, p. 221, para. 430.

> international rules and standards further provide an objective measurement for the due diligence test"[294].

It is clear from the above that the principle of due diligence must be detached from any subjectivity and must be assessed, in law, objectively. To that end, "generally accepted international rules and standards" may be used. UNCLOS thus includes numerous references to such rules, norms and standards. For example, as regards pollution of the marine environment from vessels, Article 211 of UNCLOS requires States to adopt laws and regulations that "shall at least have the same effect as that of generally accepted international rules and standards".

197. In the area of climate change, a number of national courts have already implemented this method, consistent with the logic of this provision. In the view of the DRC, this jurisprudence clearly reflects the state of positive international law and merits consideration by the Court in these proceedings.

198. Mention may be made in particular of the *Urgenda* case, which closed with a decision by the Supreme Court of the Netherlands on 20 December 2019[295]. In this case, the Dutch courts had to rule on an action to sue the Dutch State for its failure to take sufficient action on climate change. In accordance with a practice described above, the Dutch Supreme Court began by linking the principle of due diligence to human rights:

> "Article 2 ECHR protects the right to life, and Article 8 ECHR protects the right to respect for private and family life. According to the case law of the European Court of Human Rights (ECtHR), a contracting state is obliged by these provisions to take suitable measures if a real and immediate risk to people's lives or welfare exists and the state is aware of that risk"[296].

In interpreting this obligation, the Supreme Court notes, in a passage that appears to echo the provision of the Institut de droit international quoted above, that "[w]hen giving substance to the positive obligations imposed on the State pursuant to Articles 2 and 8 ECHR, one must take into account broadly supported scientific insights and *internationally accepted standards*"[297]. The Supreme Court then quotes Article 31 (3) *(c)* of the 1969 Vienna Convention on the Law of Treaties which allows "any relevant rules of international law" to be taken into account in interpreting an obligation [298.] Finally, the court considered that the Paris Agreement testifies to the conviction of the necessity to drastically reduce greenhouse gases, by setting targets that justify the requirement for the Netherlands to reduce emissions by at least 25 per cent by the end of 2020 compared to 1990[299].

199. Similarly, in the *Royal Dutch Shell Petroleum* case, concluded by a judgment of 26 May 2021, the Hague court observed that "[t]he non-binding goals of the Paris Agreement represent a universally endorsed and accepted standard that protects the common interest of preventing dangerous climate change" [300]. The court further noted that the Guiding Principles on Business and

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[294] Article 3 of the Strasbourg resolution, cited above.

[295] Hoge Raad, No. 19/00135, C/09/456689 HA ZA 19/00135, 20 Dec. 2019.

[296] Unofficial English translation of the summary of the judgment provided on the website of the Hoge Raad.

[297] *Ibid.* Emphasis added.

[298] Unofficial English translation of the judgment provided on the website of the Hoge Raad., para. 5.4.2.

[299] *Ibid*., paras. 7.2.8, 7.2.9, 7.3.2, 7.4.4.

[300] *Milieudefensie and others* v. *Royal Shell PLC, The Hague District Court, No. C/09/571932/HA ZA 19-379*, 26 May 2021, para. 4.4.27.

Human Rights, the ten principles of the United Nations Global Compact and the OECD Guidelines for Multinational Enterprises

> "constitute an authoritative and internationally endorsed 'soft law' instrument, which set out the responsibilities of states and businesses in relation to human rights. The UNGP reflect current insights [, even though t]hey do not create any new right [or] establish legally binding obligations"[301].

These texts thus form the basis of the court's "interpretation of the unwritten standard of care"[302]. Referring to figures taken from the IPCC report, the court ultimately ordered Royal Dutch Shell Petroleum, the parent company of the Shell group, to reduce greenhouse gas emissions by 45 per cent (compared to 2010) by 2030 at the latest[303]. Thus, a due diligence standard, as general as it is, can be interpreted by reference to "internationally endorsed" quantitative criteria, even though they are not necessarily to be found in formally non-binding instruments. This Dutch jurisprudence clearly merits being taken into account, in so far as it applies an approach that is well established in positive international law for assessing whether standards of conduct have been complied with. Similarly, in the *Shrimp-Turtle* case, the Appellate Body of the World Trade Organization interpreted the concept of "exhaustible natural resources" in Article XX *(b)* of GATT by reference to various non-binding national instruments, such as the Action 21 programme adopted at the Rio Conference in 1992[304].

200. It is worth mentioning the concept of "reasonable" in support of this line of argument. It is a concept that generally moderates the exercise of rights or powers under international law and which is intrinsically linked to the due diligence standard. The latter has long been defined by jurisprudence as involving "reasonable measures"[305], maintaining "reasonable care"[306], implementing "reasonable diligence"[307] or availing of "ordinary or reasonable foresight"[308]. The United Nations High Commissioner for Human Rights refers to "due diligence" as follows: "Due diligence has been defined as 'such a measure of prudence, activity, or assiduity, as is properly to be expected from, and ordinarily exercised by, a reasonable and prudent [person] under the particular circumstances"[309]. In sum, as the International Law Association states, "'[r]easonableness' thus appears to be a recurrent concept in applying the due diligence standard"[310].

201. A careful study of practice and jurisprudence shows that what is reasonable is regularly interpreted by reference to instruments that are formally non-applicable or non-binding but which reflect a consensus on the meaning given to the concept[311]. Thus,

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[301] *Ibid.*, para. 4.4.11.

[302] *Ibid.,* para. 4.4.27.

[303] *Ibid.*, para. 4.4.29.

[304] Appellate Body of the WTO, *United States - Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R* 12 Oct. 1998, para. 130.

[305] *LAFICO* v. *State of Burundi*, *Revue belge de droit international (R.B.D.I.)*, 1990-2, p. 543, para. 48.

[306] *Nick Cibich* case, *R.I.A.A.*, Vol. IV, p. 58.

[307] *British Claims in the Spanish Zone of Morocco* case, *R.I.A.A.*, Vol. II, p. 644.

[308] *Wipperman's Case, Moore, International Arbitrations*, Vol. III, p. 3041.

[309] "The corporate responsibility to respect human rights: an interpretive guide", 2012, p. 6.

[310] ILA, 2014, report cited above, p. 9.

[311] Olivier Corten, *L'utilisation du "raisonnable" par le juge international. Discours juridique, raison et contradictions*, Bruylant, 1997, pp. 660-661.

— in the case concerning the *Land, Island and Maritime Frontier Dispute*, a chamber of the Court referred to a non-ratified treaty to uphold a delimitation that was contained in the treaty, describing it as a "reasonable and fair solution"[312];

— in the LAFICO case, the arbitral tribunal, seeking to identify a standard of conduct by reference to a reasonable cause, refers to declarations by the European Commission of Human Rights[313];

— longstanding jurisprudence from the European Court of Human Rights on reasonable measures to be adopted by States includes numerous references to treaties that were not applicable in the cases in question[314].

— Reference can also be made to the 2016 *South China Sea Arbitration*[315]. In that award, the gravity of environmental damage is borne out by international conventions that demonstrate an international consensus on the threatened or endangered status of certain species[316]. While a convention cannot be used directly, because it would be binding on the parties, it can be used as a reasonable means of interpretation, in accordance with Articles 31 and 32 of the 1969 Vienna Convention on the Law of Treaties[317].

Thus, what is reasonable can be determined by reference to various instruments, the most important thing being to ascertain what has been accepted without any specific format being required.

202. The approach taken by the Dutch courts in the *Urgenda* and *Shell* cases thus truly reflects the state of positive law. In assessing the content of reasonable measures that States are required to adopt in application of the principle of due diligence in respect of climate change, recourse can be had to various instruments, as long as they reflect general agreement in the international community. It is therefore perfectly appropriate to rely on figures contained in various instruments — be it the 2015 Paris Agreement, decisions of the Conference of the Parties, United Nations General Assembly resolutions and IPCC reports — to determine what measures States are required to adopt to comply with their obligations.

203. The Paris Agreement, which was adopted by consensus among 195 parties, lays down the objective of holding

> "the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-

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[312] *Land, Island and Maritime Frontier Dispute (El Salvador/Honduras: Nicaragua intervening), Judgment, I.C.J. Reports 1992*, p. 515, para. 263.

[313] Decision of 4 March 1991, *R.B.D.I.*, 1990-2, pp. 540 *et seq.*

[314] E.C.H.R., Inze case, Series A, No. 126, 28 Oct. 1987, para. 41; Marckx, Series A, No. 31, 13 June 1979, para. 41; E.C.H.R., S. v. Switzerland, Series A, No. 220, 28 Nov. 1991, para. 48) or to formally non-binding resolutions of the council of Europe (E.C.H.R., S. v. Switzerland, Series A, No. 220, 28 Nov. 1991, para. 48).

[315] PCA Case No. 2013-19 in the matter of the South China Sea Arbitration before an arbitral tribunal constituted under annex VII to the 1982 United Nations Convention on the Law of the Sea, between the Republic of the Philippines and the People's Republic of China, Award of 12 July 2016.

[316] *Ibid*., para. 956. In this case, sea turtles found on board Chinese fishing vessels are listed under Appendix I to the CITES Convention as species threatened with extinction and subject to the strictest level of international controls on trade.

[317] *Ibid.*, para. 476.

> industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"[318].

As recalled above, this objective was set jointly by State representatives and scientific experts[319]. While the objective of limiting the increase to 1.5°C was (compared to 2°C) aspirational in 2015, it was already stated that it "would significantly reduce the risks and impacts of climate change", which was largely confirmed by the IPCC's 2018 report on the consequences of an increase in average temperatures of 1.5°C[320]. It has now been scientifically proven that the objective of maintaining global average warming well below 2°C does not protect sufficiently against catastrophic climate change and does not prevent tipping points from being crossed[321], and that global warming needs to be limited further. The threshold of 1.5°C appears to be the objective to be reached, even though it does not prevent the dramatic consequences that are already visible today. The Summary for Policymakers in the IPCC's latest synthesis report, approved by consensus by the 195 IPCC Member States, reflects the consensus not only of the scientific community but of States. It confirms (with very high confidence) that the risks and projected adverse impacts, and related losses and damage from climate change, will escalate with every tenth of a degree increase in global warming[322].

204. Since the adoption of the Paris Agreement, the objective of limiting the temperature increase to 1.5°C has thus become increasingly important. Several decisions of the Conference of the Parties to the UNFCCC or the Conference of the Parties to the Paris Agreement (CMA), adopted by consensus by the Parties to both instruments, bear witness to this and stress how urgent it is to take action. In Decision 1/CMA. 3 of 2021 (the "Glasgow Climate Pact"), the Conference "[r]ecognizes that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2 °C and *resolves to pursue efforts to limit the temperature increase to 1.5 °C*"[323], and

> "[f]urther recognizes that this *requires accelerated action in this critical decade*, on the basis of the best available scientific knowledge and equity, reflecting common but differentiated responsibilities and respective capabilities in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty"[324].

The following year, Decision 1/CP.27 of the Conference of the Parties to the UNFCCC ("Sharm el-Sheikh Implementation Plan") "[r]eiterates that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2 °C and resolves to pursue further efforts to limit the temperature increase to 1.5 °C"[325]. This is repeated in the same words in the recent COP28 decision relating to the global stocktake, which mentions the object of limiting the increase in

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[318] Article 2, para. 1, subpara. *(a)*.

[319] See paras. 39-46 and 86-89 above.

[320] IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-24.

[321] See above, paras. 86 *et seq*.

[322] They are higher for 1.5°C warming than at present, and even higher at 2°C warming (high confidence); IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)], IPCC, Geneva, Switzerland, pp. 1-34, 10.59327/IPCC/AR6-9789291691647.001 para. B.2.2.

[323] Decision 1/CMA.3 of 2021 "Glasgow Climate Pact", para. 21. Emphasis added.

[324] *Ibid.*, para. 23. Emphasis added.

[325] Decision 1/CP.27 "Sharm el-Sheikh Implementation Plan", para. 7.

temperature to 1.5°C no less than 13 times. States also express "serious concern that 2023 is set to be the warmest year on record and that impacts from climate change are rapidly accelerating" and emphasize "the need for urgent action and support to keep the 1.5 °C goal within reach and to address the climate crisis in this critical decade"[326].

205. Yet the policies and actions of the largest GHG emitters are notoriously insufficient to reach the objective of limiting global warming to "well below 2°C", let alone 1.5°C. What is more, the members of the G20 have fallen far short of their mitigation commitments for 2030, which has led to an implementation gap, as is clearly apparent from UNEP's latest Emissions Gap Report[327]. This report also makes clear that, if States do not change their policies, it will not be possible to limit global warming to less than 3°C[328].

206. The States with the highest emissions have acknowledged this on numerous occasions. In Decision 1/CP.27 "Sharm el-Sheikh Implementation Plan", cited above — which, it should be recalled, was adopted by consensus by the 198 Parties to the UNFCCC in 2023 — the States parties recognize that limiting global warming to 1.5°C "requires rapid, deep and sustained reductions in global greenhouse gas emissions of 43 per cent by 2030 relative to the 2019 level"[329]. United Nations General Assembly resolution 77/165 of 14 December 2022 on the protection of global climate for present and future generations of humankind, adopted shortly afterwards without a vote, mentions that "*rapid, deep and sustained* reductions in global greenhouse gas emissions [are required], including reducing global carbon dioxide emissions *by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century*, as well as deep reductions in other greenhouse gases"[330]. The General Assembly goes on to state that "this requires *accelerated action* in this *critical decade*"[331]. Similarly, the General Assembly resolution of 29 March 2023, also adopted without a vote, notes

> "with concern the significant gap both between the aggregate effect of States' current nationally determined contributions and the emission reductions required to hold the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels, and between current levels of adaptation and levels needed to respond to the adverse effects of climate change"[332].

207. Shortly before COP28, the annual report of the UNFCCC secretariat confirmed that, while the latest science from the IPCC indicates that GHG emissions must be reduced by 43 per cent by 2030 compared to the 2019 level, to limit the temperature increase to 1.5°C by the end of the century they would have to be lower[333]. At COP28, the States again recognized the need "for deep,

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[326] Decision -/CMA.5, Outcome of the first global stocktake, paras. 4 and 5.

[327] See UNEP, Emissions Gap Report 2023, 20 Nov. 2023, available at: https://www.unep.org/resources/emissions-gap-report-2023.

[328] *Ibid.*, p. XI.

[329] Decision 1/CP.27 "Sharm el-Sheikh Implementation Plan", part V., para. 14.

[330] UNGA resolution 77/165, Protection of global climate for present and future generations of humankind, para. 5. Emphasis added.

[331] *Ibid.*, emphasis added.

[332] UNGA resolution 77/276, Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change.

[333] Nationally determined contributions under the Paris Agreement, Synthesis Report by the Secretariat, FCCC/PA/CMA/2023/12, 14 Nov. 2023.

rapid and sustained reductions in greenhouse gas emissions in line with 1.5°C pathways"[334]. They also recognized that "limiting global warming to 1.5 °C with no or limited overshoot requires deep, rapid and sustained reductions in global greenhouse gas emissions of 43 per cent by 2030 and 60 per cent by 2035 relative to the 2019 level and reaching net zero carbon dioxide emissions by 2050"[335].

208. In these circumstances, in accordance with the customary rule of due diligence, States are under an obligation to take all measures in their power to limit the increase in temperature to 1.5°C and, to that end, to reduce greenhouse gas emissions by 43 per cent by 2030 relative to the 2019 level. This is especially so given that the required degree of care is proportional to the degree of hazard involved[336]. Activities that cause abrupt or irreversible changes, which is the case with climate change, must therefore be assessed in light of a heightened duty of care.

209. This includes specific obligations to phase out fossil fuels. In its contribution to the IPCC's Sixth Assessment Report[337], IPCC Working Group III noted the following on the subject of fossil fuels in particular:

— "Projected cumulative future CO_2 emissions over the lifetime of existing and currently planned fossil fuel infrastructure without additional abatement exceed the total cumulative net CO_2 emissions in pathways that limit warming to 1.5°C (>50%) with no or limited overshoot. They are approximately equal to total cumulative net CO_2 emissions in pathways that limit warming to 2°C (>67%). (high confidence)" (*op. cit.*, B.7).

— "All global modelled pathways that limit warming to 1.5°C (>50%) with no or limited overshoot, and those that limit warming to 2°C (>67%), involve rapid and deep and in most cases immediate GHG emission reductions in all sectors. Modelled mitigation strategies to achieve these reductions include transitioning from fossil fuels without CCS [Carbon Capture and Storage] to very low- or zero-carbon energy sources, such as renewables or fossil fuels with CCS, demand side measures and improving efficiency, reducing non-CO_2 emissions, and deploying carbon dioxide removal (CDR) methods to counterbalance residual GHG emissions . . . (high confidence)" (*op. cit*., C.3).

— "Reducing GHG emissions across the full energy sector requires major transitions, including a substantial reduction in overall fossil fuel use, the deployment of low-emission energy sources, switching to alternative energy carriers, and energy efficiency and conservation. The continued installation of unabated fossil fuel infrastructure will 'lock-in' GHG emissions. (high confidence)" (*op. cit.*, C.4).

States are thus under an international obligation to make rapid and deep reductions in the use of fossil fuels with a view to phasing them out. This was explicitly recognized by COP28 in one of its decisions, in which the States parties to the Paris Agreement were called on to contribute to "[t]ransitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the

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[334] Decision -/CMA.5, Outcome of the first global stocktake, para. 28.

[335] *Ibid.*, para. 27.

[336] ILC, Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities, Commentary to Art. 3, para. (18); *YILC*, 2001, Vol. II (2), p. 155.

[337] https://www.ipcc.ch/report/ar6/wg3/.

science"[338]. Under the principle of common but differentiated responsibilities and respective capabilities, industrialized countries and countries with economies in transition have an obligation to be the first to end the use of fossil fuels, while least developed countries are entitled to be the last to continue using fossil fuels, without jeopardizing the objective of keeping the temperature increase to a maximum of 1.5°C.

210. Thus, in conclusion, given the considerable risks to the climate system, to other parts of the environment and to humans posed by an average increase in temperature of 2.8°C to which current emissions are leading, the principle of due diligence has a particularly broad scope. It requires the largest emitters to take urgent and strong measures in accordance with the quantitative criteria already accepted by States. These measures must be adopted individually by States, which have an obligation of prevention. First, they must take urgent action to align their emission reduction goals for 2030 with the pathway outlined by the Paris Agreement and revise their level of ambition for national contributions. Second, they must implement their national contributions effectively. Third, States that have committed to carbon neutrality over a longer timeframe must ensure that their short- and medium-term emissions trajectory is consistent with that objective. As UNEP has observed, "[t]his will require not just incremental sector-by-sector change, but wide-ranging, large-scale, rapid and systemic transformation", which will "not be easy, given the many other pressures on policymakers at all levels. Climate action is imperative in all countries but must be achieved simultaneously with other United Nations Sustainable Development Goals"[339]. These are international obligations and States cannot use the fact that other States are failing to take action as an excuse to absolve themselves from them.

B. Specific obligations in the United Nations Convention on the Law of the Sea

211. The régime of general international law described above is supplemented by treaty régimes, including that of UNCLOS, in particular Part XII thereof, which is of particular importance.

212. This régime was the subject of a request for an advisory opinion submitted by the Commission of Small Island States on Climate Change and International Law (COSIS) to ITLOS; the DRC participated in these proceedings alongside a large number of States and organizations. At the time of filing this written statement, the written and oral proceedings before ITLOS had closed but the Tribunal had not yet rendered its opinion. It is in this context that the DRC draws the Court's attention to the specific features of UNCLOS that the DRC also raised, in greater detail, before the Tribunal.

213. One of the key features of this régime is that States' obligations under Part XII of UNCLOS are not limited to the prevention of harmful acts.

214. Article 192 of UNCLOS, entitled "General obligation", provides first that "States have the obligation to protect and preserve the marine environment". This provision includes obligations not to do and obligations to do.

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[338] Decision -/CMA.5, Outcome of the first global stocktake, para. 28 *(d)*.

[339] United Nations Environment Programme, 2022. — Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies, cited above, p. X[XII].

215. Article 194 of UNCLOS is, for its part, entitled "Measures to prevent, reduce and control pollution of the marine environment". Paragraph 1 provides as follows:

> "States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection."

This obligation to "prevent, reduce and control pollution of the marine environment" must be read in conjunction with the definition of pollution in Article 1 of UNCLOS. Article 1, paragraph 1 (4), defines pollution as the introduction of substances or energy into the marine environment: "'pollution of the marine environment' means the *introduction* by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life"[340]. It follows from this definition that, pursuant to Article 194, paragraph 1, States must prevent, reduce and control the introduction of substances or energy. Confirmation of this can be found, *a contrario*, in Article 194, paragraph 2, which sets out a different but more traditional obligation to take "all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment".

216. Fulfilling the obligation to prevent, reduce and control by reference to the introduction of substances or energy into the marine environment means *checking at source whether obligations have been complied with or not, when substances that have or may have deleterious effects are introduced and not only when such effects occur or are about to occur*. This is especially important in respect of climate change, since the damage caused by greenhouse gas emissions has a long time delay, is often irreversible and is a threat to the survival of planet Earth and humankind. In these circumstances, it is imperative that States be held responsible for their acts and omissions with regard to the introduction of substances into the environment and not only for the harmful consequences thereof.

217. The DRC notes that the duty of due diligence in general international law can have the same scope. Thus, in the cases concerning *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica* v. *Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua* v. *Costa Rica)*, the Court held that Costa Rica had not complied with its obligation under general international law to carry out an environmental impact assessment concerning the construction of the road[341], and did not consider that Costa Rica's responsibility could not be engaged because there was no harm. The DRC would like to underline here that violation of Articles 192 and 194 is not subject to such a condition either.

218. Furthermore, the obligations of States under Part XII of UNCLOS concern the "marine environment" in general. They thus extend to the marine environment beyond any national jurisdiction, as is also clear from Article 194, paragraph 2, which provides that "States shall take all measures necessary to ensure that . . . pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention"[342].

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[340] Emphasis added.

[341] *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica* v. *Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua* v. *Costa Rica), Judgment, I.C.J. Reports 2015 (II),* para. 162.

[342] UNCLOS, Article 19[4], para. 2.

219. States' duty of due diligence must also be considered in correlation with an obligation to co-operate, with which it is inextricably linked, and which the DRC will now address.

C. An obligation for developed countries to lend assistance to developing countries

220. The DRC will now show that the general obligation to co-operate (1), which must be read in light of the principle of common but differentiated responsibilities (2), is the source of a legal obligation for developed countries to lend assistance to developing countries (3).

1. A general obligation to co-operate

221. The general obligation to co-operate is recognized by various sources of international law. The Rio Declaration on Environment and Development provides in particular that "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem"[343]. Similarly, in respect of environmental damage, the Court considered that "it is by co-operating that the States concerned can jointly manage the risks of damage to the environment that might be created by the plans initiated by one or other of them, so as to prevent the damage in question"[344]. In the same decision, the Court stated that obligations to co-operate (in that case, to inform, notify and negotiate) "are all the more vital when a shared resource is at issue, as in the case of the River Uruguay, which can only be protected through close and continuous co-operation between the riparian States"[345].

222. As the DRC has recalled (paras. 56-60), in respect of environmental damage caused by GHG emissions more specifically, which pose a global threat, *all* States are "concerned", to use the words of the Court. In these circumstances, the atmosphere, or Earth's climate system itself, is a resource shared among all States "which can only be protected through close and continuous co-operation" among all States. The draft Articles on the Prevention of Transboundary Harm from Hazardous Activities, adopted in 2021 by the ILC, similarly provide that "States concerned shall cooperate in good faith and, as necessary, seek the assistance of one or more competent international organizations in preventing significant transboundary harm or at any event in minimizing the risk thereof"[346]. The same is true of Guideline 8 of the Draft Guidelines on the Protection of the Atmosphere, adopted by the ILC in 2021, which provides that "States *have the obligation to cooperate*, as appropriate, with each other and with relevant international organizations for the protection of the atmosphere from atmospheric pollution and atmospheric degradation"[347]. This general obligation to co-operate "has effects both 'upstream', with a view to the prevention of transboundary harm, and downstream, to limit it once it has occurred"[348].

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[343] Rio Declaration, Principle 7.

[344] *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay), Judgment, I.C.J. Reports 2010 (I)*, para. 77.

[345] *Ibid.*, para. 81.

[346] Text adopted by the ILC at its 72nd session in 2021 and submitted to the General Assembly as part of its report on the work of the session. The report also contains commentaries on the draft Articles; *YILC*, 2001, Vol. II (2).

[347] Text adopted by the ILC at its 72nd session in 2021 and submitted to the General Assembly as part of its report on the work of the session as part of its report on the work of the session (A/76/10, para. 39); *YILC*, 2021, Vol. II (2), Directive 8, para. 1. Emphasis added

[348] M. Forteau, A. Miron, A. Pellet, *Droit international public*, LGDJ, Paris, 9th edition, 2022, p. 1786 [*translation by the Registry*].

223. The UNFCCC provides a framework for co-operation between the Parties. It breaks down the general obligation to co-operate into a series of specific obligations. The Parties thus undertake to "cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change"[349]. Article 4 of the Convention, on "Commitments", breaks down and provides details of the obligation to co-operate in different areas, regarding

> "the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors"[350],

and "the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases . . ., including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems"[351], preparing for "adaptation to the impacts of climate change"[352], co-operation and promotion in "scientific, technological, technical, socio-economic and other research"[353], "exchange of relevant scientific, technological, technical, socio-economic and legal information"[354], "education, training and public awareness related to climate change" and "the widest participation in this process, including that of non-governmental organizations"[355].

224. Continuing on from these obligations, Article 2 of the Kyoto Protocol commits each Party to

> "[c]ooperate with other such Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article, pursuant to Article 4, paragraph 2 *(e)* (i), of the Convention. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, consider ways to facilitate such cooperation, taking into account all relevant information".

The Kyoto Protocol places particular emphasis on co-operation between industrialized States and developing States to combat global warming. In this respect, it extends the UNFCCC on financial co-operation and the transfer of technology[356], scientific and technical co-operation[357] or in the area of education, training and strengthening national capabilities[358].

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[349] UNFCCC, Art. 3, para. 5.

[350] *Ibid.*, Art. 4, para. 1 *(c)*.

[351] *Ibid.*, Art. 4, para. 1 *(d)*.

[352] *Ibid.*, Art. 4, para. 1 *(e)*.

[353] *Ibid.*, Art. 4, para. 1 *(g)*; see also Art. 5.

[354] *Ibid.*, Art. 4, para. 1 *(h)*.

[355] *Ibid.*, Art. 4 para. 1 *(i)*.

[356] Art. 10 *(c)*.

[357] Art. 10 *(d)*.

[358] Art. 10 *(e)*.

225. The preamble to the Paris Agreement, for its part, affirms "the importance of . . . cooperation at all levels on the matters addressed in this Agreement". The importance of co-operation is recalled in numerous decisions of the Parties adopted under this treaty, including in particular the Sharm el-Sheikh Implementation Plan, which underlines

> "the critical role of multilateralism based on United Nations values and principles, including in the context of the implementation of the Convention and the Paris Agreement, and the importance of international cooperation for addressing global issues, including climate change, in the context of sustainable development and efforts to eradicate poverty"[359].

2. An obligation to co-operate linked to the principle of common but differentiated responsibilities

226. The DRC has already stressed the importance of the principle of common but differentiated responsibilities in interpreting the obligation of due diligence. It will now turn to the implications of this principle in the specific area of co-operation. Principle 7 of the Rio Declaration on the Environment and Development states on the subject of the obligation to co-operate that

> "[i]n view of the different contributions to global environmental degradation, States have *common but differentiated responsibilities*. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command"[360].

227. Similarly, as early as the preamble to the UNFCCC, the Parties recognized 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*"[361].

The principle of common but differentiated responsibilities and respective capabilities is expressly recognized in Article 3, paragraph 1, and Article 4 of the UNFCCC.

228. As the DRC has already noted, the Convention states further on that "the developed country Parties should *take the lead in combating climate change and the adverse effects thereof*"[362]. It is also in the light of this principle that Article 4, paragraph 1, on the "commitments" common to all the Parties should be read, whether they are developed or developing countries, in particular in the area of co-operation. Article 4, paragraph 2, sets out what "developed country Parties and other Parties included in Annex I" commit themselves to "specifically", in other words, commitments that do not concern developing countries. It refers in particular to technical and financial assistance. Lastly, the Convention provides that

> "[t]he extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by

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[359] Decision I/CP.27, Sharm el-Sheikh Implementation Plan (2022), preamble.

[360] Emphasis added.

[361] Emphasis added.

[362] UNFCCC, Art. 3, para. 1, Principles. Emphasis added.

> developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties"[363].

229. The Kyoto Protocol also rests on the principle of differentiated responsibilities; this principle forms the basic structure of the Protocol, including in the area of co-operation[364].

230. Finally, the Parties to the Paris Agreement state in the preamble that they are guided by "the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances"[365]. Article 2 also states that the Agreement "will be *implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances*"[366]. Here again, this differentiation is reflected in the area of co-operation, which translates into an obligation of assistance, as the DRC will now show.

3. An obligation to lend assistance to developing countries

231. The obligation for developed countries to lend assistance to developing countries originates in the UNFCCC, which states that, in implementing their commitments under the Convention, the Parties

> "shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures"[367].

Article 10 *(c)* [of the Kyoto Protocol] is also a central provision from this point of view, according to which the Parties shall

> "[c]ooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, or access to, environmentally sound technologies".

232. The Kyoto Protocol clarified these obligations for the States parties. In particular, Article 11, paragraph 2, requires the developed country Parties and other developed Parties included in Annex II to the Convention to provide financial and technical assistance. Their efforts must be

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[363] Art. 4, para. 7.

[364] See Art. 10 in particular.

[365] Preamble.

[366] Art. 2, para. 2. See also Art. 4, paras. 3 and 19. Emphasis added.

[367] Art. 4, para. 8.

genuine; they must provide "new and additional" financial resources. Furthermore, they must "take into account the need for adequacy and predictability in the flow of funds".

233. The preamble to the Paris Agreement, for its part, affirms "the importance of . . . cooperation at all levels on the matters addressed in this Agreement". As regards adaptation to climate change, the Parties to the Agreement "recognize the importance of support for and international cooperation on adaptation efforts and the importance of taking into account the needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change"[368]. It also invites the Parties to "strengthen their cooperation on enhancing action on adaptation", including with regard to

> "*(a)* Sharing information, good practices, experiences and lessons learned, including, as appropriate, as these relate to science, planning, policies and implementation in relation to adaptation actions;
>
> *(b)* Strengthening institutional arrangements, including those under the Convention that serve this Agreement, to support the synthesis of relevant information and knowledge, and the provision of technical support and guidance to Parties;
>
> *(c)* Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making;
>
> *(d)* Assisting developing country Parties in identifying effective adaptation practices, adaptation needs, priorities, support provided and received for adaptation actions and efforts, and challenges and gaps, in a manner consistent with encouraging good practices; and
>
> *(e)* Improving the effectiveness and durability of adaptation actions".

Regarding loss and damage associated with the impacts of climate change, Article 3 of the Paris Agreement calls for co-operation in the following areas:

> "*(a)* Early warning systems;
>
> *(b)* Emergency preparedness;
>
> *(c)* Slow onset events;
>
> *(d)* Events that may involve irreversible and permanent loss and damage;
>
> *(e)* Comprehensive risk assessment and management;
>
> *(f)* Risk insurance facilities, climate risk pooling and other insurance solutions;
>
> *(g)* Non-economic losses; and
>
> *(h)* Resilience of communities, livelihoods and ecosystems".

Article 10 of the Paris Agreement provides more generally that the Parties "shall strengthen cooperative action on technology development and transfer"[369] and that financial support be provided

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[368] Art. 7, para. 6.

[369] Art. 10, para. 2.

to that end to developing countries. Article 9 states that "[d]eveloped country Parties *shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation* in continuation of their existing obligations under the Convention"[370]. This is clearly an obligation, as the following paragraph provides that "[o]ther Parties" are "*encouraged* to provide or continue to provide such support voluntarily"[371]. The mobilization of climate finance should represent a "*progression beyond previous efforts*"[372]. The provision of scaled-up financial resources "should aim *to achieve a balance between adaptation and mitigation*, taking into account country-driven strategies, and the priorities and needs of developing country Parties"[373]. It is in this context that the Sharm el-Sheikh Conference eventually decided to establish

> "new funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change, in responding to loss and damage, including with a focus on addressing loss and damage by providing and assisting in mobilizing new and additional resources, and that these new arrangements complement and include sources, funds, processes and initiatives under and outside the Convention and the Paris Agreement"[374].

This is an important step, but a commitment that could come to nought if it is not realized in the years ahead.

234. The provisions of the Paris Agreement are to be read here in conjunction with decision 1/CP.21 of the Conference of the Parties, which was adopted at the same time. In that decision, the Conference of the Parties

> "[*r*]*esolves* to enhance the provision of urgent and adequate finance, technology and capacity-building support by developed country Parties in order to enhance the level of ambition of pre-2020 action by Parties, and in this regard *strongly urges* developed country Parties to scale up their level of financial support, with a concrete road map to achieve the goal of jointly providing USD 100 billion annually by 2020 for mitigation and adaptation while significantly increasing adaptation finance from current levels and to further provide appropriate technology and capacity-building support"[375].

It further provides that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement "shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries"[376].

235. However, it is established that the goal for developed country Parties of to mobilize jointly US$100 billion per year by 2020 at the latest has not been met. A decision adopted, by consensus, by the Conference of the Parties at Sharm el-Sheikh expressed "serious concern" at this[377]. This decision also noted that

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[370] Art. 9, para. 1. Emphasis added.

[371] Art. 9, para. 2. Emphasis added.

[372] Art. 9, para. 3. Emphasis added.

[373] Art. 9, para. 4. Emphasis added.

[374] Decision 2/CP.27, Funding arrangements for responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage (2022).

[375] Emphasis in the original, para. 114.

[376] *Ibid.*, para. 53.

[377] Decision 1/CP.27 cited above. Sharm el-Sheikh Implementation Plan, para. 36.

> "global climate finance flows are small relative to the overall needs of developing countries, with such flows in 2019-2020 estimated to be USD 803 billion, which is 31-32 per cent of the annual investment needed to keep the global temperature rise well below 2°C or at 1.5°C, and also below what would be expected in the light of the investment opportunities identified and the cost of failure to meet climate stabilization targets"[378].

In these circumstances, the Conference of the Parties

> "[*u*]*rges* developed country Parties to provide enhanced support, including through financial resources, technology transfer and capacity-building, to assist developing country Parties with respect to both mitigation and adaptation, in continuation of their existing obligations under the Convention, and encourages other Parties to provide or continue to provide such support voluntarily"[379].

In the same vein, in the preamble to resolution 77/276 of 29 March 2023, the United Nations General Assembly expressed "serious concern that the goal of developed countries to mobilize jointly USD 100 billion per year by 2020 in the context of meaningful mitigation actions and transparency on implementation has not yet been met, and urg[ed] developed countries to meet the goal"[380]. On 16 November 2023, the OECD again confirmed that developed countries remained short of meeting the financing goal of US$100 billion[381]. The COP28 again noted with "deep regret" that the goal was not met in 2021[382].

236. It is also established that the provisions of Article 9, paragraph 4, of the Paris Agreement have not been complied with, the financial resources provided falling far short of achieving a balance between adaptation and mitigation. This failure is also recorded in the decision of the Conference of the Parties adopted by consensus in 2021 in Glasgow which "[*n*]*otes* with concern that the current provision of climate finance for adaptation remains insufficient to respond to worsening climate change impacts in developing country Parties" and

> "[u]*rges* developed country Parties to at least double their collective provision of climate finance for adaptation to developing country Parties from 2019 levels by 2025, in the context of achieving a balance between mitigation and adaptation in the provision of scaled-up financial resources, recalling Article 9, paragraph 4, of the Paris Agreement"[383].

The COP28 went further, taking the view that "adaptation finance will have to be significantly scaled up beyond the doubling as per decision 1/CMA.3, paragraph 18, to support the urgent and evolving need to accelerate adaptation and build resilience in developing countries"[384].

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[378] *Ibid.*, para. 38.

[379] *Ibid.*, para. 39.

[380] UNGA, resolution 77/276 of 29 March 2023, Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change.

[381] OCDE, "Growth accelerated in the climate finance provided and mobilised in 2021 but developed countries remain short and must continue scaling up to reach the USD 100 billion goal", https://www.oecd.org/environment/growth-accelerated-in-the-climate-finance-provided-and-mobilised-in-2021-but-developed-countries-remain-short.htm.

[382] Decision -/CMA.5 "Outcome of the first global stocktake", para. 80.

[383] Decision 1/CMA.3 "Glasgow Climate Pact" (2021), paras. 14 and 18.

[384] Decision -/CMA.5, "Outcome of the first global stocktake", para. 86.

237. The obligation to co-operate, of customary origin, should be read in light of the treaty obligations in the UNFCCC, the Kyoto Protocol and the Paris Agreement, which were themselves informed by the successive Conferences of the Parties and all adopted by consensus. These decisions have no binding legal scope, notwithstanding their titles. However, as the Court affirmed in respect of the recommendations of the International Whaling Commission, "[t]hese recommendations, which take the form of resolutions, are not binding. However, when they are adopted by consensus or by a unanimous vote, they may be relevant for the interpretation of the Convention or its Schedule"[385].

238. This is especially true given that the customary obligation to co-operate is included in various treaty régimes that supplement the obligations laid down in the framework of international climate change law. In the environmental sphere, there is the 1985 Vienna Convention for the Protection of the Ozone Layer, in which the Parties declare that they are "[a]ware that measures to protect the ozone layer from modifications due to human activities require international co-operation and action, and should be based on relevant scientific and technical considerations"[386]. Its 1987 Montreal Protocol establishes a financing mechanism to enable developing countries to implement the Convention[387].

239. There is also Article 5 of the Convention on Biological Diversity, which provides that

> "[e]ach Contracting Party shall, as far as possible and as appropriate, cooperate with other Contracting Parties, directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity".

States must, moreover, co-operate among themselves and with international organizations to establish education and public awareness programmes with respect to conservation and the sustainable use of biological diversity. "Technical and scientific cooperation" must also be undertaken in the area of conservation and the sustainable use of biological diversity, where necessary, through the appropriate international and national institutions. The new Global Biodiversity Framework adopted in late 2022 at COP15 states that its "full" implementation

> "will require the provision of adequate, predictable and easily accessible financial resources from all sources on a needs basis. It further requires cooperation and collaboration in building the necessary capacity and transfer of technologies to allow Parties, especially developing country Parties, to fully implement the Framework"[388].

240. Article 3 of the United Nations Convention to Combat Desertification (UNCCD) also provides that

> "*(b)* the Parties should, in a spirit of international solidarity and partnership, improve cooperation and coordination at subregional, regional and international levels, and

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[385] *Whaling in the Antarctic (Australia* v. *Japan: New Zealand intervening), Judgment, I.C.J. Reports 2014*, p. 248, para. 46.

[386] Vienna Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985, *UNTS*, Vol. 1513, p. 293, preamble. See also Art. 4.

[387] *Ibid.*, Art. 10.

[388] Decision 15/4, Kunming-Montreal Global Biodiversity Framework. See also Decision 15/7 on resource mobilisation and Decision 15/8 on capacity-building and technical and scientific cooperation.

> better focus financial, human, organizational and technical resources where they are needed;
>
> *(c)* the Parties should develop, in a spirit of partnership, cooperation among all levels of government, communities, non-governmental organizations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affected areas and to work towards their sustainable use".

These provisions are clarified in Article 4, which, *inter alia*, requires the Parties to strengthen subregional, regional and international co-operation, or to co-operate within relevant intergovernmental organizations. In addition, Article 12 provides that

> "[a]ffected country Parties, in collaboration with other Parties and the international community, should cooperate to ensure the promotion of an enabling international environment in the implementation of the Convention. Such cooperation should also cover fields of technology transfer as well as scientific research and development, information collection and dissemination and financial resources."

Reference is also made to scientific and technical co-operation, particularly in the fields of climatology, meteorology and hydrology, including networking for data collection and assessment, information sharing and project monitoring, and co-ordination and prioritization of research and development activities.

241. Similarly, in the law of the sea, Article 192 of the Montego Bay Convention establishes a general obligation to "protect and preserve the marine environment", which is then expanded on with more "specific" obligations, including obligations to co-operate that are mentioned several times. Thus, according to Article 197,

> "States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features".

In this regard, ITLOS held that the duty to co-operate "is a fundamental principle in the prevention of the pollution of the marine environment under Part XII of the Convention and general international law"[389]. This general duty, which is both customary and treaty-based, consists of various obligations (notification, information, research and monitoring). The Convention underlines in several places the need to take into account characteristic regional features, the economic capacity of developing States and their need for development[390]. The obligation to co-operate also covers "the allocation of appropriate funds and technical assistance" to developing countries[391]. The adoption and implementation of the UNFCCC and the Paris Agreement must enable States parties to fulfil these

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[389] *MOX Plant (Ireland* v. *United Kingdom), Provisional Measures, Order of 3 December 2001, ITLOS Reports 2001*, p. 110, para. 82; *Land Reclamation by Singapore in and around the Straits of Johor (Malaysia* v. *Singapore), Provisional Measures, Order of 8 October 2003, ITLOS Reports 2003*, p. 25, para. 92; *Dispute concerning delimitation of the maritime boundary between Ghana and Côte d'Ivoire in the Atlantic Ocean (Ghana/Côte d'Ivoire), Provisional Measures, ITLOS Reports 2015*, para. 73.

[390] See also Arts. 198 and 199 of UNCLOS.

[391] UNCLOS, Art. 203; see also Art. 202, *(a)* and *(c)* in particular.

obligations "directly or through competent international organizations"[392], as is the case when States establish technical and financial assistance mechanisms[393].

242. Lastly, Article 1, paragraph 3, of the United Nations Charter also lists among the "Purposes of the United Nations" that of "achiev[ing] international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion". The Charter thus lays down an obligation to co-operate. In so far as climate change is an "international problem", which cannot be disputed since the United Nations General Assembly considers that it "is an unprecedented challenge of civilizational proportions and that the well-being of present and future generations of humankind depends on our immediate and urgent response to it"[394], the United Nations Member States are under an obligation to co-operate to solve this "problem". The ultimate aim is to adopt a policy based on collaboration and dialogue for the effective management of the issue of climate change in relation to international peace and security.

D. An interpretation and application of international economic law in such a way as to ensure maximum effectiveness against climate change and its effects

243. The above-mentioned obligations have an impact on the interpretation and application of other rules of international law which might thwart States' efforts to combat climate change and its impacts.

244. This is especially the case of certain rules of international economic law, such as investment protection treaties. These treaties have already been relied on by certain investors to oblige States in which they have invested to make reparation for economic damage they suffer or allege to suffer as a result of regulatory or other measures taken by the States to combat climate change and its impacts. For example, companies investing in coal-fired power have instituted arbitral proceedings against the Kingdom of the Netherlands to obtain reparation for loss of future profits due to the decision of the Netherlands to put an end to coal-fired power generation in order to meet its climate objectives[395].

245. The risk of being confronted with such claims is likely to have a negative effect on the political will of States to take the measures required to fulfil their international obligations in respect of climate change, measures that are already difficult because of their economic and social impacts.

246. Reparation of this kind is particularly inappropriate given that the companies concerned, in making large profits, have often made a significant contribution to climate change and its effects. Furthermore, such reparation fails to give a clear signal that the use of fossil fuels must be rapidly reduced and ended; instead, it has the harmful effect of helping to maintain investments in fossil fuels.

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[392] UNCLOS, Art. 202.

[393] See in the UNFCCC: Art. 4, para. 1, para. 3, para. 5, para. 8, para. 9; Art. 5 *(b)*; Art. 6 *(a)* (iv); Art. 9 (2) *(c)*; Art. 11, para. 1; Art. 12, para. 4. See in the Paris Agreement, Art. 6, para. 8; Art. 7, para. 7; Art. 10; Art. 11; Art. 13.

[394] Resolution 77/276 of 29 March 2023.

[395] *RWE AG and RWE Eemshaven Holding II BV* v. *Kingdom of the Netherlands*, ICSID Case No. ARB/21/4, https://www.italaw.com/cases/9156.

247. That is why the DRC requests the Court to declare that international investment law does not permit investors to obtain reparation for the economic damage they suffer as a result of measures taken in good faith by States in combating climate change and its effects.

248. Indeed, in general, investment law does not affect the sovereign right of States to legislate, regulate and take measures in the general interest, in particular for the protection of health and the environment. This right is moreover reinforced by the obligations under international law to combat climate change and its effects.

249. In any event, measures taken in good faith by States to address climate change and its impacts must be deemed necessary and proportionate within the meaning of the relevant rules of international economic law. This results from three combined facts:

— first, the challenges for present and future generations and the obligation of States to respect and protect human rights, including the right to life;

— second, urgency;

— and third, the limited means that States have to deal with climate change and its impacts, both on a practical level (limitations in terms of mitigation and adaptation) and financial level[396].

250. Similarly, international trade law must be interpreted and applied in such a way not as to obstruct the measures taken by States and regional organizations to combat climate change and its impacts but on the contrary in such a way as to reinforce them.

IV. THE LEGAL CONSEQUENCES FOR STATES WHERE THEY, BY THEIR ACTIONS OR OMISSIONS, HAVE CAUSED SIGNIFICANT HARM TO THE CLIMATE SYSTEM AND OTHER PARTS OF THE ENVIRONMENT

251. Question *(b)* put to the Court concerns the legal consequence for States "where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment". The DRC will now show that these consequences are real and potentially serious, whether — in the words of the request for an advisory opinion — they concern "States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change" (A) or "[p]eoples and individuals of the present and future generations affected by the adverse effects of climate change" (B).

252. The DRC will focus on the legal questions in respect of developing countries in general, rather than small island States in particular. In so doing, it is in no way the DRC's intention to minimize the magnitude of the challenges faced by small island States. It gives its full support to small island States in their fight for survival as States and the protection of their populations. It considers, however, that the legal questions specific to small island States can best be addressed by the small island States themselves.

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[396] In this regard see: IPCC, Working Group III, Sixth Assessment Report, 2022, E.5: "Tracked financial flows fall short of the levels needed to achieve mitigation goals across all sectors and regions. The challenge of closing gaps is largest in developing countries as a whole. Scaling up mitigation financial flows can be supported by clear policy choices and signals from governments and the international community (high confidence)".

A. The legal consequences for States

253. By engaging the responsibility of another State in respect of climate change, a State's objective may be to seek reparation for an injury or to prevent future damage. In the latter case, its action will serve not only its own interests (or those of another injured State) but more widely those of the international community as a whole. The DRC will show below that the legal consequences of an internationally wrongful act can be applied to meet this twofold objective. They include cessation of conduct in breach of an international obligation (1), mitigation of damage (2) and reparation (3).

1. The obligation to cease wrongful conduct

254. It is clear from the second part of this written statement (paras. 55-97) that the acts in question are of a continuing nature, since States are continuing to emit greenhouse gases in amounts that cause significant damage to the climate system and are failing to take adequate measures to cease doing so.

255. States that are in continuing breach of any of the primary obligations identified in the third part of this written statement cause, in the words of the question put to the Court, "significant harm to the climate system and other parts of the environment". They must cease their wrongful conduct and perform the obligation or obligations violated[397]. This applies whether their wrongful conduct consists in an act or an omission, "since there may be cessation consisting in abstaining from certain actions"[398]. It also applies whether the obligations are substantive (such as the duty of due diligence) or procedural (such as the obligation to co-operate).

256. A State's obligation of cessation, and the corresponding right of other States to seek cessation, does not depend on the demonstration of injury caused directly to one or more other States. The duty of due diligence applies to damage caused both on the territory of another State and in areas beyond any national jurisdiction. As the Court held in its Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, "the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment"[399]. This is especially relevant in view of the very nature of climate change, which affects humankind's common heritage — the atmosphere and the oceans — before causing inordinate harm to States and present and future generations of humankind. Cessation must, in this case, meet two requirements: urgency and effectiveness.

257. The climate emergency described in the second part of this written statement (paras. 45-110) requires particularly rapid cessation. This requirement is legally recognized. In Decision 1/CMA.3 of 2021, the "Glasgow Climate Pact", the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement recognized that "the impacts of climate change will be *much lower* at the temperature increase of 1.5°C compared with 2°C and *resolve[d] to pursue efforts to limit the temperature increase to 1.5°C*"[400]. It

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[397] Art. 29 of the ILC Draft Articles.

[398] Arbitral Award, 30 April 1990, *Rainbow Warrior (New Zealand/France), UNRIAA*, Vol. XX (1990), p. 270, para. 113.

[399] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 242, para. 29.

[400] Decision 1/CMA.3 "Glasgow Climate Pact" (2021), para. 21 (emphasis added).

> "[f]urther recognize[d] that this requires *accelerated action in this critical decade*, on the basis of the best available scientific knowledge and equity, reflecting common but differentiated responsibilities and respective capabilities in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty"[401].

In the same vein, United Nations General Assembly resolution 77/165 of 14 December 2022 on the Protection of global climate for present and future generations of humankind considers that limiting global warming to 1.5°C

> "requires *rapid, deep and sustained* reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century, as well as deep reductions in other greenhouse gases, [and] further recognizes that this requires *accelerated action in this critical decade*"[402].

258. The *essentially irreversible nature* of climate change and its impacts requires both *rapid and effective* cessation. The deadline for the objectives contained in resolution 77/165 is set for within a few decades to avoid the worst consequences of climate change for the whole planet. As also shown in the second part of this written statement (see above, paras. 67 *et seq.*), climate change caused by anthropogenic GHG emissions is nevertheless already causing serious harm in various parts of the world; it is already certain that emissions to date will cause irremediable and serious harm to future generations (see below in the fourth part of this written statement, paras. 317 *et seq.*).

259. Therefore, in so far as complete and immediate cessation is materially impossible, States in breach of their obligations must in any event immediately engage in a process that will enable them to cease their wrongful conduct as soon as possible.

260. It is essential to ensure that cessation by the States concerned is effective. The DRC notes in this regard that the Court, in the case concerning *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay)*, ensured the effective protection of the environment by giving concrete form to the general duty of due diligence and by providing in addition an example of measures that could be taken to implement international law[403]. It is also, or even more, justified to give such concrete form to States' secondary obligations to ensure the effective cessation and non-repetition of the above-mentioned violations. The DRC notes that such concrete form can be found in particular in the *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements*, adopted by UNEP in 2006[404]. The following concrete measures can, for example, be adopted:

— Compliance plans (para. 19);

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[401] *Ibid.*, para. 23 (emphasis added).

[402] UNGA resolution 77/165, Protection of global climate for present and future generations of humankind, adopted on 14 Dec. 2022, para. 5 (emphasis added).

[403] *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay), Judgment, I.C.J. Reports 2010 (I)*, para. 197: "It is an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party".

[404] https://digitallibrary.un.org/record/778165.

— Laws and regulations that are regularly reviewed (para. 20) and that meet the following requirements:

  — they have clear objectives, appropriate implementation times (which must in this case be as short as is reasonably possible);

  — they are technically, economically and socially feasible (taking into account, in this case, the extreme urgency and socio-economic consequences of climate change);

  — they include penalties encouraging compliance by raising the cost of non-compliance above that of compliance and the repayment of costs of restoration or remediation (para. 40);

— Enforcement measures (para. 22) and criteria for enforcement priorities (para. 41 *(e)*) that give very high priority to the implementation of the obligations under UNCLOS in relation to climate change;

— National focal points (para. 24) and national co-ordination measures (para. 25);

— Access to administrative and judicial proceedings (para. 32), including access of the public and civil society to procedures to challenge failures by public authorities or corporate persons to comply with their national and international obligations (para. 41 *(i)*), wherever this is compatible with the national constitutional order.

The DRC considers that these requirements are, for the most part, the necessary concrete embodiment of the obligations of cessation and non-repetition in the circumstances of this case. While they are not directly part of the primary obligations under customary international law, they arise by virtue of a reasonable interpretation of the secondary obligations of States as a result of the violation of the primary obligations in the circumstances of this case. This is particularly true of the adoption of compliance plans and laws and regulations that have clear objectives and implementation times that are as short as reasonably possible.

261. In the same way, States are under an obligation, pursuant to Article 4 of the Paris Agreement, to prepare, communicate and maintain nationally determined contributions (NDC) with a view to mitigating climate change. They must also pursue domestic measures to achieve the objectives they have defined. These treaty obligations inform the duty of due diligence, and vice versa.

262. Furthermore, given the gravity of the harm and the urgent climate situation affecting all countries — particularly developing small island States and developing States more broadly that are vulnerable to climate change and do not have the means to adapt — States in breach of their obligations must also give assurances and guarantees of non-repetition[405]. As the ILC noted, this legal consequence of the breach of an international obligation has a preventive function. It may be described as a "positive reinforcement of future performance"[406], concerned with "the restoration of confidence in a continuing relationship", which is necessary in the present case[407].

[405] Art. 30 of the ILC Draft Articles.

[406] Commentary to Art. 30, p. 216.

[407] Commentary to Art. 30, p. 219.

2. The obligation to mitigate harm

263. It is a general legal principle that any wrongdoer has an obligation to mitigate the harm arising from the wrongful act. This obligation exists for the injured State and is enshrined in Article 39 of the Articles on State Responsibility in respect of contribution to injury[408]. This same obligation exists in particular for the State responsible for the internationally wrongful act.

264. It has been shown above (paras. 98-110) that climate change and the resulting harm are to a very great extent *delayed*. It is now certain that past and present greenhouse gas emissions will cause significant harm to the climate system and other parts of the environment, and, subsequently, to States.

265. Some of the delayed effects of climate change can no longer be avoided. However, this might not be the case for concrete instances of delayed harm for States, such as flooding, storm damage, etc. Some of this harm may be avoided, in whole or in part, by the adoption of *adaptation* measures such as the construction of sea walls, the adoption of appropriate methods of construction and insulation, etc.

266. In accordance with the obligation to mitigate harm, the States that are primarily responsible for climate change are under an international obligation to provide the States that are primarily injured with material or financial assistance to enable them to adopt effective adaptation measures.

3. The obligation to make reparation for injury

267. It will first be shown below that the treaty régime of the UNFCCC in no way affects the application of international law relating to reparation for injury caused by climate change *(a)*. The DRC will then recall the basic factual characteristics of climate change *(b)*, and will show that the violation of the duty of due diligence or treaty obligations of prevention engages the individual responsibility of each State (party) having caused significant harm to the climate system, for any harm caused *to the climate system* and for any specific harm caused *to another State* (party) *(c)*, and that it is subject to compensation and without prejudice to any recourse against other States responsible *(d)*, before concluding *(e)*.

(a) *The treaty régime of the UNFCCC does not exclude a right to reparation for injury caused by climate change*

268. There is nothing in the treaty régime of the UNFCCC that precludes the application of rules of general international law on the responsibility of States for internationally wrongful acts.

269. The Paris Agreement deals with "loss and damage" in Article 8, paragraph 1, which provides that the Parties "recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage". It establishes the "Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts", which is placed under the authority of the Conference of the Parties to the

[408] Article 39 — Contribution to injury: "In the determination of reparation, account shall be taken of the contribution to the injury by wilful or negligent action or omission of the injury State or any person or entity in relation to whom reparation is sought".

UNFCCC serving as the meeting of the Parties to the Paris Agreement[409]. This mechanism is struggling to translate into financial measures for the most affected States and communities. On 30 November 2023, the first day of the 28th Conference of the Parties to the UNFCCC (COP28), some developed States finally committed to contributing to the fund for a total amount of US$267.5 million, which is still clearly insufficient[410].

270. Article 8 of the Paris Agreement recognizes as a fact the existence of loss and damage linked to the adverse effects of climate change. It is nevertheless clear that Article 8 and the Warsaw Mechanism do not establish a régime of international responsibility for loss and damage. Thus, in Decision 1/CP.21 on the Adoption of the Paris Agreement, the Conference of the Parties to the UNFCCC agreed that "Article 8 of the Agreement does not involve or provide a basis for any liability or compensation"[411]. Article 8 thus does not establish a *lex specialis* on the international responsibility of States, but it does not preclude the engagement of the international responsibility of States on other treaty bases and under general international law.

(b) ***The essential facts capable of engaging the responsibility of States in relation to climate change***

271. International responsibility for the effects of climate change depends first on a series of factual data recalled below.

272. *First*, as demonstrated above, historic and current GHG emissions are mainly attributable to a small number of industrialized States (paras. 71-73).

273. However, Western industrialized countries have played a much bigger role than is apparent from these figures, for three reasons:

— First, climate change is also the result of historic emissions that have accumulated by industrialized States since the beginning of the industrial era.

— Second, countries like China and India have far more inhabitants than the United States and the European Union, such that their per capita emissions are much lower.

— Lastly, a large part of GHG emissions by developing countries serve production and consumption in industrialized States. From this point of view, they are attributable to industrialized countries as much if not more than to developing countries.

274. At the other end of the spectrum, the 100 least polluting States are jointly responsible for only 3.5 per cent of total GHG emissions[412].

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[409] Art. 8, para. 2.

[410] See the press release from COP28: https://www.cop28.com/en/news/2023/11/COP28-Presidency-unites-the-world-on-Loss-and-Damage.

[411] Decision 1/CP.21, Doc. FCCC/CP/2015/10/Add.1 of 21 Jan. 2016, para. 51.

[412] WRI, CAIT Climate Data Explorer, "Total GHG emissions excluding land-use change and forestry", 2013. See e.g. https://www.sonnenseite.com/en/environment/this-interactive-chart-explains-worlds-top-10-emitters-and-how-theyve-changed/.

275. *Second*, the risks inherent in GHG emissions and more specifically the use of fossil fuels have been known to the industries concerned and their governments for several decades. A recent study by Professor James Gustave Speth dates knowledge of these risks by the United States authorities to more than fifty years ago, i.e. to the administration of President Jimmy Carter (1977-1981), and beyond[413].

276. *Third*, GHG emissions mostly originate in one State or another; they can thus be individualized. The acts or omissions of each State in controlling and reducing those emissions can also be individualized. Climate change and its effects are nevertheless largely (apart from the particular case of the largest GHG emitting States) the result of the *accumulation* of these various emissions. This accumulation can be seen in space — in the sense that it is attributable to different States — but also in time — in the sense that industrialized States began emitting and accumulating GHGs from the beginning of the industrial era, and at least some of those GHGs only degrade slowly.

(c) *The applicable rules of the law of international responsibility*

277. Breach of the duty of due diligence consists in the failure of States, in particular industrialized States, to take the necessary measures — according to the terms of Article 2 of the UNFCCC "to achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". Dangerous anthropogenic interference with the climate system corresponds to "significant harm" to the climate system or other parts of the environment, referred to in the request for an advisory opinion.

278. The DRC will first recall the *erga omnes* character of obligations of environmental protection in areas beyond any national jurisdiction (i). The DRC will then address the principle of individual or "independent" responsibility of States under international law (ii), and will show that, notwithstanding certain potentially specific cases, the régime of responsibility in Article 47 of the ILC Articles on Responsibility of States for Internationally Wrongful Acts should be applied (iii). This régime is, however, subject to differentiation of responsibilities (iv). It is also without prejudice to the offsetting of debts (v). It ensures full reparation for injured States with equity, it being understood that States could limit their responsibility in proportion to their contributions to GHG emissions by creating a binding reparation mechanism for full reparation on a multilateral basis (vi).

(i) The *erga omnes* obligations for the environmental protection beyond any national jurisdiction

279. It has already been recalled above (paras. 165-166) that, in accordance with the Court's jurisprudence, States are under an international obligation to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control. Each State having caused significant harm to the climate system has an international obligation to make reparation for that harm.

280. It is well established that significant harm has already been caused to the climate system, entailing the obligation of reparation and, especially, the obligation of mitigation.

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[413] James Gustave Speth, They Knew: The US Federal Governments Fifty-Year Role in causing the Climate Crisis, The MIT Press (2021), https://doi.org/10.7551/mitpress/14083.001.0001.

281. These obligations are *erga omnes* obligations by nature. Such obligations create rights *omnium*, with which everyone may seek compliance; each State has a legal interest in taking action if such an obligation is breached, as the Court has recognized[414]. In its advisory opinion of 1 February 2011, the ITLOS Chamber relied on the works of the ILC in finding that "[e]ach State Party [to UNLOS] may also be entitled to claim compensation in light of the *erga omnes* character of the obligations relating to preservation of the environment of the high seas and in the Area"[415], consistent with the characterization of the Area as the common heritage of humankind. Each State is thus entitled not only to seek compliance with primary obligations but also to seek reparation for any harm caused to the environment beyond any national jurisdiction.

(ii) The individual or "independent" responsibility of States

291. As the ILC recalls in the commentaries to its Draft Articles on Responsibility of States for Internationally Wrongful Acts, "[i]n international law, the general principle in the case of a plurality of responsible States is that each State is separately responsible for conduct attributable to it"[416]. This principle of individual or "independent" responsibility[417] is also applied when "internationally wrongful conduct . . . results from the collaboration of several States rather than of one State acting alone"[418].

292. Similarly, the Court found in the case concerning *Application of the Convention on the Prevention and Punishment of the Crime of Genocide* that a State that has failed to comply with its obligation of prevention cannot exculpate itself on the ground that it would, in any event, have been unable to prevent the act in question. The Court underlined that this is particularly the case where the obligation of prevention is common to several States[419]. Earlier, in the *Corfu Channel* case, Albania was required to make reparation for all the harm suffered by the United Kingdom while Albania had not laid the mines in the Channel[420].

293. The late Judge Crawford, who was then Special Rapporteur for the ILC, set out the consequences of the principle of individual or independent responsibility in his Third Report on State Responsibility. Mr Crawford emphasized that where an identifiable element of harm could properly be allocated to one of several concurrently operating causes alone, the State responsible for the

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[414] *Barcelona Traction, Light and Power Company, Limited (New Application: 1962) (Belgium* v. *Spain), Second Phase, Judgment, I.C.J. Reports 1970*, p. 32; *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina* v. *Yugoslavia), Preliminary Objections, Judgment, I.C.J. Reports 1996 (II)*, p. 615, para. 31.

[415] ITLOS, *Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011*, para. 180.

[416] ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries, p. 314, para. 3. See also *ibid*., p. 150, para. 1.

[417] *Op. cit.*, p. 150, para. 1.

[418] *Op. cit.*, p. 150, para. 2.

[419] *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina* v. *Yugoslavia), Judgment, I.C.J. Reports [2007 (I)]*, p. 221, para. 430:

> "[I]t is irrelevant whether the State whose responsibility is in issue claims, or even proves, that even if it had employed all means reasonably at its disposal, they would not have sufficed to prevent the commission of [the act to be prevented]. . . . this is irrelevant to the breach of the obligation of conduct in question, the more so since the possibility remains that the combined efforts of several States, each complying with its obligation to prevent, might have achieved the result . . . which the efforts of only one State were insufficient to produce."

[420] *Corfu Channel (United Kingdom* v. *Albania), Assessment of Amount of Compensation, Judgment, I.C.J. Reports 1949*, p. 244.

wrongful act should be held responsible for all the consequences of its wrongful conduct, unless some part of the harm could be shown to be severable in causal terms from that attributed to the responsible State. Mr Crawford observed that this conclusion also applied in private comparative law, referring to a study relied on by the United States of America in the *Aerial Incident of 27 July 1955 (United States of America* v. *Bulgaria)*:

> "It is the very general rule that if a tortfeasor's behaviour is held to be a cause of the victim's harm, the tortfeasor is liable to pay for all of the harm so caused, notwithstanding that there was a concurrent cause of that harm and that another is responsible for that cause . . . In other words, the liability of a tortfeasor is not affected vis-à-vis the victim by the consideration that another is concurrently liable"[421].

294. Moreover, the Court stated in the case concerning *Certain Phosphate Lands in Nauru* that in the case of a plurality of potentially responsible States, the absence of one of them (in that case, New Zealand and the United Kingdom) from the proceedings did not preclude the Court from exercising its jurisdiction with regard to the party present, in that case Australia. The Court rejected the objection to admissibility raised by Australia in words that echo the principle of individual or "independent" responsibility:

> "The Court does not consider that any reason has been shown why a claim brought against only one of the three States should be declared inadmissible *in limine litis* merely because that claim raises questions of the administration of the Territory, which was shared with two other States. It cannot be denied that Australia had obligations under the Trusteeship Agreement, in its capacity as one of the three States forming the Administering Authority, and there is nothing in the character of that Agreement which debars the Court from considering a claim of a breach of those obligations by Australia"[422].

295. It results from the foregoing that each State that has made a significant contribution to changes in the climate system is individually responsible for all the harm caused by those changes and it cannot be relieved of its responsibility on the ground that another State has also contributed to that harm. Its responsibility can be engaged before the Court or another international court or tribunal in the absence of other States that share responsibility.

(iii) Application of the régime of Article 47 of the Articles on State Responsibility

296. The foregoing is supplemented, in the circumstances of this case, by the application of the régime of responsibility in the case of a plurality of responsible States contained in Article 47 of the Articles on State Responsibility[423]. Of course, the circumstances of this case have some potential differences with the situation foreseen in Article 47, but above all they have substantial similarities that justify the application of that régime.

297. Article 47 provides that "[w]here several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act"

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[421] ILC, Third Report on State Responsibility, by James Crawford, Special Rapporteur, Document A/CN.4/507 and Add. 1 to 4, para. 36 and fn. 7[1].

[422] *Certain Phosphate Lands in Nauru (Nauru* v. *Australia), Preliminary Objections, Judgment, I.C.J. Reports 1992*, pp. 258-259, para. 48.

[423] Articles on Responsibility of States for Internationally Wrongful Acts, annexed to UNGA resolution 56/83 of 12 December 2001.

(paragraph 1), it being understood that any injured State cannot recover, by way of compensation, more than the damage it has suffered (paragraph 2 *(a)*) and that the possibility of invoking the responsibility of each State in relation to that act is "without prejudice to any right of recourse against the other responsible States" (paragraph 2 *(b)*). The ILC states that Article 47 "only addresses the situation of a plurality of responsible States in relation to the same internationally wrongful act"[424]. The article states "the general principle that in such cases each State is separately responsible for the conduct attributable to it, and that responsibility is not diminished or reduced by the fact that one or more other States are also responsible for the same act"[425]. Again according to the ILC, this situation is to be distinguished from that where "several States by separate internationally wrongful conduct have contributed to cause the same damage"[426]. However, this does not mean that, in the latter case, the responsibility of each State is necessarily reduced[427].

298. At first sight, State responsibility for harm caused by climate change appears to deviate from the core circumstances referred to in Article 47, in so far as each State has individually breached its duty of due diligence. We could be faced with many parallel wrongful acts, rather than a single wrongful act.

299. On reflection, however, there are far greater similarities between the question put to the Court and the circumstances referred to in Article 47. In the case of climate change, we are faced with a *single act* causing *indivisible harm*:

— A single act: subject to the individual role of the largest GHG emitters, the *accumulation of* GHGs emitted by each State, i.e. through the accumulation of parallel breaches by States of the duty of due diligence, which causes a single act, namely dangerous anthropogenic interference with the climate system.

— Indivisible harm: interference with the climate system in turn causes specific harm to certain States, such as sea level rise, destruction of mangroves, increase in the number and intensity of cyclones, etc. While it might be possible in the future to establish specific causation through hard science, this harm is *indivisible* in the sense that it results from climate change in general and *cannot be subdivided into attributable parts to one State or another*.

300. It is precisely these characteristics — the single act causing indivisible harm — that form the basis of the régime of responsibility in Article 47 of the ILC Articles.

301. In these circumstances, it is therefore appropriate to apply the rule set out in Article 47 of the Articles on Responsibility of States for Internationally Wrongful Conduct, according to which where several States are responsible for the same act, the responsibility of each State may be invoked in relation to that act, without prejudice to the any right of recourse against the other responsible States[428].

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[424] ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries, p. 317, para. 8.

[425] *Ibid.*, p. 314, para. 1.

[426] *Ibid.*, p. 317, para. 8.

[427] *Ibid.*, p. 317, para. 8, referring to the *Corfu Channel* case. See also *ibid*., pp. 229-230, para. 12.

[428] The DRC notes that Article 47 is not a treaty provision but seeks to codify a rule of international custom. Customary rules are generally less clearly delimited than treaty provisions. The terms of Article 47 thus do not preclude the DRC's position that the customary rule applies in this case.

302. This conclusion holds especially true in this case. At least since the UNFCCC was concluded, States, and in particular industrialized States, have all breached their individual obligation of prevention, *aware* of similar breaches by other States and *aware* of the fact that these accumulated breaches would cause the occurrence of the event to be prevented, namely dangerous interference with the climate system. They acted jointly in continuing to accumulate GHG emissions and together failed to take the necessary measures to prevent dangerous interference with the climate system.

303. As the late Judge Crawford put it in his capacity as ILC Special Rapporteur in this Third Report on State Responsibility, "common adventures" are governed by special rules of responsibility intended to protect the interests of the victim:

> "Where two persons jointly engage in a common adventure causing loss to another, it is usually held that the victim can recover its total losses against either of the participants, on the common sense ground that the victim should not be required to prove which particular elements of damage were attributable to each of them. International tribunals have reached similar results by reference to considerations of 'equity' or by requiring a State responsible for wrongful conduct to show what consequences flowing from the breach should not be attributed to it."[429]

The collective failure to have taken the necessary measures in good time to prevent dangerous interference with the climate system is a "common adventure" of States, and in particular industrialized States, which is among the most destructive "common adventures" in the history of humankind.

304. Consequently, each State may be held individually responsible for all the specific harm caused by climate change to other States. This responsibility is without prejudice to any right of recourse against other responsible States, and without prejudice to the differentiation of respective responsibilities and the offsetting of debts, examined below.

(iv) The differentiation of responsibilities

305. While the above-mentioned responsibility potentially lies with all States, it is appropriate to differentiate. States that have made only a marginal or "negligible" contribution to climate change cannot be held internationally responsible for that contribution. The reason is twofold.

306. First, the duty of environmental due diligence aims to avoid "significant" harm. In bilateral relations, this means that a State's responsibility is not engaged for negligible harm. In the same vein, the commentary of the ILC on Article 16 of the Draft Articles on State Responsibility notes that a State that has assisted in the commission of a wrongful act is not responsible for the wrongful act even when "the assistance may have been only an *incidental* factor in the commission of the primary act, and may have contributed only to a minor degree, if at all, to the injury suffered"[430]. This rule of non-responsibility can be applied, to some extent, to climate change. It has been shown above that the 100 least polluting States are jointly responsible for only 3.5 per cent of global GHG emissions (para. 274 above), namely an average of 0.035 per cent per State. Collectively these States, and *a fortiori* each of these States individually, must be considered to have made only a negligible contribution to climate change. This is especially so since the historic emissions of these

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[429] ILC, Third Report on State Responsibility, by James Crawford, Special Rapporteur, Document A/CN.4/507 and Add. 1 to 4, p. 75, para. 276 *(c)*.

[430] Commentary to Article 16, p. 159, para. 10. Emphasis added.

same States are even more negligible. These States are in exactly the same situation as that described by the ILC of a State having given negligible assistance.

307. The same conclusion can be drawn with regard to the principle of common but differentiated responsibilities and respective capabilities, contained in particular in Article 3, paragraph 1, and Article 4 of the UNFCCC. The ensuing duty of due diligence and international responsibility must be interpreted and applied in conjunction with this principle.

308. Furthermore, since industrialized States are technologically advanced, they must have been aware long before developing States of the magnitude of the risks inherent in GHG emissions. In accordance with the jurisprudence of the Court[431], the obligation to prevent and the duty to act both arose for industrialized States long before they became applicable to developing States. Under Article 3, paragraph 1, of the UNFCCC, industrialized States should take the lead in combating climate change and its impacts.

309. It follows from the foregoing that the responsibility of States that have made a negligible contribution to serious interference with the climate system is not engaged, in accordance with the régime set out above. This is the case for the 100 States identified in 2023 as having the lowest GHG emissions.

(v) The offsetting of debts

310. Among States whose responsibility is and continues to be engaged according to the rules set out above, debts should be offset where appropriate.

311. The principle of offsetting debits underlies the rule set out in Article 39 of the Articles on State Responsibility, whereby, in the determination of reparation, "account shall be taken of the contribution to the injury by wilful or negligent action or omission of the injured State or any person or entity in relation to whom reparation is sought"[432]. In general, the offsetting of debts is, in bilateral relations between mutual creditors and debtors, a general legal principle[433].

312. Accordingly, industrialized State A having contributed less to dangerous interference with the climate system than industrialized State B can only claim reparation from State B to the extent that State B's responsibility is greater than that of State A. In the view of the DRC, this offsetting should be done in respect of the respective GHG emissions. If State A has emitted a volume of 100 GHGs while State B has emitted a volume of 200 GHGs, State A can engage the responsibility of State B to the amount of 100 only. Indeed, State A cannot reasonably engage the responsibility of State B as if it (State A) had not contributed itself to climate change.

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[431] *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina* v. *Serbia and Montenegro), Judgment, I.C.J. Reports 2007 (I)*, p. 222, para. 431: "a State's obligation to prevent, and the corresponding duty to act, arise at the instant that the State learns of, or should normally have learned of, the existence of a serious risk that [the act to be prevented will occur]".

[432] Articles on Responsibility of States for Internationally Wrongful Acts, Art. 39.

[433] The offsetting of debts is often invoked before international courts and tribunals without being challenged in principle, even though some arrangement may be open to discussion. Thus, for example, J. Salmon, ed., *Dictionnaire du droit international public*, Bruylant, Brussels, 2001, see "compensation" which refers to the position of Germany in the *Factory at Chorzów* case before noting: "In domestic law, debts are generally required to be certain, liquid and payable. It is unsure whether international law has the same requirements".

(vi) Conclusion on reparation for States

313. It follows from the foregoing that each State, other than those whose contribution to climate change is negligible (essentially, the 100 States that were collectively responsible in 2023 for approximately 3.5 per cent of global GHG emissions), has an individual responsibility towards every other State:

— to make reparation for the harm caused to the climate system beyond any national jurisdiction, and

— to make reparation for all the harm suffered by that State in particular because of climate change,

— subject to their respective debts being offset, such offset being based on a comparison of the respective contributions of the States concerned to GHG emissions; and

— without prejudice to any right of recourse against other responsible States.

314. This régime applies under the applicable international law and is entirely equitable.

— First, the obligation to make full reparation (Article 31, paragraph 1, of the Articles on State Responsibility) comes with the mirror rule that the injured State is entitled to full reparation for the harm it has suffered. As the late Judge Crawford stated in his capacity as Special Rapporteur, it is a "common sense [principle] that the victim should not be required to prove which particular elements of damage were attributable to each of"[434] those responsible. The rights of the victim cannot be sacrificed to the complexity of responsibility.

— Second, the burden on the State held responsible can be alleviated by offsetting and by its right of recourse.

315. A régime of responsibility that holds each State responsible in proportion to its historic and current GHG emissions — a régime of responsibility that has some basis in certain national laws[435] — would not ensure full reparation for injured States. The latter would be faced with the daunting task of claiming reparation for 1 per cent of their injury from one State, 2 per cent from another, 3 per cent from a third, etc., and in each case both the responsibility and the share would be contested.

316. The States responsible for climate change can, however, limit their responsibility in proportion to their GHG emissions, by creating a multilateral mechanism for implementing their past, current and future responsibilities, ensuring full reparation for injured States.

B. Legal consequences with respect to peoples and individuals of the present and future generations

317. The second part of the second question submitted to the Court concerns the legal consequences for States where they, by their actions or omissions, have caused significant harm to

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[434] ILC, Third Report on State Responsibility, by James Crawford, Special Rapporteur, Document A/CN.4/507 and Add. 1 to 4, p. 75, para. 276 *(c)*.

[435] *United Kingdom House of Lords, Fairchild v. Glenhaven Funeral Services Ltd*., [2002] UKHL 22, [2002] 3 All ER 305; *Barker v. Corus UK Ltd.*, [2006] UKHL 20, [2006] 2 AC 572; Supreme Court of Canada, *Clements v. Clements*, Judgment of 29 June 2012, 2012 SCC 32, [2012] 2 SCR 181.

the climate system or other parts of the environment, with respect to "peoples and individuals of the present and future generations affected by the adverse effects of climate change".

318. As the ILC affirmed, "State responsibility extends . . . to human rights violations and other breaches of international law where the primary beneficiary of the obligation breached is not a State"[436]. Thus, the DRC will now show that the responsibility of States having caused significant harm to the climate system is also engaged with respect to "peoples and individuals of present and future generations affected by the adverse effects of climate change".

319. Having identified the rights holders (1), the DRC will show that the peoples and individuals of present and future generations have the right to an effective remedy and appropriate reparation (2) and to the cessation of violations and the prevention of future harm (3). Reparation is not limited to pecuniary compensation but will have, where necessary, to take different forms suited to the circumstances of the case (4).

1. Rights holders

320. The DRC first notes that the way the question is formulated covers all rights holders under international human rights law, whether they be "individuals", who can act individually or in a group, or "peoples". This terminology, which echoes the preamble to the Paris Agreement[437], encompasses individuals, in particular when they belong to particularly vulnerable categories such as children, the elderly, women or girls, migrants, persons with disabilities, the poor, etc., but also peoples, whether they are local communities or indigenous peoples.

321. The reference to "present and future generations" means taking into account the intergenerational dimension of violations of human rights caused by the adverse effects of climate change. The Paris Agreement, moreover, commits the signatory parties to "respect, promote and consider their respective obligations . . . [and] intergenerational equity"[438].

2. The right to an effective remedy and appropriate reparation

322. States must guarantee access to effective remedies and appropriate reparation for individuals affected by the adverse effects of climate change. This obligation clearly arises both from international environmental law and international human rights law. In 1992, Principle 10 of the Rio Declaration affirmed that "[e]ffective access to judicial and administrative proceedings, including redress and remedy, shall be provided"[439]. Similarly, according to Article 2, paragraph 3, of the International Covenant on Civil and Political Rights, "[e]ach State Party to the present Covenant undertakes . . . [t]o ensure that any person whose rights or freedoms as herein recognized are violated

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[436] ILC, Commentary to Article [28], p. 214.

[437] It provides that

> "Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity".

[438] Paris Agreement, preamble.

[439] See also Maastricht Principle 19, Maastricht Principles on the Human Rights of Future Generations, July 2023, and the 1997 resolution of the Institut du droit international cited above, Article 26 of which provides that "[i]n the event of preventive mechanisms being unsuccessful, expeditious access to remedies, as well as submission of claims relating to environmental damage, should also be provided".

shall have an effective remedy". In the same vein, Principle 10 of the Framework Principles on Human rights and the Environment adopted in 2018 by the Human Rights Council provides that "States should provide for access to effective remedies for violations of human rights and domestic laws relating to the environment"[440]. In the commentary below these principles, it is stated that to provide for effective remedies, States should ensure that individuals have access to judicial and administrative procedures that meet basic requirements, including the following procedures:

> "*(a)* are impartial, independent, affordable, transparent and fair; *(b)* review claims in a timely manner; *(c)* have the necessary expertise and resources; *(d)* incorporate a right of appeal to a higher body; and *(e)* issue binding decisions, including for interim measures, compensation, restitution and reparation, as necessary to provide effective remedies for violations. The procedures should be available for claims of imminent and foreseeable as well as past and current violations. States should ensure that decisions are made public and that they are promptly and effectively enforced"[441].

323. The Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, adopted by the General Assembly in 2005, also state that the victims of violations have the right to remedies, i.e. equal and effective access to justice and "adequate, effective and prompt reparation" for the harm suffered[442]. "Reparation should be proportional to the gravity of the violations and the harm suffered"[443].

324. Furthermore, as the Committee on Economic, Social and Cultural Rights affirmed in its General Comment No. 24 (cited above, para. 186) on the existence of international obligations regarding the effects of activities beyond national borders, States parties are required also to ensure the right to effective remedy and appropriate reparation for peoples and individuals, including when they are not located on their territory, when activities on their territory or under their jurisdiction or control cause them harm[444]. Thus, States, and particularly industrialized States, are under an obligation to provide mechanisms for effective remedies, judicial or otherwise, making it possible to engage the responsibility of businesses and non-State actors under their jurisdiction or control and which are responsible for violations to human rights outside their national territory, especially in developing countries. The measures to be adopted in order to fulfil this obligation include the following at the very least.

325. *First*, financial impediments to private action by victims from developing countries before remedy mechanisms of industrialized States must be removed. This requirement arises from

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[440] United Nations, Human Rights Special Procedures, Special Rapporteurs, Independent Experts and Working Groups, Framework Principles on Human Rights and the Environment — The main human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2018.

[441] Human Rights Council, *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Note by the Secretariat*, 24 Jan. 2018, A/HRC/37/59, para. 29.

[442] UNGA resolution 60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, adopted on 16 Dec. 2005.

[443] *Ibid.*

[444] Committee on Economic, Social and Cultural Rights, General comment No. 24 (2017) on State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities, E/C.12/GC/24 of 10 Aug. 2017, para. 28.

the principle of non-discrimination[445] and concerns impediments both upstream of judicial procedures (*cautio judicatum solvi*[446]) and downstream (allocation of the costs of proceedings), as well as free or partially free access to legal services for low-income victims. This requirement is confirmed once again in the work of the Human Rights Council[447] and the United Nations High Commissioner for Human Rights[448]. Removing financial impediments is also consistent with the principles of environmental rights identified by UNEP. In its First Global Report on the Environmental Rule Law, UNEP highlights the importance of ensuring effective access to remedies for the protection of the environment. Access to justice must be guaranteed by lowering bond requirements in public interest cases and encouraging free representation for those without adequate resources by qualified professionals[449].

326. *Second*, victims from developing countries, who may have suffered harm in their own country, must have effective access to the remedy mechanisms of industrialized countries, in particular through collective action mechanisms. In this regard, the Human Rights Council considers that rules of civil procedure should provide for collective redress mechanisms in cases arising from business-related human rights abuse[450]. Such mechanisms should make provision for rights holders to collaborate and seek collective redress for business-related human rights harms[451].

327. *Third*, States, and industrialized States in particular, must ensure that the rules governing legal jurisdiction and the structures of commercial companies and business do not constitute barriers, in law or in fact, to obtaining an effective remedy. Commercial companies must be prevented from avoiding paying compensation for harm caused by their activities, by entrusting formal decision-making on their harmful activities to subsidiaries and sub-subsidiaries that do not have the capital needed to pay compensation. Steps should also be taken to ensure that the rules governing the legal jurisdiction of a State do not preclude foreigners having suffered harm abroad because of the activities of a company with the nationality of that State from being able to take action against that company in that State. In his report of 10 May 2016 cited above, the United Nations High Commissioner for Human Rights identified the issues of which national regulations should take account so that the structure of a business does not constitute a barrier to obtaining an effective remedy. Domestic law must be changed or adapted where appropriate to remove existing uncertainties as to the extent of the legal responsibilities of parent companies in identifying and preventing business-related human rights abuse. As the High Commissioner points out, this is

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[445] See also the ILC Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities (2001), Art. 15.

[446] A bond deposited with a tribunal by a foreigner who wants to take legal to secure payment for the costs of litigation.

[447] United Nations, Human Rights Council, *Improving accountability and access to remedy for victims of business-related human rights abuse*, Report of the United Nations High Commissioner for Human Rights, A/HRC/32/19 of 10 May 2016.

[448] United Nations, Human Rights Council, *Improving accountability and access to remedy for victims of business-related human rights abuse through non-State-based grievance mechanisms*, Report of the United Nations High Commissioner for Human Rights, A/HRC/44/32 of 19 May 2020, para. 8.7.

[449] UNEP, Environmental Rule of Law: First Global Report, 2019, p. 186. Available at: https://www.unep.org/resources/assessment/environmental-rule-law-first-global-report.

[450] United Nations, Human Rights Council, *Improving accountability and access to remedy for victims of business-related human rights abuse*, Report of the United Nations High Commissioner for Human Rights, A/HRC/32/19 of 10 May 2016, p. 21, Policy objective 15 (15.3).

[451] United Nations, Human Rights Council, *Improving accountability and access to remedy for victims of business-related human rights abuse through non-State-based grievance mechanisms*, Report of the United Nations High Commissioner for Human Rights, A/HRC/44/32 of 19 May 2020, para. 8.5.

especially so when these uncertainties are not only a barrier to remedy itself, but also give rise to further barriers by adding to legal costs and delaying proceedings[452].

328. The DRC notes that international safeguards, where they exist, in principle are only residual. Before using them, plaintiffs must have exhausted local remedies. However, there are exceptions to this rule; it is not applicable if domestic remedies "objectively . . . have no prospect of success, for example in cases where under applicable domestic laws the claim would inevitably be dismissed or where established jurisprudence of the highest domestic tribunals would preclude a positive result"[453]. This would be the case if the above-mentioned requirements are not met.

329. All these procedural requirements are especially important in respect of climate harms. The operation of remedy mechanisms must *take due account of the various vulnerabilities* to climate change and its impacts. This follows from the principle of equality before courts and tribunals[454] and is consistent with a statement made by the United Nations General Assembly that

> "while the human rights implications of environmental damage are felt by individuals and communities around the world, the consequences are felt most acutely by women and girls and those segments of the population that are already in vulnerable situations, including indigenous peoples, children, older persons and persons with disabilities"[455].

330. Lastly, States must adopt all the appropriate measures, of an institutional and procedural nature, in their domestic legal order and international co-operation forums to ensure *effective representation of the rights and interests of future generations* in any decision-making process that might affect them. This means, in particular, recognizing bodies formed by indigenous and traditional peoples that have developed their own mechanisms to represent future generations, and recognizing and respecting the fact that the children and youth of today are closely connected to future generations, which involves an obligation to protect the right of children and young people to be heard and to protect their participatory rights[456]. The DRC therefore invites the Court to declare that States must adopt all the appropriate measures, of an institutional and procedural nature, in their domestic legal order and in international co-operation forums, to ensure effective representation of the rights and interests of future generations in any decision-making process that might affect them.

3. The cessation of violations and the prevention of future damage

331. In parallel with their obligations as set out above, States whose wrongful conduct affects the rights of individuals and peoples must first cease those violations.

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[452] United Nations, Human Rights Council, *Improving accountability and access to remedy for victims of business-related human rights abuse*, Report of the United Nations High Commissioner for Human Rights, A/HRC/32/19 of 10 May 2016, pp. 10-11, paras. 21-23.

[453] Committee on the Rights of the Child, Decision adopted by the Committee under the Optional Protocol to the Convention on the Rights of the Child on a communications procedure, concerning communication No. 106/2019, CRC/C/88/D/106/2019, 10 Nov. 2021.

[454] International Covenant on Civil and Political Rights, Art. 14, para. 1; United Nations Human Rights Committee, General Comment No. 32 on the International Covenant on Civil and Political Rights, CCPR/C/GC/32 of 23 August 2007, paras. 3 and 7; African Commission on Human and Peoples' Rights, Principles and Guidelines on the Right to a Fair Trial and Legal Assistance in Africa, point A.

[455] UNGA resolution A/76/L/75 of 26 July 2022, The human right to a clean, healthy and sustainable environment.

[456] Cf. Maastricht Principles, para. 22.

332. According to the Human Rights Committee, "[c]essation of an ongoing violation is an essential element of the right to an effective remedy". The Committee adds that reparation can take the form of "guarantees of non-repetition and changes in relevant laws and practices". Accordingly, with regard to the obligation integral to Article 2 to take measures to prevent a recurrence of a violation of the International Covenant on Civil and Political Rights, it has been a frequent practice of the Committee "to include in its Views the need for measures, beyond a victim-specific remedy, to be taken to avoid recurrence of the type of violation in question. Such measures may require changes in the State Party's laws or practices"[457].

333. In this case, cessation may require the State to adopt measures to bring its legislation and practices into conformity with its international obligations: regulate activities on its territory or under its jurisdiction or control that contribute to human rights violations, stop subsidizing fossil fuels or certain agricultural activities, close coal-fired power plants, support the development of renewable energy, etc. Cessation of violations may also involve taking an active part in international co-operation, at a global, regional or bilateral level, including by providing financial and technological assistance to enable communities or States to adapt.

4. Forms of reparation

334. Whether with respect to other States or individuals and peoples, States are "under an obligation to make *full* reparation for the injury caused by the internationally wrongful act"[458]. With regard to climate change, as the three United Nations rapporteurs on human rights noted in the amicus brief submitted to ITLOS, "[s]uch remedies must not be restricted to adaptation measures, and should instead include a combination of mitigation actions, adaptation measures, and compensation for loss and damage"[459].

335. In practice and depending on the circumstances, reparation will take various forms, alone or in combination: restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition.

336. Restitution, which should "restore the victim to the original situation before the gross violations of international human rights law"[460], should be favoured, but full restitution will not always be possible in so far as many of the impacts of climate change are irreversible on a human time scale (loss of an ecosystem or territory, a farmer's land become infertile, sickness or death of a close relative, etc.)[461]. But at least partial restitution will often be possible, in so far as the situation of the victims can generally be improved by climate change adaptation measures to foster resilience (construction of sea walls, reconstruction of a house or a village in a less exposed place, help with establishing more resistant crops, access to water and irrigation, etc.). Thus, the obligation of

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[457] Human Rights Committee, International Covenant on Civil and Political Rights, General Comment No. 31, The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, adopted on 29 March 2004 (2187th meeting), CCPR/C/21/Rev.1/Add.13, 26 May 2004, pp. 7-8.

[458] Article 31 of the ILC Draft Articles on State Responsibility. Emphasis added.

[459] ITLOS (Case No. 31), Request for an advisory opinion submitted by the Commission of Small Island States on climate change and international law, Amicus brief submitted to the International Tribunal for the Law of the Sea by the UN Special Rapporteurs on Human Rights & Climate Change (Ian Fry), Toxics & Human Rights (Marcos Orellana), and Human Rights & the Environment (David Boyd), 30 May 2023.

[460] [UNGA A/RES/60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, para. 19.]

[461] *Ibid.* [*sic.*].

restitution can take the form of an obligation for the wrongdoing State to adopt or fund adaptation measures on behalf of individuals or peoples injured by the internationally wrongful act.

337. Where restitution is not possible, compensation must be given when the harm can be assessed in economic terms and must be proportionate to the harm suffered. It will cover physical and mental harm; lost opportunities, including employment, education and social benefits; material damage and loss of income, including loss of earning potential; moral damage; and costs required for legal or expert assistance, medicine and medical services, and psychological and social services[462].

338. Rehabilitation should "include medical and psychological care as well as legal and social services"[463].

339. Satisfaction could, depending on the circumstances, take various forms, including some that are especially appropriate for human rights violations caused by the adverse effects of climate change, such as judicial and administrative sanctions against persons liable for the violations.

340. Guarantees of non-repetition should, depending on the circumstances, include the review and reform of climate change legislation.

341. The variety and flexibility of responses to loss and damage resulting from climate change can also be found in Articles 8 and 9 of the Paris Agreement. Article 8, paragraph 4, thus provides that

> "areas of cooperation and facilitation to enhance understanding, action and support may include:
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> *(a)* Early warning systems;
>
> *(b)* Emergency preparedness;
>
> *(c)* Slow onset events;
>
> *(d)* Events that may involve irreversible and permanent loss and damage;
>
> *(e)* Comprehensive risk assessment and management;
>
> *(f)* Risk insurance facilities, climate risk pooling and other insurance solutions;
>
> *(g)* Non-economic losses;
>
> *(h)* Resilience of communities, livelihoods and ecosystems."

342. In the DRC's view, it is important that the Court recognize that reparation of climate harms will have to take the form suited to the circumstances, possibly in combination, and not limited to pecuniary compensation. That is the practice of the United Nations Human Rights Committee,

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[462] *Ibid.*

[463] *Ibid.*

which often combines different forms of reparation in environmental cases. Thus, for a farmer who died from agrochemical poisoning, the Human Rights Committee held that Paraguay was under an obligation to provide the victims with an effective remedy, which entailed full reparation for the persons whose rights had been violated. It also recommended that the State conduct an effective and thorough investigation into the events in question; impose criminal and administrative penalties on those responsible for the events and make full reparation, including adequate compensation to the victims for the harm suffered. It added that the State party was also under an obligation to take steps to prevent similar violations in the future[464].

343. In the area of climate change, in the *Daniel Billy et al.* v. *Australia* case, the Committee requested that Australia make full reparation to individuals whose Covenant rights had been violated. It considered that the State party was obligated, *inter alia*, to provide adequate compensation to the authors for the harm that they had suffered, to engage in meaningful consultations with the authors' communities in order to conduct needs assessments, to continue its implementation of measures necessary to secure the island communities' continued safe existence and to monitor and review the effectiveness of the measures implemented and resolve any deficiencies as soon as practicable. Similarly, the State party was under an obligation to take steps to prevent similar violations from occurring in the future[465].

344. In conclusion, the DRC notes that certain measures of reparation, in particular satisfaction and guarantees of non-repetition, are especially legitimate and important since they have a twofold role: for the plaintiffs, they potentially improve the protection of human rights throughout the world, and for present and future generations. Far beyond the particular case at hand, they benefit all humankind and help preserve the rights of future generations.

FINAL SUBMISSIONS

BASED ON THE FOREGOING, THE DEMOCRATIC REPUBLIC OF THE CONGO REQUESTS THE COURT TO FIND THAT:

1. The Court has jurisdiction and there is no reason for it to exercise its discretion to decline to respond to the request for an opinion.

2. In respect of the first question: As regards the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations, the obligations of States under international law are the following:

***(a)* Regarding the duty of due diligence**

— This obligation is applicable to climate change.

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[464] See Human Rights Committee, *Norma Portillo Cáceres et al.* v. *Paraguay*, Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2751/2016, CCPR/C/126/D/2751/2016, 20 Sept. 2019; *Benito Oliveira Pereira et al.* v. *Paraguay*, Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2552/2015, CCPR/C/132/D/2552/2015, 21 Sept. 2022.

[465] See Human Rights Committee, *Daniel Billy et al.* v. *Australia*, Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 3624/2019, CCPR/C/135/D/3624/2019, 22 Sept. 2022.

— This obligation is embodied in the norms and instruments of international human rights law and international environmental law, and more specifically the international law on climate change.

— Climate change causes serious harm to human rights, including the right to life and the right to a clean, healthy and sustainable environment. Consequently, the duty of due diligence requires States to take extremely urgent action and adopt a series of measures to protect and preserve the human rights of both present and future generations.

— The duty of due diligence also requires States not to cause harm to areas beyond national jurisdiction. This is an obligation *erga omnes*.

— Due diligence must also be interpreted and applied in light of international conventional rules setting quantified targets based on officially recognized scientific studies. States have an international obligation to limit the increase in global temperature to 1.5°C, in order to substantially reduce the risks and effects of climate change.

— In light of the work of the Intergovernmental Panel on Climate Change (IPCC), States are under an international obligation to make rapid and deep reductions in the use of fossil fuels. Industrialized countries and countries with economies in transition must be the first to end the use of fossil fuels, in accordance with the principle of common but differentiated responsibilities and respective capabilities.

(b) **Regarding the international law of the sea and Part XII of the United Nations Convention on the Law of the Sea (UNCLOS)**

— States have obligations not only to prevent but also to reduce and control pollution of the marine environment, and obligations to preserve and conserve the marine environment. These are simultaneously negative and positive obligations. Violation of these obligations does not depend on whether the event to be prevented has occurred.

— Article 1 of UNCLOS defines “pollution” as the introduction of substances or energy into the marine environment which results or is likely to result in harm to that environment. States can therefore be held responsible for their acts and omissions relating to the introduction of substances into the environment rather than with regard only to the harmful consequences.

(c) **Regarding the obligation of international co-operation**

— States have customary and conventional obligations to co-operate in the fight against climate change. These obligations extend to the adaptation of States to the impacts of climate change and reparation for loss and damage.

— These obligations must be interpreted in light of the principle of common but differentiated responsibilities and respective capabilities.

— These obligations are reflected in particular in the obligation for developed countries to provide developing countries with adequate and appropriate resources, not only to reduce their greenhouse gas emissions but also to enable them to deal with climate change and its impacts. This concerns in particular the countries most vulnerable to the effects of climate change and those that have insufficient capabilities to deal with them.

***(d)* Regarding international economic law**

— The rules of international economic law must be interpreted and applied in such a way as to reinforce the measures taken by States and regional organizations to address climate change and its impacts. In particular, the measures taken by States to address climate change and its impacts must be considered necessary and proportionate within the meaning of the relevant rules of international economic law.

— International investment law does not allow investors to obtain reparation for the economic harm they suffer as a result of measures taken in good faith by States in addressing climate change and its effects.

3. In respect of the second question:

(a) Obligations to protect the environment beyond national jurisdiction, including the obligation of reparation and mitigation, are *erga omnes* in nature. Every State is entitled to seek compliance with primary obligations and seek reparation for any harm caused to the environment beyond national jurisdiction.

(b) Any State that has caused significant harm to the climate system bears individual responsibility towards any other State (or, in respect of treaty obligations, any other State party):

(i) To *cease* the wrongful act, in such a way as to limit the increase in the global temperature to 1.5°C, and, as a corollary to this, other States have the right to seek cessation of such conduct.

The States concerned must adopt urgent and effective measures to that end. They must in particular adopt compliance plans.

(ii) To *mitigate* the harm, which requires funding for adaptation measures for delayed harm.

(iii) To *make reparation* for all damage in accordance with the following principles:

1. The treaty mechanism in the Framework Convention on Climate Change for "loss and damage" is not a mechanism for responsibility for internationally wrongful acts.

2. States having caused significant harm to the climate system beyond national jurisdiction have an obligation *erga omnes* to make reparation for the harm.

3. States having caused significant harm to other States as a result of climate change have an individual obligation to make reparation.

4. Each State has an individual obligation to make reparation for the entirety of the harm, in accordance with the rule set out in Article 47 of the Articles on Responsibility of States for Internationally Wrongful Acts, subject to what follows.

5. States that have made only a negligible contribution to climate change cannot be held internationally responsible.

6. Responsible States may offset their respective debts through a comparison of the respective contributions of the States concerned to global GHG emissions.

7. States having caused significant harm to the climate system can limit their responsibility in proportion to their contributions of GHG emissions, by creating a multilateral mechanism ensuring full reparation for the harm caused to injured States.

(c) The responsibility of any State having caused significant harm to the climate system is engaged with respect to peoples and individuals of the present and future generations affected by the adverse effects of climate change, including when they are not on its territory, when the harm results from activities under its control or jurisdiction.

(d) States must guarantee that peoples and individuals affected by the adverse effects of climate change have access to effective remedies and appropriate reparations. To that end:

1. Financial barriers to private action before remedy mechanisms of industrialized States by victims from developing countries must be eliminated.

2. Victims from developing countries, who suffer harm in their own country, must have effective access to remedy mechanisms in industrialized countries, in particular collective action mechanisms.

3. States, and particularly industrialized States, must ensure that the rules governing jurisdiction and the structure of commercial companies and businesses do not constitute barriers, in law or in fact, to obtaining effective remedies.

4. The operation of remedy mechanisms must take due account of the various vulnerabilities to climate change and its impacts.

5. States must take all appropriate measures to ensure effective representation of the rights and interests of future generations in any decision-making process that may affect them.

(e) States whose wrongful conduct affects the rights of individuals or peoples must cease the violations and adopt measures to bring their legislation and practices into conformity with their international obligations as quickly as possible.

(f) States whose wrongful conduct affects the rights of individuals and peoples are under an obligation to make full reparation for the injury caused. The reparation must be tailored to each specific case. This may require a combination of different forms of reparation, pecuniary and non-pecuniary.

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Done at Kinshasa, 4 March 2024

On behalf of the Democratic Republic of the Congo

Its Agent

Ivon MINGASHANG

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